In Pursuit of a Better Legal Theory of the Company

A Data-driven, Co-evolutionary and Multiple Equilibria Model

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Declaration

This dissertation is the result of my own work and includes nothing which is the outcome of work done in collaboration except as declared in the preface and specified in the text.

It is not substantially the same as any that I have submitted, or, is being concurrently submitted for a degree or diploma or other qualification at the University of Cambridge or any other University or similar institution except as declared in the preface and specified in the text. I further state that no substantial part of my dissertation has already been submitted, or, is being concurrently submitted for any such degree, diploma or other qualification at the University of Cambridge or any other University or similar institution except as declared in the preface and specified in the text

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Ann Sofie Cloots
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Abstract

This dissertation is concerned with the theory of the company. It draws on three different disciplinary perspectives, namely those of law, economics and management, and on qualitative-empirical evidence.

The aim is to evaluate the shareholder primacy model which underlies the current orthodoxy in Anglo-American company law. The thesis argues that, in line with generally accepted definitions of efficiency in new institutional economics (NIE), the objective of company law should be to increase aggregate (that is, social or total) welfare. The dissertation then examines whether there is sufficient theoretical and empirical corroboration for the efficiency claims of the orthodox company law model to hold. Finding that these claims do not generally hold, the dissertation then addresses the question of whether the model can be enriched to increase the value-creating potential of company law.

Chapter 1 introduces the research questions in light of the overall leitmotiv of the dissertation: what do we mean by efficiency? Chapter 2 outlines the methodology of the thesis. Chapter 3 assesses the economic model of NIE on which the orthodox legal theory of the company is based and suggests how more recent economic insights could enrich our economic analysis of the company. It proposes a new model which is data-driven, co-evolutionary and can accommodate multiple equilibria. Chapter 4 analyses what the implications of this proposed model are for company law and assesses to what extent a number of UK company law provisions follow the NIE legal theory of the company. Chapter 5 appraises the relationship between company law and management studies: what, if anything, can company lawyers learn from management studies (including risk management and behavioural management literature) to enhance corporate value-creation? Chapter 6 subjects the theoretical conclusions of Chapters 3-5 to a preliminary empirical level of scrutiny: it summarizes interviews with 16 corporate actors on questions related to the dissertation's main themes. Chapter 7 concludes.

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[1] A. N. Whitehead.

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[2] Benjamin Franklin.

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Chapter 1

Introduction

1.1 *Tour d'horizon*: Efficiency in the orthodox legal theory of the company

This dissertation is concerned with the theory of the company. It draws on three different disciplinary perspectives, namely those of law, economics and management, and on qualitative-empirical evidence.

NIE in company law

The first chapters of the dissertation examine the legal theory of the company and its economic underpinnings. A law & economics approach to the company is hardly novel.[1] On the contrary, the economic-functionalist approach to company law has become ubiquitous, considered even 'natural'. The aim of this dissertation, however, is to shake this established oak of scholarship gently for the dead wood to fall out. The dissertation argues the orthodox law & economics model of the company is incomplete, at best, and counterproductive,[2] at worst. "There are no whole truths; all truths are half truths. It is trying to treat them as whole truths that plays the devil,"

[1] 'Law & economics' has a particular meaning, as opposed to 'law and economics', although the two concepts are at times conflated in the literature. 'Law and economics' is the general term to denote an analysis that applies both legal and economic arguments: "Methodologically, law and economics applies the conceptual apparatus and empirical methods of economics to the study of law" (Posner and Parisi 1997, p. ix). Economic arguments to assess the company could be based on any orthodox or heterodox economic theory. The 'law & economics' approach, however, is limited to a particular set of arguments from orthodox economics (welfare economics, neoclassical economics, new institutional economics) (Mercuro and Medema 2006, p. 1).

[2] Stout (2011, preface).

philosopher-mathematician Alfred North Whitehead said.[3] It is argued that treating the New Institutional Economics (NIE) theory of the company as "the whole truth" is highly problematic. An astute critic may object that "all models are wrong; some models are useful," relying on statistician Box's famous words.[4] The orthodox NIE-model of the company cannot, however, find refuge in these words either: the model has provided valuable insights, but its axiomatic dominance is unhelpful and, it is argued, counter-productive if company law is to facilitate efficient value-creation.

The law & economics approach has added useful technical competences and research questions to company law research. However, the merits of this model, on its own, cannot fully account for its current dominance.[5] Nor is its academic and practical influence fully supported by empirical data. Legitimate concerns regarding the current economic model of the company have arisen from diverse angles.[6] From the financial crisis and a long, continuing series of corporate scandals on the empirical side, to academic critiques from game-theoretical, behavioural or evolutionary colleagues, standard law & economics proponents have many more questions to answer than standard company law articles shed light on.

One of these core questions is: what is efficiency? Efficiency of what? And for whom?[7] Similarly, what is that 'value' that companies are expected to create? Value of what? And for whom?

The limiting contours of the debate

The validity of these questions is acknowledged by standard company law scholarship, though it appears to consider these matters long settled. Most corporate law discussions seem to hinge on a number of narrowly formulated questions, such as who should have the final say between managers and shareholders.[8] I am reluctant to even

[3]Price (1954, p. 14).

[4]Box, Hunter, and Hunter (2005, p. 440); Box (2013, p. xii). An earlier version of this statement formulated the litmus test as: "the practical question is how wrong do they have to be to not be useful" (Box and Draper 1987, p. 74).

[5] Different reasons for its dominance have been put forward, including its elegance and simplicity; and the streams of finance poured into the law & economics approach to law as compared to alternative, or complementing, approaches (Stedman Jones 2012, 162-169), (Orts 2013, p. 24). On the influence of the Olin foundation on the spread of orthodox law & economics, see Miller, Zinsmeister, and May (2015, p. 38-40).

[6]Hodgson (2011).

[7]Orts (2013, p. xvi).

[8]Orts criticized such approach on the basis that "the presumed macro-problem of the corporate separation of ownership and control appears to have been overstated" and that scholarly attention should shift to "other pressing issues" (Orts 2013, p. 80). See also Johnston (2017, p. 1001).

mention Friedman, as his conclusion that 'the business of business is business' [9] has already received more attention than it deserves (perhaps because it is an appealingly simple way to introduce the question of corporate purpose to undergraduate students, novices or space- and time-constrained media). Even Friedman, however, couples the mandate of corporate profit-seeking to a higher political goal. For him (perhaps unsurprisingly from a US perspective), this ultimate objective is freedom.[10] The 'freedom' goal can be replaced by other objectives (maximum utility, social welfare, GDP or GHP, to name just a few[11]), but the basic principle (even for Friedmanites) remains unchanged: the efficient ordering of corporate transactions (and economic transactions at large) remains subservient to a higher social-political aim.[12] Claims of efficiency of a particular model, regulation or incentive thus necessitate an understanding of this ultimate goal that efficiency is meant to serve. From an empirical point of view, this means efficiency claims should be examined in light of these social-political goals.[13]

Shareholder value in the bigger picture

It is exactly this higher-level[14] question of what efficiency is, which is conspicuously absent from mainstream company law debates. Standard Anglo-American company law debates assume that shareholder value maximization is the most efficient tool to achieve overall social wealth.[15] Shareholder primacy has been justified as a necessary regulatory protection for incomplete contracting by shareholders.[16] Shareholders are given both a bundle of control rights and the power to demand from management that the company be managed in their best interest. This, the argument goes, is the best way to ensure an efficient, market-based allocation of resources. Protecting shareholder rights, it is argued, encourages corporate investments that will benefit employees (jobs), creditors (interests on loans), suppliers (supply contracts), consumers (a variety of competing products), the government (corporate tax) and, ultimately,

[9] This is the widespread summary of Friedman's 1970 New York Times contribution entitled *The Social Responsibility of Business is to Increase its Profits* (Friedman 1970).

[10] Hence the title of his book "Capitalism and Freedom" (Friedman 2002), offering a more nuanced justification for his corporate purpose-views than the New York Times article may suggest.

[11] On corporate purpose, see e.g., Bratton (2014) or Bruner (2012). On Gross Happiness Product or Gross National Happiness, see, e.g., Antolini (2016).

[12] Parkinson (1993, p. 22) ("These positions [CSR approach and profit-maximization approach] have in common that they express a view about how company law should regulate corporate power in the public interest)". See also Ferran (2001, p. 383) and Orts (1993, p. 1578).

[13] See Parkinson (1993, p. 24).

[14] Lo equally makes the case for the 'bigger picture' question for financial markets (Lo 2017, p. 3).

[15] Kraakman et al. (2017, p. 271).

[16] Johnston (2009, p. 22).

society.

Shareholder value maximization is thus construed as company law's most appropriate tool to ensure efficient societal value creation. Critics may argue that this is as far as company law or economics should go in defining value. Leaving aside the controversial questions of whether 'value' is identical to share price and dividends, which time-frame value creation should be measured over and whether maximization is identical to optimization,[17] this still requires us to examine whether shareholder value maximization is the best (most efficient) tool to achieve whichever of the ultimate societal goal(s) we aspire to.

The important question of what we understand by efficiency and corporate value creation forms the leitmotif of this dissertation.

Focus on Anglo-American company law

These questions will be addressed through the lens of the dominant legal theory of the company, which embraces the pursuit of shareholder value maximization.[18] This model has been most wholeheartedly endorsed in the US and the UK, from which its influence has spread throughout the world (though with differing degrees of success across jurisdictions).[19] Anglo-American company law theory will therefore be the focal point of this dissertation.[20]

Company law is only one piece of the puzzle in the pursuit to make companies a

[17] I am grateful to Malcolm Rogge for raising this question.

[18] This assumption is not grounded in company law: as Deakin remarks, "[n]o legal system, whether of common law or civil law origin, imposes a duty on managers to *maximize* shareholder value regardless of the effect on other corporate constituencies or on the company's reputational and other assets" (Deakin 2012, p. 361).

[19] On the spread of US-UK company law to other jurisdictions, see, e.g., Kraakman et al. (2017, p. 270) ("Global institutional investors have generated pressure for the international adoption of the governance practices prevailing in developed (typically UK and U.S.) markets."); Heath (2014, p. 1) (defending the Canadian welfare state against what he calls "the ever-present pull of the American model.")

[20] The term 'Anglo-American' is used to signify that the two jurisdictions share similar characteristics peculiar to them. Moore and Petrin point to the highly dispersed ownership by "small-scale investors who typically fulfil no materially significant management or direct control function" (Moore and Petrin 2017, p. 12) as distinguishing features of US-UK company law. Cheffins likewise saw the UK and the US as the "only two countries where the Berle-Means corporation is firmly established as the dominant corporate paradigm" (Cheffins 2001, p. 484). This does not imply that the two jurisdictions have identical company law regimes, of course, as Moore warns (Moore 2013, p. 10). Davies makes a similar argument on takeover regulation differences in the two countries (Davies 2000, p. 22) and Armour et al. on private enforcement (shareholder lawsuits against directors of public companies of breach of duty) (Armour, Black, Cheffins, and Nolan 2009). See also Harris and Lamoraux (2016) on corporate governance differences between the two countries from a historical perspective.

greater force of value creation in society. Other areas of law interact with company law (one obvious example is tax law, which creates its own set of incentives for corporate behaviour). One would also need to explore the world beyond the bounds of law:[21] motivators are not limited to legal incentives. Changing corporate behaviour, therefore, should not be confined to official reforms in a single area of law.

1.2 Research questions

The general aim of the dissertation is to evaluate whether the shareholder primacy model in orthodox Anglo-American company law theory, as based on New Institutional Economics, is the best model to generate aggregate efficiency. In line with generally accepted definitions of efficiency in NIE, the objective of company law should be to increase aggregate (that is, social or total) welfare. The dissertation examines whether there is sufficient theoretical and empirical corroboration for the efficiency claims of the orthodox company law model to hold. If such corroboration is found lacking, the dissertation will assess whether the model can be enriched to increase the value-creating potential of company law, drawing in particular upon the disciplines of law, economics and management as well as on qualitative-empirical evidence.

The overall research question of the dissertation is **whether the orthodox shareholder-oriented Anglo-American company law model is the best available model to create corporate value efficiently and increase aggregate wealth in the present environment**.

This overarching research question is assessed through a number of sub-questions. Chapters 3-6 each address a particular set of sub-questions, as shown below:

[21] McConville and Chui (2007, p. 1).

Chapter 1

- Introduction

Chapter 2

- Methodology

Chapter 3

- Does NIE offer the best available methodology to assess the efficacy of the legal theory of the company?
- Does the use of the orthodox NIE methodology to assess the legal theory of the company generate hypotheses for empirical testing?
- Can the economic analysis of company law and its efficiency-increasing potential be enhanced through insights from other economic approaches?
- Is the orthodox NIE methodology useful for the legal theory of the company from a normative perspective?

Chapter 4

- Is the NIE-based orthodox shareholder primacy model sufficiently grounded in the existing state of company law?
- Is there a viable alternative to the orthodox, shareholder-oriented model in Anglo-American company law? Can such alternative bolster company laws potential to enhance aggregate efficiency?
- Is the shareholder primacy norm in Anglo-American company law useful from a normative perspective?

Chapter 5

- Is the orthodox, shareholder-oriented model sufficiently grounded in management studies, in particular risk management and behavioural management literature?
- In developing alternatives to the shareholder-oriented model, what can we learn from the discipline of management studies?

Chapter 6

- Is the orthodox, shareholder-oriented model sufficiently grounded in managerial practice?
- In developing alternatives to the shareholder-oriented model, what can we learn from the perceptions of managers themselves?

Chapter 7

- Conclusion

The bounds of the research questions reflect the bounds of this dissertation. Although the thesis spans a relatively wide array of topics, the questions listed above invariably leave out other research questions. In particular, the thesis does *not* offer either (i) a full analytical-philosophical theory of justice, nor (ii) an ontological theory[22] of the company. References to fairness are based on a social-sciences understanding of fairness (as opposed to an analytical-philosophical theory of justice), namely as an endogenous and self-sustaining set of commonly shared values that perform a social function (generate stable norms as 'first best option'-signalling devices, which can furthermore reduce transaction costs).

1.3 Structure

The remainder of this thesis is structured as follows. Chapter 2 outlines the methodology of the thesis. It elucidates the reason to use new institutional economics (NIE) as the starting point for the dissertation's analysis. It describes the proposed alternative model for an economically informed analysis of company law, namely a data-driven, co-evolutionary model accommodating multiple equilibria. This model is better than the standard NIE approach for at least the following five reasons: the proposed model (i) has greater explanatory power, (ii) is more realistic, (iii) bridges the fact-value divide by endogenizing fairness, (iv) generates more hypotheses for empirical testing[23] and (v) offers a normatively useful contribution by embracing multiple equilibria, thereby avoiding a one-size-fits-all approach and instead accommodating diversity in the corporate landscape. The chapter furthermore explains the usefulness of the interdisciplinary approach and the contribution of qualitative empirical research to the dissertation's research questions. Finally, the chapter describes the methodology of the interviews conducted for the dissertation. Chapter 3 assesses the economic model of NIE on which the orthodox legal theory of the company is based and appraises whether more recent economic insights could enrich our economically-informed[24] analysis of the company. It demonstrates why the standard NIE approach to the legal theory of the company should be abandoned in favour of the proposed alternative (a data-driven, co-evolutionary model accommodating multiple equilibria). Chapter 4 analyses what the implications are of Chapter 3's findings for company law, illustrated by a num-

[22] An ontological exploration of the company has been offered by others, e.g., Lawson (2012).

[23] "One of the purposes of theory is the generation of testable *hypotheses*" (Lawless, Robbennolt, and Ulen 2010, p. 9).

[24] Deakin (2012, p. 345).

ber of examples from UK company law, including on shareholder limited liability for corporate torts. Chapter 5 explores relatively uncharted territory and appraises the relationship between company law and management studies: what, if anything, can company lawyers learn from management studies (including risk management and behavioural management literature) to enhance corporate value-creation? This topic has not yet received much attention in company law literature and the purpose of the chapter is to sketch a roadmap for a future research agenda. Finally, Chapter 6 subjects the theoretical conclusions of Chapters 3-5 to a preliminary empirical level of scrutiny: it summarizes interviews with 16 corporate actors on questions related to the dissertation's main themes. The purpose of the chapter is not to 'test' the validity of the suggestions made throughout the thesis in any representative way. The aim of the interviews is to shed light on (i) whether the thesis touched upon the topics perceived as most relevant by those working more closely with companies and (ii) questions of sequence and correlation that the thesis may not have discerned. Chapter 7 concludes.

The issues are diverse and challenging for a lawyer-by-training to fully apprehend. Appraising questions spanning disciplinary divides is no easy task, especially in the limited time span of a single PhD project. The following chapters consequently represent "no more than a very modest contribution to the informed debate of cognoscenti."[25]

[25] Meyers (1982, p. iii).

Chapter 2

Methodology

2.1 Introduction

The dissertation rests on three methodological choices that warrant further explanation in this chapter. The first is the decision to use New Institutional Economics ('NIE') as its methodological starting point for the doctrinal analysis. The second is the decision to complement the doctrinal analysis with qualitative empirical research in the form of interviews. The third is the methodology applied to conduct the qualitative research. Each of the three methodological choices are discussed below.

2.2 New Institutional Economics as the starting point of the analysis

The analytical starting point for the examination of the theory of the company in this dissertation is NIE. The dissertation mostly avoids the terms 'neo-classical economics' and 'neo-liberalism'[1], both of which have been used as catch-all phrases[2] that may allow their users to avoid the more cumbersome task of delineating between the various schools of thought covered by them. To limit the risk of confusion, this disser-

[1]For a description of neo-liberalism, see Chang: "Neo-liberalism emerged out of an 'unholy alliance' between neo-classical economics, which provided most of the analytical tools, and what we may call the Austrian-libertarian tradition, which provided the political and moral philosophy" (Chang 2002, p. 544). Neo-liberalism is another 'grand récit' (metanarrative), to use the words of Lyotard. See also Stedman Jones (2012, p. 2) for a similar definition of neo-liberalism as an ideology, but also as "a nuanced response to a very different set of conditions" in the interwar period, when it emerged, as compared to those of the late twentieth century (Stedman Jones 2012, p. 3-4).

[2]On neo-liberalism, see Stedman Jones (2012, p. 2).

tation instead makes reference to New Institutional Economics (NIE).[3] NIE has been categorized as a member of both the neo-classical[4] and neo-liberal family, but has a more precise meaning than the umbrella terms of 'neo-classical' and 'neo-liberal' (even though it is itself home to varying schools of thought).[5]

NIE, as a strand of economics, has entered company law theory through the law & economics approach to law, including company law. The law & economics school has attempted to identify the economic principles at work in company law and has, over time, added a normative aspect (policy recommendations) to the descriptive dimension of economic analysis of company law. The NIE-based company law theory is not the only possible angle to assess company law and many competing or complementary theories have been set forth. The importance attached to economics and an economic analysis of law, however, have made the NIE-based theory of company law particularly influential. To the extent a NIE-based theory of company law is descriptive, its impact could have been limited to mere academic attempts to identify an underlying logic to the variety of rules classified under the company law umbrella. However, this approach has become highly normative over time, making policy recommendations for company law reforms based on economic cost-benefit analysis promising efficiency increases. Potentially due to the simplicity and elegance of these models, and/or due to the well-funded research institutions promoting such economic approach to law, these policy recommendations have had their impact on actual company law. This is not to say that company law in either the US or UK can *exclusively* be explained based on NIE principles. Policy makers have often balanced a much greater variety of policy considerations than mere cost-benefit analysis. Nevertheless, NIE's impact on company law theory over the past years and its promise to quantify efficiency gains of specific company law reforms have had a strong impact on company law in practice, including the interpretation of company law provisions by courts. This impact is more tangible in certain areas of company law (e.g., takeover law) than others. Chapter 4 provides a number of examples from UK company law in which the impact of NIE are discussed. The main characteristics of NIE are described in further detail there.

For the purposes of this dissertation, the working definition of a 'NIE-based legal model of the company' is the economic approach to company law that considers the

[3]For a very brief description of NIE, see, e.g., Chen, Deakin, Siems, and Wang (2016, p. 2).

[4]NIE relies on neoclassical concepts but also borrows from other schools of thought and the link between the two "remains unclear" (Mercuro and Medema 2006, p. 241 and 243). Buchanan, Chai, and Deakin (2012, p. 8). For example, NIE allows for an evolutionary perspective largely absent from neo-classical accounts.

[5]For a general introduction into the different economic schools of thought, see White (2012).

company to be a Coasean "transaction cost-minimizing device,"[6] rooted in a rational actor assumption in combination with methodological individualism,[7] which justifies the primacy of shareholder interests based on their status as residual claimants[8] of the company and views company law as a set of mainly default rules to lower contracting costs. NIE is not a monolithic school.[9] Nevertheless, a number of common themes can be identified in NIE (such as the assumption of a (boundedly) rational pursuit of self-interest given a number of constraints and methodological individualism). Institutions are acknowledged to both be shaped by, and shape, individuals, although they are assumed to affect only individual *behaviour*, not motivation or preferences.[10]

The dissertation also uses the term 'law & economics' sparingly. In principle, any economic approach to law can fall under the heading of 'law and economics'. In practice, however, 'law & economics' is typically assumed to refer to quite a *particular* economic approach to law.[11] This is also how the term is used in this dissertation, where it is mentioned. The dissertation will mostly use the more specific terms of 'NIE-based legal theory of the company' or the 'orthodox' or 'standard' company law theory.

A focal point in NIE's theory of the company has been agency concerns regarding the manager-shareholder relationship. If, however, we view agency problems as a core concern to be addressed in company law, we should not only acknowledge the agency problems of managers-shareholders, but also the potential agency problems between the company and its directors, as well as between the company and non-contractual constituencies.[12] The next chapter looks more closely at potential agency concerns

[6] Deakin (2012, n. 1).

[7] On the ambiguity of the concept of methodological individualism, see Hodgson (2007) and Hodgson (2012). See also Deakin (2011, p. 671).

[8] For arguments against such view, see Chapter 4. The position of shareholders as residual claimants has fuelled a widely held (but legally inaccurate) perception of shareholders as owners of the company rather than as owners of a bundle of rights (Dow and Putterman 2000, p. 32).

[9] Some NIE approaches are complementary while others are more difficult to reconcile (e.g., the property rights-approach and the transaction cost-approach, see Orts (2013, p. ix). See also Deakin (2003, p. 97).

[10] Chang (2002, p. 554). See also Stigler and Becker (1977). Stigler and Becker argue against the traditional economic interpretation of preferences as 'de gustibus non est disputandum', in which "a difference in tastes between people or times is the terminus of the argument". Instead, the authors put forward the hypothesis of stable preferences that do not differ importantly between people and posit that "all changes in behavior are explained by changes in prices and incomes" and not by exogenous factors changing preferences themselves. Stigler and Becker (1977, p. 76-77, 89). Both the traditional economic as well as Stigler and Becker's approach to 'de gustibus non est disputandum' refrain from studying the 'black box' of preferences and how they are established or evolve.

[11] Chapter 1, note 1.

[12] In the third edition of *The Anatomy of Corporate Law*, the authors briefly acknowledge the

affecting non-contractual constituents.

The decision to take an economic theory such as NIE as the analytical starting point of this dissertation leaves it vulnerable to the objection that it neglects the important moral critiques of orthodox company law models.[13] It is a valid critique. This is nevertheless a dissertation in law assessing a legal theory of the company premised on a particular economic model. Its aim is to evaluate to what extent the internal logic of *NIE itself* may be employed to identify the concerns that a moral critique of the orthodox company law model may equally raise.[14] It will furthermore become clear in the next chapter why morality and social norms matter even for a purely efficiency-based argument.[15] In other words, the dissertation does not argue that other critiques on orthodox corporate law (such as moral or power-related critiques[16]) are irrelevant (in fact, quite the opposite).[17] Mine is a complementary, not a competing, approach to other (valid) critiques of orthodox company law theory. The dissertation explores whether even a purely efficiency-based NIE analysis of the company would call for a reassessment of some of the orthodox company law assumptions. The aim is to examine whether concepts such as trust,[18] cooperation or social values matter even to those

existence of such wider agency problems. They conclude, however, that corporate law is rarely the best setting in which to deal with these concerns (Kraakman et al. 2017, p. 79 and 108).

[13] "Economists who regard the self-interested reasons for cheating as rational and largely ignore moral reasons not to cheat may unintentionally justify cheating" (Hausman, McPherson, and Satz 2016, p. 78); Donaldson (2012, p. 256-257).

[14] This is without prejudice to the important question of how much further a moral critique may bring us. The efficiency-based argument presented in this dissertation does not in any way pretend to be exhaustive or superior.

[15] Heath took a similar approach, arguing that, where both efficiency and equality arguments can be put forward to defend a welfare program, "it is always better to lead with the efficiency argument, simply because they are inherently less controversial" (Heath 2014, p. 2). I do not subscribe to the proposition that efficiency arguments should be prioritized in any way, even if only for reasons of convenience (doing so reinforces the normative perception that public discourse *should* be framed in economic efficiency terms - a discourse that most Western societies are already disproportionately subjected to). The point that it is worth examining whether an economic line of reasoning can lead to the same conclusions as a moral reasoning (and can complement or reinforce it), is nevertheless well taken. See Hausman e.a., arguing: "Moral norms enable people to coordinate their actions more efficiently than would be possible without a shared morality; such norms can be economically productive" (Hausman et al. 2016, p. 74).

[16] Polanyi (1944), Parkinson (1993) or Moore (2013).

[17] Indeed, one obvious critique against the functional (or functionalist) analysis of corporate law, as acknowledged in *The Anatomy of Corporate Law*, is exactly that it fails to account for factors such as history and path dependency or power disparities as an explanation of particular corporate rules (Kraakman et al. 2017, p. 268). The same criticism has been aired against Bowles' and Gintis' evolutionary game-theoretical approach, Finch and McMaster (2017, p. 6).

[18] To the extent concepts such as trust are discussed in this dissertation, they are approached from an empirical, not a doctrinal perspective. Others more familiar with disciplines such as sociology, philosophy, biology or anthropology are better placed to define concepts such as trust, trace their

reluctant to give moral arguments a prominent place in corporate law discussions. In other words, it offers an appraisal of whether, even for a discourse solely grounded on efficiency arguments, such concepts quite alien to orthodox corporate law discourse should matter more than they currently do.

The thesis will spend little ink on repeating orthodox corporate law and economic ideas. These have been discussed at length by authors much more versed in their intricacies.[19] The purpose of this thesis is to show how some heterodox conclusions may flow from consistently applying orthodox concepts and assumptions. We can retain the concept of companies as efficient value-creating entities, as well as the idea that company law attempts to enhance companies' potential to do so. 'Efficiency' is used abundantly in both company law and economics literature, though definitions (often implicit) may differ. One should be careful in using the terms 'social' and 'economic' efficiency as if these were two different objectives. Orthodox legal and economic theories of the company share the understanding (though often implicit) that the 'efficiency' they envisage is ultimately a societal efficiency (total wealth creation).[20] The disagreement emerges at the level of what the best *tools* are to achieve this ultimate societal efficiency (not so much *that* this should be the goal).

2.3 The proposed alternative: A data-driven, co-evolutionary & multiple equilibria model

The thesis takes the NIE-based legal theory of the company as a methodological starting point for the analysis, although it attempts to move beyond it. The orthodox model is put to the test - or, more accurately, a number of its *assumptions* are challenged. The economic analysis of company law is not abandoned. Instead, an *alternative* economic approach to company law is advanced.

origin and evolution or systematically study their role and functioning in society. This lies beyond the bounds of this dissertation. It is equally outside the scope of this dissertation to make any definite division-of-labour claims on whether the government or companies should bear primary responsibility for generating trust or social norms, to the extent required for efficient corporate value creation. The aim of the dissertation is first and foremost to assess *whether* concepts such as trust and social norms affect efficient corporate value creation.

[19] Easterbrook and Fischel (1991), Jensen and Meckling (1976), Coase (1937), Kraakman et al. (2017), Posner and Parisi (1997), Demsetz (1983).

[20] There is consequently only one 'efficiency'. 'Economically' efficient policies are recommended on the understanding that they will ultimately advance overall efficiency in society, beyond the economic realm.

The proposed model has three main characteristics: (i) it is data-driven,[21] (ii) it is co-evolutionary and (iii) it can accommodate multiple equilibria. These characteristics are explained in detail in Chapter 3 and will run through the dissertation's chapters as a recurring theme.

This proposed alternative is a better model than the orthodox, NIE-based legal theory of the company for at least the following five reasons:

1. the model has greater explanatory force;
2. it is more realistic;
3. it bridges the fact-value (efficiency-fairness) divide;
4. it is better capable of generating hypotheses for empirical testing; and
5. it offers a normatively useful contribution since its multiple equilibria approach avoids the pitfalls of a one-size-fits-all approach.

Each of these five reasons are explained below.

Greater explanatory force The proposed model is better because it has greater explanatory power than the orthodox NIE model. The latter largely views law as an exogenous factor, whereas the proposed model considers company law endogenously. The orthodox NIE model views (company) law as a given and cannot sufficiently explain why the law evolves as it does. The proposed model, on the other hand, attempts to explain the law's endogenous evolution (reflexive law, infra), as well as its co-evolution with business needs and the wider environment. It acknowledges the emergence of company law, as both being shaped by business needs and as shaping business behaviour.[22] The orthodox model provides a functional-teleological explanation of company law in terms of business needs. The proposed model, on the other hand, accounts for both how corporate behaviour shapes law (functional explanation) and how the law shapes corporate behaviour beyond mere pay-off calculation (law as a constitutive institution). Aoki (see Chapter 3) describes company law as a cognitive device, coding knowledge about corporate behaviour (coordination) into the legal system. The knowledge coded is not only about actual but also about desired corporate

[21] Juselius (2011).

[22] On the emergent property of company law, see below.

behaviour: the law is also a normative signalling device, providing cues on expected corporate behaviour.[23]

The orthodox law & economics (L&E) model does not sufficiently acknowledge these different functions of a company law model. An economic approach to the L&E model views it as a hypothesis-generating device. For lawyers, a model does not only serve the purpose of generating hypotheses for empirical testing. It also serves the purpose of being an explanatory and epistemic tool. To the extent a model attempts to explain and understand reality, it can inform policy-making. The concept 'model' in this dissertation is used to capture both purposes: 'model' in this dissertation means the epistemic tool that legal researchers use not only to generate hypotheses for empirical testing, but also to understand and explain reality and, through this explanatory and epistemic force, to inform policy-making. The alternative model proposed in this dissertation views company law both (i) as coding knowledge about cooperation into the legal system and (ii) as a normative signalling device of what behaviour is expected from companies.

More realistic The proposed model is better because it is more realistic. Coase argued that a theory needs to "correspond to the real world".[24] Whereas any model will necessarily involve a degree of abstraction, there is a cost associated with an unrealistic model, especially if it is employed to inform policy-making. The proposed model is better able to capture the legal account of the company than a shareholder-primacy model (see Chapter 4). A model that can accommodate multiple equilibria is also more capable of capturing differences in company law regimes across countries, as well as different business forms within a given country.

Capable of bridging the fact-value divide The proposed model is better because it is capable of bridging the fact-value (efficiency-fairness) divide by endogenizing fairness considerations into the model. The orthodox NIE model views fairness concerns as exogenous to company law debates and emphasizes efficiency considerations. A standard criticism is that company law should not only be about efficiency but also about fairness and ethics.[25] The proposed model argues that fairness considerations are, at least to a degree, an intrinsic part of efficiency. The next chapters will demonstrate how

[23]Indeed, "[l]egal rules may also serve to clarify social norms by providing focal points for their meaning" (Eisenberg 1999, p. 1270).

[24]Chapter 3, note 42. For a similar remark by Sen, see note 43 of the same chapter.

[25]Supra, section 2.2.

fairness considerations, as captured by certain social norms and expectations, enhance efficient corporate outcomes. Artificially separating the analysis of efficient corporate outcomes from the fairness of those outcomes unnecessarily limits our understanding of corporate behaviour and its interplay with law and non-legal norms.

Tractability: greater capacity to generate hypotheses for empirical testing A realistic model is better than an unrealistic model, it was argued above. Nevertheless, a model also requires tractability, as Coase acknowledged,[26] which implies a degree of reduction and abstraction. A model is preferable over an alternative one if it is better capable of generating hypotheses for empirical testing. Whereas the standard L&E model claims empirical corroboration, this empiricism is partial and incomplete (see Chapters 3 and 4). Too many assumptions are posited as axiomatic rather than empirically verified. The proposed model is better capable of generating hypotheses for empirical testing. A data-driven model is one that insists that even (the assumptions of) the model itself should be subjected to empirical testing, not just hypotheses formulated within the model. Moreover, a data-driven-model acknowledges the complementary usefulness of a wider set of data that can inform hypothesis-generation, consisting not only of quantitative but also of qualitative-empirical (including anecdotal) data. The data-set is furthermore widened to data provided by other disciplines, which can include fields as diverse as behavioural game theory, neuroscience or evolutionary biology.

A normatively useful model The proposed model is better than the orthodox NIE model because it is normatively more useful. It can accommodate multiple equilibria, avoiding the pitfalls of a one-size-fits-all approach along the lines of the end-of-history view of company law.[27] This characteristic is linked to some of the other criteria mentioned above. Building on Aoki's descriptive account of corporate diversity, a multiple-equilibria model is better able to accommodate diversity across legal systems and diversity of business forms within a given legal system, as mentioned above. This approach avoids a simplistic narrative that one model is inherently superior to alternatives regardless of circumstances, reducing the risk of ineffective or counter-productive legal transplants of a shareholder-primacy model. Moreover, the proposed model is normatively useful because it endogenizes fairness. Increasing efficiency means decreas-

[26] Chapter 3, note 42.
[27] Hansmann and Kraakman (2001).

ing transaction costs. Fairness is one way of reducing transaction costs. Schultz argues that moral normative conditions are required for economic efficiency and that legal rules can help enforce such moral constraints but cannot efficiently replace them.[28] This means, he argues, that legal rules should not thwart efficiency-increasing moral norms and conventions. His main finding is that certain moral conditions and conventions need to be in place for markets to reach Pareto efficiency. This dissertation does not assume that Pareto efficiency is the most appropriate proxy for efficiency[29] but nevertheless comes to the same conclusion that moral norms and conventions matter for efficiency. A model that exogenizes fairness or considers it relevant only for post-transaction redistribution will lead to inefficient outcomes.

The brief summary of these five advantages of the proposed model is provided to help guide the reader through the dissertation. They are expounded in greater detail throughout the following chapters.

2.4 Inter-disciplinary approach

The inter-disciplinary value of adding a law and economics perspective does not seem to be contested.[30] Whereas the company law and economics literature is abundant, an inter-disciplinary literature combining company law and management studies is however harder to find. It is much more rare to find an inter-disciplinary approach to the company that combines company law and management studies. It nevertheless seems logical to compare how company law conceptualizes the company and how the literature catering to a management audience views it. Company law creates incentives, based on particular assumptions, and it is sensible to compare these incentives and assumptions with those applied by managers (or the literature catering to them).[31]

[28] Schultz (2001, p. 2).

[29] Pareto efficiency is a simple metric: it merely requires that no one can be made better off without making someone else worse off. This is too reductionist and simplistic a criterion to appraise the complexity of aggregate efficiency as defined in this dissertation. (See Chapter 3, in particular the views of Gintis (Gintis 2014, p. 221), for a criticism of another commonly used metric of efficiency, namely the Nash Equilibrium.)

[30] It is contested, however, first, whether the economic approach to company law, and to law in general, should receive the weight it currently has in legal analysis and, secondly, whether the 'economics' through which company law is assessed should be welfare economics.

[31] Critics may object that the function of management studies differs from that of company law. One may object that the latter serves to solve agency problems between management-shareholders, while the former clarifies how managers should execute that agency-duty in coordinating corporate inputs. Even if we were to follow such partitioned approach, the managerial task should at least be acknowledged in the legal theory of the company. At the very minimum, company law and manage-

The drawback of this inter-disciplinary approach includes the bounds of knowledge of the author.[32] One may wonder what a lawyer could usefully have to say about management studies. I am very much cognizant of this valid criticism. The purpose of Chapter 5 on management studies is not so much to provide definite answers but to sketch a research agenda. The literature to draw on for law & management is much more limited than the law & economics literature. There is no obvious theoretical nor practical justification for such disparity, as Chapter 5 argues.[33] Whereas much of company law debates revolve around the question of whether to increase shareholder rights or other narrowly framed questions, an inter-disciplinary approach can promote a bigger-picture view. It can help re-frame the questions by challenging some of the basic assumptions made (e.g., methodological individualism, the relationship between efficiency and basic social values or the validity of choosing certain metrics of efficiency over others). An inter-disciplinary approach is therefore advanced in this dissertation to widen and enrich some of the central debates in orthodox company law discussions.

2.5 A mix of interpretive and qualitative empirical research methods

The dissertation adopts a methodological approach combining interpretive analysis and qualitative empirical[34] research to asses the legal theory of the company. Technically, such combination is 'mixed' in its methods.[35] To avoid confusion, however, the dissertation abstains from describing its methodology as one of 'mixed methods', which is traditionally understood to mean a mix of qualitative and quantitative analysis.

Different types of research questions call for different types of research methods.[36] Since each method has its inherent limitations,[37] collecting data through different

ment studies should be compatible: our theory of company law should not impede managers from fulfilling their coordinating task and, where a fiduciary duty is not statutorily limited to shareholder interests, to fulfil their fiduciary duty towards the company.

[32] Van Hoecke (2011, p. 18). On the advantage of inter-disciplinary (legal) research, see McConville and Chui (2007, p. 5).

[33] Political-commercial interests played a role in advancing traditional law & economics, see Chapter 1, footnote 5.

[34] "... 'empirical' research involves the systematic collection of information ('data') and its analysis according to some generally accepted method" (Cane and Kritzer 2010, p. 4).

[35] The benefits of a mixed methods approach over a single method have been discussed elsewhere. See, e.g., Poteete, Janssen, and Ostrom (2010, p. 11-15), Nielsen (2010), Buchanan et al. (2012, p. 13), Leeuw and Schmeets (2016, p. 198) and Lawless et al. (2010, p. 47).

[36] Blackham (2016, p. 29, 34) and Poteete et al. (2010, p. 4).

[37] Poteete et al. (2010, p. 4).

methods may be the most appropriate way to test a hypothesis.

In view of the theoretical framework and the research questions to be addressed, a part-interpretive, part-qualitative empirical methodology is deemed particularly suitable.

The doctrinal method is "*systematically* interpretive, involving a search for coherence across legal texts and sources."[38] Such method facilitates an assessment of the internal consistency of the NIE legal theory of the company. Moreover, to assess the impact of the NIE-foundation of Anglo-American company law in practice, a doctrinal approach needs to be complemented by empirical research, which "recognizes the importance of investigating beyond 'law on the books' to consider legal *results*."[39] Law-in-action requires an understanding of norms, habits and perceptions that may affect the actual effects of a legal rule.[40]

As opposed to a positivist method, an interpretivist method "considers people as the products of their environment but additionally as those who construct the environment through their understandings of it."[41] This helps us understand how an economic *explanation* (and potentially justification) of company law *affects* corporate behaviour, through the principle of double hermeneutic between theory and practice.[42] Moreover, the economic narrative in company law may have ripple effects on social behaviour beyond the bounds of company law (law in context and socio-legal research).

Reflexive law

The research questions of the thesis require a method that takes into account how legal interventions are mediated by other social systems and affect them.[43] Here the dissertation threads on reflexive law grounds.[44] Reflexive law builds on systems theory, which views law as one of the various social systems alongside economics, politics,

[38] Blackham (2016, p. 29).

[39] Blackham (2016, p. 25). Doctrinal analysis in isolation from its context can be "misleading and inadequate" (Blackham 2016, p. 30).

[40] Zumbansen (2007, p. 473).

[41] Webley (2010, p. 930).

[42] Ghoshal (2005, p. 77). The idea of double hermeneutic was a key concept in the work of Giddens, who described it as the "two-way relation involved between lay language and the language of social science"(Giddens 1984). The core idea is that social science theory not only conceptualizes but also affects reality. Whereas our attempt to understand natural sciences is uni-directional, our social sciences' conceptualization of society is two-directional: the insights we gain from social science are *constitutive* of the reality studied. The theory can shape social reality (reflexive monitoring).

[43] Blackham (2016, p. 18).

[44] Alternative concepts have been used in the literature, including 'responsive' regulation (Ayres and Braithwaite 1992). Deakin, McLaughlin, and Chai (2011, p. 4) and McCrudden (2007, p. 259).

etc., that are affected by (and affect) each other.[45] Although systems are 'operationally closed', they are 'cognitively open'.[46] 'Operationally closed' means law is a self-referential communicative system,[47] which can nevertheless co-evolve by incorporating concepts and evolutions from other systems. It does so indirectly, namely by translating them into the law's self-referential system.[48] Operationally closed but cognitively open systems allow for complex, adaptive structures. Operational closure of a system means it can accommodate a higher degree of complexity while cognitive openness facilitates adaptation to an evolving environment (however imperfect) rather than rigidity. The legal system can evolve both through its internal dynamics (the internal search for consistency; operational closure) and through co-evolution with changes in its environment (cognitive openness to other systems).

Law, including company law, has to acknowledge this emergent property:[49] it is this cyclical[50] back-and-forth, this co-evolution of a system with its environment that challenges an end-of-history view in company law theory and instead emphasizes its emergence. Reflexive law is more cognizant of this co-evolution than orthodox NIE, with its attempts "to tailor regulatory mechanisms to particular contexts."[51] A model is not intrinsically superior and can only be more fit for purpose than an alternative for a particular context. Under circumstances of uncertainty and a constantly co-evolving law-in-society, a reflexive method emphasizes the importance of corporate diversity as a learning tool and as a means to adapt to changing contexts.[52] Moreover, reflexive law does not perceive the context with which it co-evolves as passively given, but recognizes that law also constitutes it.[53]

Law is an adaptive institution that can "receive, store and transmit information" about its environment.[54] It encodes knowledge about "coordination strategies which have proved more or less successful in particular social settings, including the economic

[45]Blackham (2016, p. 18).

[46]Luhmann (1988) and Deakin (1997, p. 90).

[47]Deakin (1997, p. 89) and Deakin (2002, p. 29-30). Teubner clarifies that self-referential does not necessarily mean self-regulating: the latter requires that a system develop "a coherent form of argumentation about its identity" (Teubner 1993, p. 18 and 20).

[48]Deakin (1997, p. 90) and Deakin (2002, p. 37).

[49]For a definition of the emergent property of law, see Deakin (2002, p. 33-34). On reflexive corporate governance, see Johnston (2009, p. 3). See also Aoki (2010) on corporations in evolving (emergent) diversity due to the linkages of economic and social exchanges (see Chapter 3).

[50]Deakin (2002, p. 39).

[51]Deakin et al. (2011, p. 4).

[52]Deakin et al. (2011, p. 5), Deakin (2009, p. 224) and McCrudden (2007, p. 260). On the difference between co-evolution and adaptation, see Luhmann (1988, p. 146) and Chapter 4, note 81.

[53]De Schutter and Deakin (2005a, p. 3).

[54]Deakin (2011, p. 660).

domains of the market and the business enterprise."[55] The orthodox law & economics model cannot sufficiently account for this cognitive function of law. It views legal rules as exogenous constraints on individual behaviour (affecting pay-off calculations) but does not sufficiently elucidate how law can be constitutive and shape individual motivations. It cannot account for the normative and signalling function of law (its 'choreographing' role, to use Gintis' terminology - see Chapter 3). As a signalling device, law can help shape the emergence, diffusion and continuation of common beliefs. Shared beliefs, in turn, provide cues[56] around which behaviour can coalesce (see Gintis' concept of the choreographer and correlated equilibria, Chapter 3). Common beliefs (a condition much less stringent than common knowledge of rationality[57]) can enable coordination,[58] reducing transaction costs and facilitating efficient outcomes. The institution of law functions as a representation of knowledge and widely shared beliefs and is both shaped by, and shapes, individual behaviour.[59]

Systems theory and evolutionary economics

Similarity between systems theory and evolutionary economics can be identified from the above. Both systems theory and the evolutionary economic theories[60] such as those of Gintis and Aoki (see Chapter 3) are better capable of explaining change and diversity than the orthodox NIE model. Systems theory "provides an evolutionary conception of law which can help to explain the dynamics of legal and economic change."[61] The evolutionary models of Gintis and Aoki, likewise, accommodate the concepts of learning and feedback loops, adaptation, variety[62] and change in a multi-directional co-evolution. The orthodox NIE-model, on the other hand, largely limits itself to unidirectional explanations (hence with more limited explanatory power). For example, the orthodox model views legal rules as exogenously affecting pay-off calculations, whereas evolutionary economics acknowledges that rules are also constitutive

[55] Deakin (2011, p. 660).
[56] Deakin (2011, p. 667).
[57] Gintis (2014). See also Deakin (2011, p. 667-668).
[58] Deakin (2011, p. 660).
[59] Deakin (2011, p. 660, 670).
[60] NIE is 'evolutionary' in a restricted meaning of the word. The law & economics model of the company, which builds on NIE, views the evolution of corporate legal systems as functional-teleological. The evolutionary economics proposed by Gintis and Aoki employ a richer and more flexible understanding of 'evolution' than the law & economics model, avoiding an end-of-history (Hansmann and Kraakman 2001) view in which a given model is deemed intrinsically superior regardless of context.
[61] Deakin (2011, p. 661).
[62] Deakin (2011, p. 667).

of individual behaviour and vice versa. It can accommodate individual adaptation to social norms, but cannot explain how such norms are established and evolve. It explains institutions by reference to individual needs and actions, without sufficiently acknowledging how institutions, in turn, are constitutive of the individual and her beliefs and preferences. Aoki's evolutionary theory of corporate diversity, for example, can accommodate a functional explanation of company law (legal norms as a response to business needs) but does not restrict the analysis to such functional explanation. Business needs are one potential source of external pressures on the legal system, but the latter may or may not accommodate them and if it does so, it needs to translate those pressures into its own internal communicative and interpretative system, alongside (and in interaction with) any other pressures exerted upon it. Company law is an institution that receives, codes and transmits knowledge relevant for the long-term and complex[63] cooperation required for efficient corporate behaviour and that way also shapes shared beliefs.

Both systems theory[64] and evolutionary economic models such as those proposed by Gintis and Aoki reject methodological individualism[65] and emphasize the interplay (co-evolution) between a system and its environment (emergence). In systems theory, the individuals (components of the system) cannot be viewed in isolation from the system(s) that shape them. Individuals cannot be seen as ontologically prior to the system(s), which includes companies and markets. Studying the individual as the ultimate unit of analysis (as the orthodox law & economics model does) cannot sufficiently account for this interplay between the system and its component parts.

Acknowledging the 'cognitive openness' of the legal system implies acknowledging the limits of legal reform: a change in law can lead to unanticipated and undesirable effects, exactly because law is only one of the social systems that interacts with other social systems (such as the economy or the political system).[66] An understanding of how law interacts with other systems is crucial to increase the chances that a legal reform will have its desired effect. Law cannot be a self-sustaining (autopoietic) system without recognizing these bounds and its co-evolution with its environment (other systems).[67]

[63] Deakin (2011, p. 666-667).
[64] Deakin (2011, p. 673).
[65] On the variants of methodological individualism, see Hodgson (2007) and supra, note 7 of this chapter.
[66] Teubner (1993, p. 26), Blackham (2016, p. 18).
[67] Deakin (1997, p. 90).

Cognitive openness and the limits of legal reform

Reflexive theory acknowledges the limits of the command-and-control theory of regulation,[68] which cannot account for the interaction of law with, for example, the political system. It equally steers clear of the deregulatory perspective:[69] reflexive law theorists have emphasized the need for certain institutional preconditions to be satisfied in order for self-regulation to be effective, acknowledging the inherent need for regulatory guidance or 'steer'.[70]

Reflexive company law eschews the idea that a particular corporate model is inherently superior.[71] Due to the cyclical interaction between systems, the link between law and society is seen as a "multivariate, non-linear causal relationship",[72] which quantitative models cannot (fully) identify and detailed rules may not be able to address in evolving contexts.

Reflexive governance allows participants to "arriv[e] at a new perception of the problem they are seeking to resolve".[73] A reflexive company law model, then, is one that encourages participants to refine their understanding of the problem, as well as their position and the context in which they operate.[74] It means an openness within company law to reflect on the formulation of the problem it attempts to address: is it "how to increase shareholder value" or should this question be reassessed based on changing contexts and experiences? The thesis assesses the need to reflect on our understanding of the core company law questions in light of (an) agreed overall objective(s) (e.g., efficient corporate value creation or social wealth increase), based on the present context and informed by the variety of qualitative and quantitative data available.

A reflexive method comes with its own risks and weaknesses and this dissertation does not suggest that this method should necessarily (and exclusively) be adopted in company law. We can nevertheless draw on the method to enrich our understanding of a company-law-in-society. Elements of reflexive theory inform the general reasoning and conclusions of the thesis, in particular the dissertation's overall attempt to identify the institutional conditions under which company law can improve its self-regulating

[68] Blackham (2016, p. 18 and 74).
[69] Deakin et al. (2011, p. 4).
[70] De Schutter and Deakin (2005a, p. 3), Barnard, Deakin, and Hobbs (2005, p. 209) and McCrudden (2007, p. 259).
[71] Ayres and Braithwaite (1992, p. 5).
[72] Blackham (2016, p. 24). See also Deakin (2002, p. 39).
[73] De Schutter and Deakin (2005a, p. 3).
[74] De Schutter and Deakin (2005a, p. 4).

(autopoietic) capacity. It will examine the *methodology* required to assess whether company law leaves a sufficient degree of flexibility, within a clear and enforceable regulatory 'steering' framework, for corporate actors to experiment and adapt to changing environments.

Qualitative methods, complementing a doctrinal-interpretivist method, are "more amenable to a complex, multi-layered world view"[75] and are "particularly suited to areas that are fluid and changing."[76] Qualitative empirical research helps overcome the risk of an overly theory-driven, deductive model.[77] The qualitative empirical part of the thesis provides a complementary, data-driven feedback mechanism to refine the legal theory of the company (triangulation).

A data-driven approach is furthermore useful (even necessary) to identify the relevant research questions: the interplay between theory and data can help discern issues of interest that the theory may not yet capture ('blind spots'). A theory-driven approach limits the scope of the research questions *a priori*. Empirical data, then, can help refine legal theory by testing whether the theoretical framework may be oblivious to relevant research questions for the subject matter under investigation. Empirical data may furthermore test whether the assumptions of a theory, in Coase's words, "correspond to the real world."[78]

2.5.1 Justification for qualitative fieldwork

The inter-disciplinary doctrinal-interpretivist approach of Chapters 3-5 is complemented by qualitative research in the form of interviews in Chapter 6. The advantages of a qualitative approach are summarized by Poteete, Janssen and Ostrom.[79]

Qualitative research of this type allows for in-depth discussions that can bring

[75]Blackham (2016, p. 26).

[76]Blackham (2016, p. 27).

[77]Blackham (2016, p. 33).

[78]Infra, Chapter 3, note 203 on the discussion of realistic assumptions and predictive power of a model.

[79]Poteete et al. (2010, p. 11-12, 33-35). See also Burton (2013, p. 55). There are several ways in which empirical legal research can enrich a theoretical analysis of law. See, e.g., Cane and Kritzer (2010) and Westerman (2011, p. 108-109). This section focuses on qualitative empirical research, not so much quantitative legal research (aspects of which are discussed in Chapters 3-5). The convenience of (Chen et al. 2016, p. 12), or familiarity with (Gigerenzer 2008, p. 149), particular quantitative methods may explain why these methods are used in a particular study, even though they may not be the most suitable for the type of study conducted. Moreover, there may be systematic errors in interpreting quantitative results (Gigerenzer 2008, p. 162). In these cases, in-depth qualitative research can help identify shortcomings or limitations of quantitative studies. On quantitative legal studies, see Epstein and Martin (2010).

to light issues not identified in theoretical models or quantitative studies based on a pre-established set of variables, including informal phenomena.[80] Such in-depth discussions act as a "magnifying glass"[81], which may furthermore shed light on potential causal relationships or the sequence of events that are difficult to unearth by quantitative studies, for example causal relationships that are "cumulative and non-linear in their effects".[82] They may also put particular events or reforms in a broader context, highlighting historical evolution and potential social-political factors that may escape a snapshot-analysis of pre-identified variables in quantitative studies or theoretical models. Such dis-entangling is especially important for complex phenomena[83] - of which the company and its relation to social-political conditions are one example. Hence, it contributes to theory-testing.[84]

Moreover, in-depth interviews help identify interviewees' perceptions[85] about particular events or developments - perceptions, which, in turn, could help explain why quantitative findings may deviate from predicted outcomes. Interviews can help unearth narratives that shape such perceptions and therefore behaviour.

This type of qualitative approach has its limits.[86] Results are not reproducible.[87] The sample of interviewees in this dissertation is small and therefore not representative of the wider population of corporate actors, policy makers and opinion makers.[88] Representativeness is not the aim of the fieldwork.[89] Rather, as mentioned in Chap-

[80]Buchanan et al. (2012, p. 13). Empirical research is not by definition value-neutral, as it is typically itself informed by a particular theoretical framework. Westerman (2011, p. 109) and Deakin (2010, p. 310) (on labour law empirical research). This is not always duly acknowledged in quantitative legal research, which is often portrayed as neutral and incorrectly contrasted with 'subjective' or 'speculative' qualitative research. See, e.g., Chui (2007, p. 48-49). Interviews may allow for a degree of openness that can challenge assumptions that theoretical or quantitative analysis alone may not.

[81]Poteete et al. (2010, p. 35).

[82]Buchanan et al. (2012, p. 13).

[83]Poteete et al. (2010, p. 35) and Buchanan et al. (2012, p. 10).

[84]Poteete et al. (2010, p. 35).

[85]Chen et al. (2016, p. 12) and Webley (2010, p. 937).

[86]Leeuw and Schmeets (2016, p. 140): "interviewees may distort information through recall error, selective perceptions, desire to please," etc.

[87]Chen et al. (2016, p. 12) and Poteete et al. (2010, p. 36).

[88]Webley (2010, p. 934). It is, however, the result of 'purposeful sampling', see Webley (2010, p. 934) to ensure representatives of key categories of interviewees.

[89]Lack of representativeness does not deprive such type of empirical research of all value. "Such concerns [of representativeness] may be unfounded; often such research is not aimed at making claims of representativeness - rather the researchers may be aiming to expand knowledge about the things that can happen and how they are interpreted in a particular social world" (Burton 2013, p. 58). As Burton acknowledges, at a practical level, a small-scale empirical study may moreover be a good way for a legal graduate to familiarize herself with empirical methods (Burton 2013, p. 59). See also Webley (2010, p. 934).

ter 1, the purpose is, first, to identify any topics deemed relevant by those working more closely with companies that the thesis may not have touched upon and, second, to better understand perceptions of causation and sequence. Trading off breadth and depth,[90] interview-style qualitative research can add depth lacking in large-N quantitative analyses. Such in-depth research can help identify models that over-fit a given set of quantitative data.[91]

2.6 Interview data

2.6.1 Data

The qualitative-empirical data set for Chapter 6 is a collection of 16 semi-structured,[92] in-depth interviews with corporate actors (broadly defined as those employed by companies, start-up founders or executive coaches), regulators and a management journalist. Interviews lasted between 30 minutes and 1.5 hours, with an average of approximately 45 minutes. Questions were tailored to the particular expertise of each interviewee, allowing for some variation though within the remits of the overarching research themes of the dissertation. Interviewees typically received a questionnaire of around 10 questions prior to the interview, though some preferred not to receive a prior questionnaire to ensure spontaneity in responses. Some interviewees prepared speaking points in advance of the interview, while most had either not prepared responses or prepared only general thoughts. One participant preferred to send responses by email instead of having an actual interview. Most interviews (11 of 16) were in-person and 4 were telephone interviews. Requests for interviews had been sent to sixteen more people (6 declined[93]; 3 initially agreed but did not respond to follow-up emails; 3 hesitated arguing they were not best suited to be interviewed; and 5 did not respond[94]).

[90] Chen et al. (2016, p. 12).

[91] Gigerenzer (2008, p. 84). Gigerenzer distinguishes between two types of statistical analysis: "data fitting" (used to "explain" existing data) and "ex ante prediction" (predictions of new observations). The former is vulnerable to over-fitting: based on the existing data, a model is established that over-fits the given data if too many variables are relied upon and consequently may fail to predict new observations.

[92] On the strengths and weaknesses of semi-structured interviews, see Lawless et al. (2010, p. 80-81) and Blackham (2016, p. 36).

[93] These include Primark's Director of Ethical Trade; three Nestle employees; Natural Balance Foods and IBM's COO.

[94] These include a representative of Aviva Investors and Blommer Chocolate Company.

2.6.2 Interviewees

Interviewees included senior executives, mid-level managers, founder-CEOs, policy makers, a management journalist and an executive coach. Some interviewees work at listed companies (a number of them still family-owned), others at privately held companies. Some CEOs were second- to fourth-generation managers; some interviewees are (or were) part-time academics; others had written about their management models. Some worked for financial institutions, others for commodities or consumer good companies, with a mix of B2C and B2B firms. Interview materials were complemented, where relevant, with publications by interviewees on their business models or corporate views[95] as well as limited financial information to support statements made during the interviews (e.g., turnover data during a CEO's tenure).

2.6.3 Selection of interviewees

The aim was to look at a diverse set of companies. This overall balance has been obtained in the eventual sample, though the ultimate selection of interviewees depended on the willingness to participate of those contacted. As the literature on qualitative research acknowledges, obtaining access to subjects can be a major obstacle to meaningful research. Consequently, "[o]pportunistic approaches and the use of personal contacts can be valuable."[96]

A 'purposeful sample'[97] of interviewees was selected based on a mix of factors, including the company's size, listed v. privately-held status, family-controlled or not, insider and outsider views and different industries. A mix of interviewees at large, mid-size and small companies should overcome the criticism by authors such as Huse that research has been disproportionately focused on US Fortune-500 companies, on which a large amount of data are available, while most companies are privately held (and non-US) SMEs.[98] Furthermore, a number of interviewees were selected that were likely to have a particularly interesting view on corporate value-creation. This includes companies that received awards such as 'Factory of the Future' or 'A Great Place to Work' (Torfs, EASI and Van Hoecke); companies with a remarkable multi-year performance (Olam, Torfs, EASI and Van Hoecke); and companies with a business

[95] See, e.g., Torfs (2014) and Ugeux (2011) or publicly available third-party interviews.
[96] Burton (2013, p. 59).
[97] Webley (2010, p. 934).
[98] Huse (2007, p. 4). Simon therefore analyses a set of highly successful, smaller companies ('hidden champions'), Simon (2009).

model that sets them apart from their peers (Olam, Has Bean). One interviewee works for an extractive company, where a 'license to operate' is seen as crucial; while another one works for an international apparel company - an industry with well-known supply chain issues. An executive coach (David Peace) adds a useful understanding of personal motivators and concerns of executives, while a Financial Times management journalist (Andrew Hill) was able to shed light on the relationship between management and corporate performance. Three interviewees (Brad Katsuyama, Bruno Colmant and Georges Ugeux) had significant exposure to the financial markets. Three interviewees (Roel Nieuwenkamp, Bruno Colmant and an ILO employee) have a background in economics. Three interviewees work on corporate policy matters for international organizations (including Roel Nieuwenkamp and Vic van Vuuren).

Although the sample size is small, distinct views are represented, with interviewees expressing opinions both supporting and criticizing the NIE-legal model of the company. The overall set of responses is skewed towards a critical standpoint on the NIE-legal model of the company. This skew may result from the selection criteria (in particular the selection based on awards and distinguishing business models). However, as mentioned above the sample is not intended to be representative. Rather, its purpose is to bring to light useful concerns and relations that may be under-represented in orthodox company law discussions. Since orthodox views are by definition well represented in the literature, the slight skew in this sample should not detract from its value in identifying under-represented topics.

2.6.4 Logistics

In-person interviews took place in the UK, the US and Continental Europe and were conducted in English, Dutch and French. Interviews with UK and US corporate actors were selected as this dissertation zooms in on the standard NIE legal model of the company, which is most wholeheartedly embraced in US and UK jurisdictions.[99] The interviews in Continental Europe allowed for an outside view on the Anglo-American company model from company actors embedded in a different company law model, which resulted in useful comparative remarks about alternative models. At the same time, interviewees shared their views on issues transcending jurisdictional boundaries (e.g., the impact of financial and non-financial incentives on cooperation or innovation).

[99] Johnston (2009, p. 21).

2.6.5 Attribution

Certain interviewees spoke on the condition of anonymity. Others agreed to have quotations reproduced and attributed to them. To respect requests of anonymity, information about certain companies and interviewees have been kept purposefully vague. Quotes are only reproduced in English, not in the original language (if different), to avoid any indications about the identity of the interviewee in question. Translations into English are my own. Furthermore, I used a single-gender 'he' for all interviewees (rather than distinguishing between 'he' and 'she' when referring to male and female interviewees, respectively) to avoid any hints as to the interviewee's identity.

Interviewees who agreed to be named in this dissertation are:

- Financial Times management journalist Andrew Hill. Hill writes a weekly management column for the FT, a collection of which are bundled in *Leadership in the Headlines*.[100] Quotes from the book were discussed during the interview.

- Bradley Katsuyama, CEO of the newly registered stock exchange IEX. The origins of IEX were described in Michael Lewis' best-seller *Flash Boys*.[101]

- Wouter Torfs, CEO and grandson of the founder of Torfs. The privately owned, family-controlled company with more than 600 employees sells shoes and accessories in over 70 physical shops across Flanders (Belgium) and through an online shop. In 2016 it had a 133 million euro turnover. It was the winner of the 2016 and 2017 'Great Place to Work' Award Belgium in the category of 500+ employees and has featured as a top nominee for the award in several other years.

- Peter Van Hoecke, CEO and son of the founder of Van Hoecke. The privately-owned, family-controlled company manufactures and supplies home & office furniture and fittings to companies and individuals. Though mainly active in the Benelux, its 200+ employees prepare shippings to customers in France, the UK, Germany, Switzerland and Israel, resulting in a 2016 turnover of over 67 million euro. The company won the 2016 Factory of the Future Award of Belgian industries.

- Salvatore Curaba, CEO and founder of EASI, a software and technology company with appr. 160 employees, active mainly in Belgium and France. EASI

[100] Hill (2016).
[101] Lewis (2015).

received the ‘Great Place to Work’ award in Belgium in 2016 in the category of less than 500 employees.

- David Peace, an independent executive coach, with prior experience in different types of management functions. He advises on performance improvements, career switches, project control and professional training of executives and staff.

- Chris Brown, Vice President Corporate Responsibility & Sustainability at Olam International. Founded in 1989 by its current CEO, Olam is an agri-business active in 70 countries. Olam developed close relationships with small-holder farmers. The company and its rapid expansion has been the subject of a number of Harvard Business Review case studies. Shares are listed on the Singapore Stock Exchange, though the majority of shares are held by Temasek Holdings (50+%) and Mitsubishi Corporation (20+%). A Financial Times article called the share purchase by Temasek potentially the first deal putting a value on a company’s sustainability practices.[102]

- Stephen Leighton, founder-CEO of UK-based Has Bean, selling high-end coffee to wholesale and retail customers, which is sourced mainly from Latin America and, to a lesser extent, Africa. Stephen visits suppliers frequently to ensure close personal contact and top quality.

- George Ugeux, whose career spans a variety of positions in the financial sector, including Group Executive Vice President of International & Research at the New York Stock Exchange and, currently, CEO, chairman and founder of Galileo Global Advisors, a New York-based investment bank and strategic advisory company. He is also a Lecturer in Law at Columbia Law School.

- A corporate responsibility manager of a major international apparel brand, of which part of the shares are listed.

- Vic van Vuuren, Director of the Enterprise Department at the ILO, Geneva.

- Roel Nieuwenkamp, Chair of the OECD Working Party on Responsible Business Conduct.

- Bruno Colmant, who held positions in both the private and public sector and is a lecturer at different educational institutions. A former president of the Brussels

[102]Terazono (2015).

Stock Exchange and former member of the Management Committee of NYSE Euronext and Chairman and CEO of Euronext Brussels, he currently is head of Macro Research at a private bank. He holds a degree in Business Engineering, a MBA in Quantitative methods and a PhD in Applied Economics.

2.7 Organization of interview material

Chapter 6 organises the interview data into seven broad themes. The limited sample of interviews did not justify using qualitative data-analysing software such as Nvivo or Atlas to identify common themes. Instead, the chapter identifies 7 main themes that flow from the dissertation's research questions (and, consequently, from the dissertation's previous chapters). These common themes were identified after completion of the interviews. In other words, the interviews did not dictate the themes discussed in the dissertation.

The dissertation's research question and sub-questions examine the assumptions of the NIE- based legal theory of the company, the normative usefulness of the model and its capacity to generate empirically verifiable hypotheses.

The themes identified in the interviews are closely related to those questions: corporate objective; shareholder value and company value; efficiency, competition-cooperation and sustainability; embeddedness; measurement; the role of corporate directors and management; and a brief digression into financial markets.

Where useful, interviewees' responses are linked to remarks made in earlier chapters.[103]

2.8 Conclusion

The methodological starting point for the doctrinal analysis in this dissertation is NIE, as manifested in the orthodox legal theory of the company and reflected in particular provisions of company law (see Chapter 4 for a number of examples in UK company law). The doctrinal analysis is complemented by qualitative empirical research in the

[103] The interview data could have been presented first, followed by a separate discussion section. It however appeared conducive to the flow of the chapter to include discussion of the comments immediately following a particular response or set of responses on the same topic. The topics discussed were quite varied and interviewee responses touched upon a even larger number of issues. This diversity makes Chapter 6 less conducive to the standard structure (data presentation followed by discussion). The chosen approach should enhance brevity of the chapter and avoid duplication.

form of in-depth interviews. This has several advantages over both a single method and a doctrinal-cum-quantitative approach. The sample of interviewees is limited in size, which makes its results non-representative. The depth of the interviews can however shed light on issues not (sufficiently) identified in doctrinal or quantitative research.

Chapter 3

Assumptions and methodology of the New Institutional Economics theory of the company

3.1 Summary of the argument

The aim of this chapter is to assess the *methodology* of NIE, on which the orthodox legal theory of the company is based. This chapter examines the strengths and weaknesses of NIE's methodology for company law theory, whereas the next chapter assesses what the implications are for company law.

Little ink is spent on the orthodox arguments in defence of the model, as these have been abundantly offered in standard corporate law literature. This chapter instead opts to shed light on the heterodox arguments in favour of a better model for the legal theory of the company, based on empirical insights from other disciplines, in particular economics. It appraises the static, single-equilibrium assumption in orthodox NIE and compares it with a data-driven, co-evolutionary, multiple-equilibria model for the legal theory of the company.

NIE's empirical approach to company law theory facilitated much progress in the field.[1] In common with other economic approaches, it insists on the need for empirical testing, contrary to traditional (doctrinal) legal scholarship. Notwithstanding this progress, like any model NIE has its inherent methodological limits, which may not justify the at times sweeping claims made in its name regarding the superiority of

[1] Deakin (2012, p. 339).

the shareholder-centred company model. Its empirical potential has not been fully carried through: to do so would require empirical testing of the assumptions of the model, not simply of hypotheses formulated *within* the model.[2] The assumptions of NIE have been challenged sufficiently by more recent insights from economics and other disciplines so as to warrant rethinking the accuracy (and desirability) of the NIE-approach to company law. Such updated theory need not ignore efficiency goals. On the contrary, it is argued that, even if one exclusively defines company law goals in terms of efficiency, such re-assessment is still desirable. This opens the opportunity for a *more* data-driven model, which will remain informed by economics, though not limited to it (and in particular not limited to NIE). This model is better for a number of reasons, including its greater explanatory force, its enhanced capacity to generate hypotheses for empirical testing, its realism, its capacity to embrace diversity and its normative usefulness by bridging the fairness-efficiency divide.

3.2 Introduction

3.2.1 NIE: Terminology and core characteristics

A brief description of NIE's main characteristics and a working definition are warranted at the beginning of this chapter.

NIE reflects the following characteristics: (i) individuals are (boundedly) rational actors, (ii) with a given set of preferences (which may change over time or apply differently depending on the particular circumstances, though NIE requires a certain degree of preference consistency), (iii) acting in their self-interest in light of their given set of preferences, (iv) limited in this endeavour by a number of constraints such as scarcity of resources and the preferences of others and (v) assuming this pursuit of individual preference functions will maximize overall market efficiency, (vi) which is further presumed to promote overall social prosperity (wealth maximization).

Furthermore, "NIE asserts that (1) institutions do matter, (2) the determinants of institutions can be explained and understood using the tools of economic theory, and (3) the structure of institutions affects economic performance in systematic and predictable ways.[3]

It is noteworthy that NIE does not explain *how* the preferences are shaped, nor

[2] Huse (2007, p. 29) (criticizing assumptions of opportunistic and one-dimensional individuals in agency theory).

[3] Mercuro and Medema (2006, p. 241).

task itself with prescribing certain preferences as more desirable than others. NIE also assumes functioning markets, which, in turn, assumes a large social infrastructure. Chang highlights the many governmental interventions presupposed by this market-based approach, such as property rights, contract law and a functioning judiciary.[4]

NIE has weighted heavily on company law theory in the past few decades. NIE-based company law theory conceptualizes the company as a transaction minimizing device. Boundedly rational actors can establish companies (shareholders), manage companies (directors), work for the company (employees) or interact with the company in other ways (e.g., suppliers) and will do so to the extent it serves their self-interest, the theory holds. Laws and institutions may impact their behaviour, but are not assumed to affect their motivations or preferences as such (they are assumed as a given). Since individuals are best placed to pursue their self-interest, a main purpose of company law is to increase efficiency by lowering transaction costs, including by providing off-the-shelf default rules that corporate parties would otherwise be likely to agree on. Corporate contracts will likely be incomplete and company law provides a set of default rules that can fill the gaps, lowering the costs for the parties involved. In essence, then, company law should lay down the rules that shareholders would be most likely to agree on among themselves, in their contracts with directors (an agency relationship) and in their dealings with third parties (e.g., limited liability).

A very brief history of neo-classical and NIE models of company law

Coase distinguished between the market, in which price is the guiding principle of exchange transactions, and the firm, in which market transactions are replaced by the entrepreneur-coordinator to guide production.[5] Firms arise where the transaction costs of market-based exchanges exceed those of intra-firm exchanges.[6] Firms can greatly reduce contracting costs, Coase argued.[7] Contracting costs on the market exist and the pricing mechanism may not always work smoothly. This may lead to externalities (social costs, in Coase's terminology). In such case, Coase argues that

[4] Chang (2002, p. 544). Polanyi made a similar argument regarding central banks (Polanyi 1944). See also Binmore (1998, p. 471-472) and Binmore (2005, p. 188). Even proponents of 'free market' theories therefore cannot genuinely be arguing for markets 'free from' any state intervention. The frequent use of the concept 'free market' in popular publications, including a more critical best-seller such as *Phishing for Phools* (Akerlof and Shiller 2015, p. xvi), entrenches the misconception.

[5] Coase (1937, p. 388).

[6] Coase (1937, p. 390).

[7] Coase (1937, p. 390).

government regulation may be more efficient.[8]

Whereas Coase saw the absence of transaction costs in the market as an unrealistic assumption,[9], subsequent transaction cost-based accounts of company law have focused on transaction costs for those involved in the company and have often deemed negative externalities on third parties as outside the bounds of company law.

The NIE-based view of the company as a transaction cost minimizing device resulted in a 'functional' theory of company law as employed by Hansmann & Kraakman, for example: an attempt to identify the economic principles on which legal rules are (or should be) based.[10] This type of functional company law theory links the descriptive to the normative: it not only identifies the economic principles operating under the surface of laws, but argues that economic theory *should* so inform laws.

Jensen and Meckling have pushed a transaction cost-account of the company to the extreme by describing the firm as a nexus-of-contracts and the company as a mere legal fiction.[11] The crux of the argument is the view of shareholders as residual claimants: other constituencies (employees, suppliers, creditors) can contractually stipulate their rights (including income), whereas shareholders only have a right to whatever is left after the contractual commitments to other constituencies have been met. Shareholders' position as residual claimants make them the best-placed parties to monitor management and ensure it maximizes firm value. This gave rise to the principal-agent view of the shareholder-director relationship. Shareholder monitoring of directors, as their agents, was thought to be in the best interest of all corporate constituencies, as it was the best guarantee for firm value maximization. This would also benefit society at large, the argument went.

Easterbrook & Fischel largely share Jensen & Meckling's far-reaching view of the company as a mere fiction and the firm as a nexus of contracts. Their book *The Economic Structure of Corporate Law* confirms the view of shareholders as residual claimants, with the best incentives to monitor management. The agency theory is firmly entrenched in their work, as is the belief that what is best for shareholders is best for the company and, ultimately, for society. Their shareholder-centred understanding of what a company is and should be, made them fervently support limited liability for shareholders even in the case of corporate torts (see the section on limited liability

[8] Coase (1960, p. 18).
[9] Coase (1960, p. 15).
[10] Deakin (2012, p. 340).
[11] Jensen and Meckling (1976).

below).[12]

Hansmann & Kraakman further developed the functional nexus-of-contracts view, although they have paid greater attention to the (in)consistency of efficiency claims under this model by also analysing the efficiency-impact of limited liability for corporate torts.[13]

Differences between the key scholars

Notwithstanding commonalities between theories loosely grouped under the heading of economic models of company law, there are also important differences among authors. The Coase/Williamson line of reasoning is often opposed to the more controversial Jensen & Meckling/Easterbrook & Fischel camp. Williamson built upon the idea of incomplete contracting in the corporate setting, arguing that the "corporate environment is complex and open-ended."[14] Williamson nevertheless held views differing from those of Coase. For example, Williamson attaches greater importance to private ordering: "Williamson argued that 'transaction cost economics' should address 'private ordering' rather than institutions such as courts."[15] Coase, on the other hand, emphasizes the limits of private ordering in enforcing contracts and places greater faith in the potential of state institutions to complement market transactions. Both authors also held different views on human nature. Coase insisted that we should "start with man as he is,"[16] whereas Williamson assumed an opportunistic human nature.[17] A commonality between Coase and Williamson is that both have little regard to company *law* and the importance of the company as a *legal* (not merely economic) phenomenon. This they share with authors from the Jensen & Meckling and Easterbrook & Fischel strand.

Differences and similarities between NIE and Chicago-style economics of law

NIE is to be distinguished from the Chicago-style, or 'neo-classical', law & economics model of the company. One of the most well-known illustrations of the Chicago-style

[12] Easterbrook and Fischel (1985).
[13] Hansmann and Kraakman (1991).
[14] Deakin (2012, p. 36), with reference to Williamson, 1985, ch. 12.
[15] Hodgson (2014, p. 600).
[16] Coase, as cited in Hodgson (2014, p. 600).
[17] Williamson (1979, p. 234).

economic model of the company is Milton Friedman's assertion that "the business of business is business".[18]

Unlike NIE's assumption of (bounded) rationality, the neo-classical, Chicago-style model at its origin assumed a substantive (rather than bounded) rationality.[19] It moreover tended to minimise the importance of negative externalities. Both NIE and neoclassical models acknowledge the existence of externalities, although neoclassical models tend to believe that private ordering, rather than regulation, should be relied upon to address externalities, whereas NIE models place greater emphasis on the law's potential to do so.

Another important difference with NIE is that the neo-classical Chicago model, while acknowledging the role of institutions such as company law, saw these institutions as subsidiary to market forces in shaping the firm. The view of company law as a set of default provisions to fill up incomplete contracts results from this neo-classical model. In addition to Friedman, Easterbrook & Fischel and Jensen & Meckling largely subscribe to this neo-classical model.

Notwithstanding these differences, NIE and neo-classical (Chicago-style) economic models of company law are not entirely different. Both view individual preferences as exogenous and economic welfare as aggregate preference maximisation. Nevertheless, the substantive rationality of neo-classical models is replaced by a more realistic assumption of bounded rationality in NIE. Under bounded rationality models, institutions are given a greater role in shaping human behaviour, offering a cognitive tool for human cooperation. Company law is acknowledged to consist not only of default provisions, but also mandatory rules, both of which can shape behaviour. Moreover, some NIE models view Anglo-American shareholder primacy as only one, path-dependent (rather than *the* optimal economic) model.

In sum, a NIE-based company law theory generally exhibits the following features:

- an economic analysis of company law based predominantly on the concepts of transaction costs, property and contract (although the weight accorded to each of these variables may vary among different NIE strands);

- whereby the company is viewed as a nexus of contracts, which are assumed to be in the best interest of the contracting parties, acting as boundedly rational individuals with a given set of (exogenous) preferences;

[18] Friedman (1970).
[19] Simon (1986, p. S210).

- whereby the role of company law is defined as limiting transaction costs by providing default options for contracting partners, in particular shareholders as residual claimants and principals of directors, as well as mandatory rules;

- which acknowledges that institutions, including law, shape behaviour (as opposed to preferences); and

- which (with some exceptions) assumes that shareholder wealth maximization is the best proxy for overall wealth maximization.

Chapter 2 provided a working definition of the NIE-based company law model, namely: the economic approach to company law that considers the company to be a Coasean transaction cost-minimizing device, rooted in a (boundedly) rational actor assumption in combination with methodological individualism, which justifies the primacy of shareholder interests based on their status as residual claimants of the company and views company law as a set of mainly default rules to lower contracting costs.

The fact that company law *theory* has been heavily influenced by NIE does not by definition imply that company *law* has followed suit. Although company law literature may have put great emphasis on an economic analysis of company law, law-makers and courts may need to take into account a much wider variety of policy considerations. Company law in both the US and the UK cannot be explained *solely* on the basis of NIE theory. Some examples from UK company law in Chapter 4 show the varying degrees to which NIE-based company law theory has impacted actual company law. The shareholder-centred view of NIE is nevertheless very much present in US and UK company law. Although this shareholder-focus has been attributed not to the requirements of the *law* as such, company law was vague enough not to *impede* corporate practices increasingly catering to shareholder interests.[20]

3.2.2 NIE as a methodology

The chapter analyses NIE as a methodology for the theory of the company. The bounds of the methodology define the bounds of its conclusions (and the policy recommendations based thereon). A confusion between NIE as a descriptive and as a normative tool is oblivious to these methodological limitations.[21]

[20] Buchanan et al. (2012, p. 38).
[21] Donaldson (2012).

Company law is a set of legal incentives to facilitate cooperation between corporate input-providers to produce value efficiently.[22] Reasonable minds can disagree on how to achieve this, though quite a few unreasonable arguments have been put forward as well.

The *leitmotif* discussed in Chapter 1 also runs through this chapter: efficiency of what? Efficiency for whom? NIE as a methodology is assessed from this perspective: is it the most useful economic model to inform the legal theory of the company nowadays?

The next chapter will analyse whether the account of company law generated through NIE is sufficiently rich, in light of its (arguably reductive) understanding of efficiency. The meaning of efficiency in the corporate context may be refined through more recent insights from the economic discipline, including empirical findings from behavioural game theory studies. Other disciplines, such as neuroscience, psychology, sociology and biology, may equally pave the way for a nuanced understanding of human motivation and behaviour.[23] Many of these insights are yet to be integrated into the orthodox economic approaches to company law, in particular the dominant Anglo-American theory of company law that has greatly impacted corporate legal scholarship, corporate practices, regulation and judicial interpretation around the world.[24]

A more refined understanding of human motivation and interaction allows for more effective and efficient incentives in company law. Whilst any model is necessarily reductionist,[25] an overly reductionist model of human behaviour risks being ineffective and even counter-productive: unrealistic assumptions result in inadequate incentives

[22] One may object the core question is not (only) one of efficiency, but (also) one of fairness, equality or other ends. See Chapter 2 on methodology for a response to this legitimate methodological objection. Another potential objection is that this definition is incompatible with the claim made in the next chapter, namely that company law should also address the question of externality (not only intra-firm efficiency). One answer to this objection is to view corporate tort victims as involuntary input providers. As is explained below, efficiently producing corporate value relies on people and institutions beyond the company walls. Critics on the other side of the spectrum may object that the aim of corporate law should be defined more narrowly as solving agency problems between managers and shareholders. Such agency approach to company law, however, is itself the product of an economic model which cannot be taken at face value but must be subjected to theoretical-analytical and empirical corroboration. Even such agency model of company law would ultimately justify its existence invoking efficiency arguments - which, it may be assumed, would not contradict the definition proposed here of facilitating cooperation between corporate input providers to ensure value creation.

[23] For a recent multi-disciplinary approach to the corporation, see Baars and Spicer (2017).

[24] See above, Chapter 1, note 20.

[25] Schultz (2001, p. xi) ("Simplifying assumptions cannot be avoided in social science. But sometimes it pays to reexamine those assumptions to see whether they can be expanded to cover other contributing factors.").

that can alter behaviour in the opposite direction than what was originally envisaged.[26] This chapter assesses whether something similar has happened in Anglo-American company law: namely whether, by creating company law incentives based on the *homo economicus* assumption, we may create a self-fulfilling prophecy to make us behave like rational, self-interested "sociopaths".[27]

3.2.3 Research questions

The overall research question for this chapter is **whether orthodox new institutional economics offers the best available methodology to assess the efficacy of the legal theory of the company**. To answer this question, a number of related sub-questions are appraised:

- Does the use of the orthodox NIE methodology to assess the legal theory of the company generate sufficient hypotheses for empirical testing?
- Can the economic analysis of company law and its efficiency-increasing potential be enhanced through insights from other economic approaches?
- Is the orthodox NIE methodology useful from a normative perspective to build a company law model? Does it allow for co-evolution with changing environments? Can it endogenize the efficiency-affecting potential of social norms?

3.3 NIE as a methodology for the theory of the company: Efficiency and partial empiricism

Neoclassical economics, on which NIE builds,[28] has advanced our economic understanding of company law by insisting on empirical testing, as opposed to traditional (doctrinal) legal scholarship. Unfortunately, the insistence on empirical testing has only partially been implemented in NIE's theory of the company, leaving much of the potential of such approach unfulfilled.

[26] Bowles (2016, p. 2).

[27] In Gintis' often-quoted words, "[i]f rationality implied selfishness, the only rational individuals would be sociopaths" (Gintis 2014, p. 1). See also Akerlof and Shiller (2015, p. vii): "If business people behave in the purely selfish and self-serving way that economic theory assumes, our free-market system tends to spawn manipulation and deception".

[28] See Chapter 1.

The orthodox NIE company law theory has striven for empirical corroboration of hypotheses formulated *within* its framework,[29] though has not revealed the same vigour when it comes to testing the empirical validity of the framework itself. This is partial or half-hearted empiricism.

A theoretical model may give the right answers to the wrong questions (type-III error).[30] The central argument in NIE supporting the orthodox theory of the company is efficiency. The hypothesis assessed in this chapter is whether the model gives the right answers to the wrong questions - or, at least, whether its questions are incomplete.

The partial empiricism of the NIE-based theory of the company entrenches a restricted understanding of efficiency. The model typically measures efficiency of a corporate regulation by its impact on shareholder returns. This is not necessarily the best proxy for aggregate wealth creation, however. For example, it ignores the important question whether greater shareholder income may in actuality simply be an income shift.[31] As discussed in Chapter 4, shareholder returns do not necessarily reflect inefficiencies from negative corporate externalities. More generally, efficiency in the corporate setting requires it to be adapted to the social-political context in which it is embedded.[32] Defending a black-letter rule or a corporate practice based only on economic considerations risks losing sight of the complexity of the corporate landscape, in which the social-political and economic spheres may not be so neatly divided as the respective disciplines studying them.

3.4 The link between company law incentives, efficiency and fairness

Company law theory discussions often boil down to the question whether rule X or Y is more efficient. Is it efficient to give shareholders greater control rights? It is efficient to encourage investor activism? For the reasons explained in Chapter 2, this dissertation

[29] Van Hoecke argues that "the observation of empirical data is theory-guided. A problem is formulated within some theoretical framework" (Van Hoecke 2011, p. 13). Both the design of empirical studies and the interpretation of empirical data may be theory-driven. Nevertheless, empirical results may also contradict a theory or particular aspects of it.

[30] Gigerenzer (2008, p. 75). See also Akerlof and Shiller (2015, p. 150): "We have written this book to offset what we consider to be another wrong focus."

[31] For example, Macey and Miller found that abolishing double shareholder liability for bank shareholders in favour of deposit insurance provided incentives to transfer wealth from other actors to shareholders (see Chapter 4, note 252).

[32] "... corporate governance must be such as to generate corporate behavior that is largely consistent and coherent with societal institutional arrangements" (Aoki 2010, p. 12).

focuses on efficiency, not on other objectives such as fairness or equality per se. Sen reminded us that economics historically has been, and should re-become, a discipline of both 'ethics' and 'engineering'. Its dual nature unquestioned for centuries,[33] more recently economics has however excessively morphed into a discipline of engineering and insufficiently one of ethics, Sen argued. Much can be said in support of paying greater tribute to ethics, not only when assessing the *impacts* of certain economic measures, but also ethics built *into* economic models.

Sen's insights were enlightening, also for an economic approach to company law, though the differentiation between 'economics as ethics' and 'economics as engineering' could incorrectly be interpreted as pitching the 'engineering' aspect of economics against ethics. This chapter argues that such duality can be overcome in company law, at least to a certain degree, and that efficiency of corporate regulation and social norms[34] need not be antithetical.[35] The proposed model bridges the efficiency-fairness (fact-value) divide by *endogenizing* fairness.

The next chapter assesses whether, even from a purely NIE-approach, company law may need to pay greater attention to negative corporate externalities to fulfil its efficiency goals, including overall societal welfare. The point of this chapter is that certain negative externalities matter even for intra-firm efficiency. It underlines why certain non-purely economic metrics matter for an economic analysis of the efficiency of intra-firm relations.

3.5 Economic assumptions of the orthodox model of the company

Like any model, the NIE model makes certain assumptions, including about our individual decision-making. These assumptions will by definition be reductionist, as any model requires a degree of generalization. Overly reductionist (unrealistic) assumptions, however, come at a cost. We do require a dose of intellectual honesty in

[33]Sen draws a line from Aristotle to Adam Smith, in which economics were seen as a form of applied ethics (Sen 1987, p. 2-3).

[34]The definition of social norms applied in this thesis is based on that of Eisenberg (Eisenberg 1999); see also Ferran (2001, n. 2). It encompasses "all rules and regularities concerning human conduct, other than legal rules and organizational rules" (Eisenberg 1999, p. 1255), which excludes rules of a regulatory nature and formal rules from private organizations but includes moral norms.

[35]See Schultz (2001) for an assessment of the moral conditions for economic efficiency. See also Deakin (2002, p. 25) ("In a positive transaction cost world, conventions save on the transactions costs of continually searching for the 'right' solution").

accepting both the limits of the existing models and a genuine willingness to spend time and effort improving them.[36] This is particularly important if models are applied in practice,[37] profoundly impacting our societies. Convenience, elegance and simplicity of a model are insufficient justifications.[38] Lack of a better alternative cannot by itself justify surrendering to an empirically uncorroborated model.

The crisis of corporate legitimacy in the wake of a string of corporate scandals[39] and the 2008[40] financial crisis equally should not succumb to *défaitisme*, but must reinvigorate the search for more sustainable corporate models adapted to present-day needs and conditions. This, for a start, requires acknowledging that a complex world cannot be predicted and engineered based on simplistic models.[41] It requires in particular much greater attention to the link between the individual and the environment in which (s)he is embedded. Moreover, it requires a model that leaves leeway to adapt to changes in that environment.

3.6 Measurability and representativeness: Simplicity in a complex world

Identifying potential patterns in human behaviour facilitates empirical testing, though it cannot be moulded into static economic 'laws'. The conditions of scientific progress require us to attempt to falsify the hypotheses on which the proposed scientific model is built.

The search for empirical corroboration is encouraged by the philosophy of NIE

[36]Fennell and McAdams make an "inverted theories" proposal: when we know a model's assumptions are highly implausible, it need not lead to the outright rejection of the model, but, "by turning the spotlight on the implications of the untrue assumptions," it is an invitation to re-focus our attention "on the conditions that make [the] supporting conditions false" (Fennell and McAdams 2017, p. 1 and 3).

[37]"The high level of abstraction in formal models, however, raises questions about their empirical applicability" (Poteete et al. 2010, p. 12).

[38]Orts (1993) and Deakin (2012, p. 343).

[39]Examples include the BP oil spill in the Gulf of Mexico, Volkswagen's Dieselgate, Libor and Euribor rate rigging scandals, Royls Royce's recent corruption settlement, JP Morgan's settlement of Foreign Corruption Practices Act charges in the US for its hiring practices in China and Enron's accounting scandal.

[40]It would be more accurate to refer to this crisis as 'the financial crisis that started in 2007', as its impact was felt much beyond 2008. Since 2008 is the year in which early symptoms exploded into a full-scale crisis, including the collapse of Lehman Brothers and subsequent bailouts of insurers and banks in the US and Europe, this thesis will abbreviate 'the financial crisis that started in 2007' to 'the 2008 crisis' for the sake of brevity.

[41] Orts (1993).

itself, starting with the writings of Coase.[42] Notwithstanding Coase's warning in 1937 that theoretical assumptions need to correspond to the real world, the two have drifted apart so much in recent decades that Amartya Sen had to remind his readers that:"[e]conomics is supposed to deal with real people."[43] The preponderant theory of NIE has boiled down human behaviour to such degree of simplicity that it appears to defeat the purpose of adequately describing, explaining or predicting our economic behaviour. This simplicity, however, may explain the great appeal of the neoclassical and NIE models.[44] One need only think of the law & economics behind the failed war-on-drugs in the US to see how simplistic economic assumptions may set us up for painful failure in real-life scenarios that are often infinitesimally more complex than economic models may allow for.[45]

This chapter argues that (bounded) rationality as an assumption need not be thrown overboard, but that methodological individualism needs revision.[46] Once the

[42] See Chapter 4, note 300. In his seminal 1937 article *The Nature of the Firm*, Coase argued that assumptions in economic theory both need to (1) correspond with the real world and (2) be tractable (i.e., manageable or measurable). The first condition does not facilitate the second, or vice versa. The NIE approach to company law has focused on the latter (measurability) at the expense of the former (correspondence with the real world). To be more precise, doctrinal NIE literature on company law has not sufficiently called into question the accuracy of its assumptions (in particular, for the purpose of this chapter, of the atomistic self-interested individual) and has insufficiently highlighted that the validity of its conclusions and policy recommendations depend on the validity of its assumptions. The empirical studies under the NIE umbrella, in turn, typically measure only metrics within the proposed model, not the assumptions of the model. Moreover, even the intra-model metrics tested are typically overly simplistic. They generally do not appraise the multivariate analysis that would be required to adequately reflect real world conditions. This is discussed in greater detail below.

[43] Sen (1987, p. 1). See also De Coninck (2011, p. 258-259).

[44] Binmore rightly argues that one needs to start with simple models and work his way towards more complex versions. This is undoubtedly a useful starting point, though not an end point. It cannot justify using simplistic models for real-world application (policy-making), let alone the at times strongly worded policy recommendations in favour of market-based solutions based thereon.

[45] The economic assumption behind harsh legal action in the war on drugs was simple. Drug dealers are rational and self-interested. They calculate pay-offs from selling drugs, with the street value of the drugs sold on the upside and the risk of ending up in jail on the downside. (This is obviously a much simplified account, which does not even include the risk of getting injured or killed in internal drug gang violence.) Benefits and costs of the drug-trade can be calculated and weighted. The economic approach to 'solving' the drug-supply problem is to increase the costs of the trade so that they outweigh the benefits. Imposing high criminal sanctions, including through mandatory minimum sentences, together with greater enforcement, increases costs for drug-dealers. A higher probability of detection in combination with high costs of long-term imprisonment would make the pay-off unattractive to any rational drug-dealer. A tough stance on drug offences was thus thought to reduce drug-related crimes. One need not know much about drug problems to see that such reasoning misses a few important points, starting with poverty and lack of viable alternative forms of employment.

[46] A distinction has been made between ontological individualism and explanatory individualism. For the purposes of this dissertation, the discussion can be limited to explanatory methodological individualism, leaving aside discussions on the ontological status of a company. An argument against

individual is analysed within a particular environment, doubt is cast on the atomistic *homo economicus* as the best descriptive, predictive or normative model of human economic behaviour. Furthermore, once we question methodological individualism, this equally challenges the single-equilibrium approach of NIE's theory of the company.[47]

Mathematical modelling,[48] if retained,[49] requires a greater acknowledgement of its limits in transplanting such models to real-life scenarios and a greater effort to include multivariate formulas.

This will require more than accounting for an error margin or adding a constant to the formula to account for 'irrational' behaviour. It requires greater research (but mainly, an intellectual willingness) on how to translate the insights from behavioural and epistemic game theory, among other things, into variables (or identify which insights cannot easily be translated into variables).[50] It may well be that what we classify as "irrational" is simply a level of complexity that our simplistic models cannot (yet) adequately capture.[51] This calls for a data-driven model, one made with *greater* knowledge of the basic facts, as Piketty observed.[52] It calls for an approach more truthful to NIE's basic insistence on empiricism.

methodological individualism does not require one to go as far as Latour's 'quasi-agency' theory in the actor-network model: one need not (ontologically) view objects as quasi-agents to acknowledge that aspects of subjects' environments impact subjects' agency.

[47]Becker and Murphy (2000, p. 16).

[48]Attempts have been made to expand standard mathematical modelling in economics to include non-traditional variables. See, for example, Sacconi's attempt to translate consequentialist and conformist preferences into a mathematical model (Sacconi 2004). He views stakeholders' moral preferences as a reinforcement factor of motivation. See also Becker and Murphy (2000, p. 9) on social capital in utility functions.

[49]See, e.g., Lawson (2013) and Dennis (2002) for a critique on the use of mathematical modelling in economic analysis. Chapter 5 discusses in more detail the possible consequences for mathematical modelling of including non-standard metrics, such as trust.

[50]See Chapter 5.

[51]Vernon Smith makes an argument along those lines: "This principle is supported by hundreds of experiments whose environments and institutions (sealed bid, posted offer, and others besides CDA) may exceed the capacity of formal game-theoretic analysis to articulate predictive models" (Smith 2003, p. 470). See also Gigerenzer's conclusion that perceived irrational biases may in fact be due to methodological errors in the research set-up (Gigerenzer 2008, p. 14-16).

[52]"Too often, economists are trained to look scientific, more scientific than other social sciences by in fact using too much complicated maths and not going sufficiently after the data" (Huffington Post Politics 2014).

3.7 Partial empiricism (I): Income shift versus income creation in activist investments

The first challenge for an improved understanding of efficiency in the NIE-based legal model of the company is to understand when corporate value is created and when it is merely shifted from one group to another (and, if so, from whom to whom).

The object of measurement

Empirical studies on the efficiency of corporate regulation and corporate governance practices often prematurely pass judgement on the alleged efficiency of a corporate rule after measuring only its impact on shareholder returns. These returns are moreover often measured over a relatively short time frame. The point is not that empirical studies should be ignored.[53] On the contrary, they are of such importance that they need to be explicit about their methodology and assumptions.[54] If an empirical study is based on a belief in the superiority of the shareholder-centred model, its methodology is likely to favour measuring only certain shareholder-focused variables (e.g., shareholder dividends, increase of share price, return on assets, etc.). An increase in shareholder return is, in a circular reasoning, sometimes proclaimed to 'prove' the superiority of the model - which assumed shareholder-centricity in the first place. The obvious limits of such methodology have not prevented authors to make sometimes sweeping policy recommendations, typically recommending strong shareholder protection in the name of efficiency. Such broad claims should nevertheless be subjected to a much more thorough, multivariate analysis to cover the complexity of our modern societies.

The object of measurement: An illustration from the activist investment literature

The empirical literature on activist investors is one good illustration of this phenomenon. Studies have found opposing effects, even within a single jurisdiction (e.g.,

[53] What is disputed here is the broad-sweeping conclusions drawn from empirical studies, which by definition are limited in accuracy due to the selection of the sample, time horizon, variables, measurement indicators and, importantly, the research question. A research question that only assesses shareholder value is unlikely to allow conclusions to be drawn on overall company value increase. Divergent findings across studies may reflect ideological preferences of the authors on different sides of the debate, further entrenched through methodology. How something is measured obviously affects the outcome.

[54] This, again, is no novel remark. In the 1930s, Coase already bemoaned economists for not clearly stating their assumptions (Coase 1991, p. 386).

the US). It is insightful to look at the respective methodologies to understand where these divergent findings stem from.

For example, one study found "no evidence" that short-term stock price gains after activist interventions in the US come "at the expense of long-term performance".[55] Note that a stock price increase only indicates that *shareholders* expect the stock price or dividend to go up, which needs not necessarily correlate to an increase in the underlying corporate assets or *company* value.[56] Another study in the US found plant productivity increases three years post-intervention, but also found that wages and working hours remained stagnant, indicating that employees perform more work for the same wage and the same number of hours. This suggests that income shift (rather than net income creation) is at least a hypothesis worthy of empirical testing.

A multivariate analysis with a careful selection of the variables measured (including the ones selected as dependent, independent and instrumental variables) is required especially before making any causal inferences (and even then should be interpreted as corroboration of a hypothesis rather than as definite proof).

A link between share prices and shareholder intervention need not necessarily imply that the latter caused the company's value to increase. Some empirical studies suggest activist investors may not *cause* greater returns, but rather that they chose targets with particular characteristics (other than under-performance due to inefficient management[57]) that facilitate shareholder returns.

For example, a study by Deakin and Singh concluded that activist hedge funds select targets by size or by cash available for distribution.[58] Klein and Zur's 2009

[55] Bebchuk, Brav, and Jiang (2015, p. 1090).

[56] An earlier, broad-sample study on acquisitions in general found that "stockholders of acquiring firms experience a statistically significant wealth loss of about 10% over five years" post-merger, adjusting for firm size (Agrawal, Jaffe, and Mandelker 1992, p. 1606). An August 2016 study by S&P Global equally found that "among Russell 3000 firms with (US) acquisitions greater than 5% of acquirer enterprise value, post-M&A acquirer returns have underperformed peers in general." These studies concern acquisitions in general and are not limited to activist investors.

[57] What are labelled under-performing companies in a quantitative study may be companies that are going through a thorough reform process, a costly modernization process or an extensive R&D phase - periods of lower operating performance, which nevertheless target higher future performance; or that are otherwise undervalued by the market for a variety of reasons. Increasing operating performance after intervention could result from slashing capital expenditure or R&D costs or hiring fewer employees to do the same work. Bebchuk et al. attempt to measure the long-term impact by extending the time horizon of the study to five years post-intervention, but this cannot correct a methodology that is biased towards measuring only a limited number of shareholder-centred variables (Bebchuk et al. 2015).

[58] "There are good theoretical reasons as well as a large body of empirical evidence to suggest why the markets for corporate control in advanced countries, including in the UK and the US, do not work at all well. A central point of this research is that the takeover selection process does not simply

study on US companies found that hedge funds target more profitable and financially healthy firms.[59] Moreover, it found that hedge funds target so-called "cash flow agency costs": in other words, activist hedge funds reduce the cash on hand of the target.[60] Another large-sample study found no empirical support of the inefficient-management thesis, concluding that "the conventional view that targets perform poorly is not supported by the data."[61]

Quantitative empirical studies are important, though are nonetheless only one tool. What some reject as 'inferior' "anecdotes or self-reported impressions"[62] can be especially important qualitative data to understand the full picture of a corporate transaction (e.g., a hostile takeover) where quantitative empirical studies fail to engage in multivariate analyses.[63] Deep qualitative research methods are then an especially useful tool to complement quantitative studies,[64] which may furthermore favour what is convenient to measure.

Language and its impact on measurement

In addition, language matters. Noteworthy in many of these studies is the subtle shareholder-focused language that suggest both employees and managers have a tendency to shirk, while there's no similar suggestion that shareholders are equally capable of shirking.[65] Shareholders are, of course, in a different position than either directors or other employees and require legal protection in conformity with their collective

punish poor performance and reward good performance. The evidence indicates that selection in this market does not take place entirely on the basis of performance but much more so on the basis of size. A large relatively inefficient firm has a greater chance of survival than a small efficient firm" (Deakin and Singh 2009, p. 213). Stapledon came to a similar conclusion regarding the UK market for corporate control (Stapledon 1996, p. 14-15).

[59] Klein and Zur (2009, p. 189).

[60] Klein and Zur (2009, p. 189).

[61] Agrawal and Jaffe (2003, p. 744).

[62] Returning to Bebchuk et al. for a moment, they claim that "empirical evidence provides a superior tool for assessing the myopic-activists claim than anecdotes or self-reported impressions of business leaders" (Bebchuk et al. 2015, p. 1092). This criticism particularly targeted statements from Martin Lipton (founding partner of the US-based law firm Wachtell Lipton) and Leo Strine (Chief Justice of the Delaware Supreme Court).

[63] Gramm wrote an entertaining collection of activist case studies covering a long time span (Gramm 2016). It gives a richer picture of a selected number of activist interventions viewed in context, which a purely quantitative analysis would be unable to portray.

[64] "Qualitative methods are of particular value where there are multiple causal variables in play, and where causal relationships are cumulative and non-linear in their effects" (Buchanan et al. 2012, p. 13). On the strengths and weaknesses of qualitative studies, see Chapter 2.

[65] This is a far cry from the days of Adam Smith, who criticized making money from mere shareholding through limited liability legal devices as morally repulsive and lazy (Smith 1827).

needs.[66] What type of protection, and to what degree shareholders require regulatory protection, are hypothesis-generating questions for empirical testing, as opposed to an axiomatic assumptions.

Narratives "can 'be viewed as actions' ... Narratives are not mere chronicles but are constitutive, shaping choice, action, and outcomes."[67] The market- and shareholder-oriented language of NIE-based company law theory matters, as it sets the bounds of what are deemed acceptable arguments. Efficiency claims matter, as they entrench the implicit understanding that those type of arguments are superior. This is also a critique against Heath's stance: "if there are both efficiency arguments and equality arguments to be made for a particular public program, it is always better to lead with the efficiency arguments, simply because they are inherently less controversial."[68] By viewing state intervention on, e.g., social welfare as a tool to address market failures, he reinforces the market-based narrative and lends, perhaps undue, credence to the perception that public discourse arguments on efficiency should be awarded greater weight than non-economic arguments. The same critique has been raised regarding the Chandlerian approach[69] to business history.[70]

3.8 Partial empiricism (II): Efficiency and rationality for the embedded company

Several decades ago, Polanyi argued:

> The outstanding discovery of recent historical and anthropological research is that man's economy, as a rule, is submerged in his social relationships. He does not act so as to safeguard his individual interest in the possession of material goods; he acts so as to safeguard his social standing, his social claims, his social assets. He values material goods only in so far as they serve this end.[71]

[66] See, e.g., Moore and Petrin (2017, p. 9) on shareholders as incomplete contractors.

[67] Popp and Fellman (2016, p. 1242).

[68] Heath (2014, p. 2). See Chapter 2, note 15.

[69] See, e.g., Alfred D. Chandler and Mazlish (2005).

[70] See, e.g., Lamouraux, Graff and Temin criticizing the Chandlerian approach to business history as overly simplistic and disproportionately focused on large companies as the supposed main historical engine of economic growth (Lamoreaux, Raff, and Temin 2003).

[71] Polanyi (1944, p. 48).

Whether or not his understanding of the nature of man is correct should not detract from his key message: the need to 're-embedd'[72] the company into its societal context. The title of Becker and Murphy's book, *Social Economics: Market Behaviour in a Social Environment*[73] indicates we are still exploring how to achieve this task. Aoki's work, discussed below, is equally an attempt to re-link the economic and social-political spheres.

The concept of embeddedness is at odds with the idea of an end-of-history for company law theory, in which certain core features of a shareholder-oriented company theory are deemed superior largely regardless of circumstances. A descriptive observation on a potential convergence towards a particular model should not be confused with a normative claim on the intrinsic superiority of such model.[74] Ubiquity does not equal efficiency. The 2008 financial crisis has cast doubt on any simplistic superiority and efficiency claims. It should also cast doubt on the sufficiency of the current model as the end-of-history[75] for company law. Moreover, the tide of populist and right-wing politics in different parts of the world has revived the interest in the relationship between the orthodox economic model (and policy-making based on it, starting with Thatcher in the UK and Reagan in the US) and social-political stability.[76]

Buchanan, Chai and Deakin's study on take-over rules and practices in Japan equally emphasizes the importance of analysing black-letter law against the background of the society in which it is embedded.[77] They show how "the stock market

[72]Polanyi (1944). Bollier argued: "In Europe, Polanyi held that the disembedding of markets from society led to the Great Depression and then fascism. In the United States, FDR's New Deal took a more benign path. He re-conceptualized how markets and society would wield their respective powers, saving capitalism from itself." Polanyi's language of the 'embedded' company was reiterated by the UN Special Rapporteur on Business and Human Rights in the UN Guiding Principles on Business and Human Rights. See also Zumbansen (2007, p. 474).

[73]Becker and Murphy (2000).

[74]Orts (1993, p. 1577).

[75]Hansmann and Kraakman (2001).

[76]A number of interviewees made this link, see Chapter 6. Conti-Brown, quoting Reich and Ackerman, echoed the observation that another such crisis and concomitant bailouts could lead to serious social-political upheaval (Conti-Brown 2012, p. 418). See also Bruner (2012) for a discussion on the link between populism and corporate governance; and Farrall and Hay (2010, p. 553, 565) for a link between Thatcherite neo-liberal policy and crime rates.

[77]Buchanan et al. (2012). The authors summarize their finding as "a clash between two different conceptions of the company: the view promoted by activist hedge funds of the company as the shareholders' property, which we call 'shareholder primacy', and the view predominant in Japan of the company as an enduring organisation or a 'community"' (Buchanan et al. 2012, p. 1). Legally the position of shareholders in Japanese firms "was little different from that which prevailed in the USA and UK at this time" and was in some respects even stronger (Buchanan et al. 2012, p. 3). In practice, nevertheless, "there developed in Japan a model of the 'community firm' which led to the almost complete marginalisation of shareholder voice" (Buchanan et al. 2012, p. 3). The

responded negatively to confrontational hedge fund interventions" in Japan[78] even though legally the position of shareholders in Japanese firms "was little different from that which prevailed in the USA and UK at this time" and was in some respects even stronger.[79] These findings illustrate how a company is embedded in a given society, with its particular history, economic needs, political forces and social sensitivities. It moreover shows the importance of social norms and institutions in understanding how company law functions in a given society. A study of black-letter law can blind one to the importance of these non-legal factors.

The important point for the methodology of the NIE-legal model of the company is a more refined understanding of its 'rational self-interested individual' assumption. Japanese corporate actors' negative appraisal of US-style takeovers is rational (internally consistent) once one takes account of a wider social-political context in which corporate decisions are made. Behaviour not predicted by standard NIE assumptions is not by definition irrational, as some would argue. Instead, behaviour consistently deviating from such predictions suggests that the assumptions themselves may be inaccurate or incomplete.

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authors refer to the historical pre-World War II context which created the need for a particular company approach: "The American and Japanese models were both, in their ways, responses to crisis, although crises of very different kinds and of different eras" that cultivated a "communitarian ethos" (Buchanan et al. 2012, p. 3), which in turn generated enhanced productivity from worker participation and innovation. Foreign hedge fund interventions into publicly listed Japanese firms tried to leverage the same shareholder-primacy model premised on agency theory that had been adopted in the US. Interventions targeted companies with characteristics similar to those identified by Klein and Zur (2009) (note, though, that the latter assessed only confrontational interventions) in the US: "lower leverage, a high cash-to-asset ratio, high dividends compared with assets, and low insider ownership were the most important factors attracting investments across the group of targets as a whole" (Buchanan et al. 2012, p. 197). The authors distinguish between confrontational and non-confrontational activist interventions, finding that "in the case of the confrontational funds, high dividend payouts was the most important factor driving targeting, while for non-confrontational funds the most significant characteristic was again a high cash-to-asset ratio" (Buchanan et al. 2012, p. 197). Despite a clear increase in dividend payout one and two years after a confrontational intervention and "some evidence of an improvement in profitability two years on, the fall in the value of Tobin's Q of target firms by comparison to their peers suggests that the stock market responded negatively to confrontational hedge fund interventions" (Buchanan et al. 2012, p. 204). For targets of non-confrontational activists, "[a]gain, the result which stands out in the case of nonconfrontational activism is the fall in Tobin's Q" (Buchanan et al. 2012, p. 204). The strategy of activists was premised on the assumptions of the US corporate framework and market practices, relying on black-letter Japanese law to predict similar outcomes, but ran into the wall due to a different corporate culture - that of a community firm as opposed to a shareholder-centred model. "In terms of the perceptions of its management, the community firm is a business before it is a joint stock company" (Buchanan et al. 2012, p. 118).

[78] Buchanan et al. (2012, p. 204).

[79] Buchanan et al. (2012, p. 3).

3.9 NIE and the corporate malaise

Several of the interviewees (see Chapter 6) acknowledged the inadequacy of the current shareholder-centred legal framework for long-term value creation, though some remarked that the pressures of globalization and capital markets[80] leave limited room to steer away from value-destructing incentives.[81] Protracted newspaper coverage or political pressure on issues such as executive bonuses, low worker morale, commodification of workers, environmental pollution, questionable transfer pricing and tax avoidance schemes are further signs of a certain corporate *malaise*.[82] They also represent a political risk factor for companies (more on risk management in Chapter 5).

These concerns are justified, though they are also of our own making.[83]

Even a system that cannot fully resolve these concerns can tweak its architecture to alleviate certain disadvantages of the current system, without having to succumb to regulatory *défaitisme*. As Gigerenzer noted, "changing environments can in fact be easier than changing minds".[84] Readers strongly supportive of a market-based approach to company law may balk at the idea of regulatory tweaks. Why should we assume the government has the capacity to design effective incentives? We need to keep in mind, however, that boards already design detailed incentives, within the regulatory framework, to encourage a particular behaviour from senior executives or other employees. Complex executive compensation, for example, is exactly that: an educated guess about how best to incentivize managers to create company (or shareholder) value. If we find it uncontroversial that boards are capable of designing detailed incentives, we may not need to find it so contentious that governments are capable of undertaking a similar task, even though admittedly on a much larger scale. How effective regulatory tweaks are in practice is a matter of empirical testing.

Moreover, such reforms need not require detailed government intervention. For

[80] See also Moore and Petrin (2017, p. 128).

[81] For a number of counterarguments to standard objections that business should be concerned with the public good, including market-based objections, see de Bettignies and Lépineux (2009, p. 28-30).

[82] The term is taken from philosopher Charles Taylor's book *The Malaise of Modernity* (Taylor 1992, p. 1).

[83] Even more critical literature uses terminology that does not sufficiently acknowledge how we *shape* the economic system and are not mere passive victims of it. In their best-selling book, Shilling and Akerlof, for example, state: "[i]nsofar as we have any weakness in knowing what we really want, and also insofar as such a weakness can be profitably generated and primed, markets will seize the opportunity to take us in on those weaknesses." It is important to keep in mind, and inform readers, that it is not the 'market' that exploits us, but 'people' in the market, who have incentives to do so based on the market architecture we, as a society, devise.

[84] Gigerenzer (2008, p. 16).

example, the next chapter argues that a fiduciary duty owed to the company instead of the shareholders (or judicial interpretation and corporate practice in line with such rule in the multiple jurisdictions where it already exists) may attenuate the need for more cumbersome, detailed regulations. Complex regulation has generated complex business reactions, whether in the form of complex products (e.g., complex financial products[85]) or complex business structures (e.g., tax-avoiding structures or financing structures). This risks turning into a costly vicious circle, in which a degree of regulatory lag is inevitable. Where the regulatory framework and enforcement falls short of expectations, this affects trust in corporate policies and, ultimately, in companies. This, again, may add to companies' political risk exposure. Insulating corporate behaviour from social and political pressure can furthermore help entrench inefficient habits, by closing down an important feedback loop.

3.9.1 Methodological individualism: a useful starting point, not an end-point

Running a successful company requires the cooperation of different input-providers. This is not a contested statement (one more explicitly acknowledged and more frequently discussed in management literature). More controversial is the question how each of these input-providers should be incentivized and rewarded to ensure the greatest degree of cooperation to produce a corporate surplus efficiently.

NIE's methodology to assess the efficacy of such incentives starts with taking the individual as the relevant unit of analysis (methodological individualism). As a simplifying starting point for the analysis, this may be useful, though as an end-point it is not.[86]

For example, the standard economic approach to individual preference sets is to view them as a given. Economists should not attempt to open this black box, it is often argued, but should limit their enquiry to individual preferences only as revealed[87] in their *actions* as empirical data input for economic models.

[85] Kay (2015).

[86] Binmore remarked that model-building requires starting from a simplified building block, working one's way up towards more complex models (Binmore 2005). This may well be the case, but the concern is that the simplicity of the building blocks in company law have not been upgraded to account for this greater complexity and do not even sufficiently acknowledge the need to do so.

[87] Smith (2003, p. 477), Akerlof and Shiller (2015) and Bowles (2016, p. 81). Nonetheless, "[o]ften, people's preferences appear to be constructed, rather than just revealed, by the way a particular decision is framed..." (De Coninck 2011, p. 260).

A major limitation of such approach is obviously that it is more challenging to create adequate incentives to obtain a particular outcome without understanding *why* people undertake certain actions. For example, for a company it would be crucial to understand why a customer bought a product: is it due to the advertisement campaign it ran on social media recently? Was it because of the free samples in the magazines? Or was a competitor unable to keep up with demand, leaving a temporary supply gap? A CEO's task would be to understand this 'why', even though such understanding may be partial and incomplete.

Understanding the "why" is at least partially linked to a second major limitation of this approach: it does not account for the interplay between individual preferences and the environment, including interactions between individuals.

Individual preferences can shape the environment, but they can equally *be* shaped by the environment. This environment includes not only other people's preferences, but also the institutional environment, socio-political conditions or history.

If methodological individualism means that such two-way interactions remain unaccounted for, any conclusions based on this methodology will by definition remain incomplete.

Moreover, once we accept that individual corporate transactions can be shaped by their environment (including interactions with others), it becomes clear that a single-equilibrium model may not be up to the task. Instead, the design of effective corporate policies may need to take into account the existence of continuously co-evolving multiple equilibria. Corporate scholarship would then not look for 'the' most efficient solution, but would aim to identify the different possible equilibria towards which a society could be moving. Normative conclusions for company law may need to become more cautious: if there are multiple equilibria, constantly co-evolving in tandem with the environment, there is likely no single superior solution to any one problem. There may not be one superior regulatory response to activist investors, executive remuneration or shareholder-director relations.

3.9.2 Is there no such thing as a good deed?

In the popular sitcom *Friends*, Joey challenged Phoebe to come up with one good deed that was not also selfish. Any example Phoebe gave was countered with a reason of why that alleged good deed also benefited the benefactor. Hence, Joey concluded, there is no such thing as a selfless good deed.

Some of the economic explanations of self-interest appear to be merely a more technical and complex manner to make the same point. Empirical data may be interpreted as confirming our self-interested behaviour. Where such conclusion is not obvious, we may stretch the interpretation of self-interest (indirectly, almost any act could be explained as self-interest-driven) or discard it as irrational.[88] Moreover, if we can convince ourselves of such interpretation that 'proves' our assumption of the homo economicus, we not only use it as a *descriptive* tool but start employing it as the *normative* benchmark.

Explanations of self-interested interpretations of human behaviour may draw on biological accounts (reciprocity for biological survival), while others may allow for social pay-offs (altruism as a tool to increase one's reputation and therefore social capital). It is indeed possible to formulate a reason why any act of apparent altruism[89] may also benefit the actor, directly or indirectly, whatever the claim of love, friendship, generosity, charity or other noble drives.[90]

That is not the question. The question is whether such explanation of ultimate self-interest is the *best* explanation for that behaviour, or at least *superior* to an explanation based on norms, emotions, norm internalization or a mix of factors.[91] The point of this chapter is not to declare human nature to be intrinsically selfish or altruist, which is a question other disciplines are better equipped to address and one that may not even allow for definite proof either way. The important point for company lawyers is that the evidence so far suggests we have both selfish and other-regarding preferences, though the question whether such is a matter of nature or nurture (or both) can be left open for the purposes of this dissertation.

NIE's theory of the company has arguably led to Anglo-American company law models that rely on self-interested incentives more than at any other time prior to the spread of neo-liberal policies under Thatcher and Reagan.[92] If this model fits our

[88]The behavioural economics work in the line of Tversky and Kahneman identified a number of biases, such as the availability bias or the excessive optimism bias, which were often explained away as irrational behaviour. Gigerenzer, however, concluded a number of these biases resulted from flawed methodologies of the research (Gigerenzer 2008, p. 14-15). Moreover, rather than portraying heuristics as irrational, Gigerenzer argued our heuristics may well be highly rational tools given a complex and at times uncertain or intractable environment.

[89]See, however, Hausman et al., arguing that such conclusion "is paradoxical, and the argument is fallacious. To be self-interested is to have preferences directed toward one's own good, not simply to act on one's own preferences" (Hausman et al. 2016, p. 75).

[90]Vernon Smith, however, concludes that one cannot merely explain non-selfish behaviour observed in game theoretical context through other-regarding preferences. Such approach is insufficient to adequately explain empirical findings (Smith 2003, p. 494-495).

[91] "Even conduct that could be explained on instrumental grounds often has a moral dimension whose explanatory power cannot be safely ignored" Eisenberg (1999, p. 1257).

[92]Stedman Jones (2012).

nature better than any other model, the set of incentives that has characterized the dominant corporate governance mode over the past decades should have provided us with a sense of relief. As the masks of altruism were dropped, we could simply follow our true nature without having to pretend, for the benefit of all.

There nevertheless seems to be sufficient discontent about the dominant corporate legal system to rethink such conclusion. The discontent is not limited to those outside of it (to the extent anyone ever truly is), whose self-interest could be promoted by changing the system. Even corporate actors who are supposed to flourish under a set of self-regarding incentives have expressed concern about the current regime to a degree sufficient to warrant a reassessment: how valid is the conclusion that the best set of incentives that company law can provide are those catering to our rational self-regarding calculations for maximum pay-off, as the best guarantor for overall efficiency and, ultimately, aggregate wealth?

Chapter 6 (presenting the findings of the interviews) highlights some interviewees' concerns about a legal-incentives-framework that 'forces' short-term profit-focused actions over behaviour that would be seen as a better balance of preferences of the different corporate stakeholders and a better tool for long-term value creation. This anecdotal evidence appears to be corroborated by Graham, Harvey and Rajgopal's study, in which they found 78% of their "surveyed executives would give up economic value in exchange for smooth earnings."[93]

Whether or not participants 'feel' the system is adequate may be dismissed by critics who may object that such 'feelings' do not matter, as long as the system *is* efficient. (See Chapter 5, however, on the reason why the interviewees' views matter.) At this point, I also leave aside the importance of trust and perceptions for the efficient functioning of markets (more on that below). Even such narrow view that only actual efficiency matters, not perceptions of it, in defence of the current regime would still require reconsideration of the latter. If the current company law model is the best that decades of scholarship could come up with, this would be quite suboptimal performance. Perhaps we simply have not had the right incentives to improve it, although one would think a crisis of the magnitude of the 2008 version should be a good start.

[93]Graham, Harvey, and Rajgopal (2005, p. 5).

3.10 Game theory, cooperation and defection: Creating a framework and internalizing norms

If company law is about the efficient pursuit of cooperation to create a corporate surplus, corporate legal incentives should be designed in such a way that defection is discouraged. If the corporate regulatory framework provides incentives that reasonably allow only for selfish actions, the result will most often be selfish behaviour - a self-fulfilling prophecy. Such incentives may crowd-out other valuable social norms.[94] This may lead to *coordination*, though not necessarily to *cooperation*. The aim of company law should not be to settle for coordination on any equilibrium, but to enhance cooperation to obtain an efficient equilibrium.

To paraphrase Binmore: if you make the conditions of a game so as to create a Prisoners' Dilemma, the only rational strategy such game allows if it is played only once is defection (non-cooperation). There is no rationality paradox in a prisoner's dilemma, he argues. It is a situation "in which the dice are as loaded against the emergence of cooperation as they could possibly be ... Rational players don't cooperate in the Prisoners' Dilemma, because the conditions necessary for rational cooperation are absent in this game."[95] The feeling of a 'prisoner's dilemma trap' in the corporate setting was discussed by some of the interviewees (see Chapter 6). This confirms views aired by managers in the press and elsewhere that the current set of incentives may excessively force a short-term profit-focus at the expense of long-term efficiency and performance.[96]

There is nothing new in such conclusion, nor in the finding that the current economic model underlying the shareholder-centred theory of the company is incomplete. The question is what to do about it. For example, if Aoki is right that the 2008 financial crisis was above all a social rat race,[97] an economically informed company law model attempting to prevent another 2008-like crisis should factor in such social variables.

[94] Bowles (2016, p. 3).

[95] Binmore (2005, p. 63).

[96] See, for example, the open letter by Laurence Fink, CEO of Blackrock Inc. arguing that "[t]oday's culture of quarterly earnings hysteria is totally contrary to the long-term approach we need". See "BlackRock Chief Urges Companies to End Quarterly Profit Guidance," Bloomberg, 2 February 2016. One could object that other motives may be behind such statements, including the wish of executives to break free from the reigns of shareholders. This may be true, but, again, would need empirical corroboration. These concerns have been aired sufficiently to take them seriously as a valid research hypothesis.

[97] Aoki (2010, p. 138).

NIE, as the name gives away, acknowledges the important role of institutions. It nonetheless insufficiently accounts for how we are also *shaped by* those institutions, rather than only *shaping* them to increase efficient transacting. Schultz argues that "[a]ppeals court judges and policy analysts often use economic efficiency as a factor in their decisions and proposals. Since ... economic efficiency requires moral normative constraints, such decisions and proposals must not undercut the moral conditions of economic efficiency."[98] If we take company law as designing a principal-agent game with 'default' rules to reduce bargaining and transaction costs, we also need to account for how such corporate legal framework shapes behaviour. By justifying and incentivizing self-regarding behaviour and by fuelling or tolerating a perception of shareholders as 'owners'[99] or 'principals', one simultaneously confirms, encourages or even internalizes such behaviour and beliefs. This, in turn, increases enforcement costs, as self-regarding behaviour is acknowledged to increase monitoring costs.[100]

If reputation, culture and other 'blackbox' variables help predict rational decision-making by self-regarding individuals, there is good reason for a rationality-based view of *homo economicus* to understand them better, even if they are more difficult (or even impossible) to measure quantitatively (see Chapter 5). The question is then not *whether*, but *how* an economically informed company law should use these factors to increase efficient cooperation to produce a corporate surplus.[101]

3.11 Multiple equilibria and the equilibrium- selection device

As Binmore remarked, little progress is possible within a prisoner's dilemma game as there is only one equilibrium, which is not even an efficient one (mutual defection). However, few situations are single-equilibrium, single-shot prisoner's dilemmas. It is more likely, especially in the context of corporate regulation, that the scenario for which an efficient cooperation solution needs to be achieved, has multiple potential

[98] Schultz (2001, p. 2).
[99] See Chapter 2, section 2.2, note 8.
[100] Becker and Murphy (2000, p. 4 and 155).
[101] If, on the other hand, it is seen as 'irrational' whenever it does not ultimately promote one's self-interest, a good part of human interaction is condemned to an economist's waste bin for no better reason than an axiomatic assumption of a self-interested nature. As Gintis argued (Gintis 2014, p. xii), the opposite of rational is not irrational but social: the blackbox many economists prefer not to look into, may explain the rationality of behaviour from our social nature, where a self-regarding assumption fails as a (full) explanation.

equilibria. Some of these may not be efficient, others are and some more than others. It is undesirable (inefficient) to coordinate on one equilibrium when there is a (more) efficient equilibrium available. While standard law & economic approaches to company law may suggest certain measures are required to achieve 'the' equilibrium of the corporate game, our understanding of the relationship between shareholders, managers and employees may be enriched by acknowledging multiple possible equilibria among these actors, as well as among these actors and the society in which they operate. The task of company law may then be to guide corporate transactions towards those (efficient) equilibria where the interests of different corporate stakeholders coincide.[102]

Cooperation and competition are not necessarily opposite forces.[103] Moreover, cooperation between a collection of individualistic 'sociopaths'[104] is likely to incur higher transaction costs than a corporate team with a higher level of trust.

Acknowledging the existence of multiple equilibria, in constant flux, avoids the fallacy of a simplistic single-equilibrium view that NIE-based company law models often imply. This may mean a less rigid company law theory and one that is co-evolutionary rather than teleological-functionalist in the end-of-history tradition. A co-evolutionary company law model means one that allows company law to co-evolve with the environment in which it is embedded. This environment, in turn, is multi-dimensional and both affects, and is affected by, the legal system. A company law regime that does not co-evolve with the changing equilibria in the wider environment risks becoming both ineffective and inefficient. A multiple-equilibria model warns us not to promote a single model as necessarily normatively superior regardless of circumstances.

The idea of multiple equilibria should be dear to those favouring market approaches. Creating multiple opportunities for society to settle on allows leeway and prevents regulators (whether shareholder-centred or other) to force a monopolistic single equilibrium model onto society where it may be unsuitable for changing circumstances. The decision which equilibrium (or equilibria) to pursue would then not necessarily be of the regulator's choosing, but society could move towards an equilibrium through a greater interplay between managers, employees, customers and society at large, as shaped by, and shaping, company law. If we trade a static, single-equilibrium

[102]Sacconi, for example, argues that "the law can create the conditions under which the shareholder's interest *coincides* with that of the stakeholders" Sacconi (2004, p. 22). See also Deakin (2002, p. 20 and 28) on 'equilibrium-shifting' conventions.

[103]Binmore (2005) and Gintis (2014). See also some of the interviewee responses in Chapter 6.

[104]Gintis (2014, p. 1).

view of the economy for a dynamic,[105] multi-equilibrium view, this could align the economic and management-studies model of a manager's task more closely (see Chapter 5). It would move the economic model of the company away from describing a manager as a mere shareholder agent and instead give her the task of choreographer, who keeps the company agile in adaptive markets[106] in quickly evolving societies, steering corporate cooperation towards a higher,[107] correlated equilibrium (see Gintis, below).

3.11.1 Equilibrium selection: the role of institutions

Whenever multiple equilibria are available for any particular corporate scenario, the question is how a more efficient equilibrium can be achieved. A standard answer would be to give players the right incentives. Incentives can be monetary or non-monetary. Although a good deal of the theoretical and empirical research within the NIE framework focuses on the monetary incentives such as shareholder returns or executive bonuses, nothing in the theory requires such incentives to be monetary per se. Studies have confirmed the limits of monetary incentives and the importance of non-tangible factors, such as the social reputation of the company to attract and retain talent. For example, studies have found that monetary incentives may not only be ineffective, but even counter-productive.[108] Including non-monetary incentives in the overall picture requires a better understanding of the 'black box' of the human mind - a task which many an economist would prefer to leave to other disciplines,

[105] Dennett (1996, p. 507): "We cannot expect there to be a single stable solution to such a design problem, but, rather, a variety of uncertain and temporary equilibria..."

[106] *Adaptive Markets* is the title of Andrew Lo's book in which he proposes the adaptive markets hypothesis rather than the efficient markets hypothesis (Lo 2017).

[107] The concept of multiple potential equilibria, with managers capable of steering the company and society towards one of greater or lesser efficiency, is also reflected in the idea behind the "phishing equilibrium" thesis in Akerlof and Shiller's best-seller, see Akerlof and Shiller (2015, p. vii and x).

[108] Cable and Vermeulen, for example, reviewed a number of studies on performance-based payment of management and performance, motivation and creativity. They concluded from these studies that performance-tied payment of managers negatively affected their intrinsic motivation and performance. (See also Ayres and Braithwaite (1992, p. 4): "Regulations ... can affect motivations of the regulated"). Cable and Vermeulen furthermore warn that it may hurt creativity and even willingness to help colleagues (Cable and Vermeulen 2016). The work of Holström equally warns against the excessive use of financial incentives to motivate company employees: "Sometimes no financial incentive is the best incentive." See Holmström's interview after being awarded the 'Nobel prize in economics' (The Sveriges Riksbank Prize in Economic Sciences In Memory of Alfred Nobel) in 2016. The slides accompanying the Prize Lecture emphasize non-monetary incentives such as easing bureaucratic rules and greater freedom in shaping the job's design, adding that the 'key' is that "[e]mployees want to be appreciated".

such as biology, psychology, anthropology or neuroscience. One may need to look to heterodox economic strands for a better understanding of how empirical insights from those disciplines should inform the model of human behaviour applied in economics and, consequently, in an economically-informed company law.[109]

A number of attempts have been made to explore which institutions could help a society to move towards a more efficient equilibrium, discussing the potential of government, industry self-regulation or social norms to facilitate a society or a subsection thereof (e.g., a particular industry) to make such efficiency-enhancing move.[110] The sections below assess three multiple-equilibria models proposing a particular coordinator in order to move towards a higher equilibrium, which may be of interest to company lawyers. Aoki, Binmore and Gintis each apply economic game theory models to understand non-monetary drivers of economic behaviour, including social norms and fairness as equilibrium selection devices, against a biological and historical background.

3.12 A landscape of corporate diversity challenging the end-of-history prediction: Aoki

Aoki's game-theoretic account of the corporate landscape identifies a diversity of corporate governance forms, wherein "a particular choice from the many possible forms may be conditional on equilibrium linkages to the outcomes of political and social games that corporations play."[111] This implies not all equilibria are (equally) efficient and that "the game-theoretic approach cannot be complete by itself."[112] As economic and social exchanges are linked, "norms may evolve through interactions of

[109]One attempt to inform our understanding of the corporation through a multi-disciplinary perspective is provided in Baars and Spicer (2017). De Coninck argues that "behavioural economists do not, however, envisage a wholesale rejection of neoclassical economics. To the contrary, behavioural economists are interested in *strengthening* traditional economic theory ... By increasing the psychological realism of its assumptions, behavioural economists thus hope to enhance the predictive (as well as the explanatory) power of traditional economics," but adds that "[t]o what extent behavioural economics succeeds in this effort, remains debated" (De Coninck 2011, p. 260 and 261, note 16).

[110]Nielsen argues that increased disclosure by one company can create positive externalities for other actors. To ensure an efficiency increase, he discusses the possibility of different coordinators to facilitate such move, such as government intervention or self-regulation (Nielsen 2006). See also Growiec and Growiec (2014) on social capital, trust, multiple equilibria and poverty.

[111]Aoki (2010).

[112]Aoki (2010, p. 121).

the two".[113] Norms should thus not be seen merely as external constraints,[114] but are (quasi-) endogenous. Understanding an equilibrium in one game may require understanding the options in the other game, since "[s]trategies that have not been viable in terms of economic calculations alone may become supportable as societal equilibrium."[115] Corporations, much like consumers, play games not only in the economic realm, but are also actors in the social-political arena. CSR can then be viewed as an effort to "link economic, commons and social-exchange games between companies and citizens."[116] One potential explanation of the positive market reactions to CSR engagements in US public firms found by Dimson et al. could be based on this linkage of economic and social exchanges: it may be one way for investors to 'nudge' executives in their role as choreographers in interlinked games.[117]

Like Polanyi,[118] Aoki attempts to re-embed corporate transactions into a wider social framework. Aoki sees the economic and social exchanges as separate but linked, with companies and individual players coordinating strategies "across the two to balance materialistic and social payoffs."[119] The two could however equally plausibly be understood as one single game,[120] with one single set of pay-offs, in which the 'financial' payoffs are but instruments to obtain 'social' payoffs. Stability requires corporate governance to "generate corporate behaviour that is largely consistent and coherent with societal institutional arrangements."[121]

[113] Aoki (2010, p. 97).
[114] Kraakman et al. (2017, p. 268).
[115] Aoki (2010, p. 106).
[116] Aoki (2010, p. 105).
[117] Dimson e.a. found positive market reactions to CSR engagements in US public firms over 1999-2009, with an average one-year abnormal return after initial CSR engagement of 4.4% for successful engagements (Dimson, Karaka, and Xi Li 2015). It may be that CSR engagements with investors remind executives that the achievement of a higher intra-firm equilibrium depends on the linkage of the economic and social exchanges. Such reminder may improve performance if, for whatever reason, executives excessively focus on a lower Nash equilibrium of an economic exchange (short-term financial variables) at the expense of understanding how the economic is linked to the social.
[118] Polanyi (1944).
[119] Aoki (2010, p. 93).
[120] Aoki characterizes interactions as games, "in that their actions, as well as their consequences, matter to the interests of each member" (Aoki 2010, p. 13). This is simply the definition of 'interaction', which need not be reduced to a game.
[121] Aoki (2010, p. 12). Aoki relies on the idea of a social contract following a hypothetical bargaining, relying on the basic axioms of a Nash bargaining solution to clarify the basic nature of a stable agreement and the role of fairness: "The fundamental rules of governance can be theoretically understood as a general 'agreement' among asset holders. Namely they must represent some essential properties of stable outcomes of hypothetical negotiation among these players. Theoretically, however, a liberal reinterpretation of the Nash axioms of a bargaining solution may help to clarify the basic nature of stable governance rules as a general 'agreement'. They represent the set of requirements, such as a deep sense of fairness" (Aoki 2010, p. 54).

Aoki offers a description of the corporate environment that allows for a greater deal of multivariate analysis than standard NIE approaches. Not only does he link the economic and social-political exchanges, he also underlines the interplay between the individual and the collective, criticizing NIE's methodological individualism,[122] and accounts for history and path-dependency to explain the current corporate landscape. Arguing against the static varieties-of-capitalism theory and against the end-of-history-of-corporate-law-view of Hansmann and Kraakman,[123] Aoki rejects the dominant shareholder-centred company model as superior *per se*. It could be a useful model in certain circumstances,[124] but Aoki identifies an important diversity in corporate architectures, with the suitability of each variant depending on different variables (history, culture, social-political institutions, etc.).

Particularly interesting for this chapter is the rising importance he identifies for the 'reciprocal essentialities' (RE) mode of corporate architecture, which emphasizes the importance of knowledge for the success of particular companies.[125] In this *'RE'* mode, both workers and managers rely on each other's *cognitive* assets to create value from the company's *physical* assets. This puts human relations and cognition squarely above capital input in this mode.[126] Neither workers nor managers can dominate the company's governance, as they need each other's cognitive assets (know-how) to put the company's assets to productive use. Shareholders, in this mode, cannot be seen as the dominant owners of the standard principal-agent theory of the company.[127] They

[122] Aoki (2010, p. 14). Binmore, however, outlines the danger of renouncing methodological individualism (Binmore 2005, p. 105).

[123] Hansmann and Kraakman (2001).

[124] Even so, Aoki points to labour agreements with unions, laws, etc. to counter the view that the typical hierarchical firm is but a mere private contract-device.

[125] Huse also emphasized the importance of knowledge: "board effectiveness will be derived from the deployment of knowledge rather than from the reduction in agency costs" (Huse 2007, p. 35).

[126] "Reciprocally indispensable human relationships become primary, while control over PHA [physical non-human assets] becomes secondary" (Aoki 2010, p. 47). The significance of knowledge for the success of the company, and thus for company law, has been identified by different scholars. See, e.g., Kraakman et al. (2017, p. 272): "Looking further into the future, it may be that technological change will prompt evolution in the basic structure of corporate enterprise. This could have a wide rang of possible impacts on the configuration of agency costs. For example, increases in the relative value of the human capital of employees may dictate greater alignment of their interests with those of investors; ... Yet changes such as these, which are driven by particular business models, seem unlikely to trigger a need for wholesale corporate law reform. Rather, they might be met by customization of the corporate form to the firm's particular challenges ..."

[127] Some may see a return to the managerial era in this description of the *RE*-mode, though the two differ. It is not a nostalgic return to an era in which managers paid greater attention to life-long employment or Ford-like managerial practices. The *RE*-mode is descriptive, not normative, and distinguishes between workers whose cognitive tools are seen as essential (giving them greater bargaining powers) and those whose cognitive tools are more easily replaceable or commodified. The

provide physical assets but rely on managers and workers to create value from those assets.[128] Aoki's description accentuates an important aspect of the purpose of the company: he regards the company through the lens of associational cognition.[129] The corporate purpose is to create, retain and put to efficient use the knowledge created within the company - knowledge which cannot be individuated.[130] If we follow Aoki's argument, this adds knowledge as an additional variable to be considered in empirical analyses of mergers and restructuring and their impact on overall efficiency. The nexus-of-contracts view of the company thus misses the essence of the company's cognitive purpose - a concern that is picked up in Chapter 5.[131] Looking at the corporate purpose through the lens of associational cognition also underscores the importance of the context in which such cognition takes place, including the corporate culture and the feedback loop it provides for cognition.

The Coasean model of the company is insufficient, in Aoki's view, as the "[o]rthodox contract theory of the firm considers the human aspects of business corporations only in terms of authority relationships" between management and workers.[132] The "organizational mode is not selected primarily in order to control people's opportunistic behavior [read: agency costs], but in order to benefit from working together." Like Bin-

latter group of workers would not benefit from the same advantages as the former, widening the inequality gap between the two types of workers. In short, while the three-pronged relationship of the *RE*-mode may appeal to those arguing for greater attention to workers' contribution to the corporate surplus and greater control rights, it splits the workers class into the haves and have-nots. This would seem to be one distinction between Aoki's description of the *RE*-mode from the corporations-as-commons model suggested by Deakin (Deakin 2012).

[128] Aoki thus attempts to bridge two approaches to the company: one that highlights the financial aspect and focuses on shareholders' financial contribution, and the other that concentrates on the organizational aspect, starting with Adam Smith's idea of the division of labour (Aoki 2010, p. 19). See also Deakin (2012, p. 350 and 357) and below, Chapter 5. On the need to re-assess the importance of knowledge in corporate governance debate, see Zumbansen (2007, p. 493).

[129] "One of the most important raisons d'être of the corporation is precisely to facilitate and exploit making reasonably coherent decisions for collective action, by organizing cognitions systematically within the organization " (Aoki 2010, p. 22).

[130] "Corporate body can cognize and store what a mere collection of individuals cannot" (Aoki 2010, p. 5). For this reason, Aoki prefers the concept 'cognitive assets' over 'human capital': the latter suggests associational cognition of an employee is portable through the labour market, while the former acknowledges its quasi-collective nature. Part of this know-how cannot be recuperated in another setting and would thus be lost upon leaving the company. This not only means that a company loses know-how (workers' cognitive assets) when losing an employee, it conversely means that the employee loses part of his value-adding knowledge whenever his employment contract is terminated.

[131] "All physical actions of human beings are coordinated by cognitive actions, with physical actions and assets providing extended resources for the latter. But the orthodox economic theory of contracts is premised on the idea that cognition can take place only within the mind of individuals" (Aoki 2010, p. 6).

[132] Aoki (2010, p. 6).

more (see below), Aoki underlines that competition and cooperation are not necessarily opposites. Nevertheless, much like Binmore, Aoki appears to describe *coordination* rather than *cooperation*. What he calls 'public indicators', such as statutory laws and norms, create beliefs and expectations through a common cognitive frame.[133] They are social cognitive categories mediating between physical actions and behavioural beliefs.[134]

Norms as public indicators are described as mere conventions, which is quite a reductionist view.[135] Aoki's account considers norms merely as helpful tools that we use to 'offload'[136] our cognitive burden - some type of short-cuts or heuristics to facilitate life with limited cognitive competences. However, norms may be more than mere off-loading tools. They can[137] be enabling,[138] allowing for cooperation to achieve a particular equilibrium where we would otherwise settle for mere coordination on an inefficient (or less efficient) equilibrium (e.g., a corrupt society). Even if we would have perfect (rather than bounded) rationality and knowledge, we would still require societal rules to obtain cooperation, which suggests norms are more than cognitive short-cuts.[139]

Aoki attempts to go beyond the rational self-interested model of standard NIE, though remains with one foot in that tradition to describe the corporate landscape, using language very much resembling traditional NIE language.[140]

[133] Aoki (2010, p. 128).

[134] Aoki (2010, p. 112-113).

[135] Schultz (2001, p. 2 and 5-8) (distinguishing between morality, normative constraints and conventions). Binmore would argue against a purely conventional view of fairness: "fairness isn't a piece of random flotsam that somehow washed up on our evolutionary beach." While the particular form of the social contract may be a matter of convention, dependent on culture, the very procedure of bargaining behind the veil of ignorance is a 'natural' requirement imprinted into our genes by Nature, Binmore argues (see below).

[136] Aoki (2010).

[137] They need not be, of course. Norms-as-conventions could equally be counter-productive to an efficient cooperative equilibrium. For example, a conventional understanding that kick-backs are required for any transaction can make a group settle for an inefficient equilibrium.

[138] Finch and McMaster (2017, p. 13).

[139] Schultz argues that "economically efficient outcomes of trade require morality" (Schultz 2001, 8). He concludes that "efficient outcomes of market interaction cannot be achieved without a system of moral normative constraints for securing competitive behavior and a set of conventions for facilitating exchange, for coordinating supply and demand, and for internalizing certain types of externalities" (Schultz 2001, p. 1).

[140] For example, Aoki distances himself from the reductionist model of human behaviour found in standard NIE theory: "I am not to be bound by the severe notion of substantive rationality and that of exclusively material-oriented, self-regarding payoffs" (Aoki 2010, p. 13). Nevertheless, he still relies on the language of calculating and balancing trade-offs across games and views norms as conventions required to patch up our limited cognitive competence: "I recognize that individuals are limited in their cognitive competence, and for this reason, they need societal rules, as well as corporate

His is a descriptive theory, leaving many normative corporate governance questions unanswered.[141] One such normative question is whether the *RE*-mode that Aoki identifies as growing in importance requires changes to the corporate regulatory framework to unlock its full potential and whether its corporate governance model, including reduced shareholder roles, should be stimulated across company types.[142]

The important message from Aoki's theory for this chapter is that, if the task of company law is to facilitate the achievement of a (more) efficient equilibrium through cooperation between corporate actors, the efficiency of any incentives provided in the corporate sphere depends on the wider social-economic context of the corporate interaction. If we are to achieve a relatively stable outcome, an economic equilibrium pursued, including through company law, needs to be sufficiently aligned with social needs and expectations. Both corporate theory and empirical studies on the efficiency of corporate regulation should bear this wider efficiency framework in mind. In the words of North, in a world of inherent uncertainty, "the ideal institutional framework

organizations, as extended cognitive resources." While he softens certain assumptions of the standard NIE model, he confirms others, e.g., that "holders of these assets [managerial and workers cognitive assets and physical assets] are all interest-driven agents who try to derive the highest possible returns" (Aoki 2010, p. 34).

141 Towards the end of his book, Aoki does offer some modest normative suggestions, though his account is mainly a descriptive-economic rather than legal-normative one. This simply was not the aim of the book, though it remains an important question for company lawyers how such insights should be integrated into the legal theory of the company. For example, Aoki gives very few normative suggestions on how to ensure short-term shareholder interests do not stand in the way of long-term, cognition-enabling governance or how to deal with corporate externalities. Moreover, his *RE*-mode of corporate governance identifies a novel relation between managers, employees and shareholders that goes much beyond traditional shareholder-centred models, but his description of this mode does not lead to the prescriptive recommendation to follow such more cooperative model across the board for different types of companies. In addition, he addresses CSR from an instrumental perspective (social capital accumulation for companies across games) though steps short of providing a normative framework to deal with corporate externalities. His account raises a few other questions from a legal perspective. For example, even though he distinguishes between short-term share price maximization and long-term corporate value creation, he attributes an informational role to the stock market. However, an increasing importance of the *RE*-mode (knowledge rather than financial capital as the most valuable input) may call for a reassessment of the stock market's information role, without returning to a traditional hierarchical model exemplified by the shareholder-centred model. Without reform of shareholders' influence over boards and management of listed companies (or a change in perspective by a sizeable number of shareholders), the destructive pressures leading to the 2008 financial crisis that Aoki rightly warns against, remain unmitigated. A business judgement rule protecting managerial decisions on how best to create corporate value are qualified if shareholders' rights under the NIE model are kept intact.

142 As mentioned above, Aoki warns against the built-in inequality in this *RE*-mode between workers whose cognitive assets are seen as essential and other workers. Bargaining power and concomitant privileges are then bestowed upon both groups of workers unequally, widening the gap between the haves and have-nots.

is one of 'adaptive efficiency'."[143]

3.13 Social norms and fairness as equilibrium- selection devices

If we follow Aoki's characterization of social norms act as public indicators, where do social norms come from?[144] How do they evolve?[145]

Biology evolves too slowly to explain changes in social norms over relatively short time frames.[146] Culture, as well, takes time to evolve. If culture and social norms are described as nothing more than a set of conventions, how can one explain change?

One answer could be that change comes from switching power alliances, with the pendulum of history swinging back and forth between rules that favour the interests of the changing power relations. If that is the case, we could not identify progress over time, as all norms would be a matter of 'convention' imposed by those in power. Abolishing slavery or serfdom would then be considered merely a matter of convention imposed by power relations. Most us may nonetheless see the legal abolishment of slavery as an achievement,[147] rather than a temporary convention. Such perceptions matter. If it is *believed* to be progress, it becomes part of the social-political *acquis*[148] (social contract, some would say), which in turn interacts with the economic

[143]North (2006).

[144]Eisenberg (1999, p. 1262).

[145]On the importance of accounting for evolution and change in theory-building, see, e.g., North's critique on Binmore's game-theoretic naturalistic approach to fairness norms, arguing it does not acknowledge a non-ergodic reality, making the past "not necessarily a good guide to policy in the present and the future" (North 2006). See also Poteete et al. (2010, p. 187-188). On a related note, see Mervyn King's conclusion that economics should be less a theory of 'stuff' and more a theory of 'stuff happens" (King 2016).

[146]Binmore (2005, p. 14).

[147]See also Chang on a related point, regarding child labour. Chang argues that "[f]ew people in advanced countries at present would consider the ban on child labour as a state 'intervention' artificially restricting entry into the labour market." His point was directed against a neo-liberal discourse on free markets. His conclusion that such rule has come to be considered as having precedent over the rights of producers, suggests that over time certain rules are seen as hierarchically superior over others (Chang 2002, p. 542-543).

[148]The term is borrowed from the EU-jargon of the *acquis communautaire*. This is the body of EU rules that has been 'achieved' ('acquis' in French), through the "content, principles and objectives" of the EU treaties, the legislation based upon it, the jurisprudence of the European Court of Justice, declarations, resolutions and instruments adopted, as well as agreements concluded by EU bodies. Though this 'achieved' body of norms is in constant flux and is reversible in principle, the fact that it is seen as 'acquis' implies a certain internal consistency and makes it more resistant to reversal, as it is likely to have become internalized.

sphere. Beliefs of what is 'acquis' may in turn impact what Kahneman labelled (automatic and unconscious) System 1 decisions.[149] As they become part of the context in which transactions take place, they shape what Vernon Smith calls our 'ecological rationality'.[150]

Social norms are endogenous to the economic exchange, contrary to a traditional economic approach that views them as external constraints to market transactions. They may be part of preference sets or otherwise influence them.[151] One need not subscribe to a Kantian idea of Categorical Imperative to understand the functioning of social norms as guiding principles or public indicators. The question of whether there *are* such principles and, if so, whether they are biological (innate/genetic), culturally acquired or (likely) the result of gene-culture co-evolution need not be resolved for the purpose of this chapter. What matters for the game theoretic approaches to social norms discussed below is the *perception* of, or the *belief* in, such principles, which shape behaviour.

3.13.1 Binmore: fairness as an equilibrium-selection device

Binmore offers a naturalistic theory of fairness norms as an equilibrium selection device.[152] To facilitate our selection of one particular equilibrium in a universe of multiple equilibria in the game of life, Binmore argues, Nature has imprinted a device onto our genetic material: the Rawlsian Original Position. The concept of bargaining behind a veil of ignorance in the Rawlsian Original Position is a tool Nature has endowed us with to facilitate devising a social contract to solve coordination problems, in Binmore's view. Stripped of the knowledge of which position one may hold in the world, everyone's self-interested bargaining strategy behind that veil of ignorance would lead us to agree upon a set of fairness norms to overcome coordination problems. Fairness

[149]Kahneman juxtaposed an automatic System 1 and an effortful System 2. System 1 is the decision-making system that works "automatically and quickly, with little or no effort and no sense of voluntary control," on which we rely for our majority of unconscious daily-decision making (Kahneman 2011, p. 20-21). System 2 is utilized for effortful reflection. Such dual process explanation may be too simplistic, though the important point is that an 'acquis' may become part of a feedback loop that facilitates learning in a particular direction.

[150] Smith (2003). Support for a model of ecological rationality has been raised by several other authors, including Gigerenzer (Gigerenzer 2008).

[151]Social norms could be one of the many preferences in an individual's preference set. Alternatively, they could be a separate variable that impacts the total preference set. See, e.g., Becker and Murphy (2000, p. 9).

[152]Binmore (2005), which is a relatively accessible summary of his more technical findings presented in Binmore (1994; 1998).

is "... the social tool washed up on the human beach by the tide of evolution for solving such coordination problems".[153] Fairness norms are conventional (the outcome of the hypothetical Rawlsian bargaining), not innate, Binmore argues. What is innate, however, is the procedure to devise substantive fairness norms, namely the Original Position procedure.

Binmore's theory is interesting in several respects. He goes beyond efficiency as the exclusive ordering criterion for society to decide on a particular equilibrium or social contract. Like Aoki, he emphasizes *stability*, which he views as a second criterion for the selection of an equilibrium. The third criterion, in his view, is fairness. It may be more accurate to view efficiency and fairness as conditions for a stable equilibrium, though the important point is that Binmore makes fairness an explicit criterion in the pursuit of a particular equilibrium in a multiple equilibria-world. Binmore accentuates that efficiency and fairness need not be opposites:[154] Nature may have endowed us with the capacity to have empathy (fairness[155]) to solve coordination problems (efficiency). Importantly, as a Rawlsian theory, it "should lead economists to consider how to design institutions that will minimize the need for egalitarian redistribution".[156] The theme of post-transaction redistribution versus pre-transaction fairness through equitable institutions is one also discussed in some of the interviews (see Chapter 6).

Binmore's theory nonetheless has a number of vulnerabilities. To start with, Binmore makes causal assumptions that remain unproven (and probably cannot be proven). For example, "[w]hy do we care about fairness? I think we care because fairness is evolution's solution to the equilibrium selection problem for our ancestral game of life." While he avoids the controversial conclusion that fairness norms are innate,[157] the causal relationship could run the opposite way: fairness may not be the 'solution' to the equilibrium selection problem, but we may instead select particular

[153]Binmore (2005, p. 200).

[154]Even though he criticizes Amartya Sen's approach juxtaposing efficiency to fairness (instead arguing they are different sides of the same coin), other parts of his reasoning appear to pit the two against each other as well.

[155]This is an oversimplification of Binmore's theory. He distinguishes between empathy ("the capacity to put yourself in the position of others to see things from their point of view") and sympathy ("caring about another to some degree as one cares for oneself") (Binmore 2005, p. 113). Emphatic preferences are required for his theory of bargaining in a Rawlsian Original Position to result in fairness principles.

[156]"... and to focus on the best ways to provide the resources that enable individuals who have very different preferences to relate to one another in a society of equals" (Hausman et al. 2016, p. 232).

[157]The norms themselves are not innate: culture in the Original Position ('OP') decides on the content of the fairness norms of the particular social contract. Nevertheless, the concept of the OP itself is innate, Binmore argues.

equilibria *because* we see them as fair. It would moreover seem simplistic to assume that, in a universe of multiple equilibria, fairness norms would be sufficient to choose one particular equilibrium over all others (although it narrows down the options). Fairness norms may still allow for different, seemingly equally fair, solutions. It would appear more likely that fairness may be one factor facilitating gravitation towards a particular equilibrium (at least as an ideal[158]) and an important factor in ensuring its stability, in addition to other factors such as history and path-dependency.[159]

Another drawback of Binmore's theory is the very idea of a hypothetical social contract, especially the version that conceptualizes the social contract as one of mutual advantage.[160] A conceptualization of justice as a rational, self-interested bargain begs the question why self-interested individuals would adhere to it subsequently.[161] A purely procedural account of fairness may be insufficient to secure cooperation. To use Weber's criticism, *Zweckrationalität* (formal-procedural rationality) does not say much about *Wertrationalität* (substantive-value rationality).[162]

Moreover, the very idea of self-interested bargaining and a procedural conception of justice is arguably typical Anglosaxon, even though Binmore presents it as what would 'naturally' be agreed upon by different cultures as a valid social contract.[163]

[158]Referring to the search of 'the' preferred equilibrium may misleadingly suggest it would be simple, or even possible, to identify such equilibrium with precision. Due to the complexity of the world we live in, in combination with the constant flux of events that shape it, a precise selection of an equilibrium may not even be possible. Nevertheless, this does not prevent one from identifying a general direction towards which society can gravitate, even if the exact equilibrium is unidentifiable or unattainable.

[159]Binmore argues efficiency should first help a society identify a number of equilibria (as without efficiency, a social contract-equilibrium cannot hold). Only then should one proceed to select a particular equilibrium from among the pre-selected efficient equilibria that is also seen as fair.

[160]Hausman e.a. refer to Barry's distinction between two broad categories of contractual theories of justice. The first is the one that sees justice as a bargaining compromise of 'mutual advantage', a social contract that is based on rational pursuit of self-interest. The second one, which includes the Kantian ideal of justice, sees the idea of justice as one of impartiality (Hausman et al. 2016, p. 225).

[161]Hausman et al. (2016, p. 226).

[162]Binmore sensibly wishes to avoid comparing the 'worthiness' of different fairness principles - though towards the end of the book, he appears to discuss property rights and freedom from a normative stance. He remains close to economic strands refraining from value-judgements on different preferences. Not all preferences may be moral in nature, however. A preference for a black over a white car may not be the same as a preference over basic fairness principles. As mentioned above, for Binmore all norms are social conventions and the difference over a preference for a black car and a preference for a more equal society differ only in degree, not kind. The only type of *Wertrationalität* allowable in Binmore's theory, as mentioned, is the innate device of the OP as a procedure to solve coordination problems. This assumption is crucial for his theory. If all individuals had such capacity to reason according to the OP's dictates and would be willing to adhere to the outcome, this would arguably result in a world very different than the one we observe.

[163]Binmore acknowledges this criticism.

Even if we could hypothetically imagine how a group behind the veil of ignorance would decide on a social contract, could this help the debate on company law move forward? At most we can speculate how one could hypothetically and ideally come to a consensus on how employees, managers and shareholders would relate and share profits. But it is mere speculation and unlikely to convince those most opposed to any reform of the shareholder-centred model.[164]

The most pressing problem in company law does not seem to be to identify the problems. Demotivated employees, lack of investment in R&D, short-term pressures or self-dealing and troublesome internal incentive systems have been identified by a broad number of authors. The problem is not so much one of devising fairness principles. It is one, rather, of applying the existing ones and, specifically, to accept a role for fairness principles in economic models of efficiency.

Those most likely to object to reform are unlikely to be convinced by a hypothetical Original Position proposition. It is for this reason that this thesis strongly argues in favour of presenting an argument that could sway even such persistent objectors. Such argument must then be based on demonstrating how social norms, including fairness norms, matter for corporate efficiency.[165] Binmore's insight that efficiency needs to be complemented by fairness and stability is useful. Adapting this statement slightly, this chapter argues that fairness is part of efficiency in corporate operations. Motivating employees and avoiding exorbitant monitoring costs requires a level of fairness to be built into the corporate regulatory framework.[166] Only then can the framework be stable - and let instability be one thing most managers, employees and shareholders (other than high frequency traders) utterly dislike.[167]

Most critiques regarding Rawls' idea of the Original Position would also hold for

[164]Binmore argues that the Rawlsian concept of the Original Position resonates with many people, which helps him make his argument that it must be a natural tool we are endowed with. What resonates with whom may very much depend on culture and ideology, rather than nature, of course. It may be preaching to the choir to elaborate on the social contract theory to convince those already enamoured by its philosophy. The question for the reform of corporate law is how to preach to those refusing to sing in the choir.

[165]In other words, the thesis' goal is to enter into debate with those who would agree with Friedman's assertion that the business of business is business.

[166]One could distinguish between intra-firm efficiency and overall efficiency. Motivating employees would be an important measure of intra-firm efficiency, as is the need for intra-firm monitoring. Externalities and the need for government or industry monitoring would be an important metric to assess overall efficiency.

[167]Instability, to the extent it creates financial market volatility, may nonetheless create profit-generating opportunities for certain market actors, in particular traders. For most shareholders, however, reliability (stability) of equity income may nevertheless be important (Moore 2017, p. 459). See Chapter 4, note 254.

Binmore's (slightly adapted)[168] version. It is more useful to decouple Binmore's game theory-approach to fairness norms from an evolutionary perspective, on the one hand, from his Rawlsian-justification, on the other - and ignore the latter but keep the former. Binmore's theory falls prey to the same fallacy as the NIE-model of markets and companies: both start from a status quo and attempt to explain and justify it based on one simplistic criterion. For the NIE-legal theory of the company, the shareholder-centred company model is explained, justified and supported, based on 'identifying' the underlying 'ordering principle' of what rational self-interested individuals would contract for under ideal circumstances. A Rawlsian social-contract approach to company regulation[169] likewise attempts to explain something highly complex from one underlying ordering principle of what self-interested individuals would bargain for under ideal bargaining conditions void of power disparities (assuming this as part of our natural genetic wiring, in Binmore's version).[170]

[168]Binmore changed the parameters of Rawls' theory slightly. For example, he argues against Rawls' position that normal decision theory does not apply in the Original Position, proposing instead the maximin principle (Binmore 2005, p. 33). He also disagrees with Rawls' assertion that the latter's theory merely operationalizes Kant's *Kategorischer Imperativ* (Binmore 2005, p. 15).

[169]Binmore's *Natural Justice* does not say much of how the Rawlsian social contract reasoning should be applied to companies. The few explicit references to company relations are rather simplistic and infused with the traditional NIE-language. E.g., "Is it possible for the firm to get from D to B when the two sides don't trust each other? Such a move will involve the gradual surrender of entrenched privileges and practises by both management and workers," Binmore (2005, p. 177) which states no more than the obvious. The core question is *how* to ensure such gradual surrender of privileges. The same goes for his statement: "[s]imilarly, a modern worker has the outside option of taking another job, or going on the dole ... if she has no option but to submit to his power. She is then effectively a serf" (Binmore 2005, p. 182).

[170] A Rawlsian approach to company law would both go too far and not far enough. Too far - as it requires imagining a hypothetical situation (the Original Position), stripping individuals of a great part of their identity (any dimension of people's identity related to their actual positions in real life, though Binmore does retain culture as a factor in the Original Position) and assuming this becomes common knowledge in the real world. Self-interest is assumed in the OP, though one would need to explain why self-interest would not prevent a self-interested individual to renege on the social contract commitments once there is a personal interest to do so. AT the same time, the Rawlsian approach does not go far enough - as the game theoretic approach to Rawlsian bargaining still very much reflects NIE-language: the very idea of all interactions being games, an assumption of self-interested rational bargaining with a maximization strategy, a purely procedural approach to social architecture and one simplistic explaining factor (self-interested rational bargaining in the real world versus self-interested rational bargaining in the hypothetical O.P.). See. e.g., "When two people use fairness to resolve an everyday coordination problem, I believe they are implicitly calculating the agreement that they would reach if they were to bargain on the assumption that their identities would be reassigned at random after the negotiation was over" (Binmore 2005, p. 21). Vernon Smith, however, convincingly argues against an all-encompassing view of constructivist rationality (Smith 2003). Binmore furthermore argues : "fairness evolved for use in situations in which face-to-face bargaining isn't an alternative option ... We mostly use fairness norms in everyday situations in which it is either impossible to negotiate, or in which the benefits of negotiating are outweighed by

One need not resort to a Rawlsian approach justifying particular fairness principles (or the procedure to design them) or decide on whether such norms are innate or conventional to argue for reform of intra-company relations. The point in this chapter is to accentuate how empirical data are already signalling inefficiencies in the current framework, some of which indicate that fairness or other social norms may play a role in increasing corporate efficiency. Notwithstanding my reservations regarding Binmore's approach, what is interesting is his use of game theory to understand the importance of fairness norms. He has nonetheless been criticized for insufficiently acknowledging the limits of game theory for such endeavour[171] and, while underlining the importance of both nature and culture, in fact spends too few words on how cultures evolve, differ and how calls for reform from within a culture arise.[172] Binmore's insistence to first identify equilibria that are feasible and only then those that are optimal is useful, though it should be added that equilibria need not only be 'identified' but may also gradually need to be 'created'.[173]

Aoki's account could fill this void by allowing for a more dynamic description of variety and change in society through interaction between multiple games. It also avoids controversial statements such as proclaiming a principle that "efficiency should take priority over fairness,"[174] which ignores the potential symbiosis between the two. How fairness norms can increase efficiency is better acknowledged by Gintis, to whom we turn next.

the costs in time or money" (Binmore 2005, p. 27). Fairness could however be a complement, or even an alternative, to negotiations, or it could be seen as an intrinsic part of negotiations. Moreover, this statement goes against some empirical evidence that fairness sentiments are stronger in face-to-face than in anonymous situations, undermining the claim that fairness makes up for lack of face-to-face bargaining. On the difference between anonymous and personal transactions, see, e.g., Smith (2003, p. 467, 483).

[171] See, e.g., North (2006), arguing that "[g]ame theory ... is simply unable to deal with the richness of the way in which human societies have evolved over time and the way in which the mind and brain have evolved." Such explanation "must take into account the evolution of beliefs and institutions as well as genes". On the limits of evolutionary game theory, see Deakin (2011, p. 667).

[172] Binmore defines a social contract as a matter of convention. Even what is right and good is seen entirely in light of this convention. For change to occur, of course, one needs to move beyond the existing convention. This is a gap in Binmore's theory which he identifies himself at the end of his book. As mentioned, there are furthermore some inconsistencies between the proclaimed moral relativist approach, which does not allow comparison between social contracts, and some Anglosaxon-tinted statements, such as his suggestion that any social contract should at least secure the "property rights of entrepreneurs on whom we rely for the creation of wealth" (Binmore 2005, p. 190).

[173] Binmore does acknowledge the role of laws (at least to the extent they are enforced (Binmore 2005, p. 3)), though he does not spend much ink on how our own interventions can create, destroy or shift equilibria.

[174] Binmore (2005, p. 191).

3.13.2 Gintis and strong reciprocity: social norms and correlated equilibria

Gintis, like Binmore, uses a game-theoretic approach to link the economic sphere with social norms from the perspective of gene-culture co-evolution. Contrary to Binmore, Gintis does not prioritize efficiency over fairness. Social norms not only facilitate selecting an equilibrium among the many options available (coordination). Social norms can also act as a choreographer[175] that helps achieve a correlated equilibrium - one that achieves greater efficiency (cooperation) than a Nash equilibrium[176] would. Gintis draws upon a variety of game theoretical experiments and insights from different behavioural disciplines to suggest a unified model of human behaviour, challenging the standard NIE-assumptions of rational self-interested individuals and its methodological individualism.[177]

Much like Polanyi and Aoki, Gintis re-embeds the individual into the societal. The bounds of rationality are not ir-rationality, as standard NIE-models typically assume, but our social-ity, he argues.[178] Gintis' approach thus provides a compelling solution to the problem Weber identified: the compartmentalization of rationality, in which each field of study develops its own understanding of rationality, results in one field calling irrational what another field may define as rational and vice versa.[179]

Gene-culture co-evolution resulted in a pro-social tendency, Gintis argues, of which the strong reciprocator norm is a crucial characteristic.[180] Individuals have a tendency to cooperate,[181] according to Gintis' interpretation of empirical data, though we typi-

[175] The choreographer suggests a certain path, which players are recommended (though not obliged) to follow. If the suggestion of the choreographer is followed, a higher equilibrium is obtained. Our normative predisposition, the result of gene-culture co-evolution, results in a tendency to follow the choreographer (social norms), which in turn facilitates achieving a correlated equilibrium, Gintis argues. A correlated equilibrium is "the Nash equilibrium in the game formed by adding to the original game a new player, whom I call the *choreographer* ... who samples the probability distribution given by the players (common) beliefs and then instructs each player what action to take" (Gintis 2014, p. 215). Self-regarding behaviour alone cannot explain how a correlated equilibrium (cooperation) is achieved, he concludes (Gintis 2014, p. 222); see also Gintis and Bowles (2011, p. 1).

[176] Binmore relied on the concept of Nash equilibria, while Aoki focused on Nash bargaining solutions.

[177] See, however, Finch and McMaster (2017) for a recent appraisal of Gintis' work.

[178] Gintis (2014, p. 223).

[179] Weber argued that "each one of these fields may be rationalized in terms of very different ultimate values and ends, and what is rational from one point of view may well be irrational from another" (Weber 2001, p. xxxvi-xxxvii).

[180] Gintis distinguishes between other-regarding (social) preferences, including strong reciprocity and empathy, and self-regarding (moral) preferences for 'character virtues' such as honesty, loyalty, trustworthiness, promise keeping and fairness.

[181] Vernon Smith distinguished between anonymous and personal transactions, with the latter demonstrating a much stronger willingness to cooperate, as mentioned above in note 170.

cally quickly reverse course once we experience a non-cooperative counter-party. Our cooperation is conditional on another party's reactions. Like Binmore, Gintis sees an endogenous feedback-loop, where punishment for non-cooperative behaviour need not be inflicted by the aggrieved party, but by any third party who internalized the cooperative norm. Standard NIE-models assume a given set of preferences for an individual, though Gintis argues this ignores how our preferences are moulded by our interactions. Methodological individualism thus ignores our social-ity. Moreover, Gintis sees social norms (such as strong reciprocity) not merely as an external *constraint* on our behaviour, but as an inherent part of our preference set. We may have both selfish and altruistic preferences, with our actual response depending on the incentives to tip our behaviour either way. Social norms thus matter much, both by internalizing pro-cooperative standards into our preference set, and by affecting how we trade off cooperative preferences against other preferences (a 'tipping point'[182]).

Gintis' theory of gene-culture co-evolution classifies pro-social tendencies as innate, which remains controversial. One need nonetheless not go that far to understand how social norms can facilitate efficient outcomes. The important point is that a pro-cooperative social and regulatory framework can help a society achieve a more efficient correlated equilibrium. Whether cooperative tendencies are nature or nurture, from a descriptive perspective it is important that they exist, whatever the source. From an explanatory perspective, it is important that they need not be considered as a reflection of our irrationality, but instead may be vital to our social-ity. From a normative perspective, this social-ity has the important function of moving beyond coordination towards cooperation, providing a guiding principle that can help achieve greater efficiency.

The rational pursuit of self-interest cannot explain all of our transactions, Gintis argues - not even all of our economic transactions. Self-interest may more pronouncedly drive our behaviour in particular settings such as anonymous market transactions with well-specified (complete) contracts.[183] However, Gintis adds, such circumstances are rare. Economics is about more than anonymised market transactions on a stock exchange. Economic transactions also include buying a bottle of milk from the little shop around the corner or employer-employee relationships.[184] While Binmore sug-

[182]Eisenberg (1999, p. 1264), with reference to Schelling (Schelling 1978). For a more recent and popularising description, see Gladwell (2000); Poteete et al. (2010, p. 183).

[183]Gintis (2014, p. xv). See also Smith, above, note 170.

[184]"The fact that self-regarding behavior explains market dynamics lends credence to the practice in neoclassical economics of assuming that individuals are self-regarding. However, it by no means justifies 'Homo economicus' because many economic transactions do *not* involve anonymous exchange.

gests that fairness evolved for "everyday situations in which it is either impossible to negotiate, or in which the benefits of negotiating are outweighed by the costs in time or money,"[185] Gintis concludes that social norms are expressed more markedly in face-to-face (as opposed to anonymous) exchanges. This suggests they are not merely 'back-up' tools when negotiation fails, as Binmore had suggested. Rather than fairness norms being relied upon only when negotiation costs are too high, social norms can lower such costs. Gintis' findings are of particular interest to those viewing company law as a set of default rules for incomplete contracting.[186] It is exactly in cases of incomplete contracting, Gintis argues, that a self-interested assumption fails and so-called character virtues gain in importance.[187]

One important consequence of this finding for the NIE approach to company law concerns the market-firm divide, as originally conceptualized by Coase[188] and followed by many others. According to Coase, the firm is a tool to reduce transaction costs. Coase sees a continuum between the market at large and any particular firm, with only transaction cost calculations as a thin dividing line between the two.

Gintis' conclusions, however, suggest there may be a crucial difference between the (anonymous[189]) market and the company. The company, as an economic and legal entity, is fundamentally distinct from anonymous market transactions. Within this legal entity, relationships are crafted that move company activities away from an anonymous market setting. Relations of employer-employee, company creditor-debitor, etc. are created. Even for shareholders, not all equity may be held through anonymous market transactions: institutional investors could actively engage with management or otherwise build up more than a purely anonymous relationship with the company.[190]

This includes employer-employee, creditor-debtor, and firm-client relationships" (Gintis 2014, p. 49), italics in the original.

[185] Binmore (2005, p. 27).

[186] This could be either situations that the contractual partners could not foresee or that they, for whichever reason, decided not to regulate in the contract. The perception that company law only "fills the gaps" of incomplete contracts, through default rules from which the parties can deviate in the contract if so desired, has convincingly been countered by Moore (Moore 2013); see also Eisenberg (1989, p. 1461).

[187] "*...when contracts are incomplete and individuals can engage in strategic interaction, with the power to reward and punish the behavior of other individuals, game-theoretic predictions based on the self-regarding actor model generally fail.* In such situations, the *character virtues* (including honesty, promise keeping, trustworthiness, and decency), as well as both *altruistic cooperation* (helping others at a cost to oneself) and *altruistic punishment* (hurting others at a cost to oneself) are often observed" (Gintis 2014, p. 50), italics in the original. See also Poteete et al. (2010, p. 185-187).

[188] Coase (1991).

[189] Not all market transactions are anonymous, hence the difference is rather between anonymous market transactions and non-anonymous intra-firm transactions.

[190] In a similar vein to Gintis and Vernon Smith, Stapledon argues short-termism in the market

In such non-anonymous setting, characterized by incomplete contracting, human behaviour cannot be fully explained or predicted by the rational self-regarding model.[191]

Gintis argues we should not assume common knowledge of rationality. A Nash equilibrium outcome in game theory may require such stringent[192] condition, but a Nash equilibrium is not the only form of coordination possible - and may not even be an efficient outcome (coordination rather than cooperation). Cooperation may be possible under the much less stringent assumption of common beliefs, which can help achieve a correlated equilibrium with the help of a correlating device (choreographer).[193] Social norms can act as such a choreographer and "supply the epistemic conditions for common priors".[194] Linking this back to reflexive law, systems theory and company law as an emergent institution (see Chapter 2), legal rules are one type of choreographing device that encodes knowledge[195] about human coordination and provides cognitive and normative 'cues' for human interaction. Individuals need not comply with the unrealistic demands of common knowledge of rationality, but cooperation can be achieved if a sufficient number of individuals deem it sufficiently probable that others will follow the choreographing institution such as legal rules or social norms. Like Aoki, Gintis thus underscores the importance of beliefs ('subjective priors') that emanate from the social network in which a person is embedded. Since social norms can enhance efficiency by reducing monitoring and enforcement costs, they should be of particular interest for the NIE-model of the company.[196] Internalization not only changes behaviour, but can also impact motivation - part of the 'black-box' that many an economist prefers to steer clear from. Internalization of social norms could further result in efficiency gains to the extent they can mitigate negative corporate externalities (see Chapter 4). Where Sen argued that economics should be about both 'ethics' and 'engineering',[197] Gintis' theory views social norms as an intrinsic part of the 'engineering' of a more efficient corporate legal framework.

This has several implications for a legal theory of the company. It opens the door

is due to arm's-length (anonymous) transactions and not to factors such as pay-for-performance, quarterly reporting, etc., per se (Stapledon 1996).

[191] Gintis (2014, p. 50).

[192] Gintis (2014, p. 142).

[193] Gintis (2014, p. 142-143).

[194] Gintis (2014, p. 143).

[195] Deakin (2011, p. 669).

[196] Eisenberg concludes that "even taking the interests of shareholders as a class apart from their interests as members of society, a legal regime that promoted the view that the social norm of loyalty is only instrumental, and which thereby diminished both the force of the norm and its internalization, would reduce the efficiency of the corporate system" (Eisenberg 1999, p. 1274).

[197] Sen (1987).

for CSR, not merely as a tool for gaining social capital through strategy-coordination across games as Aoki suggests, but as one of multiple ways to reinforce a cognitive framework, a horizon of beliefs, that encourages cooperation. (One interviewee argued that having employees on the board does not necessarily make the board more susceptible to supply chain concerns, though that employees in such company may well be more open to complaints from people working further down in the supply chain, which would support the argument on CSR as shaping a cognitive framework - see Chapter 6.) If company law is defined as a set of incentives to facilitate efficient cooperation to create a corporate surplus, CSR is one of the tools that can help it achieve this goal. Re-embedding the company into its social environment requires viewing employees, shareholders and managers *also* as social actors in that wider environment, who provide inputs to the company with a set of beliefs and expectations shaped by (and shaping) social interaction outside the company's premises. Cognitive dissonance is created where the narrative within the company is too dissimilar from the one prevailing in the social-political arena. Such dissonance can lead to unstable and inefficient equilibria in company law, as suggested by Aoki's and Binmore's theories. Corporate culture, CSR, internal remuneration policies and investor demand for longer-term strategies can all help re-set the narrative of the company to one more in line with the demands in the social-political arena. So would dropping the agent-owner[198] view of the company, which legal scholars have convincingly argued is not even an accurate description of shareholder rights in the US and the UK.[199] Neither should it have the normative weight it has at present. This task would be facilitated if empirical studies researching the effects of particular corporate law provisions are broadened to test the validity of any NIE assumptions they are based on, as mentioned. This would also lay bare the fact that this framework does imply certain moral preferences, notwithstanding the claim of moral neutrality. The view of efficiency as utility-maximization is in itself a moral stance - namely, a utilitarian conception of justice.[200] The conclusion of this chapter lays the groundwork for the next chapter, which assesses its implications for company law. The first step in the reform of corporate law is to unearth its nor-

[198]See Chapter 2, note 8.

[199]See Chapter 4.

[200]The dominant theory of the company in the US and the UK would also put forward some moral ideals such as property rights and, ultimately, as Friedman argues, freedom (Friedman 2002). Where utilitarian goals or property rights would clash with freedom, a Friedmanite account of company law is unlikely to sacrifice the latter in favour of the former. Friedman's reasoning leaves little doubt that freedom is the ultimate objective, which no utilitarian argument should override (Friedman 1970). See Chapter 1.

mative assumptions and empirically test whether they, overall, add or detract from the goal of corporate efficiency (and, potentially, from the ultimate goal of freedom or other ideals, which efficiency is meant to serve).[201] This chapter has argued that NIE's methodological individualism may create inefficiencies due to the lack of attention for certain social norms that could enhance cooperation and therefore efficiency.

3.14 Conclusion

A number of recent crises in the corporate sector, of which the financial crisis of 2008 was the most severe one, showed the limits of the dominant, NIE-based legal model of the company. They emphasize the need to test the validity of the underlying economic assumptions.

For company law provisions based on NIE, NIE's assumption of atomistic, self-regarding individuals raises the following problem: how can company regulation make self-regarding individuals cooperate to produce efficient outcomes? The framing of the question sets it up for a particular methodological trap: the 'problem' of cooperation between self-regarding individuals is 'solved' by mandating what has been problematic in the first place: namely, designing incentives in company regulation in such a way they appeal to individuals' self-interest. This not only axiomizes self-interested behaviour, but moreover prescribes it for policy-making. Entrenching it in corporate regulation further encourages such behaviour, which risks becoming a vicious circle. This not only fails to capture the efficiency-enhancing potential of more cooperative norms - it actively suppresses it. As Vernon Smith argued, assuming self-interested behaviour is not required.[202] While such assumption may facilitate economic modelling, it does not necessarily lead to better explanatory or predictive strength:

> In economics the resulting exercises are believed to sharpen economic thinking, as if - then parables ... The temptation is to ignore this reality because it is poorly understood, and does not yield to our familiar but inadequate modeling tools, and to proceed in the implicit belief that our parables capture what is most essential about what we observe. Having sharpened our understanding on Cartesian complete information parables

[201] Hausman e.a. accentuate that "[r]ationality is itself a normative notion". Since rationality is used by both normative and positive economics, this "forges a deep connection" between the two. See Hausman et al. (2016, p. 70).

[202] "This proposition says nothing about the necessity of human selfishness ... Markets economize on the need for virtue, but do not eliminate it" (Smith 2003, p. 466).

> we carry these tools into the world for application without all the necessary caveats that reflect the tractability constraints imposed by our bounded professional cognitive capacities as theorists.[203]

Even though behavioural sciences may not yet have presented a convincing and testable alternative model, they do equip us with propositions that we can distil into testable hypotheses, employing a wider set of variables.[204] Weber warned against the Iron Cage (*Gehäuse*) of man: our obsession with calculability, predictability and efficiency (*Zweckrationalität*) can push us into a straight-jacket that curtails the very freedom and agency that *Wertrationalität* has put forward as the highest goals - a warning also relevant to a Friedmanite view on corporate purpose. The paragraphs above attempted to show how the search for efficiency can be enhanced by basic social norms, such as fairness and strong reciprocity.[205] One can agree with Binmore: "So why should we allow for the fact that we can't find an absolute justification for the fairness norms that circulate in our society to prevent our using them to improve our way of life?"[206]

While NIE's methodological individualism has been useful as an additional analytical tool to assess the corporate legal framework, its limits have been insufficiently acknowledged in the NIE-based theory of the company. The shortcomings cannot be remedied simply by adding the social in a subsequent step of the analysis. The collective-societal is intrinsically interwoven with the individual. A methodological individualist approach fails to account for such linkages, which weakens its explanatory force. As the saying goes, what doesn't get measured, doesn't get done. To avoid another self-fulling prophecy that risks a repetition of the 2008 crisis, an economic approach to the theory of the company cannot outsource understanding the black-box of human motivations and interactions to other disciplines. "[U]nderstanding decision requires knowledge beyond the traditional bounds of economics," Vernon Smith argued, as he "importune[d] students to read narrowly within economics, but widely in science.

[203] Smith (2003, p. 468).

[204] "As theorists the professional charge for which we are paid is to formulate and prove theorems. A theorem is a mapping from assumptions into testable or observable implications. The demands of tractability loom large in this exercise, and to get anything much in the way of results it is necessary to consider both the assumptions and their implications as variables" (Smith 2003, p. 471).

[205] As Gintis readily acknowledges, strong reciprocity can turn into a highly inefficient force, such as when it leads to excessive punishment to take revenge. Regulatory and non-regulatory incentives alike can help restrain punishment of non-cooperative behaviour. Eisenberg equally warns that social norms can be inefficient (Eisenberg 1999, p. 1271).

[206] Binmore (2005, p. 200).

Within economics there is essentially only one model to be adapted to every application: optimization subject to constraints due to resource limitations, institutional rules, and/or the behavior of others, as in Cournot-Nash equilibria. The economic literature is not the best place to find new inspiration beyond these traditional technical methods of modeling."[207]

What should be clear is that corporate legal scholarship cannot continue to focus only on hypotheses formulated *within* the NIE-based shareholder-centred model (and should refrain from making broad policy claims based on uni- or bi-variate analysis using methodological individualism). The complexities of modern corporations are such that even a multivariate analysis cannot give definite answers. Following Popper's methodology for scientific inquiry means using all available data to falsify a particular theorem. Models can never be conclusively verified (at most they can be more corroborated than an alternative model), but scientific progress is made when attempting to falsify a model.[208]

A company law model that aims to increase cooperation needs to understand the tipping point at which our more self-regarding or more cooperative preferences are triggered, against the background of the prevailing socio-economic and political conditions. Analogous to Lewis' conclusion that other coordination tools exist beyond contract,[209] the corporate legal framework can rely on various, complementary tools to achieve the cooperation needed to efficiently produce a corporate surplus. The bargain-and-contract approach of NIE is but one path to achieve that goal. Other paths include expectations based on prior cooperative encounters, societal norms or even inspiring leadership by political or managerial figures.

Legal compliance is not the only tool for a company to signal its intention to meet societal expectations. CSR may be another way to do so. Where a shareholder-centred model is perceived as an undesirable, unstable outcome, it may mean it insufficiently approximates an equilibrium spanning the social-political and economic exchanges. CSR initiatives may help fill a perceived void, though the room to manoeuvre remains limited as long as the shareholder-centred model is retained in law and practice. Reorienting directors' fiduciary duty towards the company's interests puts more tools in managers' hands to align corporate practices with changing socio-economic con-

[207] Smith (2003, p. 471).

[208] Leeuw and Schmeets (2016, p. 55).

[209] "Coordination by means of an agreement is not, of course, an alternative to coordination by means of concordant mutual expectations. Rather, agreement is one means of producing those expectations ... Another source of mutual expectations is precedent," Lewis (1969, p. 34), quoted in Aoki (2010, p. 127).

ditions - in other words, to fulfil the managerial task of keeping the company agile and adapted to a constantly changing society (see Chaper 4). As Deakin remarked, company law "offers no account of how management performs the task of coordinating the production of goods and services"[210] - the very essence of managers' roles. This requires a shift away from the managers-as-shareholder-agents view of the NIE-based company law model. Instead of assuming that 'what is best for shareholders, is best for the company,' we may consider 'what is best to ensure an adaptive company is best for shareholders'. The latter view puts the manager-as-choreographer above the manager-as-agent: the principal task of management is to keep a company well-adapted to its competitive environment. This environment includes a link to social-political exchanges.

One could object that the task of a manager as a choreographer (adapting the company to the changing needs of its environment) should be addressed in management studies, while company law should only occupy itself with the task of management as an agent of shareholders. As argued in Chapter 4, this does not relieve the legal theory of the firm to acknowledge the important choreographing task of management. Moreover, just like company law should not prevent other areas of law to adequately and efficiently deal with externalities, company law should not prevent managers from efficiently and effectively undertaking their choreographing role that management studies emphasize. A shareholder-primacy model in company law is unlikely to leave sufficient leeway for managers to pursue such goal effectively. An alternative model, such as Deakin's commons model[211] or an extended model based on Aoki's 'reciprocal essentialities'-mode, may better capture the monetary and non-monetary company law incentives required to facilitate the cooperation needed for a company to be successful. The message accentuated in this chapter is that the current shareholder-centred model is not intrinsically superior per se, contrary to what an end-of-history theory claims. At best it is a model that may be suitable under a particular set of conditions, as Aoki underscored.

3.14.1 Research questions

The overall research question for this chapter was whether orthodox new institutional economics offers the best available methodology to assess the efficacy of the legal theory of the company. A number of related sub-questions were addressed that appraise the

[210]Deakin (2012, p. 361-362).
[211]Deakin (2012).

orthodox model as compared to the alternative model proposed in this dissertation, such as:

- Does the use of the orthodox NIE methodology to assess the legal theory of the company generate hypotheses for empirical testing?
- Can the economic analysis of company law and its efficiency-increasing potential be enhanced through insights from other economic approaches?
- Is the orthodox NIE methodology useful from a normative perspective to build a company law model? Does it allow for co-evolution with changing environments? Can it endogenize the efficiency-affecting potential of social norms?

The conclusion offered in this chapter to the overall research question is negative: orthodox NIE does not offer the best available methodology to assess the efficiency of the legal theory of the company. While not all aspects need to be abandoned, the methodology is incomplete. We need not abandon bounded rationality, although methodological individualism is difficult to maintain in a multiple-equilibrium model. We need not abandon an economically-informed model, although we need to stay clear from an overly reductionist NIE model with unrealistic assumptions.

NIE's insistence on empirical testing is a useful complement to the largely doctrinal approach of traditional legal scholarship, although its partial empiricism fails to meet its full potential. Hypotheses for empirical testing are formulated *within* the framework. This chapter argued for a data-driven methodology in order to encourage empirical testing of the very foundations on which it is built, which are now presented as axiomatic. Neither a selfish nature nor its opposite can be empirically proven. Nor can we necessarily prove that certain individuals have altruistic-preferences while others don't (which would also not explain why certain individuals have such preference and others don't). The data suggest we express both self-regarding and other-regarding preferences. Only further empirical research can help understand what could be tipping points either way under particular circumstances. Metrics exclusively focused on shareholder variables (e.g., shareholder returns through share price increase or dividends) or monetary variables (return on assets, plant productivity) are insufficient to complete the task at hand: they are rooted in a theoretical framework that takes rational self-interested actors and methodological individualism as a given, rather than as a working hypothesis to be tested empirically.

NIE's methodology towards the legal theory of the company furthermore does not sufficiently acknowledge the importance that knowledge (associative cognition) plays in a company's success. Management studies suggest a broader set of variables that could inform an economically-informed alternative model (whether it be a commons-model proposed by Deakin, an associative-cognition reciprocal model suggested by Aoki or yet another model), which is discussed in the next chapter.

A data-driven and co-evolutionary methodology should equally acknowledge how a model and narrative can shape the environment in which it is embedded. For the purposes of the chapter, this means analysing how the NIE theory of the company, and its shareholder primacy narrative, shape the wider environment and what overall efficiency repercussions this may have.

A data-driven and co-evolutionary model is one that can accommodate multiple equilibria. Methodological individualism is difficult to reconcile with such multiple-equilibria, co-evolutionary model, as it fails to account for how both interaction between individuals, and between institutions and individuals, can shape individual preferences and outcomes. An efficient company law framework needs to take into account the social-ity of its actors, including the social norms and conventions that are required for, or conducive to, efficient transacting. This calls for acknowledging the endogeneity of social norms and conventions as a feedback loop for learning, and the way in which shareholder primacy may affect those norms. Norms and rules can encode knowledge and function as signalling devices for expected behaviour.[212] They are not merely input factors for rational individual pay-off calculations, but are constitutive of the individual.[213] The proposed model is better because it acknowledges this interplay between individuals and institutions.

The business judgement rule[214] presumes that managers have superior expertise to coordinate inputs than shareholders, which is more compatible with a view of managers-as-choreographers than NIE's view of managers-as agents. Such choreography role may be important to create a company adaptive to changing economic and socio-political circumstances. A multiple-equilibria model, which accepts linkages between economic and social exchanges, is arguably more compatible with market-oriented models than a single-equilibrium company law model. Not only a company needs to be adaptive, so should company law. While it is true that company law allows

[212]See Deakin (2011) on the cognitive foundation of institutions and their role in constituting, as well as reflecting, common beliefs.

[213]Finch and McMaster (2017, p. 19).

[214]The rule nonetheless does not challenge shareholder primacy per se.

for different types of corporate forms, the presumption of a NIE legal theory of the company is that there is only one efficient corporate organization for widely held companies - one of shareholder supremacy.[215] If we want companies, and company law, to strive for a more efficient equilibrium from among the multiple equilibrium options, this requires not just coordination but cooperation. Cooperation, in turn, requires company law theory to account for certain basic social norms and expectations. A shareholder-primacy model is unlikely to achieve this, other than under very specific circumstances.

As management scholar Hurst concludes, contrary to the Cartesian world-view of NIE, "contexts matter, history matters and stories matter."[216] In an environment of radical uncertainty,[217] narrative matters more than ever.[218] Bruner, for example, concludes that whether or not the continued post-2008 belief in the shareholder-wealth maxim is legally accurate "is only partly relevant because if enough people believe that it does, then it can be expected to constrain the politics of corporate governance reform moving forward."[219] Such belief, he argues, has impoverished our capacity to think creatively about potential solutions.

To conclude, we can look at Sen's approach over Rawls's as a way to move the important debate on how we conceptualize our companies going forward. We may look for ever better theoretical models of the company in perpetuity. Rawls's *Theory of Justice* was another example of what Lyotard would call *grands récits* or metanarratives. In reaction to such grand search for an overarching theory, Sen's much-revealing title of his book *The Idea of Justice* proposed a more modest approach. Even if we cannot agree on *the* theory of justice, this should not prevent us from starting to correct situations we perceive as manifestly unjust. Similarly, a lack of theoretical agreement on *the* theory of the company should not prevent us from correcting cor-

[215] The same shareholder supremacy norm would be encouraged for other corporate forms, such as worker or employee cooperatives. Since workers or employees are also shareholders, there may be less tension among intra-firm actors, but this does not negate a shareholder-supremacy norm. Deviating from shareholder primacy requires contractual agreement - entirely dependent on shareholders' approval.

[216] Hurst (2015).

[217] King (2016) and Kay (2015, p. 71).

[218] In Keynes' well-known words: "The ideas of economists and political philosophers, both when they are right and when they are wrong, are more powerful than is generally understood" (Keynes 1936). Akerlof and Shiller likewise write: "... we have been saying that people are phishable because the 'stories' they tell themselves are an important input into their decisions" (Akerlof and Shiller 2015, p. 149). They add: "New Story [i.e., the post-Reagan story of free market efficiency] is wrong: because its characterization of the economy is wrong. Its characterization of US history is also wrong" (Akerlof and Shiller 2015, p. 152).

[219] Bruner (2012, p. 559).

porate legal incentives that are widely perceived as manifestly inefficient. Where even business-oriented newspapers like the Financial Times or CEOs of some of the largest companies proclaim the manifest inefficiency of short-term shareholder-focused practices, we should not surrender to the belief that the current shareholder-centred model is the best we can come up with.

Chapter 4

Company law: In search of a data-driven and co-evolutionary model

4.1 Summary

The previous chapter assessed the methodology of NIE and argued for a data-driven, co-evolutionary economic model to inform the theory of the company. This chapter analyses the relevance of this critique for company law. The chapter explores whether company law can be more closely aligned with the pursuit of efficiency as a tool to increase overall social wealth creation by including a wider range of data to test hypotheses and alternative models. It furthermore assesses whether company law can be enriched by allowing for a co-evolutionary model that can accommodate multiple equilibria, in which shareholder primacy is but one potentially efficient model.

The law offers a diversity of legal forms that business ventures can select from. While companies are in theory free to choose from any of the legal forms available to them, other (non-company law) legal and non-legal pressures can nudge companies into a particular corporate form and, more importantly, into a shareholder-oriented *business model* that limits the legal diversity of corporate forms in practice. Limited corporate diversity means limited learning opportunities for company law (and companies) to adapt to, and co-evolve with, changing contexts.

To provide context to the theoretical debate, this chapter includes a number of examples from UK company law, evaluating the extent to which they follow NIE prescriptions. The chapter will briefly look at (i) managerial discretion and section 172 of the Company Act (CA) 2006, (ii) takeover regulation and the no-frustration rule, (iii) shareholders' rights of intervention in corporate governance and s 168 CA 2006, (iv) derivative actions and enforcement and (v) ongoing reforms to UK corporate governance, in particular the recent proposals on employee involvement. By way of a more elaborate case study, the chapter also evaluates shareholder limited liability for corporate torts against the proposal for a more data-driven and co-evolutionary methodology for company law.

4.2 A data-driven and co-evolutionary NIE model of the company: Potential consequences for company law

This chapter assesses the potential consequences for company law of the conclusions drawn in the previous chapter: how would a legal theory of the company based on a data-driven, co-evolutionary economic model that recognizes evolving, multiple equilibria affect company law? Could such approach make company law more efficient (increase aggregate wealth creation)? To assess these questions, first it is necessary to assess some of the basic assumptions of the standard Anglo-American company law framework.

4.2.1 The NIE-based company law model and efficiency claims

The strengths of the NIE model of company law have been abundantly and eloquently explained elsewhere.[1] The attractiveness of the orthodox NIE-model of the company is clear (including its intellectual elegance, simplicity and - at least partial - explanatory and predictive power). It is, however, an incomplete model - an incompleteness insufficiently addressed in standard corporate scholarship.

An important weakness of the model examined in this chapter is its assumption that corporate externalities are absent or otherwise dealt with by other fields of law or non-legal mechanisms. While attractive for a purely theoretical economic model, such unrealistic assumption is much more problematic when applied to real-world scenarios through company law.

[1] See Chapter 2, footnote 19.

One could object that company law is not the appropriate instrument to address corporate externalities.[2] One may indeed argue that "the purpose of corporate law is not the law of corporate purpose"[3]. Such view confines the role of company law as regulating only one particular aspect of corporate relations, namely the manager-shareholder relation. Other aspects, in this approach, should be relegated to other areas of law, such as labour law, environmental law or consumer protection law. While such approach is not necessarily convincing,[4] common ground can still be found: even if these externalities are not addressed in company law proper, at least the legal theory of the company should do so. This means company law should at least allow sufficient space for other areas of law, or for non-legal mechanisms, to address externalities efficiently.

Since the assumption of externalities is so crucial to economic efficiency claims, company lawyers should exert caution when claiming efficiency of any particular corporate regime (or inefficiency of any particular legal intervention) without due regard to externalities, for example in the context of activist investments or corporate restructuring.

When such claims of efficiency are made, this dissertation assesses them through its *leitmotiv* of 'efficiency of what', as discussed in Chapter 1. The bird-eye's view may help us refine the key questions of company law debates.

For example, company law discussions on managerial versus shareholder power have raged incessantly for decades - witness the Berle and Dodd debate in the 1930s[5] - with often impassioned arguments on both sides. The risks of managerial abuse[6] and

[2]This is indeed the argument in Kraakman et al. (2017, p. 271-272).

[3] I am particularly grateful to Vince Buccola to sum up this view so eloquently.

[4] It is unconvincing as a general statement. The purpose of a company is, broadly speaking, to create value efficiently. Company law is one tool, a set of rules necessary for or conducive to efficient value creation by companies. The use of the label 'company law' to regulate only director-shareholder relations suggests the mistaken conclusion that the essence of a company can somehow be reduced to this set of relations. Such conclusion is either the result of, or at least appears to entrench, the shareholder-oriented theory of the company. Moreover, even if we agree that company law should be limited in this way, we need to ensure that company law rules do not impinge the capacity of other areas of law to facilitate efficient corporate cooperation and value creation. A shareholder primacy rule in company law, nonetheless, appears to do exactly that. See below, section 4.5.6.

[5]Berle (1931), Dodd (1932) and Berle (1932). Berle and Mean's position has often incorrectly been classified as supportive of shareholder primacy (Talbot 2014, p. ix). Berle and Means, instead, advocated a 'third way' for company law: "They have placed the community in a position to demand that the modern corporation serve not alone the owners or the control but all society. This third alternative offers a wholly new concept of corporate activity. Neither the claims of ownership nor those of control can stand against the paramount interests of the community" (Berle and Means 1932, p. 356). See also Stout (2012, p. 1169-1171).

[6]Shareholder monitoring is not the only monitoring management faces. Fama points out mon-

shareholder abuse, respectively, are tangible. There is neither convincing doctrinal nor empirical evidence in favour of a clear-cut rule in favour of either constituency, irrespective of socio-political, economic, industry-wide or company-specific conditions. Moreover, these may not be the greatest risks facing companies at present. With the managers-versus-shareholder debate generating little novel arguments on either side, this chapter takes a slightly different approach.

It zooms out of the manager-shareholder debate to frame the question at a higher level. Granting greater powers to either managers or shareholders is typically defended in terms of claimed efficiency gains. But, again, efficiency of what? There is the implicit understanding, either mentioned only in passing or not at all, that rules of company law should add to efficient economic transacting, which in turn should lead to overall social wealth increases. Shareholder value maximization is assumed to be the most efficient tool currently available to achieve this result (see Chapter 1).

4.2.2 Research questions

The main theme of the dissertation is carried on in this chapter: what we understand by efficiency (and how we measure it) has repercussions for company law. The previous chapter concluded that 'efficiency' requires an understanding of the linkages between economic and socio-political spheres and that the intra-company governance mechanisms affect, and are affected by, the constantly evolving socio-political sphere.[7] This chapter assesses **what the potential consequences are for the orthodox, shareholder-oriented company law model if we embrace a data-driven, co-evolutionary methodology that can accommodate multiple equilibria**, as proposed in the previous chapter.

The research questions addressed in this chapter are:

- Is the NIE-based orthodox shareholder primacy model sufficiently grounded in the existing state of company law?

- Is there a viable alternative to the orthodox, shareholder-oriented model in Anglo-American company law? Can such alternative bolster company law's potential to enhance aggregate efficiency?

itoring among managers at different levels (Fama 1980, p. 293), whereas Bainbridge points to accountability mechanisms through internal and external employment markets, product markets, etc., to warn against an excessive focus on traditional agency concerns (Bainbridge 2009, p. 75).

[7]See also Robé (1999, p. 66).

- Is the shareholder primacy norm in Anglo-American company law useful from a normative perspective?

4.3 The shareholder primacy narrative as a constraint on corporate diversity

In most jurisdictions, black-letter company law does not require companies to adopt a shareholder primacy business model,[8] with fiduciary duties owed to the company and not to shareholders as such.[9] Nevertheless, other (legal and non-legal pressures) have nudged companies, in particular listed companies, into adopting a shareholder-centred narrative. Although multiple authors have emphasized that in most jurisdictions shareholder primacy is not grounded in company law,[10] there is still a widely shared perception that the law imposes a shareholder primacy duty on management.

The law allows for a diverse set of legal forms for business ventures: those wishing to start a business can choose to set up a cooperative, a privately held company, a benefit corporation, a partnership or a listed limited liability company, for example. This variety of legal forms is a basic acknowledgement in law that one size does not necessarily fit all[11] and that one legal form may be more efficient than another depending on the circumstances.

A formal-theoretical observation that a legal diversity of corporate forms exists

[8] As Deakin notes, no jurisdiction requires managers to maximize shareholder value at the expense of any other consideration (such as third party interests or the company's reputation) (Deakin 2012, p. 361).

[9] A historic case in the UK in this respect was *Percival v Wright* in 1902 (Talbot 2008, p. 159). Also on the UK, see, Davies and Worthington (2016, p. 465). See, however, Davies (2000, p 6-7) (arguing that, even though formally, directors' duties are owed to the company, in English common law the interests of the company are equated with those of its shareholders, at least as long as it is a going concern); Talbot (2014, p. ix) and Talbot (2008, p. 182-183). See also Kraakman et al. (2017, p. 97): "The corporate laws of many jurisdictions [the authors analyse] provide that directors owe their duty of loyalty to the company rather than to any of its constituencies. Such a duty is most naturally understood as an exhortation to maximize the net aggregate returns (pecuniary and non-pecuniary) of all corporate constituencies." This statement raises the question of how non-pecuniary returns can be measured - a subject which is discussed in more detail in Chapter 5. Even where measurement issues arise, this should not preclude boards from considering non-shareholder interests: "Whether explicitly or implicitly, all jurisdictions [the authors analysed] require or at least permit the board to take into account the interests of non-shareholder constituencies" (Kraakman et al. 2017, p. 102).

[10] Deakin (2005), Deakin (2012, p. 361) and Stout (2012, p. 1171). See also Robé (1999, p. 87) and Delaware's Supreme Court decision in *Paramount Communications Inc v Time Inc* (1990) 571 A 2d 1140. This legal conclusion is also acknowledged in economic analyses, see, e.g., Hart and Zingales (2017).

[11] Mayer (2013, p. 5, 9-10).

nevertheless reveals little about how these legal forms operate in practice. Benefit corporations, for example, are as of yet no more than a niche phenomenon.[12] Cooperatives are also of limited prevalence. The reason why one form is used more than another may not necessarily be that one *is* inherently more efficient than another. Liao, for example, points to the lack of familiarity of investors with alternative forms such as cooperatives or benefit corporations.[13] Entrepreneurs may not have the bargaining power to convince potential investors to experiment with a lesser known corporate form.

In short, the theoretical diversity of legal forms may hide legal and non-legal pressures that result in a lack of diversity in the corporate landscape in practice. For example, the increasing dominance of the shareholder primacy narrative has taken place even though black-letter company law has remained largely stable.[14] In other words, even if company law may not have changed substantially, narrative and practice have. Pressures from outside company law must therefore underlie such shift.

Legal pressures towards a shareholder primacy model ensue, for example, from takeover law,[15] where the financial interests of shareholders have been more unequivocally put centre stage. Another set of legal pressures derives from securities regulation, for example through regular reporting requirements for listed companies. This adds a layer of pressure towards a shareholder primacy norm that would otherwise not be imposed by company law (at least in most jurisdictions).[16] Davies concludes that those who could benefit from shareholder primacy "would do better ... to concentrate on reform of securities market law rather than core company law", as it is cheaper and easier to influence securities regulation (from stock exchanges and financial regulators closer to market actors) than company law, which has to go through the traditional legislative channels.[17]

Among the *non-legal* pressures one can count, for example, finance theory and simplistic, shareholder-favouring models such as the efficient capital markets hypothe-

[12] Moore (2017, p. 427 and 434).
[13] Liao (2018) (draft, forthcoming).
[14] Davies (2000, p. 3-4).
[15] Deakin (2005).
[16] A shareholder-primacy pressure in securities law would be felt most directly by listed companies, of course. To the extent it entrenches a general shareholder-focused narrative, it can nevertheless also exert indirect pressures on privately held companies.
[17] Davies (2000, p. 18 and 30).

sis[18] or CAPM[19] models.[20] Such finance models lent credence to the idea that rational shareholder decisions will result in efficient capital allocation, which in turn is assumed to result in efficient economic resource allocation and ultimately aggregate wealth creation.[21] Even though they originated as stylized, simplified economic models requiring empirical corroboration,[22] these finance models gained a normative dimension, turned into a simple "marching order"[23] for management.

These are ex-ante pressures, creating expectations by shareholders and the financial community towards management that ex-post shareholder monitoring rights may not be able to overcome.[24] Legally strengthening shareholder control rights ex-post may not only be insufficient to counter inefficient shareholder primacy pressures ex-ante, but may exacerbate such ex-ante pressures that prod managerial strategies towards this model.[25]

The legal and non-legal pressures create a shareholder primacy narrative that is internalized,[26] such that even where the law changes (such as abolishing a legal re-

[18]Talbot (2013, p. 118-119) (on the normative justification of pro-shareholder policies based on efficient market hypothesis notions).

[19]Capital Asset Pricing Model. See Bratton and Wachter (2010, p. 689) for a critique on the informational value of share prices and the pressure they create on management strategy. See also Rebérioux (2006, p. 520) for a critique of how so-called 'value-based' management metrics such as EVA drive shareholder pressures towards excessive risk strategies.

[20]Deakin (2012, p. 357) ("The idea that the surplus should be returned to the shareholders on a regular basis owes little or nothing to the legal framework of company law. It owes much more to late twentieth century finance theory, which argued that companies should distribute 'free cash flow' to shareholders in order to promote capital efficiency"). See also the Kay Review 2012 (p. 10) for a critique on the efficient markets hypothesis as a basis for regulation or investment.

[21]This is a questionable reasoning, however, as Deakin argues: "Whether the market allocates ownership of the economy's capital stock in an efficient way does not predetermine whether the relationship between capital, labour, and production is an efficient one in the sense of providing for the optimal use of a given society's scarce resources, let alone ensuring the well-being of the members of that society" (Deakin 2015, p. 19).

[22]Shiller concluded: "Yet our belief in the perfect applicability of the efficient markets theory goes even further than that, to an impulse to simplify the mission we expect businesspeople to pursue, and hence to moral implications ... There is a very human tendency to be a bit too attracted - perhaps distracted - by the symmetrical and the beautiful. The conservation laws of finance are only as valid as their underlying assumptions, and their applicability to real-world phenomena has been overrated." Shiller (2012, p. 133).

[23]Bratton and Wachter (2010, p. 653).

[24] "... the power of capital markets is expressed through the definition of ex ante financial requirements, which lead corporate executives to pursue highly risky strategies. Weak control on one side and strong pressure on the other ..." (Rebérioux 2006, p. 522).

[25]Several scholars have criticized the post-2008 regulatory response in favour of increased shareholder rights, in particular due to the link between shareholder primacy and excessive risk-taking. See, for example, Bratton and Wachter (2010) and Bruner (2012).

[26]Deakin (2005, p. 14).

quirement for quarterly reporting[27]), the practice and narrative continues, including through business school curricula[28] or analyst habits.[29]

4.3.1 Shareholder primacy and reflexive law

The shareholder primacy narrative could gain traction due to the ambiguity in company law in many jurisdictions on this point: even though the law may not require shareholder primacy and may technically call for a fiduciary duty owed to the company (not shareholders), there is sufficient ambiguity to accommodate a shareholder primacy narrative. Johnston and Morrow, for example, conclude that, in the EU, "[t]he current state of the law on fiduciary duties is uncertain" and that this hampers institutional investors' incentive to include ESG[30] criteria into their investment decisions.[31] Instead, they tend to follow conservative legal advice and adopt a short-term and quantitative investment strategy.[32] The authors emphasize the need for legal clarification of the fiduciary duty, as "it is unlikely that the courts will have adequate opportunities in the near future to clarify matters".

Chapter 2 briefly discussed the potential of a reflexive approach to increase the effectiveness of company law-in-society. As the chapter explained, the reflexive law literature emphasizes that a number of institutional conditions need to be in place before the potential benefits of reflexive law can become effective.[33] The landscape sketched by Johnston and Morrow suggests that the institutional conditions that would be required for a reflexive company law are currently not (yet) in place.

The functional-teleological explanation of company law in the end-of-history tradition[34] claims convergence towards a number of key features in company law, including

[27]See, e.g., the 2013 changes to the EU Transparency Directive (Directive 2013/50/EU, Articles 3-4) to this effect.

[28]See Chapter 5.

[29]"The conclusion is that securities analysts tend to restrain managerial strategy, in favour of 'familiar' strategies that are not necessarily profit-maximising" (Rebérioux 2006, p. 519).

[30]ESG stands for Economic, Social and Governance.

[31]Johnston and Morrow (2016).

[32]Johnston and Morrow (2016).

[33]De Schutter and Deakin (2005a, p. 3-4), see Chapter 2, section 2.5.

[34]Hansmann and Kraakman (2001). See, Deakin (2002, p. 35) however, (arguing that a functional explanation comes with the important caveat that the functional adaptation is an adaptation to *past* conditions, not necessarily current conditions). Ugeux made a similar argument regarding financial market regulation: "The structure of regulation itself is nothing else than the accumulation of the various rules and institutions created to solve the problem of the previous crises since 1929" (Ugeux 2014, preface).

limited liability and 'shareholder ownership'.[35] The claim is that this convergence demonstrates an inherent superiority of these characteristics over alternatives. The reflexive law literature, however, emphasizes the need for certain institutional pre-conditions to be met for company law to co-evolve with society in order to be fit for purpose in a particular context and that these conditions have to be "affirmatively created"[36]. When we assess the shareholder primacy norm from a reflexive law perspective, the functional explanation appears insufficient.

One of the institutional pre-conditions identified in reflexive law literature is that the law 'steers'[37] the process of self-regulation. The decentralized experimentation requires centralized coordination and evaluation,[38] which cannot take place if there is no clear central guidance on what the desired outcome and minimum standards are. Legal clarification on fiduciary duties would improve this central 'steering' and evaluation: it would provide a clear(er) benchmark against which alternative models (shareholder primacy, stakeholder theory, team production theory, the company as a commons, etc.) should be evaluated: the interests of the company, as a tool to create aggregate value. Due to the current lack of clear legal reference point, Johnston and Morrow argue, pension fund trustees "often seek to demonstrate that they have discharged their duty of prudence by 'benchmarking' asset managers against their peer group, which can lead to herding into particular types of investments (increasing rather than decreasing risk) and an unwillingness to consider new strategies".[39] If this is correct, it suggests that the learning potential is hampered by a risk-mitigating strategy to adhere to the well trodden path. This limits company-level experimentation, curbing the potential of company law to co-evolve with the broader society. Shareholder primacy, then, is not the outcome of the guided experimentation proposed by reflexive law theory. Rather, the picture sketched above is that it is the outcome of market forces that, due to lack of central evaluation and coordination, may lead to a suboptimal equilibrium unfit for the present context and a discourse unable to self-reflect on this.

Moreover, a reflexive law approach relies on the possibility of legal enforcement of the legal minimum standards. Without such enforcement, an outcome may again settle for a suboptimal equilibrium.[40] This would require not only clear legal guidance

[35]Kraakman et al. (2017, p. 5 and 13).
[36]De Schutter and Deakin (2005b, p. 3).
[37]Barnard et al. (2005, p. 209).
[38]Deakin (2009, p. 226) and Blackham (2016, p. 80).
[39]Johnston and Morrow (2016).
[40]Chapter 3 developed the idea that rules and norms can be equilibrium-shifting (Deakin 2002, p. 20, 22 and 28): they can help a community move to a more efficient equilibrium. Not only legal rules

on fiduciary duties, but also the tangible threat of legal enforcement of directors' duties towards the company.

As discussed in Chapter 2, a reflexive company law approach is one that "encourage[s] mutual learning by an ongoing deliberative process in which the actors involved accept that no-one has privileged access to the best solution."[41] This means a centralized guiding framework that allows participants to "arriv[e] at a new perception of the problem they are seeking to resolve".[42] The central steering framework should therefore refrain from the temptation to lay down a shareholder-oriented problem-framing (e.g., how can company law increase shareholder value?). Only then can it create the learning opportunity to redefine the problem in light of the overall objective (corporate value creation to increase aggregate wealth), context and experiences (as reflected in the collection of qualitative and quantitative empirical data).

Law as a self-sustaining (autopoietic[43]) system was based on the idea of autopoiesis in biology.[44] Random deviations within a particular species create a diversity that can increase survival rates in a changing environment (adaptability). Although autopoiesis in the natural sciences is different than in the social sciences,[45] a lack of corporate diversity through a shareholder primacy pressure can arguably decrease adaptability to a changing context. A more reflexive company law approach, which views corporate diversity as a learning device and adaptive tool, may mitigate this risk.

The standard shareholder primacy model of company law is self-referential but not self-regulating.[46] It is self-referential as it typically frames research questions in terms of the internalized narrative of shareholder primacy. Chapter 3 illustrated how the debate on activist investors assesses efficiency from a shareholder perspective and is therefore unable sufficiently to assess the difference between income creation and income transfers.[47] Empirical studies in standard company law are typically similarly self-referential: the research question assumes a shareholder-oriented model and the variables assessed flow from such pre-assumed model. Chapter 3 criticized this

and legal enforcement can have this effect, but also social norms.

[41]De Schutter and Deakin (2005b, p. 4). Although this statement was made regarding the Open Method of Coordination, the authors assess the potential and limits of the OMC from the angle of reflexive governance, making their statement relevant for this section.

[42]De Schutter and Deakin (2005b, p. 3).

[43]See Chapter 2, section 2.5.

[44]Teubner (1993, p. 27-28) and Loureno (2010, p. 2).

[45]Deakin (2002, p. 31) and Teubner (1993, p. 25-26).

[46]Teubner (1993, p. 18 and 20) ("A system can be described as self-regulating if it is able not only to build up and stabilize its own structures, but also to alter them according to its own criteria").

[47]See Chapter 3, section 133.

approach as partial empiricism, which limits the learning potential that a data-driven method facilitates. Although the empirical angle of neoclassical modelling sharpened our understanding of the functioning of company law rules, it is incomplete. A self-regulating system requires that the validity of the prevailing model is itself empirically tested. Quantitative modelling can still play a role, though its limits have to be duly acknowledged.

4.3.2 Shareholder primacy as a business model constraint

Shareholder primacy can be considered a form of (typically non-legal) constraint on a company's business model. The variety of *legal* models leaves open the different *business* models that can be adopted by a company under any of these legal forms: a business model focused on shareholders, on employees, on highly qualified employees, on creditors, on customers, etc. Shareholder primacy, however, can be seen as a constraint on the managerial discretion[48] to choose a business model deemed most fit for purpose for the company in question.[49] Managers may be under pressure to adopt a shareholder-focused business model (for example, due to pressure from equity markets) even where it may not be the most efficient business model. Bratton and Wachter warn that this adds a layer of agency costs of its own.[50] If the company operates in a knowledge-intensive sector in which employees' knowledge is crucial, for example, a business model focused on training and retaining employees would ultimately need to be justified in terms of shareholder benefit (whereas it could otherwise be a full-fledged business model in and of itself).

Admittedly, the business judgement rule leaves much room for directors to make their case when legally challenged.[51] However, the most important impact of the shareholder primacy narrative may be that managers and directors internalize a shareholder-oriented business model even if there is no legal obligation nor a looming threat of legal challenges in court, but because they may take the narrative for granted. If this is the case, the flexibility and diversity of legal forms that the law allows for cannot

[48]The importance of managerial discretion is not only underlined by scholars criticizing a shareholder primacy model. Bratton and Wachter (2010, p. 659) (emphasizing the superior knowledge of management as a warning against further shareholder empowerment) and Rebérioux (2006). It is also emphasized by authors subscribing to the more orthodox shareholder-centred model. Bainbridge (2009, p. 75).

[49]This is a micro-level argument of potential inefficiency, whereas the previous chapter made a macro-level argument on the inefficiency of shareholder primacy as a dominant model.

[50]Bratton and Wachter (2010, p. 654 and 690).

[51]Bainbridge (2009, p. 96).

co-evolve with changing circumstances and expectations where there are legal and non-legal pressures to adopt a shareholder-centred business model.

The fact that shareholder wealth maximization is not grounded in company law as such may also explain why not all companies (even in the same jurisdiction or in the same sector) may adhere to it to the same degree: its influence may be felt more depending on whether a company is listed, whether the shareholder-base is dispersed or which type of investors hold the company's stock, for example. If securities law prompts shareholder primacy, for example, it should come as no surprise that representatives of non-listed companies interviewed for this dissertation (see Chapter 6) were less likely to adopt an explicitly shareholder-focused business model than their listed counterparts. If finance theory may provide an additional, non-legal nudge in the shareholder primacy direction, we may expect financial institutions more readily to adopt a shareholder-focused business model than non-financial institutions (a hypothesis not further tested in this dissertation).

Orthodox agency theory holds that dispersed shareholding increases the agency costs to hold management accountable. The idea of shareholder primacy is to serve its purpose mainly in such scenario: the norm protects shareholders where they are least likely to be able to protect themselves through contract, namely where share dispersion creates the obstacle of collection action problems. There have been suggestions in the literature, however, that there may be behavioural aspects to the share dispersion that cannot be overcome by mere legal strengthening of shareholder rights. Stapledon, for example, identifies the arm's length relationship between shareholders of widely held firms and the companies they invest in as a main problem of short-termism of listed companies.[52] His conclusions suggest that the corporate legal form is not the problem, nor is the separation between 'ownership'[53] and control as such. Rather, the problem

[52] Stapledon (1996, p. 214).

[53] See Chapter 2, note 8. Shareholders are owners of shares, not of the company. Scholars have pointed out the legal inaccuracy of calling shareholders 'owners' of the company, although this perception remains widespread. Talbot (2014, p. 27 and 47), French (2017, p. 429); see also, from a different perspective, Fama (1980, p. 289-290)(abandoning "the typical presumption that a corporation has owners in any meaningful sense" and distinguishing between ownership of capital (stockholders) and ownership of the company); see however Bainbridge (2009, p. 3). The corporate form comes with asset partitioning, which has two legs: the assets of the company cannot be seized by creditors of shareholders (more precisely, corporate creditors have a claim on the company's assets "that is prior to the claims of personal creditors of the corporation's constituencies" (Bainbridge 2009, p. 3)); and creditors of the company cannot make a claim against shareholders' assets. The second leg of asset partitioning results in limited liability for the company's shareholders (discussed below). The first leg challenges the agency model. Shareholders (or their creditors) cannot claim a slice of the company's assets at will, as ownership rights would provide. Moreover, under US bankruptcy law, fiduciary duties shift from shareholders (in a solvent company) to shareholders and creditors (a 'community

in his view is the behavioural impact of the type of relationship between shareholders and the company in question. Stapledon's suggestion that the anonymous, arm's length relationship is problematic points to a behavioural dimension rarely discussed in company law: the psychological distance between a company and its shareholders alters the incentive package.

A legal theory of the company that ignores such behavioural impacts may well be incapable of adequately describing and predicting corporate behaviour. Hart and Zingales identify this problem and point to a behavioural lacuna in the Friedmanite conception of the company.[54] They propose a theoretical model that explains why shareholder monitoring rights may not lead to the outcomes that shareholders themselves prefer. They add a behavioural dimension to explain "why in a world of socially conscious shareholders we do not observe prosocial takeovers" (what the authors call 'amoral drift').[55]

Although Hart and Zingales distinguish between market value and shareholder value (and between shareholder value and shareholder welfare), their model is still very much shareholder-focused. Nevertheless, the hypothesis they put forward is interesting in that it suggests a *behavioural* 'agency', as opposed to the legal-formalistic 'agency theory' in standard company law debates.[56] The behavioural dimension of agency that the authors emphasize is whether a shareholder *feels* responsible for a particular corporate action (for which legal monitoring rights do not suffice). Whereas orthodox company law theory puts forward shareholder primacy as a tool to protect shareholder interests, especially in case of dispersed shareholding and concomitant collective action problems against managerial self-serving, there could be situations where such narrative harms the interests it is supposed to protect, *especially* in case of dispersed shareholding. The behavioural dimension not typically assessed in company law debates may prevent shareholders from altering a shareholder-oriented business model even if they would so desire.[57] The behavioural-psychological consequences of an arm's length distance between investors and the company is a variable that or-

of interests') in bankruptcy proceedings (Buccola 2013, p. 2). This is hard to explain if shareholders were the owners of the company.

[54]Hart and Zingales (2017).

[55]Hart and Zingales (2017, p. 251).

[56]Theirs is only a theoretical model, which requires empirical corroboration not presented in their paper.

[57]Hart and Zingales conclude that "without any restrictions publicly traded companies will naturally drift towards social indifference, i.e., they will tend to put little weight on the externalities they produce. They will underweight social surplus much more than privately held companies" (Hart and Zingales 2017, p. 258).

thodox company law debates hardly (if at all) touch upon but is a hypothesis worth testing empirically. Potentially inefficient pressures towards shareholder primacy may not be felt as strongly in closely held companies, while the norm may exacerbate the risk-taking or short-termist effects in widely held listed companies.

If this is correct, then dispersed shareholding may mitigate risk at the micro-level (portfolio diversification) but increase risk at the macro-level (amoral drift leading to inefficient equilibrium outcomes). A data-driven company law model is one that empirically assesses the efficiency implications also at this macro level.

Some authors (e.g., Mayer) view the separation of 'ownership' and control positively (allowing management to commit to different stakeholders[58]). If the above-mentioned hypothesis would have any ground, however (an arm's length separation may cause behavioural inefficiencies), it would make a shift in narrative, away from shareholder primacy and toward 'company primacy', particularly pressing.[59] Such shift requires no more nor less regulation than the current regime. It would maintain a degree of contractual freedom[60] within the regulatory constraints of a company-owed fiduciary duty.[61]

One could object that a shift in the interpretation of fiduciary duties would not make much difference, as "directors' corporate law fiduciary duties - regardless of their actual or perceived content - are arguably a relatively trivial component of the overall corporate governance machinery"[62] and one that is hard to enforce in practice. Moreover, as long as shareholders can appoint and dismiss directors, a fiduciary duty theoretically owed to the company may be eroded in practice by such shareholder rights. The alternative of giving up shareholder monitoring rights completely would, however, not seem particularly appealing. One could contemplate the possibility of allowing not only shareholders but also creditors and employees to bring derivative suits against directors for a breach of fiduciary duty owed to the company, as mentioned

[58] Mayer (2013, p. 6-7).

[59] A fiduciary duty owed to the company goes further than Hart and Zingales' interpretation of a fiduciary duty to maximize shareholder welfare (as opposed to shareholder wealth or market value). A fiduciary duty owed to the company, rather than shareholders, may also not necessarily require a *maximization* duty (see, however, Keay's 'entity maximization' model).

[60] See Moore (2017, p. 442) for a critical note on post-shareholder-value propositions preferring "flexible private ordering" "consistent with the underpinning contractarian rationality of the orthodox shareholder primacy position."

[61] The choice of business model would be free for management to decide upon. A shareholder-oriented business model could be chosen, although it is unlikely that a shareholder-primacy model could be justified as compliant with a company-owed fiduciary duty on the same scale as at present.

[62] Moore (2017, p. 449). See also Davies (2000, p. 4) ("litigation over the common law of directors' duties in the UK (in contrast to the USA) has always been infrequent").

above. Even if the legal enforcement of fiduciary duties towards the company is limited, a shift in the interpretation of the fiduciary duty would already allow for a change in narrative.[63] Moreover, it may reduce the possibility for managers to 'hide' behind a shareholder primacy explanation where doing so can conveniently serve managerial interests.[64]

In sum, the answer to the first research question of this chapter is negative: shareholder wealth maximization is not grounded in company law as much as in (non-company law) legal and non-legal pressures. Whereas company law does not require directors and management to prioritize shareholder interests above all others, there is a nudge towards shareholder primacy in law and beyond law that limits the diversity and adaptability that the different legal forms could otherwise allow for. Even though company law may not be the main drive behind the rise of shareholder primacy, it has been unable to stop it. Elements of a reflexive governance approach could nudge companies (and company law) in the other direction. This also touches upon the third research question:[65] there is a risk of inefficiency if shareholder primacy is adhered to even where it is not the most appropriate business strategy and where formal shareholder monitoring rights cannot overcome ex-ante pressures created outside of company law in this direction. It could nevertheless be the case that, even though not perfect, shareholder primacy is the best available model. The next question is: even though not legally mandated (at least in most jurisdictions), is shareholder primacy nevertheless overall the most effective tool to create corporate value? Is it normatively useful, even if descriptively inaccurate from a company law perspective?

[63] Moore (2017, p. 449); see also Eisenberg (1989, p. 1524) on the "double duty" of mandatory rules, both as prescriptive norms and as signalling devices of moral norms.

[64] "It is not unusual for boards and CEOs to justify a controversial action on the grounds that fiduciary duty to shareholders requires them to do it." (Hart and Zingales 2017, p. 263). See also Rebérioux (2006), arguing that shareholder primacy creates a disconnect between monitoring power and actual knowledge of the company's position. Shareholder primacy, in his view, empowers external actors (shareholders) while their capacity to monitor corporate insiders (management) is inherently limited due to a lack of knowledge. The term 'shareholder primacy' is used in this dissertation to refer to the idea that a company should be managed in shareholders' interests. This is not necessarily the same as the idea of shareholder monitoring rights. It is not clear what alternative Rebérioux suggests to shareholder monitoring rights.

[65] The third research question of the chapter was: is the shareholder primacy norm in Anglo-American company law useful from a normative perspective?

4.4 Purpose of the company - is shareholder primacy the most effective tool?

There is quite an extensive literature on the purpose of company law.[66] The technicality of the debate does not prevent a more widely shared acknowledgement that, ultimately, company law should somehow support corporate value creation, which in turn is assumed to increase aggregate social welfare. As mentioned in Chapter 1, the debate may continue as to *how* company law should be devised to facilitate corporate value creation (e.g., through shareholder primacy or stakeholder theory), though it is much less controversial *that* it should aim to do this.[67]

The next question is an empirical one: is shareholder primacy the most effective tool currently at our disposal to facilitate corporate value creation in the current context?[68] Or would another model be more fit for purpose, such as stakeholder theory,[69] the team production model,[70] a company-as-commons model[71] or a combination thereof? Moreover, can we put forward a single model as inherently superior, regardless of circumstances and expectations?

As the shareholder primacy model is the dominant narrative in Anglo-American company law literature, it is the subject of this chapter. The aim of the chapter is not to propose a single model as inherently superior, but to understand the *methodology* through which the usefulness of a model should be assessed, relying on reflexive governance theory.

Shareholder primacy may have been a useful tool to address particular needs historically.[72] It could be that the model became dominant as it was best suited to meet the demands and expectations at the time. (This need not be the case, of course, as a model may become dominant for other reasons, such as path dependency or power

[66] See, for example, Bratton (2014), Bruner (2012) and Johnson (2013).

[67] See, e.g., Kraakman et al. (2017, p. 22-23).

[68] Moore argues that a "shareholder-oriented corporate governance framework may be a social evil, [but] it is nonetheless a necessary evil" under the given social-institutional context, in particular US worker-savers' reliance on corporate equity gains as a source of non-occupational income (Moore 2017, p. 427). A follow-up empirical question is whether worker-savers' gains through the status quo outweigh any losses from a shareholder-oriented company law model (Keay's theoretical assessment is that they may not (Keay 2008, p. 689)).

[69] Freeman (1984), Donaldson and Preston (1995), Clarkson (1998) and Freeman, Harrison, Wicks, Parmar, and de Colle (2010).

[70] Blair and Stout (1999).

[71] Deakin (2012).

[72] This is an argument made by Orts in the preface of his forthcoming book *Rethinking the Firm: Theories of the Business Enterprise*, to be published by Oxford University Press.

relations. More on that below.) Even if we accept this, we would require a continued assessment of whether it remains the most suitable tool for current circumstances.[73]

The focus on shareholders came at least in part as a reaction to managerial self-serving concerns in what became known as the era of managerial capitalism.[74] Shareholder primacy may have been the appropriate antidote under those circumstances. It may however come with its own risks (as Berle and Means readily acknowledged[75]), which furthermore need to be assessed against the backdrop of changing conditions and expectations. Moreover, we need to be clear on what we understand by shareholder primacy. For example, is shareholder value the same as shareholder primacy? Is shareholder primacy necessarily a maximization requirement? If so, is it the maximization of shareholder wealth or (as Hart and Zingales argue) of shareholder welfare (as opposed to market value)?[76] Moreover, we need to distinguish between shareholder monitoring rights and shareholder primacy (the idea that the company needs to be managed for the shareholder interests - see below).

In addition, the effectiveness of the prevailing model needs to be assessed not only against the background of changing circumstances, but also against an evolving body of knowledge. Since the coming to prominence of the current shareholder-oriented model, significant advances have been made in various disciplines that can enrich our company law model and bolster its efficiency. Economics, psychology, biology and neuroscience, for example, have all made significant progress in understanding human behaviour, as explained in the previous chapter. Such refined understandings of human behaviour should be reflected in company law, as a set of incentives, as well.

It is in light of this evolving body of knowledge, against the background of an evolving society, that the question of a data-driven and co-evolutionary company law model needs to be assessed. Under current conditions and given the current state of knowledge, is the shareholder primacy model (still) the most effective tool at our disposal?

[73]See preface, Orts, *Rethinking the Firm* (forthcoming).

[74]An early account of the manager v. shareholder debate can be found in Berle and Means (1932), which nevertheless ends by proposing a “third alternative” in the form of a community-oriented company.

[75]Berle and Means (1932).

[76]Hart and Zingales (2017).

4.5 Can a data-driven, co-evolutionary model make company law more efficient?

Before assessing whether a data-driven, co-evolutionary model can make company law more efficient, it is useful to clarify what is meant by these concepts.

A data-first model A data-driven (or 'data-first'[77]) company law means a company law framework that interprets empirical data "against the background of not just one but several (possibly competing) ... hypotheses and without constricting them in a pre-specified direction."[78] Contrary to a theory-first approach, a data-first company law approach "facilitates the discovery of new evidence" and "allow[s] the data to speak as freely as possible".[79] In a multiple-equilibria model, a data-first approach can more readily accommodate the search for a more efficient equilibrium among the various feasible equilibria. Linking the insights from the previous chapter to this chapter, the shareholder primacy model may be one out of the multiple possible equilibria, though whether it is (one of) the most efficient from among the feasible equilibria (at the macro- or micro-level) is the subject of assessment. A data-driven model assesses not only the corporate legal framework by itself, but how it interacts with non-legal factors, such as habits, narrative or behavioural factors. The data-driven approach suggested here is compatible with a reflexive law approach and systems theory, in which the interaction between different systems clarifies the limits of the legal system. The data-driven model is aimed at incorporating data that shed light on this interaction of law and other systems, with the objective of making company law more self-regulating (autopoietic - see Chapter 2).

A co-evolutionary model A co-evolutionary[80] company law model is one that allows for adaptation[81] to changing conditions (socio-political, economic, environmental, etc.). The term 'co-evolutionary' as used in this chapter should not be confused with 'evolutionist' in a teleological sense (as criticized in Chapter 3).[82] An evolutionary

[77]Juselius (2011, p. 425).
[78]Juselius (2011, p. 426).
[79]Juselius (2011, p. 426).
[80]Teubner (1993, p. 45).
[81] The word 'adaptation' may suggest that company law passively follows changing socio-political circumstances. One should not lose sight of the fact that the company law regime, in turn, shapes socio-political conditions. The word 'co-evolutionary' is used in this chapter as it expresses more clearly the dual direction of the relationship. See also Luhmann (1988, p. 146).
[82]Teubner (1993, p. 47-48).

perspective is implicit in the institutional economic analysis of the company (including new institutional economics). This chapter uses the term 'co-evolutionary model' to acknowledge that the legal system and other systems (including the economy) co-evolve over time. However, this does not mean that it necessarily evolves towards an inherently more efficient model in the end-of-history tradition (see Chapter 3). The co-evolutionary company law model put forward here is in line with the reflexive law approach discussed in Chapter 2: namely a non-linear, multivariate interaction between law and non-legal systems that requires a clear and centralized 'steering' framework to be effective (self-reproducing and self-sustaining). This means the regulatory framework needs to allow sufficient flexibility for law to co-evolve with society, namely to experiment and adapt to changing contexts (without such change necessarily being optimal)[83]. The autopoietic company law model simultaneously attempts to shape the context to make self-regulation effective. This leads to a view of law as an emergent[84] system: there cannot be an end-of-history model that is superior regardless of circumstances. If we consider company law as an emerging property, it requires a constant reassessment of whether it allows sufficient flexibility for companies to adapt to changing contexts (including, for example, expectations for greener technologies or ESG-benchmarking; or changing norms on worker welfare and child labour) and simultaneously acknowledges how it actively co-creates the context. Nevertheless, contrary to the functional, market-oriented company law debates that place great confidence in market-based self-regulation, the reflexive co-evolutionary model proposed here is one that supposes and calls for a clear regulatory steer, within which such experimentation and diversity takes place.

A data-driven, co-evolutionary company law model, in sum, is one that acknowledges that the company is embedded (cf. Polanyi), that therefore a search for an internal corporate equilibrium cannot be insulated from the search for equilibria[85] beyond the confines of the company or even the economy (cf. Aoki), that the multitude of potential equilibria are in constant flux and that company law should therefore be

[83]Deakin (2002, p. 4).

[84]Teubner (1993, p. 26 and 45). For a definition of emergence, see Deakin (2002, p. 33-34). On an evolving (emergent) diversity of companies and norms due to linkages between the economic and social exchanges, see Aoki (2010).

[85]The language of equilibrium is retained in this dissertation, although the complexity of companies and company regulation may not ever allow for an equilibrium to be reached. Some may argue that, due to this inherent complexity, equilibrium-thinking should be abandoned entirely. Due to time and space constraints, this is not further discussed and, for the purposes of this dissertation, equilibrium-based modelling is not abandoned but shifted from a single- to a multiple-equilibrium approach to accommodate a higher level of complexity.

sufficiently adaptable to allow for the pursuit of co-evolving, more efficient equilibria and should simultaneously help shape the institutional context required for effective self-regulation. In short, it could make company law more efficient, in particular where a shareholder primacy norm may inefficiently constrain the business strategies available to management to adapt to a changing business environment.

4.5.1 Efficiency and externalities

The dominant Anglo-American[86] model of the company is that of a transaction-cost -reducing, shareholder-wealth-maximizing contractual vehicle. The language of bargaining and contracting particularly begs the question how such contractarian approach accommodates involuntary creditors. Absence of externalities[87] is so critical to the ideal-type optimal efficiency envisaged by NIE, that a company law model based on this premise needs to take this question seriously.[88]

If we follow Blumberg's definition that externalities include all transactions "where parties are not in a practical position to negotiate credit terms,"[89] the problem of externalities ventures into situations beyond corporate tort.[90] It invites the obvious question of how to respond to *contractual* relations in which certain conditions af-

[86]See Chapter 1, footnote 20 on the similarities and differences of Anglo-American-style company law.

[87]Companies create both positive and negative externalities. Without wishing to deny the existence of positive externalities resulting from corporate activities, this chapter focuses on negative externalities that are not addressed through the market - i.e., are not reflected in the price of a particular product or service. When the word 'externalities' is used in the remainder of the chapter, it refers to 'negative corporate externalities' unless otherwise specified.

[88]"One broadly accepted view ... is that corporate law should seek to maximize shareholder value, because this ordinarily tends to serve the broader goal of advancing social welfare. Yet for this to be true, regulatory measures must be used to impose the social costs of corporate activities onto the firm's bottom line where affected parties cannot bargain with the firm" (Kraakman et al. 2017, p. 271).

[89]Blumberg (1985, p. 576). A classic reference in economic literature on externalities is the work of Pigou, see White (2012, p. 344), Pigou (1920; 1912), criticized i.a. by Coase (1960) and Knight (1924). See also Meade (1952) versus Cheung (1973).

[90]Johnston (2012, p. 1). Such broad definition of externalities may not be acceptable to all scholars. Discussions about corporate externalities typically focus on tort cases. Risks which the contractual creditor was aware of would typically be seen as part of the bargain rather than an externality. In their book on microeconomics, Mas-Colell, Whinston and Green define externalities as follows: "An externality is present whenever the well-being of a consumer or the production possibilities of a firm are directly affected by the actions of another agent in an economy," which excludes "any effects that are mediated by prices". Leaving aside the fact that externalities can create effects beyond consumers or a firm's production possibilities (e.g., neighbouring populations), the definition of effects 'not mediated by prices' would appear to allow for a broad definition of externalities (Mas-Colell, Whinston, and Green 1995, p. 352).

fect the ability of the contracting partners to genuinely bargain for the mutually best possible outcome. As Johnston remarks, the absence of bargaining does not necessarily mean that assets are put to their highest use.[91] Factors that can prevent the parties' bargaining ability include power disparities,[92] asymmetric information and prohibitive monitoring or transaction costs. Note that a classical definition of power closely resembles that of externalities[93] - indeed, negative corporate externalities are one manifestation of corporate power, sanctioned (or not) by law. The second part of the chapter will focus on corporate torts and shareholder liability. This is only a subset of 'externalities' as defined by Blumberg, leaving out externalities that flow from contractual arrangements mired by unequal bargaining power. It is a topic of future research to assess how the conclusions of this chapter could apply to this broader category of externalities.

A data-driven, co-evolutionary model of company law assesses whether the degree of externalities generated under a shareholder primacy model (in which externalities either rest where they fall or are addressed through commercial incentives, shareholder charitable giving or general ex-post legal remedies) is more efficient (creates greater societal wealth) than an alternative model in which externalities are mitigated by law ex-ante. Hart and Zingales, for example, partially object to Friedman's view on shareholder value maximization: it may be more efficient to prevent certain externalities than to maximize shareholder returns and let shareholders address externalities through charitable giving, namely where "money making and ethical activities" (or

[91] Johnston (2012, p. 5).

[92] The standard economic-functional explanation of company law insufficiently accounts for power as an explanatory factor (Parkinson 1993). Concerns over corporate power and 'might makes right' in the explanation of shareholder primacy were already raised by Berle and Means in the early 1930s (Berle and Means 1932, p. 353-355). An "economic-informed" company law (Deakin 2012, p. 345) should not make us oblivious to power disparities as a partial explanatory variable. Hurst argues that "pressures of businessmen" can explain in the first instance why "[w]e gave up building general social controls into corporate structure" (Hurst 1970, p. 162). Robé (1999, p. 121). For a definition of corporate law and corporate governance based in terms of power, see, e.g., Orts (1993, p. 1577), Moore and Petrin (2017) and Eisenberg (2006, p. 1) .

[93] Traditional definitions of both power and externalities reflect the situation in which one party's actions affect another party, without the latter's consent. Economists may infer consent from agreeing to a transaction where the negative effect on the other party is mediated by a price correction. On the definition of power, see, e.g., Parkinson (1993, p. 8, 10) and Moore and Petrin (2017, p. 6, 8), with reference to classical definitions of power by Kaysen and Galbraith. For definitions of externalities from an economic perspective, see, e.g., Mas-Colell et al. (1995, p. 352), Coase (1960, p. 1), Pigou (1912), White (2012, p. 343-345) or Kelly (2011, n. 6); and from a company law perspective, see, e.g., Johnston (2012, p. 1). See also Finch and McMaster (2017, p. 16) on "how power is maintained, exercised, constrained and legitimised" through social institutions.

"profit and damage", i.e., externalities) are not neatly separable.[94] Schultz views moral norms as a necessary condition to decrease externalities efficiently: they create an internal incentive to mitigate externalities, without which "resources are wasted enforcing compliance and rectifying the results of non-compliance".[95]

In sum, the shareholder primacy norm may not be normative useful if it increases the risk of negative corporate externalities that would more efficiently be mitigated by a non-shareholder primacy alternative.

4.5.2 Contracts and law

Companies are legally sanctioned entities that can be a more effective organisational tool to create corporate value than a mere collection of individuals or other form of collective endeavour. The corporate form has its advantages and disadvantages, though it is assumed that, when the legislator sanctioned incorporation laws, the benefits of corporations were deemed to outweigh the costs at the time. The chapter is based on the assumption that this is still the case. It assesses whether the regulation of the corporate form can be made more efficient.

NIE has greatly contributed to the legal theory of the company as a nexus-of-contracts, which dominates Anglo-American corporate law scholarship and heavily influenced scholarship in other Western countries as well.[96] This view of the company as a bundle of contracts has nonetheless come under criticism for underestimating, or even ignoring, the important role law plays in the formation and functioning of companies.[97] Contrary to a nexus-of-contracts view, law is constitutive in ensuring the benefits of the corporate form as an organizational tool.

It is law that establishes a company as a separate legal entity, with all the rights and obligations this entails. Though proponents of the nexus-view argue that, in the absence of law, the company's contractual partners would negotiate the same basic rules as those found in the dominant company law systems, their argument must imply acknowledgement of a market failure. Company law is put in place exactly because it is thought, even by proponents of the nexus-theory,[98] to be more efficient

[94] Hart and Zingales (2017).

[95] Schultz (2001, p. 2).

[96] See Chapter 1.

[97] Gindis (2015) and Blair (2004). This is not to deny the strengths of the model, see Orts (2013, p. 66).

[98] Proponents of the nexus-theory would of course not agree that every single provision of company law is efficient, though they would agree that a set of default rules such as limited liability, delegated management or transferable shares would lower negotiation costs and thus increase efficiency.

than individual bargaining in the market place. So-called ‘default’ terms in company law are defended by proponents of the nexus-theory as efficiency-enhancing: it saves contracting partners the cost and time of individually negotiating these terms in every single contract. However, legal scholars have demonstrated why such justification is not grounded in company law: company law provisions are often laid down not as mere default rules which the parties are free to deviate from through contract, but as mandatory rules.[99] Moreover, a functional explanation of a company law provision on the axiom that it would be the standard clause that most contracting parties would prefer absent transaction costs, is unconvincing by itself.[100] On the contrary, certain provisions would appear to go against contracting parties’ preferences.[101] Depending on the circumstances of the company, some may instead prefer creditor primacy (for highly leveraged companies with concentrated debtors but widely held shares), as Easterbrook and Fischel have argued, for example.[102]

The comments from a number of interviewees (see Chapter 6) also give rise to some scepticism towards that claim. A number of them manage closely held companies, in which shareholders could easily replace the CEO with a more shareholder-focused one if they would deem it desirable. Their views chime in with criticism on the current impact of the shareholder maximization doctrine and short-term shareholder pressures by CEOs such as Larry Fink,[103] Warren Buffett,[104] Jamie Dimon[105] and former-GE

[99]See, e.g., Moore (2013), French (2017, p. 29) (referencing the Eisenberg - McChesney debate) and Eisenberg (1989, p. 1461) (distinguishing between enabling, default and mandatory corporate rules). Standard company law literature nevertheless continues to view company law mainly as a set of default rules. See, e.g, Bainbridge (2009, p. 48) (“most corporate law rules are default rules - i.e., off-the-rack principles that may be modified by contract.”).

[100]The nexus-of-contracts view could be seen as more egalitarian in character than an agency model: subordination of interests is assumed to flow from implied contractual agreement between different corporate input providers (including employees and suppliers), not an inherent superiority of one type of claims (shareholders’) over others. It has nevertheless led to the same conclusion as the agency model in proclaiming shareholder primacy.

[101]One example is shareholder limited liability: it cannot simply be assumed that contractual creditors or employees would typically agree to limit shareholder liability for contractual claims or even non-contractual claims that may arise (Bainbridge and Henderson 2016, p. 11 and 13). Historically, great opposition existed against limiting shareholder liability, including from creditors, as discussed below.

[102]Easterbrook & Fischel suggested that creditors may under certain conditions be better monitors than shareholders, since they are often fewer in number, thus facilitating coordination and lowering free-riding problems (Easterbrook and Fischel 1985, p. 100).

[103]See the 2016 Corporate Governance Letter to CEOs by Blackrock’s CEO Larry Fink.

[104]X (2009) and Foley and McLannahan (2016).

[105]Foley and McLannahan (2016).

CEO Jack Welch[106].[107] These anecdotal comments may not be sufficient to claim that shareholder primacy is inefficient, but they add to the volume of evidence that warrants further empirical verification of shareholder primacy's efficiency claims. Even if we assume that shareholder primacy is the arrangement that corporate input-providers would contract for, this may not be sufficient as proof that it is more efficient than alternative models. Empirical corroboration is required to corroborate such hypothesis.

It is impossible to explain the basic features of corporate law by relying on self-interested bargaining only (although this is undoubtedly a partial explanation). The idea that the company is nothing but a bundle of contracts led some scholars to draw peculiar conclusions. Jumping ahead to the discussion on shareholder liability, Easterbrook & Fischel, for example, strangely propound that "[t]he liability of the 'corporation' is limited by the fact that the corporation is not real."[108] Were the company not real, as they assert (in other words: were it no more than a bundle of contracts), it would be *less* likely to see limited liability for shareholders as a general feature. It was law that was required, and lobbied for by businessmen at the time,[109] to impose a general rule of limited liability in favour of shareholders.

In sum, a normative foundation for the shareholder primacy norm cannot be grounded on the speculative outcome of a hypothetical bargaining scenario. Such hypothesis is inconsistent with the volume of mandatory company law rules and not sufficiently corroborated by the historical data available on the enactment of limited liability.

4.5.3 Agency and management

If the company, as a legal entity, is premised on an organizational advantage over a non-incorporated version, we may expect company law to concern itself with this organisational dimension of the company. It is nonetheless surprisingly understated in company law. The agency model of company law limits the function of management to that of shareholders' agent; while the manager-employee relationship (to the extent discussed in company law) is very much reduced to one of hierarchical subordination.[110]

[106] Welch famously called shareholder value "the dumbest idea in the world" (Guerrera 2009).

[107] One may object that such laments by CEOs merely serve to free themselves from unwanted shareholder monitoring (see Chapter 3, note 96). This is indeed a valid working hypothesis, but not a statement that can be accepted axiomatically.

[108] Easterbrook and Fischel (1985, p. 89).

[109] Blumberg (1985, p. 583 and 591).

[110] "... the orthodox contract theory of the firm considers the human aspects of business corporations only in terms of authority relationships between the management and the worker" (Aoki 2010, p. 6).

This is a very reductionist view of the company as an organizational device.

Gand and Segrestin, instead, portray the company's organizational capacity as one of creating *"potentiels collectifs"*.[111] The company is set up for a shared purpose (a corporate mission), which can better be achieved through the corporate form than without it. The legal entity of the company allows for the coordination of inputs to further this 'collective potential'. To the extent this requires a subordination, Gand and Segrestin argue, this is a subordination of individual input-contributors to this corporate goal and not the subordination of one type of input provider to another.[112]

Part of this collective organisational capacity is the creation of knowledge within the company that cannot be individuated, as Aoki concluded.[113] Acknowledging the collective organizational capacity as the main strength of the legal corporate form sits uneasily with a model that reduces the company to an aggregate of assets or a collection of contracts.

Such organizational typology of the company pays greater attention to the crucial role of management than the agency model does. It moves beyond a reductionist view of a rather passive role for management as mere guardians (agents) of any particular group of interests. Shareholder primacy is one example of such reductionist view on management. Stakeholder theory, however, may also be too reductionist: the role of management is not primarily to act as agent of any particular group of interests or a collection thereof. Instead, management is more accurately viewed as an agent of the company itself, with its own collective goals.[114]

[111] Gand and Segrestin (2009, p. 138).

[112] "La problématique porte donc non pas en premier lieu sur la nature de la subordination mais sur l'objet de la subordination," (Gand and Segrestin 2009, p. 138). See also Aoki (2010, p. 23) ("... the organisational mode is not selected primarily in order to control people's opportunistic behavior, but in order to benefit from working together. We then worry about the architecture-specific problem of opportunism").

[113] See Chapter 3.

[114] The focus on the corporate entity, rather than its input-providers, resembles Mayer's thesis in *Firm Commitment*. However, this chapter does not argue that the purpose of the company is limited to a commitment device. A degree of commitment is a necessary although insufficient condition for efficient corporate value creation. It also bears some resemblance to Keay's Entity Maximization model (Keay 2008). However, this chapter does not argue that we necessarily need a 'maximization' model, whatever the metric to be maximised may be. Keay mitigates the 'maximization' norm in his model by not limiting it to the maximization of profit (Keay 2008, p. 679). His model proposes maximization of 'market value' and 'net present value' (Keay 2008, p. 685), which risks ignoring the fact that these concepts are themselves very much the product of a market-based, shareholder-oriented model. In his defence, Keay employs a much more flexible and broad understanding of NPV than the traditional finance- and accounting-NPV. His model nevertheless remains market-based and may not sufficiently enable a multiple-equilibria model of an embedded company (in which value and efficiency are assessed from an overall social-wealth-creation perspective, not a market-perspective only). This chapter also does not invoke a hypothetical bargaining analysis in support of a particular model, as

A greater acknowledgement of the important role of management in company law would realign it with management studies, which more readily appreciates management's organizational coordination task.[115] Those wary of a return to the era of managerial capitalism may object to company law attributing greater powers to managers at the expense of shareholders. Acknowledging the important role of management in company law does not necessarily mean increasing managerial powers. Rather, it would amount to greater legal recognition of the tasks they already undertake, as better acknowledged in management studies. Moreover, such objection should not ignore the fact that shareholder primacy is a working hypothesis, the usefulness of which depends on the extent to which it is capable of furthering the ultimate goal of increased aggregate wealth creation. A greater acknowledgement of management's role in company law could lead to greater managerial accountability, as management cannot 'hide' behind shareholder demands, but has its own, separate responsibility towards the collective corporate potential.[116]

If we view the company as an associational-organizational legal entity capable of achieving what no mere collection of individuals can, the primacy of any subset of individual interests can only be justified if it is found to further the interests of the organization (enhancing its organizational capacity). For the present chapter, this requires assessing whether shareholder primacy is the most effective tool to further the company's organizational capacity. A particular group interest (whether a shareholder, creditor or other investor-group interest) should not be prioritized by company law except where a sub-group's interests (or an aggregate of particular group interests, such as in stakeholder theory) would be most conducive as a tool to enhance the corporate organizational capacity.

For directors' fiduciary duties, this implies that these should be owed to the com-

Keay does (Keay 2008, p. 686), but makes an argument in light of overall efficiency (social wealth creation). Finally, this chapter does not argue in favour of the maximization of the entity's value as a goal in itself but emphasizes the company's best interest (rather than shareholder interests only) as a tool towards efficient overall value creation. It highlights the organisational capacity of the company (its 'collective potential'), which brings a wider set of variables into the equation than a value-maximization model (it is unclear to what extent the entity maximization model would factor in the behavioural effects of executive bonuses, relocation decisions or tax avoidance schemes on employee morale, productivity and creativity, for example). Keay's model resembles an instrumental CSR approach, only not in order to maximize shareholder value but the company's value. This chapter, instead, attempts to highlight the importance of an instrumental model in shaping a normative narrative.

[115]It may be no coincidence that Freeman, typically referred to as the intellectual father of stakeholder theory, entitled his 1984 book *Strategic Management: A Stakeholder Approach*.

[116]Hart and Zingales allude to the risk of management hiding behind fiduciary duties allegedly owed to shareholders to legitimize otherwise controversial decisions (Hart and Zingales 2017, p. 263).

pany, as the organizational-associational device. Fiduciary duties towards shareholders directly, whether *de iure* (enshrined in law) or *de facto* (due to judicial interpretation or common practice) would call for a sustained empirical assessment to ensure this enhances the company's organizational capacity.

The business judgement rule can be seen as a legal recognition of this organizational potential, giving directors (including executive directors) a relatively large degree of discretion in the high-level coordination strategy for the company's inputs and providing a degree of insulation from shareholder control.

The business judgement rule allows for a degree of adaptability of the company that a rigid agency model cannot. This is critical both at the micro-level for the company's survival and success in a changing, competitive environment, as well as at the macro level to ensure that the company, as a legal entity and organizational device, remains fit for purpose for current needs and expectations. The latter is also crucial to ensure corporate legitimacy. The standard company law model that largely detaches questions of corporate efficiency from the interaction with socio-political spheres, is incapable of sufficiently making this bridge between company law rules, on the one hand, and societal expectations and legitimacy, on the other. (Chapter 5 goes into greater detail in explaining why an understanding of the company as an embedded entity is also important for risk management purposes and therefore matters for corporate performance.)

In short, the agency model implicit in standard company law literature is too reductionist to capture the essence of the managerial task of coordinating corporate inputs, in a changing and competitive environment. A tacit or explicit rule of shareholder primacy in company law may actually prevent managers form discharging this task, by imposing a business model that may not be fit for purpose. On this basis, shareholder primacy cannot be supported as a normatively useful standard regardless of circumstances.

What this means is not necessarily that shareholder primacy is an intrinsically desirable or undesirable model. Rather, if the model is internalized (even if this is not because of company law per se), it may prevent the corporate form from evolving into a more effective tool for corporate value creation that can enhance social wealth.

4.5.4 Shareholder primacy and risk-reward preferences

Even if legally inaccurate, the shareholder primacy model could be defended by the traditional argument of risk-reward distribution within the company. Although shareholders may not have the legal rights that owners have, it is often claimed they must have special rights as residual claimants.[117] In case of corporate bankruptcy, shareholders are the last in line to claim the remaining value of their investments. Their claims are subordinated to those of employees, creditors and tax authorities, for example. As residual claimants, it is often assumed shareholders have the best incentive to monitor the company's directors (hence management). This, in turn, is said to justify shareholder control rights,[118] such as the right to appoint directors and to terminate their contract, or their final say in a restructuring or takeover.

This explanation is neither necessary nor desirable. It conflates two different issues. One issue is the risk-reward mix preference of the different types of investors: different corporate input providers are each rewarded, at least in theory, according to the type of risk they are willing to bear, with the greatest risk-reward spread for shareholders. Investing in a share, in such model, is by definition more risky than an investment in the form of a loan or labour input. Shareholders are rewarded for this risk by the potential to gain a return on investment (ROI) that can be a multiple of the ROI of other input providers. The role of management encompasses (though is not limited to) the task of ensuring each group of investors receives the level of reward associated with the risk-level undertaken. Remuneration of the different input providers is merely a necessary condition to ensure corporate survival (but is insufficient, by itself, to ensure the company thrives).[119]

The question who is best placed to monitor management (through the board) is a separate issue. Acknowledging shareholders as residual claimants in case of corporate bankruptcy does not necessarily guarantee that they have the greatest incentive to monitor directors when the company is a going-concern, as opposed to, for example, ensuring the greatest value extraction before bankruptcy is declared.[120] Shareholders,

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[117]Bainbridge (2009, p. 5). See, however, Stout (2013a, p. 2006) and Black (2001). Deakin concludes that "[t]he idea that the surplus should be returned to the shareholders on a regular basis owes little or nothing to the legal framework of company law" (Deakin 2012, p. 357).

[118]As Moore and Petrin correctly remark, "it is strictly speaking the *board of directors*, rather than management itself, which assumes the crucial corporate 'control' function historically ceded by shareholders" (Moore and Petrin 2017, p. 19).

[119]Where fiduciary duties are owed to the company, ensuring adequate returns to different input providers may be seen as one aspect of acting in the company's best interest.

[120]See, e.g., Squire (2010) on correlation-seeking behaviour by shareholders, which increases their rewards but lowers their risk exposure (contrary to the orthodox assumption of a linear relationship between higher risk and higher return, see, e.g., Bainbridge and Henderson (2016, p. 47)). The question who can best monitor managers and directors depends on a number of different criteria: who has the best monetary or other (e.g., reputational) incentive to do so, who has access to the best information to do so, who is less likely to forego monitoring duties due to coordination and free-rider problems, etc.

like other types of investors, are already rewarded for the risk they are willing to take, namely through the possibility of a rising share price or dividends. Conferring a bundle of control rights should not be seen as part of the reward package. Risk-reward preference and monitoring capacity are two separate issues. We may well assume that shareholders are better monitors than any other type of investor, or than any other combination of investors (e.g., board co-determination). Such decision nevertheless need not necessarily be related to the idea of shareholders as residual claimants in the case of bankruptcy.

Finally, even if shareholders are the best monitors, this does not necessarily mean that the company should be run in their (and only their) interest.[121] Again, this is a separate question: shareholder monitoring rights need not necessarily imply shareholder primacy. If directors' fiduciary duties are owed to the company itself, empirical data should test whether the interest of the company is best promoted by focusing on shareholder returns.

In sum, the traditional risk-reward argument cannot sufficiently bolster shareholder primacy as a normatively useful standard either.

4.5.5 Shareholder primacy and partial empiricism

So far, it has been argued that shareholder primacy is not grounded in company law and that it can neither be deemed normatively useful based on alternative doctrinal arguments such as agency theory, a hypothetical bargaining position or a risk-reward argument. There may nevertheless be empirical data suggesting it is a more efficient tool to achieve corporate value creation (hence overall social welfare improvements) than alternative models.

The empirical evidence presented in favour of shareholder primacy in company law is however typically characterised by the same partial empiricism of the standard NIE approach discussed in the previous chapter. Empirical data presented in favour of shareholder primacy typically start from shareholder-focused assumptions. Eighty years ago, Coase argued that "[e]conomic theory has suffered in the past from a failure to state clearly its assumptions."[122] This is not merely a problem of the past, but the concern has intensified in recent decades because of an increasingly impoverished legal theory of the company. Research questions are formulated within the shareholder-

[121] See, e.g., Bainbridge (2003) for a distinction between the means (control rights) and ends (fiduciary duty recipients) of corporate governance.
[122] Coase (1937, p. 386).

primacy model and typically do not test the assumptions of that model. Efficiency claims are tested by measuring shareholder returns, which is of course only valid as a metric of efficiency if shareholder returns are a good proxy for overall efficiency (social welfare improvements). Chapter 3 illustrated this point by reference to the empirical claims on the efficiency of activist hedge funds.

Quantitative empirical studies may furthermore rely on a highly limited number of variables, which cannot adequately capture the variety of factors that can affect corporate value creation and overall efficiency. Qualitative statements are therefore particularly useful to complement large-sample but limited-depth quantitative studies (on the usefulness of qualitative empirical data, see Chapter 3). Anecdotal statements on the 'dumb' idea of shareholder primacy by the CEOs mentioned above are one indication that shareholder primacy may not be the most fit-for-purpose tool under current conditions, as do the statements by a number of interviewees (see Chapter 6) of the view that shareholder primacy would reduce their company's value creating potential rather than enhance it. These do not *prove* that shareholder primacy is an inadequate model, though call for a more rigorous assessment of the efficiency claims of shareholder primacy and alternative models. Qualitative accounts can furthermore capture wider effects of shareholder-oriented measures that have not been measured by standard quantitative studies. Chapter 3 mentioned the risk that traditional metrics may not capture the difference between income creation and income shift. Furthermore, traditional shareholder-oriented measures may not reflect the ripple effects of shareholder primacy on worker motivation or trust, or the wider effects on corporate legitimacy or distrust and any political consequences that may flow from such narrative. The next chapter (Chapter 5) will assess whether CSR may be one tool to mould an otherwise rigid shareholder primacy model into closer realignment with changing needs and circumstances.

In short, the normative usefulness of shareholder primacy is not sufficiently corroborated by empirical evidence that favours its overall efficiency outcome (social wealth creation) over that of alternative models. Empirical evidence on the efficiency claims of shareholder primacy is typically based on shareholder-centred assumptions, which does not allow for a comparison of the different models.

4.5.6 Company law and the legal theory of the company

The legal theory of the company may be broader than company law.[123] If we continue to view company law as tasked only with a narrow subset of corporate relations (namely manager-shareholder relations)[124], there is a tangible risk that the legal theory of the company will follow suit with an impoverished scope for debate. This is indeed what we already see in orthodox company law discussions: the focus on the manager-shareholder agency problem has crowded out many other important issues. Even if the legal theory of the company and company law need not fully overlap, in practice it appears that discussions outsourced from company law tend to be demoted from the legal theory of the company as well. Only if we view company law as tasked merely with manager-shareholder relations, can one describe employee concerns as "interests extraneous to the firm."[125] This is, moreover, not a description that was supported by interviewees (see Chapter 6), several of whom criticized the shareholder-focus of company law.

It is this 'outsourcing' of the problem of negative externalities that appears to have given free reign to the use of company law as a vehicle to promote shareholder interests at the expense of other interests, thereby generating the very externalities that proponents argue should be addressed by other areas of law. We should not assume this is the most efficient way forward. If mitigating the shareholder primacy norm decreases the incidence or impact of negative externalities, that may lead to an overall more efficient outcome. As mentioned earlier,[126] at the very minimum, company law and the legal theory of the company should not prevent other areas of law (or non-legal mechanisms) from addressing externalities satisfactorily.

In sum, we cannot conclude that shareholder primacy is useful from a normative perspective. On the contrary, it entrenches a narrative that makes it difficult to overcome a shareholder centred managerial strategy, even if it would not be the most appropriate business model for the company. Shareholder monitoring rights ex-post may well be incapable of counterbalancing the ex ante pressures for shareholder returns, which increase risk at a micro and macro level (see Chapter 5). Limiting the purview of company law to the management-shareholder relation risks anchoring

[123] See above, section 4.2.1.

[124] As Coffee argues, "[a]cademics tend to plough and re-plough the same furrow over and over. Nowhere is this truer than in the case of the scholars of corporate governance, who have studied the board of directors and shareholders endlessly" (Coffee 2006).

[125] Kraakman et al. (2017, p. 93).

[126] See section 4.2.1.

the perception that managing shareholder demands and returns are the main task of management, a view that may contribute to inefficient negative corporate externalities that cannot be mitigated ex-post as efficiently as through ex ante prevention.

4.5.7 To summarize: Potential consequences of a data-driven, co-evolutionary NIE model for company law

So far, the chapter has outlined some of the potential consequences of a data-driven and co-evolutionary NIE model for company law. It has emphasized the following conclusions:

- Company law is premised on the assumption that the corporate legal entity has an organizational, value-creating potential that a collection of individuals without incorporation lacks. This value-creating organizational capacity is assumed to enhance overall social wealth, although this assumption is typically mentioned only in passing and seldom explicitly addressed in empirical studies.

- Orthodox Anglo-American company law has largely reduced this organizational capacity to an agency relation between shareholders and managers (and a hierarchical subordination relationship between managers and employees). This is too reductionist a model to capture the organizational complexity that gives the corporate entity its value-creating potential.

- The agency model reduces the company to a collection of group interests. Shareholder primacy prioritizes the interests of one group of input providers over another. Stakeholder theory widens the group of sub-interests beyond shareholders, though this may not go far enough: acknowledging the associational-organizational capacity of the company requires greater recognition of the company's goals, rather than sub-group goals (or a collection thereof).

- For directors' fiduciary duties, this means they should be owed to the company, not shareholders. Only if the collective corporate interest is best served through the pursuit of a particular corporate group interest, should fiduciary duties be formulated to that group's advantage. In most jurisdictions, a shareholder primacy norm does not stem from company law, but from a combination of legal and non-legal pressures that nudge companies towards that norm in practice.

- Although shareholder primacy may not be imposed by company law, it is typically sufficiently ambiguous to accommodate such model where other legal and non-legal pressures nudge companies in that direction.

- The agency view overshadows the managerial dimension of the company. This can be justified if (and only if) shareholder primacy enhances the company's *"potentiels collectifs"*. Shareholder primacy is then an assumption, a working hypotheses, which requires continued empirical corroboration.

- At present, however, the empirical corroboration of shareholder primacy's desirability is marked by partial empiricism. Empirical studies often presume the superiority of the model and formulate empirical variables within this model. Instead, empirical testing should (also) test the model itself, and the validity of its assumptions.

- Empirical studies based on the shareholder primacy model are furthermore limited in validity where they apply methodological individualism. Quantitative studies with limited breadth in variables may underestimate the inter-active ripple effects of shareholder primacy rules on variables that are less convenient to measure (such as trust or motivation). The illustration of activist studies in Chapter 3 shows how measuring shareholder price and dividends may be incapable of assessing the difference between income creation and income shift and may not capture important organizational variables such as the effect on worker motivations. Company law, as a set of incentives to increase corporate value creation, needs to understand the limits of legal incentives and how they may affect other value-creating incentives and norms.

- The company shapes, and is shaped by, the environment in which it is embedded. The managerial dimension of the company calls for a thorough understanding of how the company is related to (and shapes) its environment (a reflexive governance approach). Adaptability and agility are required to ensure the company's success in changing circumstances. A shareholder primacy norm may not allow for the degree of adaptability that is required for management to fulfil this task.

- A data-driven and co-evolutionary company law is one which integrates a wider set of data from various disciplines to identify more efficient equilibria from among the set of feasible equilibria, moves beyond partial empiricism to empirically test the compatibility of a model with overall wealth creation (efficiency), and acknowledges both how multiple equilibria in corporate-economic and socio-political spheres are linked and constantly evolving as well as how law shapes them.

The chapter has so far discussed some potential consequences of a reformed NIE model of the company for shareholder-centred company law in general. Further research is required to explore these potential consequences in greater depth. The next part of the chapter attempts to make the analysis more specific by applying these insights to a number of examples from UK company law.

4.6 Some examples from UK company law

This section looks at a number of examples from UK company law to give context to the rather theoretical analysis so far. The purpose is to assess to what extent they follow NIE prescriptions or what a more data-driven and co-evolutionary alternative may look like. Due to space constraints, this analysis is limited to a high-level discussion. Each of these examples would merit a much more in-depth analysis in future research. The point of this section is to give the reader an indication of how actual company law provisions in the UK are moulded by NIE theory(or not) and how they could be amended to adopt a more data-driven and co-evolutionary approach as suggested in this thesis. The next section will discuss one example in greater depth (limited liability for corporate torts).

The examples discussed in this section are:

- managerial discretion, in particular the good faith element of s 172 of the Companies Act (CA) 2006;
- takeover regulation, in particular the no-frustration rule;
- shareholders' rights of intervention in corporate governance, in particular s 168 CA 2006;
- derivative actions and enforcement; and
- ongoing reforms to UK corporate governance, in particular recent proposals for UK Corporate Governance Code reform with regard to employee involvement.

4.6.1 Managerial discretion and the good faith element of s 172 Companies Act

Section 172 of the Companies Act 2006 sets out the director's duty to promote the success of the company. It was one of the more controversial provisions of the CA 2006. S 172 is particularly relevant to this dissertation as, in essence, it reflects a vision of what the purpose of the company is.

A director "must act in the way he considers, in good faith, would be most likely to promote the success of the company for the benefit of its members as a whole" and "in doing so have regard" to (amongst other matters) a number of considerations not directly tied to share price or short-term shareholder interests.

S 172 reflects NIE theory to a certain extent, although not entirely. It does not fit in neatly with a purely contractual approach to the company. A director owes his duty to the company, not to the shareholders, which is difficult to reconcile with a NIE-based view of shareholders as the company's 'owners'. S 172 is mandatory in one direction: shareholders cannot contractually require directors to manage the company in *their* interest. On the other hand, s 172 preserves shareholders' contractual freedom to a large extent: other than the restraint just mentioned, shareholders are free to define the 'success of the company' as they please (e.g., by stipulating in the company's articles that its corporate purpose is to engage in environmental protection or the prevention of forced labour in its supply chain - s 172(2)).

The default, now laid down in statutory form, is nevertheless that the success of the company is measured by the benefit to its shareholders as a whole. As mentioned before, the choice of the default rule is important as it sets the stage: it shapes a shareholder-centred narrative. The 'inclusive' language of s 172 is an attempt to shift that narrative away from a shareholder-only narrative: it was hoped this "would have a major influence on changing behaviour and the climate of decision-making."[127] Commentators have found little difference in how directors discharge their duties in practice, as compared to the pre-CA 2006 era.[128] The factors listed in s 172 are non-exclusive and directors remain free to have regard mainly to short-term shareholder metrics as long as they decide, in good faith, that this is most likely to contribute to the success of the company for the benefit of its shareholders as a whole.

This does not mean that the inclusive language of s 172 is entirely irrelevant - it may shape the narrative in company law theory. More recent initiatives (e.g., on pay

[127] Hannigan (2018, p. 227).
[128] Hannigan (2018, p. 230).

ratios or employee representation - see below) could suggest the narrative is slowly changing indeed.

S 172 reflects a concern that directors would be no longer accountable to shareholders if they could hide behind duties to other constituencies. This agency-perspective very much reflects standard NIE-based company law theory. A data-driven approach would let the wording of s 172 depend on empirical data, namely on company success and broader variables (e.g., unemployment costs or environmental costs) measuring efficiency of an alternatively worded fiduciary duty. Fiduciary duties could arguably be more co-evolutionary (adaptable to changing socio-political environments) had the principle at common law not been fixed into statutory form.

4.6.2 Takeover regulation and the no-frustration rule

Takeover regulation in the UK has to be read in tandem with the EU's Takeovers Directive.[129] The Directive took more than a decade to negotiate and eventually was modelled largely after the UK's takeover approach.[130] Prior to the CA 2006, the Panel on Takeovers and Mergers ('Panel') and the City Code on Takeovers and Mergers ('Takeover Code') "operated on a non-statutory basis", "reflective of the country's laissez-faire tradition".[131]

Part 28 CA 2006 gives statutory force to the Panel's largely self-regulatory powers.[132] In theory, this should give the Panel a good level of freedom to adapt to changing expectations (co-evolution). In practice, however, the Panel's set-up and expertise are more likely to reinforce the status quo and focus on shareholder interests. Chapter 3 described how a data-driven model would assess the efficiency of activist investments and hostile takeovers, namely taking into account a broader set of variables to measure overall efficiency of takeover rules.[133]

The Takeover Code "places power firmly in the hands of the shareholders of the offeree company"[134] Although "the role of the [shareholder] has become more and more that of a passive investor,"[135] takeover law is one of the aspects of UK company law (broadly defined) that aligns most closely with NIE-based company law theory

[129] Directive 2004/25/EC of the European Parliament and of the Council of 21 April 2004 on takeover bids.
[130] Dine and Koutsias (2014, p. 233).
[131] Dine and Koutsias (2014, p. 233).
[132] Dine and Koutsias (2014, p. 235).
[133] See Section .
[134] Hannigan (2018, p. 147).
[135] Worthington (2016, p. 189).

and its emphasis on agency theory.

Post-bid defenses against a takeover bid by directors are severely curtailed.[136] Shareholder consent required for takeovers aims to "heal ... this agency rift, confirms the primacy of shareholders within the company and prevents the management for [sic] serving their personal agenda to the detriment of the interests of the company."[137]

The Takeovers Directive also limits pre-bid takeover defenses. Art. 11 of the Directive (curtailing contractual restrictions on share transfers and voting rights in the offeree company) sits uneasily with a nexus-of-contracts model of the company in NIE. The UK opted out of Art. 11, consistent with its contractual approach.[138]

Like s 172, Pt. 28 CA 2006 now gives statutory form to takeover rules that "historically had no legal force."[139] These rules make reference to fairness as a guiding principle, but this is limited to fairness for shareholders. "Wider questions of public interest are dealt with" by other governmental bodies.[140] The inclusive language found in s 172 CA 2006 is not repeated in Pt 28 CA 2006. Directors' duties under s 172 remain unchanged in a takeover context, although in practice shareholders have the final say. There is no obligation, nor a statutory encouragement, for them to take into account the effect of a proposed takeover on non-shareholders, e.g., on employees. Employees or employee representatives have (only) information rights[141]

4.6.3 Shareholder intervention rights in corporate governance and s 168 Companies Act

One of the most important shareholder rights is the right to remove a company director at any time "notwithstanding anything in any agreement" between the company and the director (s 168 CA 2006). No particular reason is to be provided for the removal.

The right to remove directors at will reflects the NIE-based agency model in which shareholders, as residual claimants, are best placed to monitor management. Note, however, that s 168 cannot be seen as a mere default rule, which shareholders can contractually deviate from: the law grants shareholders the right to dismiss directors at will *notwithstanding* any contractual arrangements to the contrary in the articles

[136] Art. 9 Takeovers Directive and Rule 21 Takeover Code.
[137] Dine and Koutsias (2014, p. 237).
[138] Sections 966-971 CA 2006 nevertheless allow for a special opt-in resolution for companies with voting shares traded on a regulated exchange - again in line with a contractual approach.
[139] Worthington (2016, p. 797).
[140] Worthington (2016, p. 797).
[141] Art. 6(1) Takeovers Directive and Rule 32.6 Takeover Code.

of association or in the contract with the director.[142]

This right is not limited to directors appointed by shareholders, but covers also directors appointed, for example, by creditors as per a credit agreement.[143] This, again, sits uneasily with a purely contractual view of the company reflected in NIE company law theory: shareholders can agree that third parties appoint corporate directors[144] and nothing prevents them from agreeing that those parties can also terminate a director's appointment, although the law would disregard shareholder consent in the latter case. If a standard NIE approach was adopted, the principle would arguably be that *pacta sunt servanda* and that shareholders may have reasons to limit their director removal rights, which the law should respect.

The right to remove directors at any time without cause may affect the practical relevance of the 'inclusive' statement in s 172 CA 2006. Although a director may in good faith decide that one of the 'inclusive factors of s 172 promotes the success of the company for the benefit of its members as a whole, the shareholders' right to remove a director at will make it more likely that the director will take their (short-term) interests at heart rather than other interests. Indeed we assume that the director wishes to retain his or her position: this assumption is the reason why directors cannot frustrate takeover bids as discussed above (assuming they will want to prevent the bid to protect their own position).

Hannigan notes that "good corporate governance depends on effective shareholder control of the board, but as the European Commission has noted, while we tend to presume effective control by shareholders, each governance crisis shows cracks in that presumption."[145] Post-crisis proposals for stronger shareholder rights are premised on the assumption that agency concerns were an important cause. Proposals have been made to encourage shareholders to engage more actively in board monitoring "in the broadest sense in the interests of good corporate governance."[146] Hannigan, however, notes that this hope may be misplaced as the identity of shareholder ownership changes: the shareholder group is increasingly heterogeneous and now also includes a high level of foreign shareholders. "Encouraging engagement by those investors is more challenging because they are less susceptible to domestic political pressure to engage." This suggests a decreasing embeddedness of a company into the socio-political

[142] Davies (2010, p. 125).
[143] Davies (2010, p. 124).
[144] Davies (2010, p. 124-125).
[145] Hannigan (2018, p. 146).
[146] Hannigan (2018, p. 146).

environment. Changing social norms or political expectations in the company's host jurisdictions may become disentangled from expectations of shareholders outside that jurisdiction.

Institutional shareholders "have come under governmental pressure to shift the balance of their activity in favour of 'voice'," [147] as opposed to exit. As Davies notes, this is probably the result of socio-political pressure on the government to curb perceived corporate governance failures as manifested, for example, in perceive excessive executive remuneration or excessive risk-taking.[148] However, Davies continues, "[i]t is, of course, somewhat ironic that governmental pressure on institutions has increased over the very period when it is arguable that their capacity to respond to governmental demands has decreased." [149] A more data-driven approach would take evolving shareholder constellations into account to test whether an assumed correlation between increased shareholder rights and improved corporate governance holds in practice. A co-evolutionary approach would be that, if shareholder dispersal or foreign ownership dilutes the link between socio-political expectations of the company's host jurisdiction and actual corporate governance practices, a general reliance on greater shareholder engagement may need to be reassessed.

4.6.4 Derivative actions and enforcement

S 260 CA 2006 defines a derivative action as proceedings brought by a member of a company (a) in respect of a cause of action vested in the company, and (b) seeking relief on behalf of the company.

Derivative claims were long covered at common law by the rule in *Foss v Harbottle*.[150] Pt 11 CA 2006 has given statutory form to a class of derivatives actions, although others still remain subject to the common law rule. Ss 260 ff CA cover derivative actions "brought only in respect of a cause of action arising from an actual or proposed act or omission involving negligence, default, breach of duty or breach of trust by a director of the company."

A particular concern during the debate on Pt 11 was its relationship with s 172 CA 2006. The fear was that disgruntled shareholders could use derivative actions to challenge decisions by directors that did not sufficiently take into account the 'inclu-

[147] Davies (2010, p. 135).
[148] Davies (2010, p. 135-136).
[149] Davies (2010, p. 136).
[150] (1843) 2 Hare 461.

sive' factors listed in s 172, such as employee or environmental impact, or long-term shareholder value.[151] This concern was addressed by inserting references to s 172 throughout Pt 11 as a reason for a court *not* to allow a derivative action to continue. The s 172 references make clear that the overriding obligation of directors is to promote the success of the company for the benefit of its members and this is also a guiding principle for courts assessing derivative claims.

Derivative claims brought under ss 260ff CA 2006 face a two-stage judicial control. First, the court must assess whether there is a *prima facie* case for permitting a derivative claim to continue (s 261). Second, the court must decide whether the claim can continue as a derivative claim. S 263(2) sets out three grounds on which the court must refuse permission: one is "that a person acting in accordance with section 172 ... would not seek to continue the claim." The other two situations are where the conduct has been authorised or ratified by the company.

If the claim should not be refused based on these three grounds, the courts can decide whether or not to permit it. However, their discretion is 'structured'[152]: the court must take into consideration a number of factors listed in s 263(3), which include the good faith of the member making the claim. Whereas a 'good faith' consideration tends more towards a multiple-equilibria model proposed in this dissertation, s 263(3)(b) opens the door for traditional NIE cost-benefit arguments. Courts should take into account what importance a director, acting in accordance with s 172, would attach to the claim. The hypothetical director-test has led courts to refuse derivative claims on the basis that a director may not attach great importance to such claim based on cost-benefit analysis (e.g., if the legal costs of the action exceed the recoverable amount or the time and costs involved[153]). This is sensible. A co-evolutionary, multiple equilibria model may add a consideration to the cost-benefit analysis. It would assess not only the cost-benefit to the *company* of allowing a derivative claim, but also any wider costs or benefits in terms of overall corporate culture within the UK. It would take into account whether allowing derivative claims (even where the costs of the lawsuit exceed potential remedies) could be beneficial to reinforce the narrative of director duties and whether this would have overall positive effects on self-monitoring of fiduciary duties in UK companies. At present, "there has not been any significant use of the derivative claim."[154] A data-driven, co-evolutionary model

[151]Hannigan (2018, p. 553).
[152]Worthington (2016, p. 671).
[153]Hannigan (2018, p. 564, 570).
[154]Hannigan (2018, p. 231).

would assess whether there is any merit, for example, in allowing employees to bring derivative claims, in terms of both a company's performance and efficiency of overall corporate behaviour. In sum, the model proposed in this dissertation would put greater emphasis on the impact assessment at a macro-economic level (as opposed to the micro-economic effect on a single company) and the impact of narrative (as reflected in fiduciary duties law and the number of successful enforcement actions) on corporate behaviour.

The very concept of a derivative claim sits uneasily with a NIE-based view of shareholders as 'owners' of a company and the company as a legal fiction. As Worthington notes, the "fundamental philosophy of the derivative claim [is]: a member ought to be permitted to pursue a derivative claim *because* this is for the benefit of the company, not because this is for the benefit of the member personally."[155] The 'no reflective loss' rule prevents a shareholder bringing a derivative action from obtaining compensation for his personal loss as a shareholder that is a mere reflection of the loss to the company. Much like s 172, s 260(4) places the company in between the director and shareholder: both are to act in the best interests of the company. Other aspects of derivative actions are more aligned with NIE-company law theory. For example, the success of the company is defined, by default, as the best interests of shareholders. Furthermore, only shareholders can bring derivative claims. It is worth noting that the event or behaviour giving rise to the derivative claim can occur before the plaintiff became a shareholder (s 260(4)). A disgruntled employee could, in theory, buy a single share to bring a derivative action after a restructuring, for example. It is nevertheless unlikely that such action would pass the two judicial tests laid down in ss 261-263.

Certain derivative actions can still be brought under common law rules, including multiple derivative claims, e.g., by a member of a parent company against a subsidiary. Briggs J came to this conclusion, using arguments leaning towards a co-evolutionary model.[156] Relying on a law-in-context argument, he stated that defending the opposite view "in a modern context where multi-layered corporate structures with holding companies and subsidiaries are ever more common, hardly commends itself as an exercise in justice." Briggs J conceded that juxtaposing a clear statutory basis for derivative actions "alongside a continued obscure, complicated and unwieldy common law regime" may not seem to be common sense. He concluded, nevertheless, that this solution is more just and more in line with solutions adopted in other common

[155] Worthington (2016, p. 675).
[156] *Universal Project Management Services Ltd v Fort Gilkicker Ltd* [2013] EWHC 348.

law jurisdictions. This reasoning leans more towards an adaptive, co-evolutionary and data-driven model than a NIE-based model.

4.6.5 Ongoing reforms to UK corporate governance: employee engagement

The sections above made reference to the Companies Act of 2006. Corporate governance initiatives have not stood still since then and some of those initiatives could be perceived as softening the (enlightened) shareholder approach of the CA.

Increased employee engagement is one example. The Corporate Governance Green Paper (November 2016) raised the issue of strengthening the employee voice. It described the link between employee engagement and economic benefits for the company (e.g., lower absenteeism and increased productivity), in line with a NIE-based approach to CSR. The Green Paper explored three options to increase employee engagement: (i) an employee advisory panel, (ii) a non-executive director for employee engagement and (iii) employee representatives on corporate boards. It also considered whether to increase reporting requirements related to stakeholder engagement.

The Companies (Miscellaneous Reporting) Regulations 2018 followed upon the reporting recommendation, requiring new content in annual reports of certain companies. The Regulations require large companies to include a statement as part of their strategic report describing how the directors have had regard to the matters in s 172(1)(a) to (f) of the CA 2006 (the 'inclusive statement' of s 172). Companies with more than 250 UK-based employees will have to include a statement in the directors' report describing directors' employee engagement and how directors have had regard to employee interests, among other things. These reporting requirements apply to company reports covering financial years as from 1 January 2019.

In line with the three options presented in the Green Paper, the Financial Reporting Council's (FRC) revised 2018 Corporate Governance Code ('2018 FRC Code') extends its comply-or-explain philosophy to employee engagement matters. Provision 5 of the 2018 FRC Code asks that, for workforce engagement, companies use one or a combination of (i) a director appointed from the workforce, (ii) a formal workforce advisory panel or (iii) a designated non-executive director. If the board does not wish to implement either of these three options, it "should explain what alternative arrangements are in place and why it considers that they are effective."

Greater employee engagement can result in 'economic benefits' to the company, as the Corporate Governance Green Paper stated. This type of employee engagement would be fully supported by a NIE-approach to company law. Since the FRC only asks for a comply-or-explain attitude, a company remains free not to increase workforce engagement if a cost-benefit analysis suggests it is not in its economic interest to do so. Provision 5 of the 2018 FRC Code does not undermine the statutory duty of directors in s 172 CA 2006. Any worker representative on the board remains subject to the duty to promote the success of the company to the benefit of its members as a whole. A director appointed by the workforce or a designated non-executive director cannot base his decision-making (only) on employees' interests, except to the extent that he believes in good faith that this will benefit shareholders as a whole (which in practice may provide a high level of insulation from judicial review).

A less sceptical view is that these initiatives can broaden the type of data considered by boards. A workforce-appointed director may bring to the table a different dataset or offer a different interpretation of how shareholder benefits can be achieved. Increased reporting requirements such as the ones laid down in the Companies (Miscellaneous Reporting) Regulations 2018 may increase public visibility of stakeholder concerns, allowing public debate to move beyond the confines of shareholder supremacy. Nevertheless, a co-evolutionary approach is difficult to achieve as long as there is a statutory duty such as the one in s 172 CA 2006. A data-driven, co-evolutionary model would assess the question of employee engagement or board representation not in terms of agency theory (potential conflicts with directors' duties towards shareholder interests). It would instead rely on empirical data (from UK companies already engaging extensively with employees or their representatives, as well as data in jurisdictions with higher employee engagement levels, e.g., co-determination in Germany) to assess the impact of employee engagement both at the company level (e.g., lower absenteeism, lower disruption due to strike) as well as the broader level (e.g., lower social conflict and strikes at the macro-level). It would seem from the feedback of a public consultation on the 2016 Green Paper that respondents' concerns for employee board representation were formulated in line with NIE-based arguments (e.g., potential conflicts of interest for directors towards shareholders); whereas those in favour of the option offered arguments more in line with the data-driven, co-evolutionary model (importance to challenge group-think, bring new perspectives and knowledge to boards).[157]

[157]Government response to Corporate Governance Green Paper, 2.17-18. See also 2.11.

4.6.6 Conclusion

The examples from UK company law provided above indicate that the impact of NIE theories of the company (in particular agency views or the nexus-of-contracts/legal fiction view) is not felt evenly across different aspects of company law. For some aspects, in particular takeover law, the standard NIE-based reasoning is felt more strongly than for others. A data-driven, co-evolutionary model would not necessarily lead to different company law provisions (although it is likely that it would, at least for certain aspects such as takeover law). It would mainly affect the *methodology* to assess the efficiency of particular company law provisions. Importantly, it would attach greater weight to empirical data (data-driven), but would also require a greater number of variables in empirical studies. This means measuring efficiency not only at the micro-level of an individual company, but also at the macro-level (corporate governance in the UK in general, but also its impacts in the socio-political sphere). It would furthermore assess the impact of narrative on corporate governance.

4.7 Limited shareholder liability for corporate torts: An efficiency-based analysis

A main objective of this dissertation is to understand how we measure efficiency in the corporate context. It asserts that efficiency cannot be measured only terms of shareholder metrics and that a broader understanding of efficiency is warranted. In order to measure efficiency beyond the confines of a company, it is important to understand how corporate behaviour can affect third parties (corporate externalities). Company law (and laws in other fields) can impact how companies internalize negative externalities. One major device with which company law shapes the incentive for companies to internalize externalities is limited liability of shareholders.

The topic of shareholder liability for negative corporate externalities is emphasized for two main reasons. First, it assesses the effect of applying the abstract NIE-model to company law-in-society: whereas abstract economic models can rely on such unrealistic assumptions, company laws destined to regulate an actual society cannot be absolved so easily from a similar unrealistic premise. The question of efficient internal governance cannot be separated from the question of external, aggregate efficiency and welfare. This forces the corporate law debate to open up: assumptions regarding efficient intra-firm governance have ripple effects beyond the company's walls. Empirical evidence of corporate externalities, in turn, challenges the validity of the assumptions of intra-firm governance models. The internal affects the external and vice versa. Second, the discussion on shareholder liability is used as a tool to test broader assumptions of NIE-based company law theory (e.g., discussions on risk-reward pay-offs among different input providers).

The section furthermore briefly looks at case law on enterprise liability. Finally, it assesses to what extent the law on shareholder liability in the UK accords with NIE.

4.7.1 Overview: historical, doctrinal and empirical support for limiting liability

Shareholder limited liability for corporate torts is hard to explain based on traditional contractual accounts of the company. It is true, of course, that "corporations have no monopoly on socially harmful activities".[158] As the authors continue, however: "because the corporate form is particularly conducive to large-scale enterprise, the social harms it engenders are correspondingly large-scale. Moreover, limited liability - an essential feature of the corporate form - serves to compound the problem, by permitting shareholders to bear only a faction of the costs their companies' activities cause for third parties. And precisely because they cannot protect themselves through contract, the corporation's non-contractual stakeholders have a greater need for legal protection than do its contractual constituencies."[159]

Why, then, is limited liability for corporate torts relatively unchallenged in the literature? The pages below first assess the historical rationale for limiting shareholder liability. Whether such historical rationale still holds for current day conditions is part of the query. Even where the historical rationale may no longer hold, there may be other doctrinal justifications offered to maintain the rule. These are assessed next. The purpose of the section is not to argue that limited liability should be maintained or abolished as such. The analysis rather attempts to show how a discussion on shareholder limited liability for corporate torts could be enriched by a better understanding of what 'efficiency' envisages and how partial empiricism limits our analysis of which company law rules are more efficient under present-day conditions. This is in line with the overall purpose of the dissertation to re-assess the NIE legal model of the company on efficiency-based arguments.

[158] Kraakman et al. (2017, p. 93).
[159] Kraakman et al. (2017, p. 93).

4.7.2 Origins of limited liability

Although limited shareholder liability is not controversial at present, initially it very much was.[160] Adam Smith, for example, lambasted limited liability both on moral and economic grounds.[161] Unlimited shareholder liability was perceived as the logical starting point in both the US and the UK, the two countries on which this dissertation focuses.

The history of limited liability in England is closely entangled with socio-political and economic developments. In the Middle Ages, boroughs were organized for defence and guilds for trade.[162] When these unincorporated organisations started requesting privileges, the need for an official license arose.[163] So-called *charters* were bestowed by the monarch, for political more than economic reasons at first.[164] "By 1628 Coke could assert firmly that royal authorization was necessary to create a corporation. (...) By the eighteenth century the accepted English doctrine was that only the king in Parliament might create a corporation."[165] Incorporate companies established by royal charter played a crucial role in colonial expansion and foreign trade from the late sixteenth century onwards. Public functions were even bestowed upon chartered companies such as the East India Company, although corporations were used mainly as private vehicles for trade by the eighteenth century.[166]

English public opinion towards companies was coloured by the dramatic turn of events at the South Sea Company.[167] This company was granted a monopoly in trade with South America in return for a loan to finance the war with France and underwriting services for the English national debt. Speculation in the company's stock increased and to reinforce the share price rally, the company lobbied for the 1720 Bubble Act. The Act prohibited joint-stock companies with transferable shares from operating without incorporation. Since incorporation charters were cumbersome and expensive to obtain, the Act limited competition for the South Sea Company, further fuelling the bubble for its shares.[168]

Soon the bubble burst, creating a generally hostile environment towards incorpo-

[160] Talbot (2008, p. 24).
[161] Smith (1827, p. 311).
[162] Hurst (1970, p. 2).
[163] Hurst (1970, p. 2).
[164] Hurst (1970, p. 3).
[165] Hurst (1970, p. 3).
[166] Hurst (1970, p. 4).
[167] Talbot (2008, p. 6).
[168] Hurst (1970, p. 5).

rated commercial entities and the ensuing "disenchantment also found expression in a tendency to insist that charters impose on shareholders liability for a company's debts".[169] The Bubble Act was nevertheless only repealed in 1825. By that time, trust-like pooling of assets with transferable shares had been accepted and "[b]y the early nineteenth century such an arrangement might even include limited liability for debts".[170]

Contractual clauses attempted to limit exposure to shareholder liability.[171] Limiting liability among shareholders was uncontroversial, though the validity of contractual clauses limiting shareholder liability towards third parties was legally problematic and only accepted after much lobbying, a few decades later in the mid-19th century.[172] Even when general incorporation became legally permitted, Gladstone and his colleagues prohibited corporate charters from stipulating limited liability.[173] The intense capital needs of the nascent and flourishing railway industry nevertheless made limited liability for dispersed railway shareholders politically acceptable. The wide dispersal of shareholders, and the consequent decreasing participation in management, further entrenched the political will to protect shareholders from the consequences of unlimited liability for all corporate liabilities. Once limited liability for shareholders of railway companies was legally secured to support the capital-intensive sector, the path was evened for limited liability for other companies as well. In 1855, a general limited liability law was enacted. Limited liability for banks and insurance companies followed suit in 1857-1858, and 1862, respectively.[174]

In the US, most states hesitatingly switched to limited liability in the 19th century, though not without vociferous debate, regulatory U-turns[175] and a wave of initial scandals of abuse, showcasing the very excesses which the critics of limited liability had warned against.[176] (Note that for certain types of companies, limited liability "is of relatively recent vintages for banks, both investment and commercial".[177] In a move of opposition towards colonial England, US states much more generously granted incor-

[169] Hurst (1970, p. 5).
[170] Hurst (1970, p. 6).
[171] Blumberg (1985, p. 582).
[172] Blumberg (1985, p. 582 and 586).
[173] Blumberg (1985, p. 583).
[174] Blumberg (1985, p. 584).
[175] A few states in the US even briefly returned to unlimited liability before continuing on the path of limited liability (Blumberg 1985, p. 595). Hurst remarks that substantial creditors nevertheless had a "tendency ... to insist on the personal credit of the principal investors" (Hurst 1970, p. 159). Bainbridge and Henderson (2016, p. 42).
[176] Blumberg (1985, p. 586).
[177] Conti-Brown (2012, p. 460); Hill and Painter (2010, p. 1177).

poration through corporate charters[178], though unlimited liability initially remained the norm. The need for a national manufacturing industry intensified due to the troubled relationship with England and Europe during the American struggle for independence.[179] The accelerated willingness to grant incorporation privileges is to be viewed against this political background. Unlimited liability was still common in the early 19th century.[180] Again premised on public interest grounds, charters for public interest companies started to grant limited liability.[181] Double liability - a regime also known in Europe - for banks was common in the US and continued until after the Great Depression, even though double liability proved ineffective during the Depression and tactics were shifted towards insurance.[182] (Note that some commentators criticize the shift from liability towards deposit insurance in the banking industry as an inefficient shift of the cost of bank failures from shareholders to taxpayers - a critique that may resonate after the financial crisis.[183] Legal uncertainty arose regarding corporate charters that did not explicitly provide for direct shareholder liability for corporate debts. Should the legal presumption be that parties contracted out of shareholder liability in such case? The question was settled in the early 19th century through case law deciding in favour of limited shareholder liability when corporate charters did not explicitly provide otherwise. This would suggest support for a functional explanation of limited liability as an efficient default rule. Note, however, that the discussion was focused on *contractual* corporate debts, for which such contractual-default argument can be more easily defended than for non-contractual claims.[184] The limited liability for public interest companies eroded the norm of unlimited liability for other companies. Limited liability was expanded first to manufacturing companies, inspired by political factors, starting in New Hampshire in 1816.[185] Notwithstanding the general trend towards limiting shareholder liability, Blumberg notes that most states imposed

[178] Talbot (2008, p. 7).
[179] Blumberg (1985, p. 587-588).
[180] Blumberg (1985, p. 588).
[181] Blumberg (1985, p. 589).
[182] Blumberg (1985, p. 600-601).
[183] Acheson, Hickson, and Turner (2010, p. 249). See also note 252 below, on Macey and Miller's finding that deposit insurance was less effective than double shareholder liability for banks, as it increased incentives for excessive risk-taking by shareholders. Hill and Painter link investment banks' excessive risk-taking in the run-up to the crisis to the shift from partnership (with personal liability) to separate legal entities and propose a measure of personal liability for top bankers (Hill and Painter 2010).
[184] Blumberg notes the increased political pressure of business interests to lobby for limited liability was facilitated by their increased political power (Blumberg 1985, p. 592).
[185] Bargeron and Lehn (2017, p. 454).

some form of qualified shareholder liability until well into the 20th century.[186]

The very late switch (1931) from unlimited to limited liability in California made it a particularly interesting object for comparative analysis.[187]

An empirical study on Californian companies around the time of the Great Depression provides more recent data than some other studies on 19th century companies.[188] An even more recent case study is that of American Express, which remained an unlimited liability company until 1965. The findings of these studies conflict on certain points. Conflicting conclusions arise, among other things, on the question whether unlimited liability decreased share liquidity and turnover.[189] The studies do seem to converge on the conclusion that there was no discernible compensation for shareholders in unlimited liability companies, either through discounted share prices or excess returns.Empirical data also indicate lower risk-taking by unlimited liability companies.

As a final note, it is noteworthy that pockets of unlimited liability continue to exist. Until very recently, Wisconsin provided for pro rata unlimited shareholder liability for unpaid wages. The obligation was imposed both on companies incorporated in the state and on foreign corporations doing business in Wisconsin, both listed and privately held. This bubble of unlimited shareholder liability was repealed only in 2006.[190] Up to this day, the state of New York has a similar, albeit more limited, legal provision of shareholder liability for unpaid wages. Section 630 of the New York Business Corporation Law imposes joint and several liability on the ten largest shareholders of privately held companies for unpaid wages and debts owed to employees. A shareholder held jointly and severally liable is entitled to require compensation from other shareholders for what exceeds his pro rata share. The law originally applied only to domestic corporations, but was expanded in 2015 to include foreign corporations for unpaid services performed in the state of New York.[191]

Interestingly, Continental Europe had the opposite evolution of embracing limited liability earlier than the US and the UK, though lagging behind in adopting general incorporation statutes. Limited liability was first introduced by Napoleon in France in 1807, from which it spread to other Continental European countries.[192]

[186] Blumberg (1985, 594).
[187] Blumberg (1985, p. 598).
[188] Bargeron and Lehn (2017).
[189] Bargeron and Lehn (2017) vGrossman (1995) and Acheson et al. (2010, p. 267).
[190] 2005 Assembly Bill 1163 of 3 April 2006.
[191] See NY Business Corporation Law.
[192] Blumberg (1985, 596) and Bainbridge and Henderson (2016, p. 126).

4.7.3 Theoretical arguments in favour of limited shareholder liability

Earlier scholarship on limited shareholder liability often failed to distinguish between liability for contractual and non-contractual claims,[193] with scholars contemplating mainly (or only) liability for contractual claims. The relevance of those earlier discussions for a discussion on liability for torts is therefore limited. Later scholarship is more nuanced. Limited liability of shareholders for contractual claims is rarely challenged.[194] The discussion has focused instead on the desirability of limited liability for corporate torts. There is little doctrinal discussion on limited shareholder liability for corporate torts from the perspective of the traditional theory of the company: the standard nexus-of-contracts arguments put forward to limited liability for the company's contractual liabilities simply do not hold. This was acknowledged in one of the few thorough articles on the topic by Hansmann and Kraakman.[195]

Though generating some ripple effects in follow-up company law discussions,[196] the Hansmann and Kraakman article failed to generate momentum.[197] The financial crisis, with its taxpayer-funded bailouts, re-generated some interest in the topic.[198] These recent proposals are more limited in scope (financial institutions rather than all companies) and ambition and probably more easily defensible against criticisms of political and practical infeasibility.

Other theoretical arguments than hypothetical contracting have been put forward to justify shareholder liability as a general rule, including for torts. One of the theoretical arguments is that of efficient risk-bearing, which is discussed below. Some have put forward fairness arguments against shareholder liability for corporate torts: it would be unfair to impose the burden of uncertainty of tort liabilities on shareholders where they do not have the ability to prevent such torts or to assess the probability of such liabilities arising. The validity of this claim is appraised below.

Most arguments in favour of limiting shareholder liability are not theoretical, how-

[193] Hansmann and Kraakman (1991, p. 1880, 1925).
[194] Bainbridge (2009, p. 56).
[195] Hansmann and Kraakman (1991).
[196] Grundfest (1992), Coffey (1994) and Hansmann and Kraakman (1992a).
[197] Bainbridge and Henderson (2016, p. 43). The discussion has continued in other fields of law, such as business and human rights circles, though is largely deemed as settled in mainstream company law debates.
[198] Conti-Brown (2012) and Hill and Painter (2010), discussed below.

ever, but practical.[199] Put simply: extended[200] liability for corporate torts is sensible though infeasible, the standard argument goes. One may contend that it makes little difference whether a rule of extended liability for corporate torts is rejected based on theoretical grounds or because of practical obstacles. The result is the same: the status quo (limited liability) should be retained. It does, however, matter a great deal. If unlimited liability for corporate torts is more consistent with the orthodox theory of the company, we should assume this regime is more efficient than the current regime, until empirical data point to the opposite conclusion. Currently, however, the presumption is that limited liability is superior, although the doctrinal support for such position is weak and empirical corroboration scant. With limited empirical data, an assumed preference either way matters a great deal in practice.

4.7.4 Teleological-evolutionary view of company law

An often heard argument, though not the strongest one, is that limited liability has been introduced over time in a great majority of jurisdictions and that, therefore, it must be the best (read: most efficient) system. Such end-of-history argument is not only prone to criticism when made by philosophers,[201] but also by corporate scholars.[202]

The end-of-history narrative nevertheless exerts great influence on standard company law debates and jurisprudence. The recent expansion of the unlimited liability rule in New York state for unpaid wages, for example, made an explicit reference to a judicial unwillingness to enforce the existing unlimited liability provision, citing in its justification a sneering remark from a court that viewed such provision as a historical anachronism.

The evolutionary argument, of course, assumes that a competition took place between limited and unlimited liability regimes for corporate torts. Historically, however, there has never been such competition. As mentioned above, the general trend was

[199] Bainbridge and Henderson (2016, p. 11-12).

[200] The term 'extended' rather than 'unlimited' liability is used: there are various degrees of increasing shareholder liability for corporate torts that do not go as far as unlimited liability (e.g., double or triple liability).

[201] Francis Fukuyama, *The End of History and the Last Man* and criticism of such evolutionary view of liberal democracy by Huntington or Derrida.

[202] See, e.g., the evolutionary argument explicitly made in Hansmann and Kraakman (2001) though implicit in many law & economics accounts. One could of course put the evolutionary argument upside down: an increasing focus by investors, consumers and governments on greener, more responsible or more sustainable business practices may indicate an evolution away from a standard, externality-outsourcing corporate form.

for jurisdictions to switch from unlimited to limited liability for all corporate liabilities, both contractual and non-contractual, although with a clear focus on contractual claims. Limited liability for corporate torts cannot be declared the winner of an evolutionary efficiency-optimizing race, since such race never took place.

Second, the evolutionary argument assumes the winning regime took the upper hand because of its intrinsic superiority. In practice, however, one regime may win from another based on a regulatory subsidy - a state intervention favouring the domestic regime and domestic companies over companies from a competing regime. A legal rule of limited liability, in its essence, is a legal intervention[203] that gives companies covered by it a competitive advantage over those who are not.[204] For example, when Wisconsin finally abolished the clause on unlimited shareholder liability for unpaid wages, it was clear that the competitive disadvantage to attract capital as compared to limited liability regimes was an important factor.

Third, once virtually all jurisdictions have enacted limited liability, little competition is left to verify whether it remains more efficient than alternative regimes in the current context. As Blumberg noted, limited liability gained widespread acceptance at a time when companies were not yet allowed to own shares in other companies.[205] His historical account shows how little thought appears to have been given to the question whether limited liability should be maintained even in a world where a sizeable number of companies form part of corporate groups.[206] To put it in economic terms, there is a near monopoly of limited liability regimes around the world, making competition from potential entrants (regimes imposing unlimited liability for torts as a general rule) face a high barrier to entry.

The evolutionary argument is typically not presented as sufficient by itself, but is generally linked to other economic or legal arguments in favour of limited liability. Two of the most frequently cited arguments in favour of limited liability are that (i) it is a more efficient system of risk bearing; and (ii) it decreases information and transaction costs. The former argument (risk-bearing) is a more abstract, economic-theoretical

[203] "Professor Arrow has observed that limited liability is a departure from the free market and necessarily impairs its performance" (Blumberg 1985, p. 621).

[204] This assumes that either shareholders would require a premium for investments in unlimited liability companies, which they may or may not do (the limited historical evidence cited above suggests they do not); or that the company otherwise encounters financial disadvantages from unlimited liability such as increased insurance costs.

[205] Blumberg (1985, p. 576).

[206] Blumberg (1985, p. 605). Relying on behavioural insights, this may suggest path-dependency and imitation, rather than a rational pursuit of the most efficient policy solution when it comes to corporate groups.

reasoning than the latter one, which relies on a concrete cost-benefit analysis. The two arguments are discussed next.

4.7.5 Efficient risk bearing: least cost avoider

A major argument advanced by proponents of limited liability for corporate torts is that the current system more efficiently allocates risk to the best risk-bearers.[207] To simplify the argument, it contends that it would be inefficient to allocate tort risks to shareholders.

(i) Risk-reward preferences of the various company investors

Shares are presumed to be more risky than other forms of investment, be they investments in the form of loans (creditors),[208] labour (employees), bonds (bondholders) or the supply of inputs for a corporate activity (suppliers).

The so-called equity-premium is typically explained by the higher risk incurred by shareholders as compared to, for example, bond holders.[209] Those who invest in the company in the form of loans, labour, bonds or inputs opt for a particular form of risk-reward mix: a lower risk of losing the investment, in return for a lower, fixed reward. In case of corporate bankruptcy, these investors will have priority over shareholders for their contractual claims. Ordinary[210] shares come with a different set of risk-reward preference: higher risk of losing (also reflected in their subordinated claim in case of bankruptcy) but a greater chance of higher rewards, if the company performs well. Under the current legal theory of the company, a shareholder is therefore by definition assumed to be a type of investor willing to risk greater losses in return for potential greater awards than other contractual investors such as bondholders,

[207] Some confusion seems to exist in literature between who is *best able* to bear risk and who is *most willing* to do so. (For contractual risk distribution, a revealed-preferences approach would hold that willingness to bear risk can be measured by willingness to pay. Such argument can, by definition, not hold for non-contractual risk distribution.) It is argued in this section that one should not look at a subjective willingness to bear risk, but to the structural risk attached to the type of investment made by different creditors.

[208] See, however, Squire's argument of "correlation-seeking" opportunistic behaviour by shareholders: a firm has an incentive to rely excessively on contingent debt, which "is especially likely to be triggered when the firm is insolvent." This type of contract "transfers wealth from the firm's creditors to its shareholders" and "can reduce risk to shareholders even as it increases shareholder returns" (Squire 2010).

[209] The line between equity and corporate debt (bonds) has become increasingly blurred, with a variety of hybrid financial instruments being designed.

[210] References to shareholders mean ordinary shareholders, as opposed to, e.g., preferred shareholders (Moore and Petrin 2017, p. 20) whose risk profile (and monitoring rights) differ.

creditors, employees or suppliers. The risk-reward preference of a shareholder is thus assumed to be different than that of other contractual investors.[211]

(ii) Risk-reward preference and monitoring capacity

Arguments on risk-bearing capacity have played an important role in the discussion on shareholder liability for corporate torts. A substantial part of the argument on who should bear the greatest risk of corporate torts is based on the economic assessment of the least cost avoider.[212] Managers are inefficient risk-bearers, Easterbrook & Fischel argued, because of their high firm-specific investment.[213] (Note that, if we follow this line of argument, the same holds for employees as a class.) Moreover, imposing liability for corporate torts on managers (rather than on shareholders) only adds limited additional assets for tort victims (managers' personal wealth). It may also make managers overly risk-averse (more on that below, on monitoring and agency costs), Easterbrook & Fischel add.[214]

Easterbrook and Fischel argue that "[t]hough the debt investors do not have the residual claim, and thus do not have optimal incentives to monitor day-to-day activities, they may be especially well suited to watch certain kinds of conduct."[215] Creditors may bear most of the risk of company bankruptcy under limited liability, which according to Easterbrook & Fischel gives them greater incentive to employ their knowledge[216] to monitor management. Few, however, have made such suggestion. Based on the criterion of risk-bearing, there would be little theoretical reason to do so: creditors agree to a lower but fixed reward in return for lower risk. Creditors would moreover have little incentive to monitor the board for corporate torts, as long as company assets cover their collateral for the loans provided and they retain their priority in case of bankruptcy.

[211] Easterbrook & Fischel's argument that limited liability can be seen as a risk-sharing device between shareholders and creditors, who both risk losing their investment, is therefore unconvincing (Easterbrook and Fischel 1985, p. 101).
[212] Posner (2005, p. 1601) in the context of contract law and Deakin (2017) in the context of vicarious liability.
[213] Easterbrook and Fischel (1985, p. 115).
[214] Easterbrook and Fischel (1985, p. 115).
[215] Easterbrook and Fischel (1985, p. 100).
[216] Easterbrook and Fischel (1985, p. 101). If creditors indeed have a better incentive to monitor corporate management, that would be an argument to give them control rights instead of shareholders.

(iii) Contractual risk-reward preferences and involuntary creditors

Much of the risk-bearing discussion relates to contractual claims.[217] For involuntary creditor claims, there is obviously no argument on who accepted greater risk ex ante in return for a potentially greater reward ex post. Even in such situation, arguments have often turned on the willingness of shareholders to bear risk, rather than on the fairness or ability of tort victims to absorb the cost. Hansmann and Kraakman's systematic analysis of unlimited liability for corporate torts, for example, categorizes situations of corporate torts according to whether shareholders are risk-neutral or risk-averse. For instance, they argue that, where a company has only one risk-averse shareholder, "both the deterrence and risk-sharing functions will often be served best by making her bear less than the full loss."[218] Consequently, in their view, imposing unlimited liability on such risk-averse shareholder may lead to over-deterrence. Efficiency of risk-sharing may require the tort victim to bear some of the costs, in their view.[219] This argument no longer looks at shareholders as a *class*, but to individual shareholders. Looking at risk-bearing from the perspective of the *individual* shareholder's risk-aversion or risk-neutrality would seem to be at odds with the higher risk-reward mix attached to shares as a general investment class, as described above. If we follow this line of argument, we should do the same for other creditors, contractual and non-contractual.

(iv) Efficiency, fairness and liability

Liability and fairness Hansmann & Kraakman argue for a flexible rule of liability, where courts can decide in each case which costs are "efficiently and equitably borne by a corporation and its shareholders and which are not."[220][221] This, they argue, would allow for much greater efficiency than the fixed limited liability rule. The judge could for example take into account whether the shareholder is a parent company or an individual investor and mitigate damage liability for the latter.[222] Several authors have suggested such distinction, which appears to be based on fairness as much as on efficiency grounds.

[217] For a critique of contractual risk-reward arguments, see Lazonick and Mazzucato (2013).
[218] Hansmann and Kraakman (1991, p. 1886).
[219] Hansmann and Kraakman (1991, p. 1887).
[220] Hansmann and Kraakman (1991, p. 1917).
[221] The tort injurer and tort victim need not necessarily fall into the stereotype hypothesis of a rich, powerful multinational and a poor tort victim. Neither should it be assumed that imposing (pro rata) extended liability would necessarily cause great havoc on small individual shareholders.
[222] Bainbridge (2009, p. 50);Bainbridge and Henderson (2016, p. 18).

A first argument for imposing liability on corporate shareholders only (and not on individual investors) is that it would be unfair to bankrupt individual investors.[223] This, again, pierces through shareholders as a general class to look at individual shareholder characteristics. If we accept moral arguments in the discussion on liability, there is no reason to limit a fairness discussion to shareholders: if we argue unlimited liability is unfair towards individual (retail) shareholders, what about fairness towards the tort *victims*?

A second argument has been raised to distinguish between corporate and individual (retail) shareholders: administration costs to attach assets from a large number of retail shareholders (rather than limiting it to larger investors) are not worth the effort. If the cost of enforcing extended liability is greater than the benefit for the tort victims, the argument goes that the more efficient solution is to leave the costs where they fall - on tort victims. How sizeable those enforcement costs are, is an empirical question (discussed below). Even if a general rule of extended shareholder liability for corporate torts is imposed, its impact could be attenuated - either by allowing courts to apply it flexibly depending on the facts of the case or because tort victims do not deem it worthwhile to attach assets from a large number of small individual shareholders, resulting in *de facto* limited liability. A theory that typically prefers rational, market-based solutions over legally imposed rules should arguably favour letting individual tort victims make a rational cost-benefit analysis on this issue.

A third argument to distinguish between liability for corporate shareholders and retail shareholders is that it would be unfair or inefficient to make individual investors pay for corporate torts even if they had very little influence over corporate decision-making. If individual shareholders did not actually influence corporate decisions and had little opportunity to prevent corporate torts from taking place, they should not bear the brunt either, the argument goes.

The argument can go the other way, however: it may be inefficient and unfair to allow shareholders to benefit from corporate torts while bearing no responsibility. Those unwilling to bear liability risk have the opportunity to buy bonds or invest differently than through share purchases.[224] The fact that small individual investors have not

[223] Other arguments can be made to distinguish corporate and retail shareholders. For example, there is an incentive issue: the possibility of liability may deter retail shareholders from acquiring shares, leaving only institutional investors and other corporate actors willing to participate in securities markets. Addressing corporate torts through enterprise liability, rather than shareholder liability, would mitigate this risk.

[224] Mendelson moreover suggests that "most corporate shareholders do not fit the image of the 'typical' small, less wealthy, risk-averse shareholder facing significant information costs." (Mendelson

contributed to corporate decision-making and should therefore not be held liable for corporate torts, is at odds with the general view in the NIE model of the company that shareholders, as a group, are best placed to monitor corporate management. If shareholders as a class should be partitioned depending on their ability and incentive to actually monitor corporate management, the question arises whether voting and control rights should be divided along the same lines. Few, however, have made such proposal.

The argument is embedded in the broader discussion on agency costs within the company, especially the publicly listed company. In a publicly listed company with dispersed shareholding, it is argued, shareholders have little incentive to monitor corporate management. The more rational approach is often a passive investment strategy. Again, this is at odds with one of the bedrocks of the legal theory of the company, in which shareholders are given control rights over corporate management exactly because they are assumed to have the (best) incentive to monitor management.[225] Such control rights include not only voting rights regarding annual reports or director appointments, but also on planned takeovers or mergers. One could argue that it is still better to give shareholders the option to monitor management, even if they don't actually exercise these rights, than to have no control rights for shareholders whatsoever. Shareholders, after all, have made their voice heard recently in votes against executive remuneration packages deemed too expensive. They do serve a useful purpose in monitoring management (especially since their rights have not been clearly laid out in ex-ante contracts, as Moore and Petrin argue). This does however not necessarily imply they should not bear any responsibility for those powers.

The argument about the unfairness of imposing liability on shareholders furthermore assumes that shareholders only influence corporate decision-making through voting (control) rights, not (also) by trading shares, thereby creating market signals (at least for publicly listed companies). Small individual investors admittedly have too few shares for their purchasing activity to impact share price fluctuations. Nevertheless, shareholders collectively add pressure on management to increase share value by the mere fact of having control rights,[226] whether or not these are actually used by

2002, p. 1227).

[225]Hansmann & Kraakman convincingly argue that "if limited liability for shareholders is justified on the grounds that shareholders have insufficient control over corporate managers to have a significant effect on the probability that the firm will commit a tort, it would seem to follow that there should be no tort liability for publicly-traded corporations at all - a position that, we believe, would gain little support" (Hansmann and Kraakman 1991, p. 1908).

[226]Ferran (2001, p. 383).

(all or a majority of) shareholders and through their share transactions. More on this below.

The fairness argument against extended shareholder liability for corporate torts implies that one should not bear the consequences of decisions over which one had little influence. This is, of course the same fairness argument that tort victims could raise *in favour* of such shareholder liability: the victims had even less influence over the decision-making, therefore it is even more unfair to make them bear the consequences of corporate torts. If we are to limit the discussion on shareholder liability to efficiency grounds, there is no room for a fairness argument vis-a-vis shareholders. If we add moral arguments to the efficiency considerations, the fairness argument seems more strongly in favour of the victims, rather than shareholders. After all, shareholders not only have a greater theoretical voice in corporate decision-making, but they also profit from externalizing the cost of corporate externalities. For the reasons laid out in Chapter 2, this dissertation does not analyse the moral arguments in detail and focuses on the NIE arguments of efficiency to make a case for extended shareholder liability. Nevertheless, the purpose of this paragraph was to show the inconsistency (or rather one-sidedness) with which fairness arguments can be invoked in standard company law debates.

Liability and fiduciary duty Let us take a step back and look at the division of labour within company. With a few exceptions, managers are legally constrained by the general rule of a fiduciary duty towards the company,[227] as discussed above.[228] The fiduciary duty is therefore more likely to benefit the interests of contractual claimants collectively than those of non-contractual claimants.[229]

In particular instances, fiduciary duties may arguably require (or at least allow)

[227]Some nevertheless argue that the "best interest of the company" is an intractable concept (Kraakman et al. 2017, p. 98). Such claim is not fully consistent with the ease with which the authors seemingly view other ambiguous concepts as unproblematic (e.g., the vague concept of 'shareholder value' and the problems of measuring what value means, what timeframe it should be measured over, etc. This vagueness has not led scholars to abandon the concept of shareholder value as too problematic.) Elhauge makes the argument that, in large publicly-held corporations, "unlike shareholders, managers are sufficiently exposed to social and moral sanctions" (Elhauge 2005, p. 734). Johnston (2012, p. 1).

[228]This includes many Continental European jurisdictions such as France. On Canada, Iacobucci (2015).

[229]The company's interest is arguably different from the collective interests of the different contractual partners. The sum is more than its parts. Even though the interest of the company will not be identical to contractual claimants' interests, it is likely to diverge even more from the interests of non-contractual claimants.

addressing certain externalities,[230] when there is either a legal obligation, market pressure or a competitive advantage to do so. Addressing externalities under such circumstances squarely falls within the NIE approach. In other cases, however, the company's best interest may exclude, or even be diametrically opposed to, the interests of non-contractual third parties.Where there is no fiduciary obligation or other legal duty to internalize externalities nor a market incentive to do so, the question arises whether further regulatory intervention can enhance overall efficiency and social wealth creation or whether alternative, non-legal mechanisms can help achieve such goal.

As lawyers, we often look to regulatory intervention for solutions to externality problems. Chapter 5 argues that legal means may not be the most effective to achieve a change in behaviour and Chapter 3 showed how legal incentives may impede non-legal incentives (e.g., social norms compliance) that can be more efficient. Since this chapter focuses on law, it will first assess to what extent company law impacts negative corporate externalities. Focusing on law to address externalities risks entrenching a traditional perception of division of labour, in which governments enhance the public interest and companies can maximize profits as long as they remain within the boundaries of law.[231] The overall conclusion from Chapters 3 and 5 challenges this narrow view of efficiency. For the purposes of this chapter, however, I focus on the potential of law to overcome those externalities for which there may not be a market incentive to address them.

A comprehensive approach to corporate externalities does not warrant an exclusive focus on a single type of measure - be it a market-based solution or a legal intervention. Instead, a variety of approaches can prove complementary. As motivations and behaviour change, so do markets. A data-driven, co-evolutionary company law model is one that discourages any norms that prevent companies from co-evolving with changing conditions where this could be more efficient (more aggregate value-generating).[232]

[230] The business judgement rule in the US (see also the internal management doctrine in the UK (Moore 2013, p. 146)) gives management substantial scope to address non-shareholder interests (Stout 2011, preface). Even where fiduciary duties are (assumed to be) owed to shareholders directly, the business judgement rule creates a wedge between shareholders and day-to-day management. (Bruner 2012, p. 530). Kraakman et al. (2017, p. 98-99), Deakin (2012, p. 339) and Elhauge (2005, p. 763).

[231] This is the so-called constraints strategy (Kraakman et al. 2017, p. 93). Some proponents of shareholder value maximization models would go a step further and argue that it is the duty of a director to ignore the law if the expected pay-off of infringement exceeds the expected risk of detection and enforcement. If such risks are low, it may indeed be perfectly 'rational' for a company to deliberately violate the law after a cost-benefit analysis.

[232] As Robé argued, the company's micro-environment and the regulatory macro-environment work in tandem - one being impacted by, and reacting against, the other (Robé 1999, p. 10). Mazzucato showed how governments have had to be more risk-taking than private actors, in order to create

Few NIE proponents would oppose legal intervention *an sich* from a theoretical perspective. Both proponents and critics leave room for government intervention to address externalities in theory, though they may staunchly disagree on which interventions they would deem acceptable. Empirical studies comparing a market-based approach with a legal intervention on a particular issue may furthermore be coloured by the ideological[233] approach adopted (see Chapter 3) or may be lacking entirely.

Whether or not the company's best interest equals shareholders' best interest is not the question at this stage. The point here is that shareholders are assumed to be best placed to 'watch the watchmen' - i.e., they are regarded as best suited to ensure management fulfils its fiduciary duty (whether towards the company or shareholders). This is the standard justification for granting shareholders control rights - typically, at the exclusion of other contractual creditors.If limited liability gives shareholders little incentive to monitor corporate tort risks, a general rule of extended liability may be an efficient incentive to do so. A general rule of extended shareholder liability for corporate torts, protecting non-contractual creditors, can be seen as a valuable and efficient counterweight to the general fiduciary rule protecting the company's contractual creditors.

Liability and control The argument on separation of ownership and control cannot provide a sufficient justification for the rule of limited liability. Historically, separation of ownership and control existed prior to limited liability.[234] The argument does furthermore not explain why the regime is also applied to parent-subsidiary relations (prohibited at the time shareholder liability was limited by law), nor why it applies to closely held private companies.[235]

Others have argued the opposite, suggesting there is greater reason to impose extended liability for torts on shareholders of publicly listed companies than on those of closely held private companies. Hansmann & Kraakman, for example, argue that shareholders in publicly listed companies already have some form of insurance through the possibility of portfolio diversification. Shareholders of publicly listed companies typically hold only a small percentage of the company's shares and invest in a range

innovative markets (Mazzucato 2015).

[233] Robé (1999, p. 123). The dividing line between theory and ideology is a willingness to subject assumptions to empirical testing. A functional NIE explanation of company law is a partial explanation, and other explanatory factors should be accounted for. One is ideology. Huse (2007, p. 5), Orts (2013, p. 23).

[234] See, however, Cheffins (2001).

[235] Easterbrook and Fischel (1985, p.110).

of companies and sectors.[236] This argument is, again, based on risk-bearing capacity: the costs of corporate torts should be borne by those most able to absorb them.[237] The argument is also at variance with fairness considerations (why make those who invest in listed companies liable but spare those who invest in closely held private companies with a greater influence on decision-making), though this is not further discussed here.[238]

Hansmann & Kraakman ultimately suggest a single rule for both listed and privately held companies, since this would greatly limit evasion tactics.[239] While this may well be true, the reason for treating shareholders in listed and privately held companies alike is not (merely) one of convenience and evasion cost, but is based on the NIE-legal theory of the company itself (risk-reward preference attached to shares as a class, reflected in, e.g., the 'equity-premium'; as well as the monitoring rights and incentives of shareholders as a class).

(v) The dual purpose of liability: deterrence and risk-sharing

In an analysis of enterprise (vicarious) liability, Deakin cites a two-fold reason to impose liability on an enterprise for the risk it creates through its activities.[240] First, an enterprise is better able to *spread* risk through insurance or product pricing.[241] Second, the enterprise is better able to *limit* risk.[242] Bainbridge has argued that piercing the corporate veil (e.g., where a subsidiary is unable to meet its liabilities arising out of a tort) should be seen as a variant of enterprise liability.[243] Extending enterprise liability for corporate torts may well be a more efficient tool to mitigate them than a general rule of extended shareholder liability. Enterprise liability at first sight appears to avoid or limit some of the concerns relating to shareholder liability.

[236] Hansmann and Kraakman (1991, p. 1917).

[237] An argument based on risk-bearing capacity should be applied consistently, so that it allows to take into account the fact that investors in privately held companies may be as capable risk-bearers as those of publicly listed companies. For example, venture capitalists, private equity investors, business angels or incubator investors of all sorts may be better risk-bearers than individual shareholders or tort victims. They may be less diversified than shareholders in publicly listed companies, but not necessarily so.

[238] The fairness argument may come to the same conclusion as an efficiency argument: liability for those profiting from externalizing corporate costs can be supported both on fairness and efficiency grounds.

[239] Hansmann and Kraakman (1991, p. 1932).

[240] Deakin (2003, p. 101).

[241] Deakin (2003, p. 101).

[242] Deakin (2003, p. 101).

[243] Bainbridge (2009, p. 50).

Due to time and space constraints, however, this is not further assessed in this chapter although it is a useful topic for further research.

Although enterprise liability is different from shareholder liability for corporate torts (and this section is only concerned with the latter), the dual function of enterprise liability can *mutatis mutandi* help assess the desirability of shareholder liability, as Hansmann & Kraakman acknowledge.[244] Imposing shareholder liability for corporate torts can (i) increase shareholder incentives to monitor management in order to mitigate the risk of torts committed by the company (deterrence) and (ii) share the risks of corporate torts among shareholders (including any insurance companies covering shareholders' liabilities) and not (only) the tort victims.

Risk-sharing In case a company faces bankruptcy due to tort liabilities exceeding the company's assets, the question is who is best able to bear the burden of the outstanding amount of the liabilities. Are tort victims or shareholders the better risk-bearers? Hansmann & Kraakman's reasoning that shareholders of publicly listed companies have insurance for unlimited liability for corporate torts through portfolio diversification rests on such argument of their risk-spreading capacity.[245] A company wishing to protect its shareholders from extended liability can buy insurance to cover tort risks. Such cost would be reflected on the balance sheet and could be priced into the company's products. Consumers, rather than shareholders, would then bear the bulk of it, but this would make prices more closely reflect the true cost of the product.[246] Alternatively, the cost of insurance may be borne by the company, diminishing its net profit and therefore shareholder return (share price and dividends). This may provide an incentive for shareholders to mitigate corporate torts, depending on the likelihood that the torts will be detected and pursued in court.

Deterrence While bankruptcy may loom for particularly severe torts (at least where access to justice is reasonable), there may still be shareholder incentives to ignore certain externalities. In the context of a corporate group, a parent company may have an interest in creating an under-capitalized subsidiary for risky activities. As a sole or controlling shareholder of the subsidiary, the parent company can exploit risky

[244] Hansmann and Kraakman (1991, p. 1933).

[245] See also Conti-Brown, arguing that "shareholders are for various reasons the best candidates for risk management and cost absorption" (Conti-Brown 2012, p. 415).

[246] Admittedly, in practice, of course, insurance is unlikely to cover the full cost of the tort. Tort risks will not be fully reflected in the price, though the cost of insurance would arguably bring the price of the product closer to its true cost than a regime of limited shareholder liability.

activities of a sub to earn dividends and either wind it down before tort claims can arise or let the under-capitalized subsidiary go bankrupt[247] if such claims are filed. In either case, the parent company may suffer reputational risks if there is sufficient public coverage of the torts committed, although there is some empirical evidence suggesting there is limited or no reputational loss for wrongdoing against third parties.[248] The parent company will nevertheless avoid legal liability, as courts will rarely pierce the corporate veil.[249] The parent company profits from the externalization of tort costs by the subsidiary, making such strategy rational to pursue under the current legal framework.

The risk of reputational damage is also not of equal deterrence to all companies.Creditors of the subsidiary may likewise not incur great risk from tort claims: the latter may arise long after debts have been repaid and the subsidiary wound down.

In a shareholder-focused legal theory of the company, shareholders ultimately control the company through voting and other monitoring rights. Shareholders' dual power of using securities markets as a signalling device and their control rights exerts significant influence over management. Even if shareholders do not actually use their monitoring or voting rights, this does not limit the collective influence they exert on management as a class. The very fact that they have certain control rights (even if not (yet) exercised), the risk of a change of control, as well as the risk of negative feedback from the financial community (such as downgrades by analysts) are interdependent pressure points on managers to maximize corporate profits to increase their job security through share price increases. Executive pay in the form of shares or options intensifies this incentive.

This important point of systemic pressure of shareholders, as a class, appears to be underestimated in arguments for extended liability only in closely-held companies or only for corporate groups.[250] The idea in this stream of scholarship is simple: only those who did, or could, control[251] corporate decision-making should be held liable

[247]Under US bankruptcy law, the claims of tort victims are ranked almost as low as those of shareholders, the residual claimants. While theoretically on equal par with (equally unsecured) suppliers, during bankruptcy proceedings a judge will typically allow payments to be made to key suppliers in order to increase the company's chances of survival. Tort victims do not enjoy similar treatment. I am grateful to Vince Buccola for giving me a very brief introduction to US bankruptcy law.

[248]Armour, Mayer, and Polo (2017).

[249]Bainbridge (2009, p.49-50) (US); French (2017, p. 143) and Ferran and Chan Ho (2014, p. 13-14) (UK).

[250]Blumberg (1985), Mendelson (2002).

[251]Mendelson (2002). The concept of control is already used in merger control proceedings. Mendelson also points to ERISA and securities regulation to emphasize US courts' familiarity with the con-

for the company's torts. However appealing this idea may seem, it misses a more structural point: the systemic influence of shareholders, as a group, over management, even absent any controlling shareholders.

It is in such context that the cost of excessive risk-taking and tort externalities has to be assessed. Insurance may not be as efficient and effective as ex-ante liability.[252]

There is a market failure to adequately address torts under the current company law framework (which includes legislative interventions such as limited liability, corporate control or case law interpretations of shareholder value maximization principles) and financial market regulation. Voluntary corporate initiatives by companies may prevent or mitigate certain types of torts, under certain conditions, to a certain degree.

Where markets and CSR[253] fail to address torts, the role of the government to enhance overall social wealth creation comes back to the fore. Recall, also, that limited liability itself is a regulatory intervention, implemented after corporate lobbying.)

This is not to say that we should ignore the cost of imposing extended liability on shareholders for corporate torts. Valid concerns have been raised as to the feasibility of enforcing such rule in a globalized economy like ours or the cost of doing so. Nevertheless, at least such discussions about cost and feasibility move the debate away from an abstract statement that we should (or should not) retain limited liability, towards a discussion that focuses on empirical questions instead. We turn to the practical objections to extended liability for tort claims below.

(vi) Summary: Few theoretical reasons in favour of limited liability for corporate torts

Easterbrook & Fischel argue that there is a point at which monitoring management is not worth the cost, though at present a greater risk exists from sub-optimal monitoring than from excessive monitoring when it comes to corporate torts. Insulating shareholders from responsibility for (externality-generating) decision-making sketches a picture of them not as monitors warranting additional control rights, but as income-seekers like other contractual creditors.[254] Management's concern for smooth-

cept of control (Mendelson 2002, p. 1288). The purpose of defining 'control' in the M&A context is different than for shareholder liability purposes and different thresholds for control seem justified (a good start may be the ownership percentage that triggers disclosure obligations under securities regulation, e.g., the 5% threshold under SEC rules).

[252] (Macey and Miller 1992). Macey and Miller (1993).

[253] Johnson concludes that "CSR does not currently offer an adequate means of internalizing externalities" (Johnston 2017, p. 1002).

[254] Robé argued that a dispersal of share-ownership changed the nature of the company, with the original *affectio societatis* giving way to a contract foreseeing a particular type of income (Robé 1999, p. 29). Reliability of income may be important for shareholders, not only profit maximization, which

ing earnings would seem to confirm shareholders as income-seekers.[255] If, indeed, shareholders are presently unwilling or unable to monitor management, the current model would be a *de facto* continuation of managerial capitalism - which the very proponents of shareholder control rights would argue is undesirable. The rule that even relatively minor shareholdings in listed companies have to be disclosed, indicates that a relatively low percentage of voting rights can influence company management. Under the SEC rules, for example, acquiring 5 per cent of a listed company's shares triggers a disclosure obligation. Activist investors frequently hold not much more than that.[256] The low threshold may suggest how weak active participation of shareholders is, but more importantly it shows how a limited number of voting shares can sway relatively great influence over management.

As Hansmann & Kraakman concluded, "limited liability in tort cannot be rationalized for either closely-held or publicly-traded corporations on the strength of the conventional arguments offered on its behalf."[257] Whether one looks at the question from the angle of the law & economics theory of the company, neoclassical economics, NIE or the nexus-of-contracts legal theory, there is no basis in either of these theories to prefer limited liability *a priori*. On the contrary, these theories are readily acknowledged by economists and lawyers alike to ideally avoid or mitigate the occurrence of corporate torts. Theory would therefore put the burden of proof[258] on proponents of limited liability to make the empirical case in favour of this regime, rather than the other way around. We can indeed not suppose, without sufficient empirical data to the contrary, that "unlimited liability would discourage shareholder investment except in firms that, under the prevailing norms of tort law, impose net costs on society."[259]

Though unlimited liability may be more consistent with the NIE assumptions of the legal theory of the company, its critics may be correct that the cost of administering and enforcing such regime will in practice outweigh its benefits.

With the conventional theoretical arguments providing scant preliminary proof of the desirability of the current limited liability regime for corporate torts, most critics instead focus on the practical feasibility of unlimited liability proposals.[260]

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further suggests they should be considered to be another group of income-seekers. I am grateful to Dr. Marc Moore for bringing this point to my attention. Moore (2017, p. 459) and Graham et al. (2005, p. 5). Veldman and Willmott (2013, p. 202) and Graham et al. (2005).

[255] Graham et al. (2005, p. 5).

[256] For a vivid description of selected activist interventions over time see Gramm (2016).

[257] Hansmann and Kraakman (1991, p. 1880).

[258] Hansmann and Kraakman (1991, p. 1934).

[259] Hansmann and Kraakman (1991, p. 1933).

[260] Grundfest (1992), Alexander (1992).

Due to space constraints, the practical objectives cannot be discussed in detail here.[261] Some of these practical objections are convincing only in particular scenarios and not others. For example, the argument that unlimited liability for corporate torts would impose excessive costs of monitoring fellow shareholders' wealth is weak in the context of corporate groups or closely held companies.

4.7.6 Shareholder limited liability and enterprise liability in the UK

Shareholder limited liability

Shareholders could, of course, contractually agree to have unlimited liability for the company's debts, although this appears to be a mere theoretical scenario. Limited liability of shareholders is lifted only in exceptional circumstances in UK company law and successful enforcement of shareholder liability for corporate torts remains very rare.

Other areas of law have been less reluctant to impose liability on shareholders, although mainly in the context of corporate groups: competition law, for example, allows competition authorities to fine a parent company for cartel infringements of a subsidiary.

UK courts have adopted a number of different approaches to hold shareholders liable for corporate torts in exceptional circumstances.

One way to hold shareholders liable for a corporate tort in the UK is through the doctrine of piercing the corporate veil. In essence, this means lifting the separate legal personality of the company to reach for the shareholders behind it. The doctrine has been applied successfully in only a very limited number of cases. The rationale behind veil piercing is that shareholders should not be allowed to hide behind the wall of limited liability of the company if the latter exists as a mere façade. Lord Keith's 'façade' conclusion in *Woolfson v Strathclyde Regional Council*[262] was elaborated upon in another well-known case, *Adams v Cape Industries plc.*[263] In a 2013 Supreme Court judgement, however, Lord Neuberger remarked that Lord Keith's statement in *Woolfson* was only an obiter and that "[t]he most that can be said about *Woolfson*

[261] Hansmann and Kraakman have rebutted a good number of practical objections raised in the literature. Hansmann and Kraakman (1992b), Hansmann and Kraakman (1992a).
[262] *Woolfson v Strathclyde Regional Council* [1978] SC(HL) 90.
[263] *Adams v Cape Industries plc* [1990] BCLC 479.

(...) is that the House was prepared to assume that the power existed."[264]

Where the doctrine was successfully applied, critics noted that a reliance on veil piercing was unnecessary in some of those cases (see, e.g, Worthington's conclusion on *Jennings v Crown Prosecution Service*[265]) and that there is no clear common thread running through the case law.

The Supreme Court had another opportunity to apply the doctrine in *Prest v Petrodel Resources Ltd*, but eventually decided the case without relying on veil piercing.[266] Lord Neuberger cast doubt on the usefulness of the doctrine. He found the doctrine of veil piercing "unsatisfactory and confused".[267] After reviewing the case law, he concluded "that (i) there is not a single instance in this jurisdiction where the doctrine has been invoked properly and successfully, (ii) there is doubt as to whether the doctrine should exist, and (iii) it is impossible to discern any coherent approach, applicable principles, or defined limitations to the doctrine."[268]

The doctrine of veil piercing has faced much criticism and courts have found alternative, less controversial ways to hold shareholders liable for a corporate tort. For example, tort law principles may impose direct liability on a company's shareholder (typically the parent company[269]). Tort principles provided the legal basis to impose liability on a parent company in the well-known case of *Chandler v Cape plc*.[270] A parent company (Cape plc), was held liable for breach of a duty of care towards an employee (Mr. Chandler) of a (then) subsidiary. Mr. Chandler had fallen ill due to exposure to asbestos. The main question in the case was whether Cape plc, as the parent company of Mr. Chandler's former employer, "owed a direct duty of care to the employees of its subsidiary to advise on, or ensure, a safe system of work for them." [271]

In *Chandler*, the court was eager to stress it did *not* pierce the corporate veil, but instead relied on general tort principles on negligence.[272]

After remarking that "[t]he development of the law of negligence has to be incre-

[264] *VTB Capital plc v Nutritek International Corp and others*, [2013] UKSC 5, at 121.
[265] Worthington (2016, p. 80). See also Lord Neuberger in *Prest v Petrodel Resources Limited and others* at 69.
[266] *Prest v Petrodel Resources Limited and others* [2013] UKSC 34.
[267] *Prest v Petrodel*, at 64.
[268] *Id.*.
[269] (Worthington 2016, p. 80).
[270] *Chandler v Cape plc* [2012] EWCA Civ 525, CA.
[271] *Chandler v Cape plc*, at 1.
[272] *Chandler v Cape plc*, at 69-70.

mental,"[273] Arden LJ clarified the very specific circumstances based on which direct shareholder (parent) liability was determined, as: "a situation where, as in the present case, (1) the businesses of the parent and subsidiary are in a relevant respect the same; (2) the parent has, or ought to have, superior knowledge on some relevant aspect of health and safety in the particular industry; (3) the subsidiary's system of work is unsafe as the parent company knew, or ought to have known; and (4) the parent knew or ought to have foreseen that the subsidiary or its employees would rely on its using that superior knowledge for the employees' protection."[274]

In sum, the principle of separate legal personality endorsed in *Salomon*[275] has been confirmed as a corner stone of UK company law in case law, although the courts have attempted to formulate exceptions on equity grounds. Cases such as *Adams v Cape Industries* have shown little appetite to provide a remedy to tort claimants, instead confirming the benefits of limited liability in group structures. Such argument accords with NIE reasoning: it assesses the efficiency of a company law rule (separate legal personality with limited liability) for the company itself. A market-based contractual solution (e.g., for the tort claimant to rely on the company's insurance) is generally preferred in this model.

Nevertheless, the *Prest v Petrodel* judgement and prior case law indicates that courts are willing to provide remedies on equitable grounds, even if (and perhaps because) the line of case law is 'unsatisfactory and confused'. Lord Sumption makes reference to the principle of abuse of rights in civil jurisdictions and finds that different principles are available in UK law to come to similar results: "[o]ne of these principles is that the law defines the incidents of most legal relationships between persons (natural or artificial) on the fundamental assumption that their dealings are honest. (...) The authorities show that there are limited circumstances in which the law treats the use of a company as a means of evading the law as dishonest for this purpose."[276] The *Chandler* case furthermore indicates that courts are willing to use the legal tools available to mitigate perceived unjust outcomes of the bedrock principle of legal personality. The case law therefore reflects the willingness to adopt a co-evolutionary approach in limited circumstances. Limited liability of company's shareholders nevertheless remains a core principle in UK law and the grounds for respecting this principle in all but extreme circumstances accord with NIE reasoning (contractual agreements

[273] *Chandler v Cape plc* at 63.
[274] *Chandler v Cape plc* at 80.
[275] *Salomon v Salomon & Co Ltd.*
[276] *Prest v Petrodel*, at 18.

and cost-benefit analysis for the companies involved and the economy at large).

Enterprise liability

Lifting the corporate veil is not the only potential company law incentive to limit the risk of corporate torts. A less controversial pathway is that of enterprise liability for torts committed by a corporate employee. Vicarious liability of employers has been supported by reference to the enterprise liability principle: "the employer puts in the community an enterprise which carries with it certain risks. When those risks materialise and cause injury to a member of the public despite the employer's reasonable efforts, it is fair that the person or organisation that creates the enterprise and hence the risk should bear the loss."[277]

A landmark case by the Canadian Supreme Court was *Bazley v Curry*. McLachlin J found a "common factor capable of explaining the otherwise inchoate case law on the liability of employers for unauthorised acts of employees", which Deakin & Markisinis labelled the 'enterprise risk'.[278] *Bazley*'s conclusion relied on a number of policy considerations. Brodie identifies equity as the strongest consideration, which would be in line with the co-evolutionary, multiple-equilibria model proposed in this dissertation. Its role in "promoting deterrence was seen as the second principal justification,"[279] which means a NIE-type cost-benefit analysis nevertheless also plays an important role.

Brodie concludes that precautions against specific risks will not suffice and that "questions of organisational 'culture' [should be] addressed" as well.[280] Such conclusion is of importance to this dissertation: liability can attach to a company if it does not take the necessary precautions to mitigate tortious risk towards third parties. Such fairness-based principle can provide an incentive to internalize at least a number of the company's externalities.

The House of Lords embraced the enterprise liability reasoning of *Bazley* in *Lister v Hesley Hall* in 2001.[281] Before *Lister*, vicarious liability was upheld for certain intentional wrongdoings by a company's employees, but not all.[282] *Lister* embraced the findings of *Bazley* and *Jacobi*, acknowledging the role of fairness and policy con-

[277] *Jacobi v Curry* [1999] 174 DLR (4th) 71, at 60 cited in Brodie (2010, p. 2).
[278] Deakin, Johnston, and Markesinis (2013, p. 586).
[279] Brodie (2010, p. 9).
[280] Brodie (2010, p. 10).
[281] [2001] UKHL 22, at 27, 70.
[282] Brodie (2010, p. 2).

siderations in those judgements. Lord Steyn quoted Fleming, who "observed that this formula represented 'a compromise between two conflicting policies: on the one end, the social interest in furnishing an innocent tort victim with recourse against a financially responsible defendant; on the other, a hesitation to foist any undue burden on business enterprise'."[283] In *Lister*, the House of Lords eventually accorded more weight to the former. The legal reasoning reflected a co-evolutionary model more than a standard NIE model. Lord Steyn pleaded against legal semantics and abstract reasoning, as he described some of the prior case law in the field: "[t]his was an overly restrictive view and hardly in tune with the needs of society."[284] Reiterating the view that the needs of society and law should be correlated, he continued: "[i]deas divorced from reality have never held much attraction for judges steeped in the tradition that their task is to deliver principled but practical justice." The judgement is not based exclusively on fairness: an efficient use of resources and cost-benefit considerations are also part of the analysis (as reflected in Lord Millett's description of enterprise liability as a loss-distribution device)[285].

A year after *Lister*, the House of Lords confirmed the enterprise risk test in the case of *Dubai Aluminium Company Ltd v Salaam.*[286] Lord Nicholls of Birkenhead reiterated the fairness considerations underlying the concept of vicarious liability: "[i]t is fair to allocate risk of losses thus arising to the businesses rather than leave those wronged with the sole remedy, of doubtful value, against the individual employee who committed the wrong."[287] He laid down once more the enterprise-risk consideration to assess vicarious liability:

> "The underlying legal policy is based on the recognition that carrying on a business enterprise necessarily involves risks to others. It involves the risk that others will be harmed by wrongful acts committed by the agents through whom the business is carried on. When those risks ripen into loss, it is just that the business should be responsible for compensating the person who has been wronged."[288]

The UK Supreme Court had to assess vicarious liability in its 2012 judgement in *The Catholic Child Welfare Society v Various Claimants and the Institute of the*

[283] *Lister*, at 14.
[284] *Lister*, at 17.
[285] *Lister*, at 65.
[286] [2002] UKHL 48.
[287] *Dubai v Salaam*, at 22.
[288] *Dubai v Salaam*, at 21.

Brothers of Christian Schools.[289] Lord Phillips's formulation of vicarious liability emphasized once again the fairness aspect of the doctrine, in combination with a NIE-like reference to market-based contractual solutions (insurance):

> "The policy objective underlying vicarious liability is to ensure, insofar as it is fair, just and reasonable, that liability for tortious wrong is borne by a defendant with the means to compensate the victim. Such defendants can usually be expected to insure against the risk of such liability, so that this risk is more widely spread."[290]

Lord Phillip lists five policy considerations to impose vicarious liability,[291] which Bell summarized as: (i) the deep pocket argument, (ii) the delegation of task argument, (iii) the enterprise liability argument, (iv) the risk creation argument and (v) the control argument.[292] Since risk creation by itself is insufficient to impose liability,[293] Bell concluded that "the second, third and fourth policy arguments are woven together into a theory of enterprise liability for helpers".[294]

In sum, enterprise liability, as reflected in the case law on vicarious liability, has been imposed for a number of policy reasons. Some of these accord with a co-evolutionary model, such as the aim for fair solutions for actual societal needs. Others are more reminiscent of a NIE-type cost-benefit analysis, such as deterrence and loss distribution objectives in combination with a market for private insurance for employers to cover their liability risks. Overall, the case law acknowledges a broader understanding of efficiency (efficiency beyond the company-level), in line with the model proposed in this dissertation.

Brodie concluded that "recourse to enterprise liability is of particular significance given contemporary concern over the proper extent of corporate social responsibility; the invocation of enterprise liability can be seen as the common law's response."[295] Risks common to a particular corporate activity will likely meet the 'closeness' test for vicarious liability. It remains to be seen how far the concept of enterprise liability can be stretched to meet a variety of CSR concerns.

[289] [2012] UKSC 56.
[290] Lord Phillips, at 34.
[291] Lord Phillips, at 35.
[292] Bell (2013, p. 18).
[293] Lord Phillips, at 87.
[294] Bell (2013, p. 20).
[295] Brodie (2010, p. ix).

4.7.7 Efficiency at an international level

One more important note on externalities and 'overall' welfare. Even if a global system of extended liability would be economically more efficient, 'overall welfare of society' is typically assessed on a national (or state- or regional level) rather than on a global level. If efficiency is calculated only at a domestic level, it may well be more efficient (rational) for a country to allow domestic companies to externalize torts abroad. For some externalities, this reasoning may not hold: for example, climate change may affect all countries in the long run or depletion of natural resources may negatively affect a broad range of countries. For other torts however, it may well be rational for a country to benefit from externalizing certain costs by outsourcing them to third countries.

If economically powerful countries impose extended liability for corporate torts only when the victims are within their own boundaries, little benefit of such rule would flow to those most vulnerable to tort risks. Such rule could therefore exclude extended liability coverage where it is most needed. Even where extended liability would cover the most vulnerable victims, lack of financial resources may prevent them from being able to launch proceedings.

There is no easy solution to this concern. Where extended liability fails, other options should be explored.

First, substantive regulation may already impose certain standards for particular industries (e.g., oil and chemical companies) or safeguard particular third party interests (noise or environmental pollution; health risks for employees or consumers).

Second, mandatory disclosure rules may increase scrutiny from financial markets on particularly tort-prone activities, although increased disclosure comes with its own risks (see Chapter 5).[296]

Third, certain torts may be mitigated or prevented based on market self-regulation. A company can gain a competitive edge through product differentiation, playing the 'sustainable' or 'responsible' card. Market demand from investors or consumers for 'greener' or more 'responsible' products may incentivize certain companies to address particular externalities.[297] The challenge for these voluntary initiatives is whether

[296]See, e.g., Sections 1502 or 1503 of the US Dodd-Frank Act on conflict minerals resp. mining safety incidents, or S. 54 of the UK Slavery Act. Regarding S. 1503 Dodd-Frank, a study by Christensen et al. concludes that the disclosure in the annual report has led share prices to reflect safety concerns more closely than if incidents were only reported on the website of the Mine Safety and Health Administration (Christensen, Floyd, Liu, and Maffett 2016). A centralization of relevant information in the annual report arguably lowers information costs for investors.

[297]Certified products may be a condition for government tenders (e.g., Fairtrade coffee for govern-

they address externalities that are most pressing for those impacted rather than those that are most likely to impact the company's bottom line (in which case it would fit in well with NIE's theory of the company). Moreover, once issues are identified, the second challenge is to formulate adequate metrics to measure impacts.

These different tools may tackle different tort risks. They are complementary methods.[298] A market-based approach to company law would favour the third option (market self-regulation) over the other two; and the second (general disclosure rules) over the first (detailed substantive regulation). Neither the first, nor the second, however, may adequately tackle a particular, 'left-over' or 'miscellaneous' type of torts. Some torts may have egregious impacts on only a few individuals, who may lack the knowledge, financial resources and access to the press or courts needed to shed light on their plight. Domestic regulation may fall short of providing protection to these victims and foreign judicial fora may be closed for these victims due to a lack of jurisdictional connection with the foreign state.The torts may be of too little financial value to be material to the company's overall financial situation, thus flying under the radar of both corporate reporting and financial markets. This may also limit the incentive of the company to address it through its voluntary CSR channel. The problem is even more pronounced for the highly prevalent phenomenon of outsourcing part of the company's supply chain to separate suppliers. Where limited liability may allow corporate groups to delegate risky activities to a separate legal entity, extended liability may push companies to outsource risky activities to separate suppliers, which even a rule of extended liability would not reach. Protecting victims from torts caused by such suppliers requires yet another approach.

Different types of measures are required to address various externality risks. Admitting that a rule of extended liability would not solve all, or even a majority of, tort problems does not necessarily mean it is not a step in the right direction - one that can help compensate (or prevent) at least a number of externalities. Moreover, a rule may not only change visible and measurable behaviour but over time also change expectations, culture and potentially motivation, slowly changing the standard for doing business.

ment offices) or for inclusion in a sustainability index (e.g., FTSE4Good or DJSI), which may attract more capital. Energy-saving devices may not only attract environmentally conscious consumers, but also those who simply wish to lower their energy bills.

[298] As Robé argues: "l'entreprise en tant que telle ne peut pas être perçue *de l'intérieur* de droit positif d'un État donné, car le contenu de celui-ci s'est développé, en réaction/symbiose avec elle, à la fois par la production de normes facilitant son autoconstitution ... et par la production de normes la contraignant..." (Robé 1999, p. 12).

4.7.8 A data-driven assessment of liability for torts

The importance of Hansmann & Kraakman's conclusion is that it brings the argument full circle: if we limit the discussion on a limited or unlimited liability regime to efficiency arguments, the empirical question is which regime is more likely to enhance efficient corporate value creation and social wealth. 'Efficient' value creation very much depends on how we define 'efficiency'. As discussed in Chapter 1, efficiency of company law provisions is acknowledged to be but a tool to achieve particular social ends. The discussion on limited liability should keep in mind the ultimate goals to be achieved by this tool. Arguments on the efficiency of limited liability from a shareholder or equities market perspective are necessarily incomplete. Useful as they are, they test only hypotheses formulated within the NIE-based legal theory of the company.

A data-driven model is needed to test whether the NIE model engenders the efficient corporate value creation it claims. Such data-driven model goes beyond testing hypotheses *within* the NIE-based legal model, to test the accuracy and validity of the model itself.[299] This includes testing the accuracy of its assumptions.[300] Empirical studies on limited liability have excessively focused on shareholder-oriented metrics (impact on share price, liquidity), not on whether shareholder primacy is itself an efficient (social wealth creating) model. Such is the difference between theory and ideology[301] that the former calls for the empirical corroboration that the latter avoids. In the absence of sufficient quantitative empirical data, anecdotal coverage of corporate externalities serves as a blunt proxy.

In short, this chapter does not argue that unlimited or extended liability is necessarily preferable. Rather, it is argued that (i) a company law rule on unlimited liability would fit in more squarely with the orthodox NIE-based legal theory of the company; (ii) therefore, the assumption of a nexus-of-contracts view of the company should be in favour of unlimited liability; and (iii) if limited liability is maintained, its supe-

[299] This is in line with Coase's warning that it is important to clearly state the assumptions on which an economic theory is based "because of the extreme importance for economics of good judgment in choosing between rival sets of assumptions" (Coase 1937, p. 385).

[300] This, again, is consistent with Coase's requirement that assumptions be both tractable and corresponding to the real world (Coase 1937, p. 386 and 404). Friedman criticizes this view, arguing that "a theory cannot be tested by the 'realism' of its 'assumptions' (Friedman 1953, p. 14). In his opinion, the determining selection criteria for theoretical assumptions is their predictive power (Friedman 1953, p. 5). See, however, Deakin (2012, n. 16).

[301] On shareholder primacy as an ideology, see Hansmann and Kraakman (2001, p. 439) and note 233.

rior economic efficiency should be corroborated by empirical data, taking into account all costs (not only those on shareholders and managers), in line with the underlying economic assumptions.

A genuine economic analysis would compare the costs and benefits of both limited and unlimited (or extended) liability as an assessment of overall efficiency (aggregate wealth creation). Such bigger-picture assessment would also account for the existing costs of externalities under the current regime (uncompensated health impacts and any unemployment it may generate, climate change costs, pollution and clean-up costs, etc.).

While certain externalities may be addressed in other areas of law beyond company law, the philosophy behind such ad-hoc regulations remains unaddressed in the *legal theory* of the company. This is inconsistent with the assumptions of the dominant NIE-based legal model, whether one focuses on the nexus-of-contracts model (which cannot account for non-contractual tort victims[302]), property rights approaches (where the property of tort victims are on equal par with those of contractual parties) or transaction cost models (the efficient allocation of capital requires projects with negative NPVs to be foregone, where 'NPV' should include costs other than those borne by the contracting partners in light of overall efficiency requirements).

In sum, this chapter does not argue that extended liability is necessarily more efficient than limited liability, though that there is little theoretical nor empirical data to favour such approach *ab initio*. The discussion on shareholder liability will not solve all negative externalities, but it is a call to re-think how the standard legal theory of the company should approach them. (And, to start with, that it *should*.)

4.8 Conclusion

4.8.1 Data-driven: Partial empiricism

The opposition to extended shareholder liability for corporate torts is based mainly on empirical arguments. The shareholder liability rule was discussed to illustrate a concern with the NIE approach to company law in general, in particular its partial empiricism described in Chapter 3: empirical data are limited to hypotheses *within* the shareholder primacy framework. Insufficient attention is paid to testing the efficiency claims of the shareholder-primacy framework itself. A data-driven approach

[302]This is not to deny the strengths of the nexus-model (Orts 2013, p. 66). It is, however, incomplete.

to company law can allow for greater efficiency, by testing the efficiency claims of different models and not just hypotheses within a single model.

A data-driven approach to the liability rule moreover moves beyond methodological individualism to test the inter-active effects of the rule on aggregate wealth: what impact does the rule have on trust and cooperation within the company, but also on trust, cooperation and efficiency-enhancing norms in the wider socio-political context? How does the shareholder primacy narrative, as reflected in the limited liability rule, affect corporate legitimacy and political stability, for example? Is the narrative self-sustaining because it is inherently more efficient or because of pressures that nudge companies towards such model even where it may lead to inefficient outcomes? Is the link between the corporate malaise and political events such as the Trump election and Brexit, identified by some interviewees in Chapter 6, plausible? A data-driven approach to company law, including the limited liability rule, assesses the impact of those various variables on overall efficiency and wealth creation.

This requires a model that can accommodate multiple equilibria, to acknowledge a company's embeddedness in a wider socio-political environment. It furthermore requires us to assess how intra-corporate governance affects this wider environment and vice versa. Some of the variables to be examined in such model may not easily be moulded into quantitative modelling. Mathematical modelling, while useful as a complementary tool, does not currently (and may never fully) capture all relevant inter-active effects. The data-driven approach to company law calls for greater attention to a variety of data sources, including the qualitative data that Bebchuk and colleagues demeaned as mere 'anecdotes'.[303] It would admittedly be messier than the elegant and simple NIE model, with its neat mathematical modelling, though we cannot take for granted that we should favour Coase's condition of 'tractability' over his requirement for assumptions to 'correspond to the real-world'.[304] A multiple-method approach[305] is more likely to uncover the relevant variables for social value creation than a reliance only on quantitative modelling of shareholder-oriented metrics such as share price, EPS, NPV or EVA. The NIE-approach to company law served the useful purpose of requiring more rigorous empirical testing of hypotheses, although the chapter argued that this empirical requirement should be implemented more consistently and broadly to increase overall efficiency of company law (i.e., its potential to increase aggregate wealth).

[303]Bebchuk et al. (2015, p. 1092), see Chapter 3.
[304]Coase (1937, p. 386 and 404).
[305]See Chapter 2.

4.8.2 Co-evolutionary: Corporate variety in a multiple equilibria model

A co-evolutionary approach to company law allows for a more adaptive response to company law questions, including the question of limited liability for torts, than the NIE-based shareholder primacy model. Contrary to the teleological end-of-history claims implicit in standard NIE company law theory, it does not assume there is only one superior rule regardless of circumstances and needs. It is therefore more open to corporate variety than the shareholder-primacy model based on orthodox NIE.

Functionalist NIE explanations require justification of a particular rule in changing circumstances. This calls for a dynamic, co-evolutionary understanding of our company laws rather than a simplistic, static model that is assumed to apply to companies uniformly.[306]

For shareholder liability, this should mean a greater openness to rigorous analysis of, and guided experimenting with, alternative models. Conti-Brown's proposal on elective shareholder liability for financial institutions after a bail-out is a good illustration: instead of assuming the superiority of a limited liability rule, he proposes a choice between extended shareholder liability or increased capital buffers. Giving companies the option[307] between different regimes may be a better way to allow for guided market-based experimenting and may provide useful data to assess the efficiency claims of different models. An alternative to the option between liability and increased capital buffers is to explore liability at the corporate group level similar to EU competition law (where for example a cartel infringement can result in a fine of up to 10% of a group's turnover). Enacting a similar group-wide (enterprise) liability for corporate torts may well be a more efficient solution to mitigate torts than shareholder liability and could avoid some of the controversial consequences of the latter (e.g., li-

[306] Harris and Lamoraux criticize such one-size-fits-all model, which ignores the different needs of large corporations and SMEs. The authors criticize the (NIE) idea of a single set of optimal rules for all companies regardless of size, as assumed, for example, in LLSV (La Porta, Lopez-De-Silanes, Shleifer, and Vishny 1997). Rather than designing an alternative set of variables from LLSV's set of variables, the authors argue against a single 'optimal' rule set. "Our aim in this paper is not to correct LLSV's variables or construct an alternative index. To the contrary, we doubt that it is possible to put together a one-size-fits-all index of legal rules ... " (Harris and Lamoraux 2016, p. 4).

[307] One may object that companies already have the option to accept shareholder liability for torts. The limited liability rule is a legal intervention that gives shareholders the power to veto any extended liability, thus legally strengthening their bargaining power at the expense of other corporate investors. Such legal distribution of bargaining power is likely to alter the outcome, i.e., the 'option' selected in terms of liability regime.

ability for retail shareholders).[308] Yet another solution is based on Rhee's bonded shareholder liability: a company could be obliged to issue corporate bonds to cover a tort-liability company fund.

In short, a co-evolutionary model need not necessarily involve more or less regulation, but it requires that the regulatory framework keep in mind the overall goal of social wealth creation and admits a wide data-set into its evaluation of which regulatory regime is more likely to achieve that ultimate goal.

4.8.3 Research questions

This chapter assessed **what the potential consequences are for the orthodox, shareholder-oriented company law model if we embrace the data-driven, co-evolutionary, multiple-equilibria methodology** proposed in the previous chapter. The research sub-questions were:

- Is the orthodox, shareholder-oriented model sufficiently grounded in the existing state of company law?
- Is there a viable alternative to the orthodox, shareholder-oriented model in Anglo-American company law? Can such alternative bolster company law's potential to enhance aggregate efficiency?
- Is the shareholder primacy norm in Anglo-American company law useful from a normative perspective?

Shareholder primacy is, for most jurisdictions, not grounded in company law, but results from a variety of legal and non-legal pressures outside of company law (such as securities law or finance theory).

Whether shareholder primacy may nevertheless be normatively useful (even if legally-descriptively inaccurate), was assessed next. The chapter found that traditional arguments in favour of a normative shareholder primacy are not fully convincing.

Doctrinal arguments based on hypothetical bargaining outcomes, risk-reward explanations or standard agency models cannot convincingly conclude that shareholder

[308] Enterprise liability for corporate torts would however not impose any liability on institutional investors, who could still pressure management for excessively risky strategies, reap the benefits and escape liability. One could conceive enterprise liability as a first-aid line for tort victims, with extended shareholder liability for legal-person shareholders or the top-10 shareholders as a complementary back-up option.

primacy is better able to increase total value creation than alternative models. In particular, if company law is a tool to contribute to aggregate wealth, it is unclear why a fiduciary duty should not be explicitly owed to the company only (not to shareholders).

There is moreover insufficient *empirical* evidence to corroborate the widely held perception that shareholder primacy is the only feasible, most efficient tool to increase corporate value creation and, ultimately, total wealth. The large majority of empirical studies focus on variables assuming a shareholder primacy model in the first place and can therefore not compare the efficiency of such model with alternative models. Moreover, they typically do not capture the important impact of a shareholder-oriented narrative beyond traditional company law metrics. Ex-ante shareholder pressures may cause inefficiencies (e.g., excessive risk-taking or negative externalities) that legal ex-post shareholder monitoring rights are unable to counterbalance. In addition, the shareholder primacy narrative may undermine the very advantage of the corporate form (the organisational dimension of *'potentiels collectifs'*) by constricting management's space to adopt a corporate strategy (business model) most fit for purpose (potentially even where shareholders would benefit from it or would prefer it). Although the primacy rule is meant to serve the interests of dispersed shareholders in particular, it is suggested it may lead to inefficiencies specifically in such scenario.

The shareholder primacy norm that dominates Anglo-American company law debates may have been useful historically or may serve a useful purpose in particular circumstances. It can nonetheless not be assumed to continue to be the model most fit for purpose under changing, inter-acting equilibria that span the corporate-economic and socio-political spheres. The call for empirical testing set forth in neoclassical economics should be carried through: the proposal of a data-driven and co-evolutionary approach to company law serves this purpose. The chapter did not conclude that a shareholder-value model should necessarily be abandoned in all circumstances, but attempted to clarify the *methodology* through which we should assess the most efficient among feasible options for company law.

Chapter 5

Management studies and the theory of the company: Risk management, externalities and corporate performance

5.1 Summary

The previous two chapters analysed the orthodox legal theory of the company and its impact on company law. This chapter assesses to what extent this NIE-based model reflects the conceptualization of the company in management studies, in particular risk management and behavioural management literature. The perspective of management studies can help assess to what degree the assumptions in the economic-legal theory of the company are shared by those actually managing companies (or the academic literature catering to them). This chapter offers a bridge to the final chapter, which summarizes the insights from interviews.

Management is “a social process”[1] that involves the institutional task of coordination.[2] Different inputs need not only be rewarded, but also put to use to create value.[3] This requires ensuring team cooperation towards corporate goals, which, in

[1] Daneke and Sager (2015, p. 36).

[2] The fact that this coordination task is important for company law as well, is acknowledged by Davies in his introductory remarks on what a company is: “For the lawyer, it is an organizational form, provided by the law, through which the suppliers of the various inputs necessary to achieve a certain objective can come together and coordinate their activities” (Davies 2010, p. 2).

[3] “[C]ompanies exist exactly because markets do not create value” (Daneke and Sager 2015, p.

turn, includes feedback[4] and information flows.

The chapter assesses whether the orthodox NIE approach to coordinating behaviour based on incentive-design sufficiently acknowledges the value of intrinsic motivation and how external incentives impact the latter. Intrinsic motivation can be more efficient than external incentives, as it can reduce monitoring costs substantially. Management literature can complement (and challenge) our NIE-based legal thinking about how to achieve corporate cooperation and bolster efficiency through company law.

5.2 Introduction

Management studies is a vast area of research by itself. This chapter only looks at this broad field to the extent it is of direct relevance to the broader research questions of this dissertation. This selective approach does disservice to the breadth of management literature. Such broad brush stroke cannot fully capture the nuances, though the general findings from particular aspects of management literature can nevertheless provide useful insights regarding the validity of the legal theory of the company - the focus of this dissertation.

Particularly relevant for the research questions presented in the previous chapters is the literature on risk management. The latter is selected for further analysis as it closely relates to the claims made in the previous two chapters. First, empirical literature on risk management can test the claim made in Chapter 3 that avoiding or mitigating certain negative corporate externalities can positively affect aggregate efficiency. Second, corporate risk management literature highlights how a company is embedded in a wider eco-system, so that risks to the company are closely linked to that wider ecosystem, as emphasized in Chapter 4.

In addition, the literature on risk management places great emphasis on issues such as trust, transparency, culture and non-financial incentives, which are acknowledged in management studies as impacting heavily on corporate performance, although undervalued in standard company law discussions. Since corporate risk management is an integral aspect of corporate performance management, the behavioural insights on culture, trust and non-financial incentives discussed in risk management literature become of direct relevance to corporate performance and, ultimately, shareholder value.

37).

[4]Daneke and Sager (2015, p. 34).

To the extent the assumptions of the NIE-based legal theory of the company and those of management studies converge, this can be a corroboration of their validity.[5] To the extent they diverge, the question is whether the NIE-based legal model can learn from management insights (and/or vice versa)[6].

Management literature serves a different purpose than company law, one could object, which limits the usefulness of trying to bring the two together. Company law is both enabling and regulatory: it creates and limits the ways in which companies can conduct their business. Even in the restrictive view (one I do not subscribe to) that company law's purpose is only to regulate director-shareholder relations while management studies deal with the relations between managers and employees, suppliers or creditors, the company law framework will impact how managers can fulfil their coordinating role. At the very least, company law should leave sufficient leeway for managers to coordinate inputs to create value, in a way they see fit depending on the needs and circumstances of their environment. A market-based approach, in particular, should be cautious not to impose a single management model through a particular company law framework.

5.2.1 Research questions

The research questions for this chapter are:

1. Is the orthodox shareholder-oriented model of NIE company law theory sufficiently grounded in management literature, in particular risk management and behavioural management literature?

2. In developing alternatives to the shareholder-oriented model, what can we learn from management studies?

[5]An alternative explanation is that the theoretical legal and economic models of the company have influenced how managers perceive their role and, consequently, their behaviour. In other words, similarity among these fields could point to circular reasoning. If economic and legal theoretical models of the company are incomplete or incorrect, their fault-lines may nonetheless be more likely to be brought to light by the practical findings of management literature.

[6]The question whether, and how, management studies can be enriched by insights from the legal and economic theory of the company is an interesting one, though not one addressed in this dissertation in law.

5.3 Corporate risk management

5.3.1 Definition of risk

Risk can be conceived broadly as anything that can negatively affect a desired outcome.[7] Corporate risk is any threat to the company's valued objectives - to its profitability, its share price, its human capital, its liquidity, etc. Defining what is of value to the company's mission is therefore a first step in managing risks.[8] Risk management can thus put into sharp focus the question of the company's ultimate objectives.

Corporate risk is typically defined as the product of the probability of a threat, multiplied by the estimated negative impact of that threat on the corporate goal. Providing a single number (probability times estimated impact) can mask inaccuracies in calculating either the probability or the estimated impact. The formula has also been criticized for assuming risk neutrality of the decision-maker. A 1% chance of a loss of 10,000 and a 25% chance of a loss of 400 may result in the same amalgamated risk estimate, though may be perceived very differently depending on one's risk aversion.

In risk management jargon, a company's willingness to take risk is called its 'risk appetite'. Such terminology (somewhat misleadingly) suggests that willingness to take risk is no more than a preference. The important question is whether those in the company deciding on 'risk appetite' are also the ones bearing the risk. As the Enron scandal or the financial crisis made clear, the brunt of excessive risk-taking by a board or management may be borne by employees, creditors, shareholders or taxpayers. If return is distributed to different actors than the risk is, there is little incentive for risk decision-makers to assess actual value and efficiency of proposed projects.[9]

5.3.2 Risk and uncertainty

Ever since Frank Knight distinguished between risk and uncertainty, this distinction has been copied into many textbooks on risk management. The line between the two

[7] Fischhoff and Kadvany (2011, p.5). See also Daelen (2010, p. 4). Some argue that risk should cover both positive and negative impacts on a desired outcome. However, I would side with those arguing that risk should include loss, in line with the general use of the word (Hubbard 2009, p. 82). Risk management handbooks equally concentrate on those events that can negatively impact a company's bottom line.

[8] See, e.g., Fischhoff and Kadvany (2011, p. 22), arguing that "[d]efining risks clearly enough to measure them means bringing value issues into relief." See also Fischhoff and Kadvany (2011, p. 41): "Risk entails some chance of losing something of value. If people value different outcomes, then they define 'risk' differently."

[9] For examples, see Shefrin (2015, ch. 8-11).

is drawn by the criterion of measurability: a risk is an uncertainty for which one can, at least in theory, calculate a probability of it materializing.[10] Uncertainty, however, does not allow for calculating estimated probabilities, according to this standard view. Some authors challenge this distinction, arguing instead that risk and uncertainty are one and the same.[11] Most literature on risk management appears to provide examples of risks that could be classified as uncertainties (e.g., political risks of war and turmoil).

What's clear is that risk management requires an assessment of a particular state of facts to predict the probability of a future event - which is by necessity uncertain. As Hubbard stated, calculating a risk estimate is merely an expression of the amount of uncertainty.[12] Certain risks may be more difficult to quantify than others. For example, one could argue that it is more straightforward to calculate the default risk on mortgages based on historical default data than it is to calculate the risk of political instability in a particular region. Nevertheless, the financial crisis has shown that even apparently straightforward risk calculations such as mortgage default risk become complex when taking into account the uncertainty of systemic risks of the ecosystem in which they operate ('common mode failures'[13]). "Risk management cannot be about managing yesterday's risks. To deal with present and future risks, one must understand the context in which the company is embedded."[14]

In hindsight, a company may wish it had prevented some risks altogether, had it made the effort to calculate estimated risks and returns accurately. This would be a case of failed cost-benefit analysis, which can be caused by poor internal information channels, insufficient risk procedures, inadequate models or psychological pitfalls. Such inadequate cost-benefit analysis leads to inefficient projects being pursued or profitable ones being rejected. Corporate scandals such as Enron and disasters such as the Space Shuttle failures[15] would fall under this category. In the standard legal model of the company, these are illustrations of inefficient management destroying shareholder value.

In other instances, the company may be well aware of the estimated risk of a project and nevertheless decide to take a strategic risk, taking a well-educated 'leap of

[10] Fischhoff and Kadvany (2011, p. 10), referring to Knight (1921). See also Guill (2016, p. 19).

[11] "Uncertainties become risks as soon as they enter the management domain" (Hubbard 2009, p. 81-84). See also Daelen (2010, p. 4).

[12] Hubbard reminds us that putting a 50/50 probability on the chance it will rain is admitting you have no idea whether it will rain. Probability does not give precision or certainty. It merely expresses the degree of uncertainty (Hubbard 2009, p. 124).

[13] Hubbard (2009, p. 4).

[14] Hubbard (2009, p. xi).

[15] Hubbard (2009, p. 107-108).

faith'.[16] The main risk management concerns in these cases may not be whether there is a distinction between risk and uncertainty, or precisely how a risk probability can be calculated. The main concern appears to be more basic, namely a lack of incentives to address risks.

5.3.3 Risk and externalities

The purpose of risk management is to safeguard the attainment of the company's objectives. Its aim is not to reduce all risks, but to manage those risks that can affect the company's bottom line. This means:

- managing risks is not the same as managing externalities; and
- managing risks is not the same as preventing risks.

Even though aspects of corporate risk management may reflect discussions on corporate externalities, the two are different. A negative corporate externality is outward-looking: it consist of any negative impact that a company may have on the people and environment around it. Corporate risk management, however, is self-centred: it assesses only risks to the company's objectives, not to third party objectives. In that sense, corporate risks are narrower than corporate externalities. Nevertheless, more rigorous risk management may be one tool to limit negative corporate externalities.

Without changing its objective (safeguarding company value), risk management has over time expanded in breadth to acknowledge non-traditional risks (social, environmental, political, etc.) that can adversely affect the company's performance. The issues covered by these non-traditional risks broadly reflect those described in the legal literature on corporate externalities and CSR. Empirical studies on the management of such non-traditional risks highlight how they can affect a company's performance.[17] These risk studies thus corroborate what has been argued in Chapter 3: even a model focused exclusively on company value (or even shareholder returns) is more likely to achieve its goals by paying greater attention to negative corporate externalities (in this case, those externalities that pose a risk to the company's performance). In other words, risk management literature suggests a broader definition of efficiency, as Chapters 3 and 4 argued for.

[16] Kaplan and Mikes (2012).

[17] See, e.g., Sharfman and Fernando (2008) on environmental risk management and the cost of capital; or Davis and Franks (2014) on the cost of social conflict for extractive companies.

Risk management does not necessarily mean risk prevention or mitigation.[18] A company's risk management strategy may prefer not to address certain risks, hedge or insure some, and reflect others in pricing.[19] Chapter 3 argued that incorporating negative corporate externalities into pricing does not guarantee that those externalities are mitigated: the increase in price of the product or service does not necessarily mean that this increase will serve towards preventing, mitigating or compensating the harm suffered by those affected by the externality. The same holds for risk management: incorporating risk in pricing policies can reduce demand for the product (depending on demand elasticity), but any remaining risk may fall on third parties. In short, even where corporate risks overlap with negative externalities, risk management will not necessarily imply preventing, mitigating or compensating those externalities. Risk transfer is equally part of risk management.[20]

5.3.4 Risk and corporate performance

The management literature on corporate strategy is vast. Corporate strategy gives a broad roadmap for the company to achieve its milestones. KPIs (key performance indicators) track progress *en route*. Risk management identifies the obstacles that may arise along the road. Measuring and managing risk, on the one hand, and measuring and managing performance, on the other, are two sides of the same coin. As Lam noted, "[h]aving separate risk and business reports is equivalent to having separate revenue and expense reports."[21]

Since corporate performance and risk management are two sides of the same coin, several authors have argued that a company should not only track KPIs but also KRIs (key risk indicators). This is a highly sensible proposal. Measuring the fundamental value of future income streams means discounting both the time value of money and the (estimated) risks.[22] A company that does not track risks accurately will not be able to assess the net value of its operations adequately. Moreover, corporate earnings statements that do not accurately reflect risk give shareholders, creditors, employees and authorities a deceptive view of the company's value creation potential.

[18]Moore nonetheless finds a shift in the board's risk efforts from risk management (mitigation) to risk moderation in the UK after the banking crisis (Moore 2010, p. 281). See also Moore and Petrin (2017, p. 207).

[19]See, e.g. Lam (2014, p. 425).

[20]Bainbridge makes a similar argument on limited liability as a tool to limit risk to entrepreneurs: risks are not eliminated but shifted to others (Bainbridge and Henderson 2016, p. 47).

[21]Lam (2014, p. 96).

[22]Shefrin (2015, p. 132).

Risk-adjusted return data are useful only to the extent models adequately identify risk (company-specific or systemic), have been empirically corroborated and address potential biases in filtering model input and output. The next sections turn to some of these challenges.

After the financial crisis, there have been many calls to revisit company law and corporate governance to lengthen the decision-making horizon of companies. Several authors suggested executives' interests should be more closely aligned with shareholder interests, others argued that pay-for-performance should be linked to long-term KPIs, while still others attacked the conflicts of interest unearthed in the aftermath of the crisis. Since risk management failure may well have been the main cause of the financial crisis,[23] as well as previous corporate scandals such as Enron,[24] it is of vital importance for company law academics, practitioners and policy makers to understand how improved risk management can facilitate or hinder the goal of corporate value creation. The full potential of post-crisis reforms in company law and corporate governance may not be realised until we understand how they shape, and are shaped by, risk management.

Risk models and empiricism

The definition of risk as probability times estimated impact implies the need for empirical data to feed into the risk calculations. Empirical data should be used not only as input into a model to calculate a particular risk, but also to corroborate the validity of the model used, including its assumptions and the validity of the risk estimates it generates. This is where both standard risk management models and the standard NIE model of the company appear to be deficient: both have fallen prey to the same flaw of selective empiricism. Chapter 3 argued how the NIE-based theory of the company used empirical data only to confirm hypotheses *within* the standard NIE-framework, rather than to test the validity of the framework itself. Similarly, standard risk management models have been criticised for ignoring empirical data challenging their validity. Assumptions in the model that have been falsified by historical data have remained unaltered, while other assumptions suggested by empirical data remain ignored.[25]

The standard risk tool of Value-at-Risk (VaR), for example, has been criticized

[23] On the financial crisis and risk management failures at major financial institutions, see, e.g., Hubbard (2009, p. 6) and Shefrin (2015, ch. 8-11).

[24] On Enron, see Deakin and Konzelmann (2004).

[25] Hubbard (2009, p. 17, 76-77 and 179).

for inducing excessive optimism by masking actual risk. "Major losses are far more common than these models predict," Hubbard concluded on VaR, Options Theory and Modern Portfolio Theory.[26] Lam, likewise, argues that Net Present Value (NPV) and Economic Value Added (EVA) models used in corporate strategic planning "naturally favor higher-risk investments unless proper adjustments are made to account for risk", since these models "are usually based on book capital, which typically doesn't fully capture expected loss, much less unexpected loss, and thus does not correspond to economic capital."[27] Yet others have criticized the empirical validity of risk models for using normal distribution assumptions (Bell curve), underestimating exceptional tail events.[28] Lack of corroboration of risk models, as mentioned above, can lead to inefficient capital allocation and an inaccurate depiction of the company's value creating potential to shareholders, employees, creditors and government authorities.

Including risk into the company's books requires the challenging task of aggregating all risk into a single accounting value.[29] The risk of providing a single number is that it is overly simplistic to reflect a complex world. It may exude scientific precision, although the very definition of a probability is that it expresses uncertainty.[30] This is even more so for arbitrary scaling methods of risk (low/medium/high or a 1-to-5 scale), which give the illusion of control and precision, but are in actuality the exact opposite.[31] One author suggested to not reduce risk to a single value, but treat it as a vector quantity.[32] This is evocative of the criticism lodged against the NIE-model of the company in Chapter 3: excessive abstraction to simplify models renders such reductionist models incapable of reflecting or predicting reality.[33] The question is not whether we should measure risk and risk-adjusted return, or efficiency and shareholder value, but *how* we measure it. As in Chapter 4, the question is not about whether a company's purpose should be to create value, but how this value

[26] Hubbard (2009, p. 68). See also Shefrin (2015, p. 129), arguing that "statistical methodologies such as VaR or volatility sensitivities are not designed to take into account exceptionally adverse events."

[27] Lam (2014, p. 5 and 45). See also Rebérioux for an analysis of how EVA metrics increase corporate risk-taking and alters the status of shareholders within the company (undermining risk-taking arguments to support shareholder primacy), Rebérioux (2006, p. 520-521).

[28] Shefrin (2015, p. 19 and 128). On tail risks as 'black swan' phenomena, see Taleb (2007).

[29] Daelen (2010, p. 14).

[30] See above, note 12.

[31] Hubbard (2009, p. 124).

[32] "Vector quantities are quantities that can be described only in two or more dimensions ... As with vector quantities in physics, we don't have to collapse the magnitude of the losses and the chance of loss into one number" (Hubbard 2009, p. 87).

[33] Orts (1993), see Chapter 3, note 41, on overly simplistic models in company law.

is measured. Inaccurately measuring value-creation or value-at-risk means inefficient decision-making.

The next sections delve into the complexity that is masked behind such single-value perceptions.

Risk management and incentives

Much more than standard company law debates, risk management literature accentuates the limits of procedures and policies.[34] No sophisticated risk model or risk management procedure will achieve the desired risk-outcome in the absence of the intrinsic motivation or incentives to rely on such procedures and apply the models. This section looks at how incentives align with risk management procedures and what, if anything, company lawyers can learn from this.

In the standard company law model, corporate directors' interests need to be aligned with those of their presumed principals, shareholders. This has led to a focus in corporate literature on financial incentives to tie pay to performance, assuming (mostly) financial incentives will increase shareholder value. Depending on how performance is measured, incentives can affect behaviour of corporate employees, resulting in a (positive or negative) impact on corporate performance and externalities. Performance is typically measured based on meeting certain thresholds or KPIs. However, it was argued above that performance should be measured by both KPIs and KRIs (key risk indicators), and so should pay-for-performance.[35] If performance management and risk management are like the income and expenses on a balance sheet, tying pay to non-risk-adjusted performance gives a distorted impression of value creation.

Tying pay-for-performance to KRIs instead of KPIs only, would give an incentive to fine-tune risk models within a company.[36] Managers would be encouraged to identify not only potentially successful projects, but to better distinguish between value-creating projects, value-destroying projects, so-called white elephants and missed opportunities.[37] This would allow a company to reach a more efficient risk-reward point

[34] "The methods will not matter much if the incentives to make better decisions and manage risks are not improved. Minimizing risk is not a factor in most executive bonus calculations ... If a ship is sinking, at least the captain can point out that he followed established procedures. This is not an irrational motivation from the point of view of the captain (we all seek to reduce the risk of blame), but it may be inadequate in the eyes of the passengers" (Hubbard 2009, p. 77).

[35] See, e.g., Hubbard (2009, p. 253).

[36] It is not argued here that pay-for-performance is an effective incentive. What is argued is that, if a company decides to pay-for-performance, such measure should take into account KRIs and not only KPIs.

[37] Shefrin (2015, p. 101 and 439).

(whether in a single equilibrium view or a multiple equilibria theory).

Behavioral risk management

Where risk models have been empirically corroborated and the appropriate incentives are in place to make company employees use them, models still rely on individuals to filter information to input into the model and to interpret the output of the model. Biases can affect both (in addition to affecting the assumptions integrated into the model).

Two biases have been particularly accentuated in risk management literature for threatening corporate performance: excessive optimism and group-think (the latter has been called a collective expression of the former). For example, people with more risk-seeking personalities may be more likely to become an entrepreneur, CEO or trader. An overoptimism-bias may lead such individuals to underestimate the actual risk of proposed projects. Such overoptimism may be reinforced if models are used that are themselves biased towards excessive risk (e.g., the VaR-method or normal-distribution-models, as mentioned above). There is little counterbalance if financial incentives are equally skewed towards risk-taking by ignoring KRIs. Overoptimism is further reinforced by group-think (though, of course, group-think could tip the other way). A culture of *esprit de corps* in which loyalty is prioritized over effective decision-making, or a rank-and-yank culture[38] stifling dissent will lead to inefficient risk-reward allocations, notwithstanding sophisticated risk models. Calls for board diversity, in particular for employee representation on boards, can then be considered a risk management tool, not only a corporate governance issue.[39]

However, a sound risk management culture needs to go much beyond the board level. Risk management, to a large degree, is about psychology.[40] The importance of the human aspect, as opposed to (or complementing) the modelling aspect, is acknowledged in best-selling management books[41] as well as specialised risk management literature.[42]

[38]See, e.g., Deakin and Konzelmann (2004, p. 140) on Enron's 'rank-and-yank' system.

[39]On a related note, see Zumbansen's description of the company as a complex and innovative institution of social learning, for a more nuanced understanding of the role of employees' beyond the traditional stakeholder or codetermination arguments (Zumbansen 2007, p. 475-476).

[40]Shefrin (2015, p. 19). See also Hubbard (2009, p. 90): "Part of the problem with risk management, at least in some organizations, has been its rapid growth mostly in isolation from already well-developed quantitative methods such as those found in decision analysis."

[41]Collins emphasizes the importance of having "the right people on the bus" first (Collins 2001, p. 41).

[42]"Nor is risk management only about establishing the right control systems and processes - it is

It has been argued above that the more coordination has to rely on external incentives and monitoring, the less efficient it is. Behavioural management studies suggest that there may be more efficient ways to ensure corporate cooperation and innovation than a traditional NIE model would suggest. Our company law models should not be too simplistic and neither should our risk models. Even where empirically-corroborated models suggest a clear course of action, behavioural studies can identify why model outputs may be ignored or misinterpreted.

The importance of behavioural studies for risk management, and for the legal theory of the company, are discussed below, but it may be useful to look at what management is expected to achieve first.

5.4 The task of management: remuneration, value creation and adaptation

Management literature is not immune to the narrative-dominance of NIE. In the post-Enron reflection on the role of business schools, Ghoshal lamented that "[m]any of the worst excesses of recent management practices have their roots in a set of ideas that have emerged from business school academics over the last 30 years," criticizing the *homo economicus* approach that had come to dominate business school curricula and output.[43] These were the "bad management theories" that were "destroying good management practices".[44] Ghoshal concluded that "[e]xcessive truth-claims based on extreme assumptions and partial analysis of complex phenomena can be bad even when they are not altogether wrong."[45]

Much like company law, management literature has thus not remained unaffected by the NIE narrative. This should not come as a surprise. NIE-based company law provisions lay down a particular basic architecture for the company that management literature cannot fully escape: the company law conceptualization of the manager-shareholder relation as one of agency must affect how managers go about fulfilling their daily activities. A manager convinced that the law requires her to maximize shareholder value is very much likely to base her management model on this premise.

The previous two chapters emphasized that company law should at least allow suf-

also about having the right people and risk culture" (Lam 2014, p. 4).

[43]Ghoshal (2005, p. 75).

[44]Ghoshal (2005, p. 86).

[45]Ghoshal (2005, p. 87).

ficient room for other areas of law and non-legal mechanisms to address externalities or for managers to adapt the company to changing expectations and needs efficiently. An understanding of fiduciary duties towards the company, rather than shareholders, already creates more space for adaptive management. The agency-model of NIE supports the finance view of the company but ignores its organizational dimension (which allows greater room for human agency).[46] From a management perspective, ensuring adequate compensation for all input providers is nothing more than ensuring survival (maintaining the company as a going concern). The company as an organization, however, presumably aims for more than survival: it aims to somehow create value through its offer of competitive products or services. Drucker's description of the corporate purpose from a management perspective illustrates this: "There is only one valid definition of a business purpose: to create a customer."[47] When we think about companies (from Google or Amazon to a local artisanal baker), we may describe our expectations towards them in terms of the good or service we expect them to provide (a crunchy, freshly made baguette, for example). We will likely view adequate remuneration of input providers as a tool for producing valuable products, rather than the other way around. Company law is a tool to ensure adequate protection for shareholder remuneration, though this must not mean that we should view management's role *only* in those terms.

Management studies, though (arguably too) mindful of the NIE model, nonetheless pay much greater attention to a manager's role of input- coordination for competitive value-creation. This leaves more room for understanding the coordinating task of management: once the necessary inputs are in place, how should the company's assets and knowledge be brought together to produce valuable products? How can management adapt the company's value-creating potential in changing environments?

Two conclusions can be drawn at this point that are relevant for company law: knowledge and adaptation.

Adaptation Management's task to steer the company through changing environments implies adaptation - to changes in the company's internal environment, its industry, wider economic and technological changes but also evolving social and political conditions. The manager-shareholder relation requires that management be given effective tools to fulfil this task. Adaptation requires a degree of flexibility. An insis-

[46] Deakin (2012, p. 350 and 361).
[47] Drucker (1973, p. 98).

tence on shareholder primacy may not be the optimal tool to allow management to create value through adaptive management in all circumstances.

One could argue that managers who wish not to abide by shareholder primacy should not accept the job - instead, shareholders can change the corporate form or purpose as they see fit, not managers. If the company is to be managed in the interests of employees, there is already the corporate form of employee cooperatives, one could indeed object. Other corporate forms allow for other benefits and it is up to shareholders to decide on such form. It is not for management to experiment with different models, critics may argue.

Different corporate forms exist indeed.[48] This does not necessarily imply that these different forms can meet all needs and changing expectations in adaptive markets. For a start, the number of corporate forms is relatively limited. Cooperatives may be seen as another form of shareholder-primacy, only one where shareholders happen to be employees or customers.[49] Partnerships or other corporate forms may not offer certain benefits that corporate constituents desire. For a company to become listed, the number of options for its corporate form is limited. Even where a company deems one corporate form to be most suitable to its needs, a lack of investor familiarity with minority corporate forms may prevent such companies from obtaining the necessary funds. The problem of investor pressure to adopt a particular form has been noted for cooperatives but also for benefit-corporations.[50] The selection of a particular corporate form is therefore not necessarily as flexible as a market-approach would deem desirable. Moreover, even where a particular corporate form is suitable for the company at incorporation, it may no longer be a few decades later. A change of corporate form or the company's constitutive documents may be less efficient than allowing for an adaptive management. CSR may be one expression of such adaptive management.

Knowledge Whether in a widely held listed or closely held non-listed company, management is selected (at least in theory) for its expertise on how to run the business successfully. This assumes a degree of knowledge shareholders may not have.

[48] See Chapter 4.

[49] See, e.g., Paranque and Willmott's study of the John Lewis Partnership: "it is implausible to characterize JLP as an unequivocally progressive or emancipatory form of organization. It is deeply infused with paternalism and the narcissistic spirit of contemporary capitalism. Its ownership and governance structures are dedicated primarily to mitigating needless 'perversions' of capitalism, rather than their eradication. Moreover, such mitigation is pursued without regard to the inclusion of other stakeholders, such as suppliers, and to the consideration of socially responsible objectives, such as sustainability" (Paranque and Willmott 2014, p. 619).

[50] Liao (2018). See Chapter 4, section 4.3.

Directors are assumed to bring complementary expertise to the table.[51] This is indeed the premise on which the business judgement rule is grounded. Witney argues that the above-average returns of private equity investments are likely related to what he calls the 'subjective judgement agency costs' - broadly, private equity firm's potential superior knowledge of the general business environment, which can ameliorate the target company board's decision-making.[52] The importance of knowledge is not limited to the board or management. To couple back to the beginning of this chapter, information flow is crucial not only for risk management or for innovation (exemplified in the 'Toyota way') but for the coordination task of management in general.

An argument in favour of adaptive management or an acknowledgement of the importance of knowledge creation, circulation and retention in management literature is not by definition incompatible with a shareholder primacy model in company law theory, one may argue. Adaptive management and a knowledge-based business model may well be tools to increase shareholder value. Nonetheless, the question is whether, in practice, the shareholder-oriented Anglo-American company law model limits the degree to which management can adapt to changing circumstances and make effective use of knowledge to increase corporate value. The sections below indicate that such is at least a working hypothesis deserving of further testing.

5.4.1 Rationality, narrative and leadership in risk management

Risk management literature has come to pay more attention to non-traditional variables than NIE-based legal models of the company, as mentioned above. For example, the notions of trust, fairness, integrity and culture feature much more prominently in risk management than in standard company law literature.[53] Through risk management, these concepts enter the realm of corporate performance, efficiency and value-

[51] Charan, Carey, and Useem (2014, p. 4, 43-44). Millstein makes the case for a more 'activist director', who dares to go against short-term shareholder pressures to create long-term value where needed: "Yet too many directors cater to the short-term boosting of share price, and become slaves to the quarterly capitalism of earnings guidance and analyst estimates. Under pressure, they forgo innovation and growth. Some short-term thinking is needed to earn long-term gain – but not so short-term that it hobbles a company's ability to achieve the long-term" (Millstein 2017, p. vi).

[52] Witney (2017, p. 218-226).

[53] The COSO frameworks on enterprise risk management, for example, "highlight the importance of soft, or behavioural, controls such as trust, ethics, integrity, building relationships, and effective leadership" (Daelen 2010, p. 48). Shefrin, however, criticises the COSO framework for failing to "stress the deep psychological issues" (Shefrin 2015, p. 15).

creation. Or so they should: the recognition of the relevance of such concepts in risk management literature does not imply their incorporation into standard risk models, let alone in corporate policies and procedures, board presentations, shareholder proxies and company law theory.

Behavioural (risk) studies may tie those non-financial, non-traditional concepts of social interaction to corporate theory and performance. Even if one stands by the shareholder-value model found in standard company law discussions, behavioural (risk) studies show the importance of such social concepts to financial returns. Again, the question is not whether the corporate purpose can be defined as creating value, but *how* such value-creation is empirically measured.

5.4.2 Why we need to understand behaviour for risk management: an additional layer of monitoring

In his elaborate study on legal compliance, Hodges stressed the importance of first understanding behaviour before designing compliance measures.[54] Legal compliance measures, he concluded, are a rather inefficient tool.[55] Other tools may be more effective in inducing compliance and reducing monitoring costs. Trust is one additional layer of monitoring within companies, and one more efficient than external incentives combined with compliance monitoring.[56] Tyler makes a similar argument. He distinguishes between instrumental and normative compliance. Instrumental compliance is the NIE-type of rational calculation of utility maximizing options. Normative compliance, on the other hand, focuses not so much on the degree to which an outcome is self-serving, but on the fairness of outcomes and procedures.[57] In other words, a law is more likely to be obeyed if people see it as legitimate,[58] not necessarily if it serves their interests.

This conclusion should not surprise us. It does not imply that formal compliance mechanisms are irrelevant. "[C]ontractual relations theory and procedural justice the-

[54] Hodges (2015).

[55] Hodges (2015, p. 10). On the hidden costs and benefits of incentives, see Fehr and List (2004).

[56] Fehr and List find that "trustworthiness is highest if the threat to punish is available but not used, while it is lowest if the threat to punish is used" (Fehr and List 2004, p. 743). On trust and monitoring and enforcement costs, see also Deakin and Michie (1997, p. 108). The need for enhanced trust was also listed among the core findings of the 2012 Kay Review in the UK on financial markets.

[57] Tyler (2006, p. 162).

[58] Regarding the mediating role of trust on the effect of procedural justice on cooperation, see De Cremer and Tyler (2007) and van Dijke, De Cremer, and Mayer (2010).

ory are both about the role of social capital in easing coordination between actors."[59] If both can encourage cooperation, both deserve acknowledgement in the legal theory of the company, currently "premised on the belief that the principal does not trust the agent."[60] It suggests there are important complementary[61] tools to formal external incentives - tools that receive little attention in standard NIE-theories of the company. However, arguing that formal compliance incentives are incomplete merely shifts the question to: what alternative (or complementary) tools can enhance intra-firm cooperation and hence efficiency? How can those tools be used to endogenise trust, integrity and fairness?

5.4.3 Behavioural studies and risk management: social variables and cooperation

Risk management can itself be a risk, if the models applied are inadequate and give a false sense of control. Even if not, risk management literature has warned against the 'crowding out' effect of risk procedures: the mere existence of risk procedures can negatively affect employees' motivation to use their own judgement to identify and mitigate risks. Van de Ven argues that "[t]he potential of quantitative risk management models are overestimated and formal controls disregard the effects of the complex interaction of these controls with the level of trust, integrity and fairness in organizations."[62] Similarly, De Cremer argues that "[b]y using control systems to regulate our moral decisions and actions, we as humans detach ourselves from any sense of responsibility – after all, it is the system that is now responsible for the moral culture of our business."[63]

Trust, fairness and corporate culture are broad concepts that can be defined in various ways. Measuring the impact of such concepts on corporate performance and efficiency is an even greater challenge. A number of empirical studies have attempted to establish an empirical link between these concepts and corporate performance. For example, the introduction of trust-based working systems was found to improve prod-

[59] Huse (2007, p. 150).
[60] Huse (2007, p. 148).
[61] Some authors have warned that external incentives may crowd out intrinsic motivation (Fehr and List 2004). Underhill, however, argues that crowding-out risks of incentives may be mitigated through smart regulatory design (Underhill 2016).
[62] Daelen (2010, p. 50).
[63] De Cremer and de Bettignies (2013, p. 62).

uct innovation.[64] Procedural fairness was found to positively affect cooperation,[65] though such positive correlation depends in magnitude on the higher level of trust in the authority proclaiming the procedures.[66] This suggests that proclaiming rules and procedures that are fair at the company level or regulatory level may not achieve the same level of cooperation as long as company leadership is not perceived as trustworthy. Lay-offs, cost-cutting or executive bonuses perceived as excessive may then lead to decreased cooperation, in turn negatively affecting corporate performance. This can off-set the expected efficiency-gains from such measures assumed by NIE-models. To borrow an analogy used by Shefrin, sound corporate management is like a game of tennis: if the 'financials' are the forehand, 'behaviourals' are the backhand, and it is hard to win the game without a good command of both.

5.4.4 Measuring non-traditional non-financials

This brings us back to the problem of measurement that has been accentuated at multiple occasions in this dissertation. The question is not whether the purpose of companies is to create value in an efficient manner, but there are substantial shortcomings in how NIE-based models have defined and measured value-creation and efficiency. We typically measure only a subset of quantitative indicators, rather than all (measurable) variables that matter. This is half-hearted empiricism. Efficiency and value-creation can be enhanced by adopting a data-driven model - one embracing also behavioural data.

Measuring the impact of trust, fairness or a sense of recognition on corporate performance is challenging. Systematic guidance on measuring non-traditional non-financial aspects of corporate performance appears to be limited, including in risk management literature.[67] Behavioural game theory experiments may help discern certain aspects of these vague concepts, though the set-up of game-theoretical experiments is itself subject to limitations.[68] In-depth qualitative data may be required to understand the

[64]Godart at al. (2014) found a 11 to 14% increase in innovation after the introduction of trust-based working systems. Quoted in Hodge (2017, p. 688).

[65]Tyler (2006).

[66]De Cremer and Tyler (2007). Cremer and Van Dijke furthermore showed how a breach of trust serves as a diagnostic tool, which is discounted more than positive information of trustworthiness (van Dijke et al. 2010).

[67]I am grateful to Prof. Daniel Ralph, Academic Director of the Centre for Risk Studies at the University of Cambridge, for giving me a brief state-of-play of non-financial risk-management tools.

[68]See De Coninck (2011, p. 261) for references to literature. See also North's critique on Binmore's game-theoretical approach to fairness and efficiency, see Chapter 3, note 171.

complex ways in which, for example, cooperativeness can affect performance.[69] Quantitative measurement of these concepts is not straightforward[70] and, arguably, not necessarily appropriate. One interviewee argued that a positive team spirit is "chemistry between people" that simply cannot be measured (see Chapter 6). Translating such concepts into variables[71] with a sufficient level of validity may indeed be part of the reason why boards seem reluctant to consider them.[72] Financial variables are perceived as more objective, therefore more reliable. Where non-financial indicators are measured, they typically include the more straightforward dimensions, such as customer satisfaction assessed through surveys (i.e., qualitative measurement or what Chow and Van der Stede call subjective measures[73]).

The lack of more refined measurement tools for the non-standard variables may well explain why they are not more commonly used. If it takes a theory to beat a theory, the design of an alternative theory requires the formulation of hypotheses that can be tested, which, in turn, asks for adequate measurement tools. This is a chicken-or-egg scenario: without more refined measurement tools, reliance on such important concepts will remain uncommon, but without greater attention from a scholarly and practical audience, more refined tools are unlikely to get developed. As Ghoshal pleaded, "such an alternative theory can only emerge from the collective efforts of many."[74] Daneke and Sager, in response to Ghoshal, suggest that an alternative model needs greater recognition of a theory of human agency than the finance-based NIE model[75] (which employs a much more narrow and formal view of 'agency').

Such effort seems particularly warranted in view of the acknowledgement that financial performance measures may be less effective and accurate than non-financial variables.[76] In the context of performance measures,[77] financial criteria may be more

[69]For a similar statement in the context of performance measurement, see Ittner (2008, p. 270).

[70]There may moreover be a greater time-lag between the occurrence of such phenomena and performance impacts (Chow and Stede 2006, p. 4).

[71]"A variable is a measurable representation of a concept" (Leeuw and Schmeets 2016, p. 131).

[72]"In a study of business executives by Wm. Schiemann & Associates, the executives widely acknowledged the limitations of traditional financial measures. Nevertheless, they still favored them over nonfinancial measures because they saw them as generally being less ambiguous. As a group, executives were less willing to bet their jobs on the quality of a variety of nonfinancial information than on the quality of financial information" (Chow and Stede 2006, p. 2).

[73]Chow and Stede (2006).

[74]Ghoshal (2005, p. 88).

[75]The financialization of society "may even portend the end of management theory per se," they conclude (Daneke and Sager 2015, p. 30).

[76]Chow and Stede (2006, p. 5).

[77]Variables to measure an individual manager's performance may not necessarily need to be the same as those measuring total company value. It is likely, nonetheless, that the two will be linked in

accurate, but the downside is an aggregate measurement including factors beyond the control of individual employees. Non-financial or subjective performance measurements "may have lower measurement precision," though the advantage for risk management purposes is that "they are focused more easily on components of operations that the manager can control."[78] The different types of measures may be complementary. Moreover, if measurement of non-traditional non-financial variables for risk management purposes would be reflected in individual performance measurement, one needs to be mindful that different types of measurements can prompt different behavioural responses. For example, Chow and Van der Stede found that "[c]ompared to both financial and nonfinancial measures, subjective measures are seen as being the most effective at curtailing shorttermism and gamesmanship."[79]

5.4.5 Rationality, analogy and narrative as 'cue'

Even though the 'backhand' of financials and calculations may be what we are most familiar with, learning the 'forehand' of 'behaviourals' may help us play more efficiently. The focus on the 'backhand' in management is put into historical perspective by Hurst, who points to the gradual over-reliance on rationality in the Western world since Enlightenment, favouring 'logos' over 'mythos', in traditional philosophical terminology.[80] Hurst juxtaposes the static logic of rationality to a dynamic narrative or logic-of-people. Applied to management, Hurst argues the former calculates and manages, while the latter narrates and leads. It is narrative that gives meaning, he concludes. This is not irrationality but ecological rationality, Hurst argues, using Vernon Smith's terminology (see above).[81] Hurst likewise proposes a rationality-in-context, rather than a sterile rationality in the abstract (epitomised by the standard 'ceteris paribus' assumption).[82]

To loop back to the start of this chapter: risk management by definition has to acknowledge and understand the embeddedness of the company in a wider ecosystem,

practice.

[78] Chow and Stede (2006, p. 7).

[79] Chow and Stede (2006, p. 6).

[80] "... Western management thought had failed to come to grips with the relationship between stability and change and between reason and emotion because of the malign influence of neoclassical economics" (Hurst 2012, p. 216). The 'malign' influence of neoclassical economics should target neoclassical economics as an ideology, though not necessarily as a theory. As mentioned above, as a theory, neoclassical economics' insistence on empirical testing has brought useful advances to traditional doctrinal legal analysis.

[81] Chapter 3, note 150.

[82] Hurst (2012).

with the latter impacting on the former and vice versa. The company's activities, including its risk-taking, affect its environment. This brings us back to Aoki's concept of equilibrium linkages discussed in Chapter 3. This is not yet fully acknowledged in risk management. Whereas risk management literature increasingly acknowledges such linkages, standard risk models still typically concentrate on the one-sided impact of external variables (e.g., political instability) as risks to the company's performance. This ignores how the company can affect its surroundings, thereby contributing to its own political risk profile (e.g., perceived intra-firm inequality or unfairness and its impact on political stability, a link also emphasized by some interviewees - see Chapter 6). Moreover, standard risk management models have focused on too narrow a set of variables emphasized in NIE-models, undervaluing a wider set of (exogenous and endogenous) variables that affect behaviour and, thus, performance.

One of the early classical management scholars, Mary Parker Follett, already hinted at what we now call a multiple equilibria approach. She argued against "the simplifying assumption of only one possible correct view of a situation."[83] There may be multiple "right answers" and the insistence on a single one may be due to power and coercion, not its inherent supremacy.[84]

Moreover, some risk management scholars have also emphasized the evolutionary dimension of risk: if a company's risk profile is linked to its environment, any changes in the environment will impact the company's risk profile. Ingmar and Bush make the case for a "plural rationality theory" for risk management. They contrast this with both the utilitarian singular-rationality view of neoclassical economics, as well as behavioural risk models, with a dual-rationality approach (rational; and irrational (emotions)).[85] Different types of risk approaches (maximizers, conservators, managers or pragmatists) are appropriate for different circumstances. A single-approach risk model (e.g., the Black-Scholes model premised on Gaussian distribution;[86] or the maximizers-approach that became dominant in the run-up to the financial crisis[87])

[83]Paraphrased in Hurst (2012, p. 140). Parker Follett argued against methodological individualism *avant la lettre*: "A man is a point in the social process rather than a unit in that process ... individuality and society are evolving together from this constant and complex action and reaction ... infinite interactions by which both individual and society are forever a-making" (Follett 1918, p. 60-61).

[84]Hurst (2012, p. 140).

[85]Ingram and Bush (2013, p. 298).

[86]"Given the drastic differences in the four risk environments, modelers will find that a model that is calibrated to one of those four environments, like a Black-Scholes model that presumes a Gaussian distribution of outcomes as is found in the moderate environment, will fail in a Boom or Bust environment when the outcomes are more extreme" (Ingram and Bush 2013, p. 303).

[87]Ingram and Bush (2013, p. 302).

cannot capture the complexity of a world-in-flux. Risk rationality-in-context requires understanding the evolution of the company's environment, as well as any overconfidence within the company's walls due to selective data-filtering, concentrating only on data seemingly confirming a preferred model.[88]

For risk management, so closely linked to corporate performance, this means we may need a more data-driven and co-evolutionary model, which acknowledges the existence of multiple equilibria (which the company's own actions can help shape).

Schumpeterian creative destruction helps us understand how such dynamic world need not necessarily be an aberration of a single-equilibrium ideal, but can create competitive advantage. A manager's role is one of flexibility and adaptability, with an eye for the detail of context.[89] Where NIE sees imbalance, a leader sees opportunity. Where the former is about the allocation of resources, the latter is about creating wealth and options.[90] This goes back to the ambiguity about management's role. The finance-based view of NIE that perceives managers as shareholders' agents will concentrate on the managerial task of shareholder remuneration. Remunerating various corporate inputs is a necessary but insufficient condition for corporate value creation: the latter requires management to act as choreographers, identifying competitive advantages, new business opportunities due to technological innovations or changing social-political expectations, etc. A single NIE-based model of company law that views managers as mere agents risks circumscribing the flexibility that is vital for an adaptive management, capable of efficiently and effectively fulfilling its task of value-creation. "If management tools approach the firm with rules and incentives and a sense of the *scarcity* of all resources, then leadership tools use *images* and *invitations* to approach it with the sense of possibility and the *abundance* of opportunities."[91]

The word 'leader' is used deliberately here, instead of the word 'manager'. Although the two concepts are distinct, there is an abundance of academic and popular literature on leadership for managers.[92] Managing as a leader means giving guidance

[88] "The most credible explanation of why risk management based on state-of-the-art statistical models can perform so poorly is that the underlying data used to estimate a model's structure are drawn generally from both periods of euphoria and periods of fear, that is, from regimes with importantly different dynamics" (Ingram and Bush 2013, p. 303).

[89] Hurst (2012).

[90] Hurst (2012, p. 245).

[91] Hurst (2012, p. 153).

[92] Management and leadership are often fused together, suggesting one is incomplete without the other. It is illustrative that The Financial Times and McKinsey Business Book of the Year Award, for example, has a separate "Leadership & Management" category. Few managers would probably describe themselves deliberately as a non-leading manager: this may indeed suggest the finance-view of managers-as-agents is incomplete.

and direction, spotting opportunities where others see uncertainty. Leadership, then, is a tool of strategic risk management. A leader motivates, inspires and gives meaning through narrative, while a manager processes information, calculates and monitors. The NIE-based theory of the company is incomplete to the extent it emphasizes only the latter.

Throughout the dissertation, it has been argued that narrative matters. De Cremer and de Bettignies, for example, find that our behaviour is affected by the fact that people associate business with competition and greed.[93] Narrative and perception matter, since they act as 'cues' through which we view the world. The stronger those cues, the weaker monitoring and enforcement costs may be. Corporate culture, CSR policies, perceived fairness of remuneration for rank-and-file employees, CEOs and shareholders can each act as 'cues', potentially reinforcing each other in a particular direction.

Moral judgements can be weakened by a number of factors, including lack of sleep, work overload or strong opposing incentives.[94] Ensuring non-excessive workload and rest for employees or fair and equal treatment among employees is then not only a question of employee well-being and CSR, but also one of risk management. It facilitates self-regulation - not in the sense of business drawing up its own formal codes of conduct and procedures, but in the sense of producing a sustainable, self-reinforcing environment that can foster more efficient cooperation for corporate value creation.

Chapter 3 introduced the perceived paradox of NIE-based management: a manager's task is to ensure cooperation among individuals assumed to be driven by self-interest. Corporate incentives often cater to this self-interested assumption in NIE-models, which in turn risk crowding out non-self-interested preferences that may be more efficient motivators for cooperation. These are useful insights for a NIE-company law model pursuing efficiency gains.[95] Leadership is associated with concepts such as

[93] De Cremer and de Bettignies (2013, p. 65).

[94] "Business is comfortably grey. Research in the behavioural sciences shows that as long as people can rationalise behaviours they can feel comfortable with them ... Research shows that the survival strategy to justify unethical actions is particularly activated when people suffer from loss of sleep, feeling depleted (physically and emotionally) and when potential losses of one's wealth are salient. Sound familiar? Business provides ample opportunities for excessive workloads, feelings of depletion, lack of sleep and financial challenges. The presence of these circumstances elicits the kind of justification processes necessary to push the limits of what is allowed, eventually ending in boundaries being crossed" (De Cremer and de Bettignies 2013).

[95] See, e.g., De Cremer, van Dijke and Mayer: "... leaders are most effective in stimulating follower cooperation when they consistently treat all group members in a fair manner and are prototypical (i.e., representative of the group's values and norms). It is often crucial for the effective functioning

narrative, motivation, fairness and transparency. The NIE-based legal theory of the company assumes a type of management that management literature deems likely to fail. While the former focuses on the backhand, the latter understands it may take the forehand to win the game.

Integrating behavioural insights into the legal theory of the company, and company law, may raise fears of manipulation (this was a concern raised by one interviewee - see Chapter 6). In view of the already large sway companies hold over our societies, one may fear that a fuzzy set of behavioural incentives will only increase their impact on our lives. Such fear of corporate exploitation of behavioural insights to increase profits is justified. It is nonetheless unrelated to whether or not such insights should inform our company law model. The opportunity for corporate (ab)use of behavioural insights exists already. It is argued that if we integrate them into a less reductionist company law model, at least we may also benefit from positive externalities. If a less reductionist company law model can lower perceptions of corporate greed, increase trust in companies as a positive force or encourage a more human-centred governance model, this can have important positive spill-over effects for our societies. The greatest protection against allowing company law to become a tool of manipulation, is to guard against normative claims that do not make their assumptions explicit and open to debate.

5.5 Risk management and the legal theory of the company: what can be learned

The chapter started with the question what company law could learn from management studies (in particular risk management literature), if anything. The purpose of this chapter was to assess whether management literature, in particular risk management studies, could make company law more efficient.

The findings can be summarized as follows:

- Standard risk management models, like the NIE-based legal models of the company, exude a cost-benefit analysis reflecting a rational-actor model.

of teams, workgroups, and organizations that members are willing to engage in behaviors that are beneficial to the collective, rather than focusing solely on their own benefits. Hence, promoting cooperation among group members is considered a core function of leadership" (van Dijke et al. 2010, p. 1121).

- Broader risk management literature, however, has acknowledged the importance of non-traditional risk variables reminiscent of CSR debates.

- Risk management can be one tool to address a number of negative corporate externalities, though its reach is limited as its purpose is to ensure company value (not aggregate welfare).

- When risk management refers to company law models, it is typically through a brief description of standard agency models of the company. Risk management literature nevertheless focuses on company value, not shareholder value as such. Ghoshal's criticism on management research in business schools suggests that strands of the broader management literature nonetheless still very much rely on NIE assumptions.

- Behavioural risk management underlines the importance of social variables such as trust and fairness to improve corporate performance. It acknowledges the importance of perception and narrative, not only calculation.

- In view of the link between risk and return, acknowledging the importance of social variables such as trust and fairness to sound risk management means acknowledging their importance for corporate performance, therefore for value creation and efficiency. KPIs should be complemented by KRIs, including where pay is conditional on performance.

- Social variables such as trust and fairness may be a more efficient way to ensure corporate cooperation than external (mostly financial) incentives and concomitant high monitoring costs.

- Risk management and leadership literature have in common that they acknowledge the importance of understanding the embeddeddness of a company's activities in a wider ecosystem.

- Such embeddeddness suggests a dynamic approach of equilibrium linkages as discussed by Aoki (see Chapter 3), rather than a static single equilibrium view advanced by standard NIE models of the company. A single risk model is unlikely to capture the complexity of a world-in-flux. A plurality of models and approaches may more accurately capture a plurality of rationality (rationality-in-context).

A few more final words on how this relates to the legal theory of the company discussed in Chapters 3 and 4. The shareholder-centred legal model of the company was criticized on two grounds. First, the assumed efficiency of the standard NIE-based legal model was criticized for not being corroborated by empirical verification. Second, the model was criticized for hiding behind a flawed risk-reward argument. Standard risk management models have been criticized on empirical grounds too, as discussed. They can also be criticized on the risk-reward ground,[96] for assuming the rewards fall where the risks are. The standard legal model argues that shareholders should reap the rewards of good corporate performance through dividends and share price increase, as their claims are subordinated in case of bankruptcy. Their risk (residual claimants in case of corporate default) is seen as the basis for their reward (owner-principals having the right to the corporate surplus). Corporate bankruptcy is however only one risk on a risk management's radar, and a rare and extreme one. The question of risk-reward in the context of risk management begs the question: who bears the risks that the company voluntarily incurs through its activities and who bears the rewards of those risks (be they recurrent or rare, small or large)? Companies need to take risk to make a profit, but as long as risk is not adequately accounted for in project selection, capital will be allocated inefficiently. Even where corporate impacts on third parties are not considered from an ethical perspective but from a purely economic-efficiency perspective, reform of our standard risk models, much like our standard company model, is warranted.

Risk management is about risks to the company's value, not to overall value creation and efficiency. As Deakin argued in the context of employers' vicarious liability for torts committed by employees, there are two reasons to shift risk to the enterprise. First, the enterprise is better positioned to spread risks, for example through insurance or pricing policies. Second, the enterprise is more capable of limiting the risk through

[96]The 'high risk, high reward' principle in risk textbooks has been challenged by some authors. For example, Lam argues: "The concept of 'no risk, no return' is widely accepted in the business world. A corollary to that concept is 'higher risk, higher return' ... This is how many people think about the trade-off between risk and return, and it has the virtue of simplicity. However, it is certainly not valid if risk is put into its proper perspective" (Lam 2014, p. 4). Shefrin, on the other hand, merely contrasts the textbook principle of "high risk, high return" with the observed behaviour of traders, explaining the divergence by behavioural pitfalls. "On average, professionals judge risk and expected return to be negatively correlated, just the opposite to the relationship depicted in textbook finance. Why should this be the case? The behavioral perspective offers two possible explanations: representativeness and affect" (Shefrin 2015, p. 258-265). Whether or not high risk transactions correlate to higher returns on average lies outside the bounds of this dissertation, though it is useful to keep in mind that the risk-reward assumption may not always hold in corporate transactions (Squire 2010).

managerial coordination.[97] Shifting liability for risks to the company whose activities they result from may incentivize the company to take better notice of risk. Nevertheless, as we have seen above, formal-legal tools may not be sufficient to improve poor risk management. As the risk failures in financial institutions and corporate scandals such as Enron show, we have to address how corporate culture, narrative and incentive structures such as rank-and-yank policies contribute to risk failure. Furthermore, the interaction of social variables such as trust and fairness with legal incentives needs to be taken into account to manage risk efficiently.

As was the case for NIE-legal models, overly reductionist risk management models may not only be useless, but counter-productive. Inadequate risk management is a risk in itself, not only for the company and its shareholders, but for its employees, tax payers, the environment and the government. The shareholder-primacy model in company law uses too precise a criterion (shareholder return) to measure something as complex as corporate value creation or efficiency. It is based on an overly rigid, static view of rationality that suggests a single-equilibrium model of welfare. If individuals, markets and societies are adaptive, so should management. If firms are shaping, and shaped by, their environments, the organizational task of management deserves greater recognition than the finance-based view of managers as mere shareholder agents.[98]

The point is not to deny that companies should (also) create value for shareholders, but to understand better how such value is created. Behavioural management studies can complement (or challenge) the NIE-model of the company. For example, where NIE models may predict wages to decrease during economic downturns, Bewley finds this is often not what occurs in practice. The reason for this downward pay rigidity, he suggests, is that the risk of hurting worker morale outweighes the potential benefits of pay cuts during recessions.[99] In Chapter 6, some of the interviewees' responses make similar links between non-standard variables such as worker morale, recognition and equity and standard financial variables such as productivity and monitoring costs.

Bewley's study makes clear that behavioural insights need not lead us to reject (bounded) rationality. The dismissive attitude in some behavioural literature of what are deemed irrational biases, may instead be a refined rationality-in-context that is not

[97] Deakin (2003, p. 100-101).

[98] This chapter focused on management, but many of the conclusions also apply to the board of directors - e.g., the focus on its role not simply as a monitor of shareholder agents, but as leading, coordinating and contributing knowledge to corporate value creation. On boards-that-lead, see Charan et al. (2014). On the issue of trust and plurality of visions in boardrooms, see Gillespie and Zweig (2010, p. 240 and 258).

[99] Bewley (1999, p. 36).

yet adequately captured in our models.[100] Neither need we reject equilibrium models altogether. Rather, we need to improve our understanding of how equilibria are linked, how they are shaped and evolve. Adding variables such as morale, trust or fairness to a model may raise practical challenges for measurement purposes. The distinction between theory and ideology was made before and any alternative theory would need to be subjected to the same rigorous requirements of empirical testing. The argument for a more data-driven model (whether in economics, company law or risk management) suggests we take into account a wider set of relevant variables beyond the traditional shareholder-oriented metrics. This is not a question of generating more data within the framework, but to allow data (from a variety of sources and disciplines) to challenge the framework itself. Measurement may take different shapes and not all relevant data may be suitable for quantitative analysis. Behavioural studies are refining the metrics used in game theory settings, but this type of data has its own limitations. Challenges in measurement do not change the importance of these factors for corporate performance and, therefore, for the legal theory of the company. They can enrich our understanding of efficiency and corporate value-creation. Acknowledging the company as a complex adaptive system allows us to see a more robust risk management, CSR or an alternative governance model as critical to its resilience and sustainability.[101]

5.6 Conclusion on research questions

The two research questions for this chapter were:

1. Is the orthodox shareholder-oriented model of company law theory sufficiently grounded in management literature, in particular risk management and behavioural management literature?

2. In developing alternatives to the shareholder-oriented model, what can we learn from the discipline of management studies?

[100] Gigerenzer (2008).

[101] Tyler links institutional legitimacy to a “reservoir of support”, which an institution can rely on during times of crisis or decline (Tyler 2006, p. 281). Bowles and Gintis provide a number of reasons “why ... altruistic social preferences supporting cooperation outcompeted unmitigated and amoral self-interest” (Gintis and Bowles 2011, p. 4). A similar competitive advantage may accrue to companies, as another type of social institution, who base their governance model and culture on more than amoral self-interested incentives. See also Zumbansen (2007, p. 479) on the importance of healthy management-employee relations for a company’s adaptation and responsiveness.

The conclusions drawn from this chapter are that the answer to the first question is negative and the answer to the second question positive.

1. The literature on management studies, in particular on risk management, partially reflects the assumptions and methodology of the NIE-based legal model of the company. The rational cost-benefit analysis is reflected in the very definition of risk as probability times estimated impact and in standard risk management models. This rational, calculation-based approach is qualified by the wider (behavioural) risk management literature acknowledging the importance and efficiency of non-financial incentives and social phenomena such as trust and fairness. This is a step beyond the methodological individualism of NIE. Risk management literature is furthermore evolving towards a broader understanding of efficiency, which acknowledges the limits of command-and-control and financial incentives more than standard company law discussions do. Moreover, to the extent risk management requires an adaptive management, this is more conducive to an organizational view on management-as-coordinators rather than the finance view on managers-as-shareholder-agents.

2. In developing alternatives to the shareholder-oriented model, it is desirable to add these insights from management studies.[102] Both risk management and company law share the same purpose of increasing efficient value-creation. Although they serve different purposes, overall they need to be compatible. The main purpose of this chapter is to show how good management practices, as identified in (risk) management literature, may be constrained by a company law model that is too reductionist and rigid. The argument that behavioural variables can increase shareholder value may well be true, but risks missing the point: 'trust', 'fairness' or 'morale' are not variables that can easily be 'optimized' for shareholder value maximization. Perceptions of trust or fairness are likely to suffer if they are seen as merely instrumental.

[102] This may well lead to a different model, rather than an 'improved' or amended NIE legal model of the company. For a criticism of a potential merger of the standard economic model with behavioural insights, see Hodges: "Attempts to integrate psychology into the economic model, as behavioural economics, miss the point. The problem with behavioural economics is that economists continue to frame most decisions in terms of rational and calculated decisions, so that subsuming psychology into a model that remains essentially based on economic calculations is thought to continue to capture reality. The fact that many decisions with economic consequences can be affected by incentives and considerations of rational irrationality, and hence nudged, does not overcome the inability of founding socio-legal structures on the reality of how people make decisions and what in fact affects their behaviour. We should be talking essentially about psychology not economics in looking at the basis of influences on behaviour" (Hodge 2017, p. 696-697).

The experiences of those managing companies, as well as the literature catering to such audience, can help corroborate the assumptions of the (more theoretical) NIE-based legal theory of the company. This conclusion is not limited to data from empirical management studies. It extends to the narrative found in best-selling management books, written either by managers themselves reflecting on their experiences, as well as by those writing for this target audience. Empirical data matter, but so does narrative. The effectiveness of risk incentives, procedures and policies is affected by the extent to which a risk culture is internalised. How managers perceive their role, and how the law describes their role to them, matters.

Chapter 6

The company through the eyes of interviewees: Summary of qualitative empirical research

6.1 Summary

Interpreting interviewees' responses, it appears that (i) they predominantly see the Anglo-American legal model of the company as a relatively accurate description of the legal requirements imposed on company directors in the US and UK, though less so in continental European and other non-Anglosaxon countries; (ii) the accuracy of this model was confirmed mainly for listed companies, less (or not at all) for privately held companies; (iii) most interviewees lamented the rigidity of short-term shareholder pressures; and (iv) several interviewees perceived a lack of alternative metrics or an alternative theoretical framework as contributing to the prevalence of the model. While most interviewees shared the perception that company law (excessively) focuses on shareholders and short-term returns, the same interviewees sketched their actual management practices in a way that deviates moderately (mostly interviewees from large listed multinationals or financial institutions) or strongly (mostly but not exclusively from smaller, family-controlled companies) from this shareholder-centred legal model.

6.2 Introduction - research questions

The previous chapters analysed the theory of the company from a theoretical perspective. This chapter adds an empirical dimension to the analysis. It draws on a number of interviews with individuals working in the corporate world or with particular professional exposure to it. Chapter 2 elaborated on the aims and methodology of the fieldwork, which need not be repeated here. Suffice it to recall that the main themes of the dissertation (the descriptive and normative appraisal of the assumptions of NIE-based Anglo-American company law theory) formed the basis of the discussions.

The research questions for this chapter are:

1. Is the NIE-based, orthodox shareholder-oriented company law model sufficiently grounded in managerial practice?

2. In developing alternatives to the shareholder-oriented model, what can we learn from the perceptions of managers themselves?

6.3 Corporate objective

On the descriptive level (as opposed to the normative level), most interviewees perceived the law as imposing a strong shareholder-oriented corporate purpose (even though most jurisdictions do not impose a fiduciary duty towards shareholders but towards the company; and even though no jurisdiction requires the pursuit of shareholder value maximization at the expense of any other consideration - see Chapter 4). This perception was held especially regarding Anglo-American jurisdictions and less for other countries. The following descriptive statement by one interviewee summarizes the dominant view among interviewees well: "the agency model is pretty accurate for countries like the UK, the US" and certain English-speaking countries. "But the question mark is around the majority of countries around the world."

Vic van Vuuren, Director of the Enterprise Department at the ILO, disagreed with this statement, even at the descriptive level: "That is how the books say it works, but I don't think they actually do it that way ... [T]he agency model is not how companies are actually governed internally. I think there is too much manipulation of people in the decision-making environment."[1] One interviewee recalled a conference at which

[1] Van Vuuren described the purpose of the company as furthering the needs of society and its people.

one of the Hansmann-Kraakman pair presented the agency model of the company and the idea of legal convergence toward that model: “but one of them turned up and he was explaining this theory and he almost got shouted at out of the room. It was in the Netherlands. I think that was a pretty good representation of to what extent continental Europe agreed or didn’t with their theory. I don’t. If you look at places such as Brussels, Japan, South Korea, and European countries, I don’t think it holds water in 2016 any more than it did in the early 2000s.”

With the exception of one interviewee strongly supportive of the neoclassical theory of the firm,[2] most interviewees saw reasons other than the inherent merits of the model as an explanation for that model’s continued adherence. In addition to power and path-dependency reasons, the following reason identified by FT management journalist Andrew Hill was mentioned by several interviewees:

> And I think it is easier [for managers to fall back on shareholder primacy]. Mainly because, once you start to consider multiple stakeholders, you have to start saying: well ok, in this balance, where does the worker come, where does society come, where does my local community come? So all those things make it much easier ... and I have heard people, directors of companies, say: “well, when it comes down to it, it is just a decision about what would be best for shareholders.” And I could imagine being a director and in the whole wealth of things that you hear about as the director, having one simple heuristic about shareholder primacy, to be able to say: “Ok, I just need to think: what is best for the shareholder?” would be very helpful and quite a relief, actually.

Bruno Colmant, Head of Micro Research at financial institution Petercam Degroof, argued the company *an sich* does not have a definitive purpose. Corporate purpose has been shaped by factors beyond the company, he argued, referring to Weber’s analysis of the Calvinistic impact on protestant economies. This demonstrates that “there can be even a conditioning beyond the company that is of a communitarian nature - there are ‘blueprints’ of a whole list of things that condition the company as well,” including cultural elements that transcend it. His conclusion that therefore the company *an sich* does not have a definitive purpose does not inevitably flow from this observation, but the idea that corporate purpose may evolve as times change approaches Aoki’s idea

[2]The word ‘firm’ is used here, as the interviewee stated that the company as such does not exist - see below.

that the economic and social-political exchanges are linked. Mr. Colmant agreed with Aoki's thesis of multiple equilibria and concluded that this conditioning of the company by cultural elements showed clearly that there are "layers of equilibria, layers of cultures." "In any case," he continued, "there is no offer and demand without a third dimension" (such as emotions).

Interviewees did not challenge the fact that companies are to seek profits, but a number challenged *how* profits were achieved and how they are distributed. A statement by Roel Nieuwenkamp, Chair of the OECD Working Party on Responsible Business Conduct, echoed similar remarks made by several interviewees: "It's not that you shouldn't make profit. You need to make profits, taking into account your social impact." Wouter Torfs, third-generation CEO of family-controlled B2C company Torfs, recited Frederic Laloux: "profit is like the air we breathe: we need air to breathe but we don't live to breathe."

In short, interviewees perceived the law to define corporate purpose as maximizing shareholder value - at least in the US and the UK. They acknowledged that, in practice, this is not how management may perceive its role - particularly in privately owned companies. Corporate purpose as maximizing shareholder value (at least for listed companies in certain jurisdictions) was confirmed as a descriptive statement, though challenged normatively by most interviewees.

6.4 Shareholder value and company value

Descriptive and normative responses on corporate purpose showed an ambivalent attitude towards shareholders by several interviewees, with some rejecting shareholder primacy outright. This ambivalence stemmed not only from the perception that shareholders do not have a right to claim certain returns (fairness argument), but also from the perception that shareholders are poor monitors (efficiency argument). The managers interviewed came closer to articulating a fiduciary duty towards the company rather than the shareholders.

Peter Van Hoecke, second-generation CEO of family-controlled Van Hoecke, deplored that the shareholder-primacy model pays "sometimes really too much attention to shareholders ... They are completely uninterested in what that business does ... They only look after themselves." Mr. Torfs argued shareholders act this way because they can; "and [they] find it almost a form of natural selection, a kind of Darwinian trough ... And this has only gotten worse." (Note that analogies using 'nature' or what is perceived as 'natural' tendencies run through the interviews, though some interviewees had opposing views on what is 'natural' - much like the academic nature-or-nurture debate on self-interested behaviour or cooperation.)

With the notable exception of one interviewee strongly supportive of the neoclassical model, most interviewees thought that the pressure of short-term shareholder demands resulted in inefficient resource allocation. A few interviewees acknowledged putting aside the law at particular points in the (mainly earlier) operations of the company, where it was seen as hampering the interests of the company.

The need for a company to be profitable was not challenged, though the current way in which profit is made, was criticized. Several interviewees used the word 'greed' to refer to current corporate profit-making. Mr. van Vuuren stated: "And so when I spell the word profit, I wonder whether it should not be spelled g-r-e-e-d. In other words: greed. There are too many companies driving profit without consideration for people or a role in poverty alleviation. Many are not interested in people. Their [i.e., young managers'] mind, how they operate, they are almost like a machine that operates in a world of make-belief." Mr. Van Hoecke commented: "Shareholder-driven companies, yuk ... Ever seen the movie "Seven"? One [of the seven sins] is greed. It is lethal for a company." Perception matters - if such views are widely held beyond the limited confines of this small sample of interviews, such negative perception adds to companies' list of political risks.

Whereas most interviewees deemed it likely that the company-of-the-future would pay greater attention to non-traditional aspects of value-creation (such as sustainability and well-being), the main concern raised by interviewees about such evolution was that of measurement problems (more on measurement below). Mr. Torfs deplored the centre-stage role for the share-price as the virtually exclusive measurement tool for corporate performance: "everything is based on measuring shareholder value, the value of the share ..." The president of the board of directors of one listed consumer goods company warned: "Well, you should know that already there is, those bonuses, there is already always complaining... And imagine you would also need to do that for non-financial numbers, then it becomes even more difficult." The same interviewee, referring to cooperation and team-spirit, warned that "you cannot model that. It is chemistry among people." The methodological issues on measuring non-traditional metrics are discussed below.

Elaborating on the distinction between shareholder value and company value, Mr. Torfs and Mr. Van Hoecke stated they could easily raise traditional metrics such as profits or EBIDTA, though warned this would come at a long-term cost to the company. Mr. Torfs said:

> That [shareholder model], of course, is all about the point of departure, the paradigm, about: what is the objective? If the objective is shareholder value, or share price or EBITDA, for the coming 5 or 3 years - because [shareholder-driven companies] do not look further ahead - then, of course: I can also increase EBITDA by 3, 4 %, it's really not that difficult ... And what afterwards? That is a first question. I have my doubts about that. And even if it would continue to work, is that what we want? Is that what the owner wants? That is very much like the plantation owner of the 18th century. We haven't made much progress.

Mr. Van Hoecke likewise remarked:

> We have, I think, a net profit of 4-5% this year. That's actually a little low. ... But if I am a cost-cutter and I start tomorrow, I would have a great time. In two years time, you would see mega-numbers. The only thing you need to do, is to make sure you leave the ship within two years. It's like the Titanic: you were hit from below and you don't know it yet. You are slowly sinking. Or you made everything so skinny and thin that you have no resilience anymore. That resilience that we have, to absorb resistance, also allows us to make those investments.

Mr. Curaba, founder and CEO of IT-company EASI, winner of a Great Place to Work Award, uttered: "but we shouldn't care about shareholders!" Another interviewee described the mindset of another family-controlled, listed company as: "they don't bother looking at the stock exchange ... A bunch of unpredictable and emotional things... Not even 5 years down the road, but they look 10 years ahead." Perhaps noteworthy that the CEO of the company that this interviewee was referring to, was among the top-100 of Harvard Business Review's ranking of best-performing CEOs in the world.

The reluctance to fully subscribe to the shareholder-centred company model did not prevent Mr. Torfs from acknowledging the strengths of the Anglo-American model: "but, yes, that is also its force. It is entrepreneurial and that is the raw capitalism. They have also achieved something, of course." Almost all interviewees who were asked the question whether ownership[3] matters, strongly agreed. One exception was Mr. Curaba, who opined that the ownership and size of a company should not serve as an excuse to manage a company for sheer shareholder profit at the expense of others.[4] He said this from a firm belief in leadership responsibility, without hinting at any competitive advantage such business model may bring. Other interviewees, especially from larger companies, did stress the competitive advantage they enjoyed from being controlled by long-term shareholders, whether family-owned or not.

On the question whether share ownership matters, Mr. Colmant responded:

> Greatly, greatly. It's that companies that are held through the stock exchange, with a minority shareholding, very dispersed, adopt a management that is ultimately quite cynical. And since there is no reference point in terms of values - and I'm not saying that values are needed - but in any case there is no reference point in terms of a company legend. And ... I observe more detachment, cynicism and less loyalty as to what the company represents. The company is more swiftly instrumentalised for the benefit of its management than in a family business ... but that sometimes comes at the cost of inefficiency because it lacks this type of confrontation with the market that a stock-listing allows. I personally strongly belief in the stock exchange, for example. I think the stock exchange, for me it's about confrontation, the formulation of permanent values.

Most other interviewees did not share this optimism in the positive force of the stock exchange, viewing private share ownership or long-term shareholders as positively impacting long-term strategy (in other words: efficient allocation of company resources, measured over a longer time frame). A handful of interviewees, both listed and privately held (though mostly family-controlled) made remarks similar to Mr. Colmant's reference to a 'company legend' as a source of pride, inspiration and influence on corporate culture. The risks of family or private ownership were however duly

[3]'Ownership' in this chapter refers to 'share ownership'. As discussed above in Chapter 4, the legal entity of the company is technically not owned by shareholders, although this is the mainstream imagery. Shareholders own shares, not the company.

[4]On the question whether critics would see the EASI-type management model as limited to SMEs, Mr. Curaba responded unapologetically: "And one always, always, uses excuses to say: 'yes, but that does not apply to the size of the company, that does not apply to my sector of activities.' We always, always come up with excuses." On the question whether being listed matters, he responded: "Those are excuses. It is human nature to look for excuses. You are listed or you are not - you need courage. And that's all. The shareholders - let them get lost." Mr. Ugeux likewise pointed to a deficit of courage as a source of financial market problems.

acknowledged by most.

A conflict between shareholder and company interests did not exist at a family-owned company like Van Hoecke, its CEO stated, perhaps unsurprisingly. However, as Mr. Torfs remarked, this does not mean the company can afford to ignore shareholder expectations of reasonable returns, as this would endanger the family-shareholders' willingness to keep the family funds invested in the company, especially for later-generation shareholders.

Two interviewees, one from a large listed multinational and the other working in financial asset management, were more positive about the traditional monitoring role of shareholders. One underlined the importance of the stock market and controlling shareholders over management. The other favoured a greater role for shareholders, who "can carry more weight" than they currently do. This, in the interviewee's view, is preferable over the current overload of regulation. Another interviewee deplored the layers of new rules every time a corporate scandal erupts, while Mr. Hill likewise pointed to the "gravitational pull for more rules every time something goes wrong." Even though an executive of a listed multinational doubted that all disclosure requirements are "particularly relevant for shareholders," disclosure seems to have come to play a dual role as both (i) an information and monitoring tool for potential and actual shareholders and (ii) increasingly, a monitoring tool for the public at large.

Regarding monitoring, one interviewee wondered about the lack of a full-fledged SEC equivalent in the UK, pointing furthermore to the lack of a shareholder track record of enforcing director duties. Another added that even influencing the board is rare for shareholders. The comment suggested a vulnerability in the NIE model: the existence of shareholder rights is assumed to lead to enforcement of those rights, if rational self-interest so dictates. This interviewee's comment about the lack of shareholder actions against directors highlights the importance of testing how an assumption so crucial to a model (in this case the NIE model) plays out in practice.

6.5 Efficiency, competition & cooperation and sustainability

With one notable exception, interviewees who used terms such as 'neoclassical economics' or 'self-interest' did so in a disapproving way. This reaction was more pronounced for interviewees either not presently in a corporate position (e.g., policy makers) or the CEOs of smaller-sized companies (though typically still operating across borders). Standard NIE concepts such as efficiency and competition were used by interviewees, though their understanding of those concepts appeared to deviate from the standard understanding in NIE. Efficiency was understood more broadly than shareholder returns (even inimical to it, according to some interviewees), while competition was not necessarily seen as an anonymous Darwinian selection force favouring those most fit for purpose and was even linked to cooperation by some interviewees.

Interviewees also underscored the link between performance and sustainability, with one interviewee interpreting the current state of empirical studies on the topic as proving a positive link between the two. Mr. Van Hoecke described sustainability in terms of company endurance: “There are 4 components to our business plan. The first one is the most important: we want to ensure that we can guarantee the continuity of this company across generations.” The three other components were: financial independence; sustainable personal growth of co-workers and any individual interacting with the company (including suppliers and the local community); and creating well-being, not just welfare. This last point, the distinction between welfare and well-being, was reiterated by several other interviewees. EASI’s founder-CEO Mr. Curaba remarked:

> We confuse welfare and well-being. Yes, human resources can try to influence the big manager, so he would think about well-being ... Choosing magnificent offices - that is welfare. And it’s important, because without respect for one’s co-workers - I find it self-evident that you give them comfortable offices, that you give them well-performing equipment, that seems to me so, so obvious ... But all of that is welfare. And then there is a confusion between welfare and well-being. But at the same time, if the majority of companies would already do everything for welfare, that would be formidable.

There was a generally shared perception among interviewees that short-term shareholder pressures typically run counter to a company’s long-term (even survival) interests. (Note that interviewees did not define what they would consider long term, though the comments of some interviewees suggested long-term would mean around 10 years.) Implicit in this view is that they view their task as safeguarding the company’s interests, rather than the shareholders’ interests put forward by NIE models. Nevertheless, a couple of interviewees emphasized the need to educate investors on the fact that their interests ultimately coincide with the company's interests, at least over the long term.[5]

The topic of investor relations brought to light the disappointment of several interviewees with a lack of investor engagement, including from institutional investors. A senior executive of a listed multinational expressed surprise at the number of institutional investors moving in and out of their positions at rapid pace.[6] Mr. Torfs criticized the "anonymous," shattered shareholdings, with pension funds "only thinking about the money." Another interviewee aired his disappointment that after three years of costly integrated GRI reporting, there was only one shareholder question on the non-financial data, adding it would be nicer not to have to be ahead of investors all the time in terms of sustainability. Nevertheless, another interviewee noted progress, with some of the company's investors now sending their sustainability policies to the company for review, "creating a relationship of trust" between the company and its investors.

Long-term thinking was underlined in the remarks of several interviewees, both smaller or family-controlled and large, listed companies. An interviewee from one large, listed multinational saw the company's proactive sustainability efforts as a way to be prepared when legislation is imposed, where competitors may be unprepared for future legislative initiatives. Another interviewee described his role as director as one of reflecting on where the company can and should be in 5 to 10 years. Mr. Van Hoecke however warned that trying to draw up 5-year corporate plans is arrogant (distinguishing between vital 'thinking ahead' and arrogant long-term 'planning ahead'). The need to adapt to changing circumstances was underscored by two interviewees, with Mr. Colmant adding that the best executives are those with a "cultural richness", able to connect the dots inductively - a characteristic he thinks will only increase in importance in an AI-based future.

Although Mr. Torfs saw examples of companies successfully pursuing shareholder-maximization strategies abound, he warned that those companies may no longer be leading the pack in ten years time. "I don't know if that is sustainable, whether they will still be there in ten years. I don't know that and no one knows. Neither do they. Because who could have predicted ten years ago that large corporate groups would

[5] One interviewee, for example, said: "So having that longer term perspective, that appreciation of what the gestation period of an investment is and being able to build that into the investment mentality of a shareholder is critical."

[6] The interviewee clarified that not all institutional investors had such trading mentality. Index-based funds such as Vanguard and Blackrock, in particular, would not adopt such strategy.

collapse?", referring to a number of Belgian holding companies that went bankrupt or found themselves in financial difficulty. "No one. That was, 10-15 years ago, *the* metaphor for success and expansion and profit, at any cost. Really at any cost. Then we were the goat-woollen socks." The latter statement echoes terminology used by other interviewees to describe the standard shareholder-driven approach as one embodying a macho culture. Shareholder-profit-driven exit strategies by entrepreneurs were likewise criticized by Mr. Van Hoecke: "And then what are you really doing? And for whom? For yourself. And how do you do that? With money that you received from others. And do you ever return that money to those others?" Mr. van Vuuren, in turn, took aim at managerial power-play on the risk-reward justification for executive pay: "And in many instances the managers who have not managed the company well are paid retention bonuses to keep them on board. This is done on the motivation of not wanting to lose management skills. And then I realised: it is just a game, of keeping people into power. Good or bad years, the top guys are always going to be the earners ... And often the top guys are not worried about what is going on down in the broader company populous where people are expendable. People have become a number rather than human beings and we need to change this."

Mr. Colmant, who worked mainly in financial institutions,[7] unconditionally endorsed the NIE-view of the company as a legal fiction and a tool to reduce transaction costs:

> The company sui generis does not exist... it is not an economic body that is autonomous. There is no permanence, it is not a full-fledged economic actor. It is given a legal personality ... but ultimately, its permanence is simply limited by rules of law. Hence rules that are extremely fragile, and changing ... In fact, the only thing that remains is the simplification of the contractual relationship...

Other interviewees did not make an explicit comment about the accuracy of NIE assumptions reflected in company law, though the remarks of several hinted at how the NIE-model (at minimum) could be improved. Some interviewees, in particular those in non-corporate roles or those in corporate roles but not in large multinationals[8] were

[7] It is tempting to remark that the belief in the NIE model is stronger among those active in the financial sector than elsewhere. However, the other interviewee very active in the financial sector, Georges Ugeux, is much more critical of the dominant model.

[8] The latter category included interviewees from family-controlled business (first, second or third generation) as well as CEO-founders.

more vocal about the perceived shortcomings of the NIE-based legal company model. One ILO economist plainly stated that "economists got it wrong". He criticized the gradual dominance of standard neoclassical approaches that re-assess the organisational aspect of a company through individual incentives. Instead, he argued, a key element is: how can one improve cooperation and collaboration within a firm? That idea, he concluded, has been lost in mainstream economics. He opined that the clear theoretical bias in economics is creating inefficiencies, pointing to the Wells Fargo scandal regarding phantom bank accounts. That scandal, he argued, was based on the idea that, once you put every employee in a clearly defined performance unit, a manager simply has to keep an eye on things and all will be fine. Such mechanical view of economics was also criticized by Mr. Torfs, who warned against the simplistic traditional view of a manager as a master-chess player merely putting a set of pawns in the right positions.

Regarding externalities, one interviewee - an economist - criticized standard economics for insufficiently addressing externalities in economic models: "Economists don't like it, because if you address it, you can't use mathematical models." When negative externalities were discussed, the issue that came up most was poor labour conditions in supply chains, though there were also general references to the lack of consideration for employee well-being and society at large in the standard model. Mr. Nieuwenkamp referred to non-legally binding initiatives such as the UN Guiding Principles and binding legal initiatives such as the Modern Slavery Act in the UK or the California Supply Chains Act as examples that the current model is deemed to address externalities insufficiently. A few interviewees nevertheless expressed concern at the increasing pace of disclosure obligations, arguing they are either not relevant but a hasty response to corporate scandals or that their scope should exclude smaller or privately controlled companies.

One interviewee-economist criticized pay-for-performance, both for how it measures performance and for negatively affecting overall productivity. The latter requires cooperation, not (mere) competition. Mr. Curaba as well warned against an excessive focus on competition, basing his management model only on 'healthy competition'. The difference between the two lies in the context in which it occurs, according to Mr. Curaba:

> [W]hen you feel that they do everything to make you evolve, when they give you the opportunity to evolve, the competition becomes healthy. On the other hand, if at any moment you really put two people into a competition

> and the message is: “I’ll choose one of them and the other one I’ll crush”[9] ... then there is unhealthy competition ... I find that our sales people are very, very competitive. They all want to become the Sales Person of the Year. But there is no rivalry. In any case I would not accept that.

Another interviewee deplored the uneven playing field facing companies, in particular when it comes to sustainability efforts. This person hoped for greater government intervention to level the playing field for all companies - a demand that would fit into a NIE assumption of ‘fair’ competition. Another interviewee saw poor corporate responsibility track records by competitors as a competitive advantage card it could play out to attract both suppliers, customers and government goodwill. This, again, fits in comfortably with a NIE-view of CSR, where the latter is employed to add to the company’s bottom line.

Mr. van Vuuren argued that, notwithstanding typical claims in the private sector about how ignoring market pressure would result in “the markets ... going to fail us,” it is financial practice to follow those pressures (not the result of inevitable economic laws). Mr. Nieuwenkamp argued that, even though legally the neoclassical model may dominate, from an ethical perspective it is long outdated. He reiterated that economics is not about *money* but about *value*, which is an important point also made in Chapter 3. “If you automatically consider only the financial side but not the value, then you must be a bad economist,” he concluded.

A couple of interviewees underscored that standard NIE monitoring is inefficient. A more efficient alternative is a model of the company that largely replaces costly (traditional) top-down monitoring with mutual trust, cooperation and team spirit. This suggestion would require an alternative model of the company, not merely a complement to the NIE model, some argued. Mr. Curaba saw procedures at EASI not as a tool to monitor and control, but as one to increase productivity through organization. He described EASI as internally self-regulating: those who do not share EASI’s cooperative mindset will find themselves isolated by others. Both Mr. Curaba and Mr. Van Hoecke recounted costly errors of choosing individuals expected to be high performers over those who were a better cultural fit.

On the question of alternative models, Mr. van Vuuren pointed to the resilience of cooperatives during the financial crisis as a hint of where an alternative model may be found. Andrew Hill pointed to the benefit-corporation in the US as “arguably one way

[9] Cf. the rank-and-yank approach of companies like Enron, see Deakin and Konzelmann (2004, p. 140).

of balancing different interests". Nevertheless, citing the example of one particular B-corp "that was essentially saying: our public benefit is to be for public benefit", he warned against a potential risk of an overly vague corporate purpose. No corporate form can insulate a business from malpractice: "things can go horribly wrong at a coop or a family-owned company or an employee-owned company, because both economic cycles and risk management and at the worst case corruption can kind of hamper any type. But it does seem to me that some of those models - mutual-owned, for example - potentially limit the damage that managerial incompetence could achieve. But mainly because you cannot get too big." Nevertheless, Mr. Hill drew an important conclusion that reflects what has been argued in Chapter 3: "in a way you need more exceptions. You need more people who are saying: "I am diverging from orthodoxy because" ... within the mono-culture of the publicly listed company, you would have different examples." Chapter 3 criticised the semi-legally imposed monopoly of the shareholder-centred model, arguing that it would be more faithful to a market-based approach to allow experimentation by listed companies with corporate forms other than the shareholder-centred model typically required for listed entities. One could object that there is already the possibility to choose from a variety of corporate forms and that, since a great number of companies opt for the standard shareholder-centred model, it must be the most desirable form for (listed) companies (see Chapter 3). The feedback from the interviews, however, suggested this choice of corporate form is not necessarily based on what is deemed most desirable for a company's best interests defined as long-term value creation. The perception shared by most interviewees was that this form is dominant *notwithstanding* its risks to the company's best interests.

Criticism on the NIE-assumptions behind the shareholder-centred legal theory of the company extended also to the idea of self-interest and the focus on monetary incentives that have come to dominate mainstream company law discussions. Responses on incentives and motivation are discussed in this section, as they shed light on how interviewees understood 'efficiency' and efficient cooperation to produce corporate value.

Although a couple of interviewees mentioned empirical studies on behavioural management, most managers interviewed appeared to rely mostly on their 'gut feeling', experience or common sense to manage their company. Their coordination role between expectations from different actors (employees, shareholders, suppliers, communities) appeared to be less the outcome of calculations and more an intuitive appraisal. This was particularly the case for the small to mid-sized company managers interviewed (both listed and privately held). The larger the company, the more interviewees appeared to rely on NIE-like management styles. Responses from CEOs in closer contact with the 'factory floor' tended to deviate more from NIE assumptions as compared to those at a greater distance from 'factory floor' employees. David Peace, who coaches executives at different levels, remarked that "directors, in my view, do have a greater motivation for financial rewards and prestige, partly because the rewards and the roles can be more significant but also because they are more removed from 'hands-on management' and so the technical job-satisfaction element is diluted. Bonuses and dividends also play a larger part." This may indicate that the lack of one type of job satisfaction (the 'human'/non-financial aspect) increases reliance on another (financial incentives). This could lead to a self-fulfilling prophecy: the more important financial incentives become, the less incentive there is to consider non-financial metrics. Mr. Peace added that the directors he coached were often building towards a portfolio career, holding a number of directorships. They saw a generous financial remuneration as a way to achieve "street cred". In other words: if the market for non-executive directors views financial remuneration as a measurement tool for success, directors are more likely to pursue it in order to show their competence.

David Peace concluded from his coaching experience that "unless there are very significant increases in salary, a financial motivator is not very effective – the single exception being the opportunity to earn a large bonus or percentage of profit, or surplus, or project value. Internal satisfaction with, and external recognition of, job performance (the boss's 'Well done') seem to be most effective." This would add force to the suggestion that people have a wide set of preferences, some of which are financial or self-regarding while others are not, wherein external incentives and the environment in which they operate can provide a tipping point either way. Peace argued that whatever a manager beliefs is his/her primary drive (money, prestige, job interest, etc.), the ultimate motivator is often the "pride of self-worth" in terms of "local, personal recognition". "As a broad generalisation, I would say that many managers apply the 'more money' incentive without really thinking about it, assuming it to be a good motivator, whereas it can be perceived by an employee as somewhat insulting unless it's a sizeable reward - again, employees' need for self-worth is very often measured in 'thank you' terms rather than pounds or dollars. Enhancing corporate goals – whatever they are, but especially if creativity is one - is more likely to be achieved by verbal encouragement and thanks than by salary increases." He remarked that "in knowledge-based sectors I suspect that the lure of access to exciting state-of-the-art facilities for pushing technical and informational boundaries will be at least as important as salaries and bonuses," which may be particularly important to keep in mind for Aoki's remarks on the knowledge-intensive companies[10].

Mr. Peace's remarks bring us back to behavioural economics described in Chapter 3. Notwithstanding its potential promises for better corporate performance and its importance to the theory of the company, some interviewees also voiced legitimate concerns regarding a behavioural approach. One interviewee warned about the limits of simple game theory experiments for complex real-life scenarios, a risk that has not received much attention in Chapter 3 and may be undervalued in the praise of behavioural studies. Andrew Hill added that employees may see it as "creepy" if human resource departments start conditioning their behaviour based on behavioural insights to increase performance. Bruno Colmant voiced the most poignant critique against a behavioural view of the company, including one that would see it as a vehicle for personal development, values or culture:

> I have a really hard time accepting that ... It's even almost dictatorial as a concept, because it assumes that a company can autonomously, beyond its social object which is to make money ... [try] to create a sort of ecosystem of a psychological or sociological nature, which does not flow from the natural expression of things ... To arrive at a certain state of decontractualizing the company ... one should perhaps create a sort of conditioning, which may take different forms, as I said of a sociological or psychological nature, that leads in fact to modify the individualism of people towards a collective objective. But the problem is that the offshoot of those corporate cultures, of those conditionings, will always be of a financial nature... This shows clearly how the company is able to condition a natural state that is, in my view, a more Darwinian state of self-interest, and is capable of conditioning it by saying that one can achieve more through more altruism, cooperation, decontractualisation of the company, and I call that a psychological conditioning, a sociological conditioning, which you make people believe in, making them imagine states-of-being that are artificial.

I asked Mr. Colmant what he thought of other interviewees' statements that corporate culture and cooperation could lower transaction costs - as he endorsed a transaction cost-reducing view of the company:

[10]See the discussion on Aoki's "reciprocial essentialities" mode in Chapter 3.

> The sociological conditioning is one way to avoid monetary costs ... by the sociological conditioning ... I think you are right. I agree with you, yes. But that means it's even worse than what I just said ... The corporate culture is actually a tool, ultimately, to make even more money, as it avoids certain financial costs to force people to de-contractualize the professional relationship.

Ultimately we discussed some of the conclusions from Chapter 3 during the interview, in particular the debate about human nature (cooperative or self-interested, genetically predisposed or culturally adopted), as well as the possibility that human nature was a mix of interests and genetic-cultural co-evolution, with certain behaviour triggered by particular incentives or environments, as a sort of 'tipping point'. Could it not be that this view of 'self-interested homo economicus' is itself a testament to the force of the dominant narrative of NIE? Could it be that NIE itself is already the conditioning that Mr. Colmant is warning against? I put it on the table during the interview, though I am uncertain if it made the interviewee's belief in neoclassical economics waver (presumably not).

6.6 Embeddedness, employees and external stakeholders: Corporate relations beyond management - shareholder

This section groups interviewees' comments on what has been referred to earlier in this dissertation as the company's embeddedness. It adds comments on a wider variety of issues discussed - broadly, all relationships that affect the company's performance other than the shareholder – director/manager relationship, which is the focus of standard company law. This includes the relationship between management and employees, relationships with government representatives and the relationship between the company's operations and socio-political evolutions.

Some interviewees pointed to the law as a constraint on their ability to take into account a wider range of considerations beside shareholder returns, though others saw this as an excuse and lack of leadership.

Whereas the legal theory of the company is largely silent on employees,[11] interviewees spent considerable time discussing employee-related concerns, as employees

[11] Deakin (2003, p. 98).

were seen as crucial to the company's success. It is telling that Mr. Torfs and Mr. Van Hoecke explicitly refused to speak of 'employees' and instead used the term 'co-workers'[12]. Both stressed the crucial importance of co-workers to the company's success. Mr. Torfs also pointed out that corporate restructurings increase the risk of "losing good people". Interviewees of listed companies referred to the importance of employees as well, though some (mostly from large multinationals) implicitly seemed to have employees in well-paid positions in mind when making such statements, rather than employees in general.

While some interviewees argued that a fairer distribution of profits will be essential to the company-of-the-future, Mr. Torfs interestingly went a step further than a fair share of profits for employees. He pointed to the importance of co-workers in value *creation* and not merely in value *distribution.*[13] Co-workers should be considered as equal-worthy actors in the value creation process, he argued, who bring everything they have and their entire personality to work. This is a comment also made by Huse in his book on the human side of governance. Mr. Torfs hypothesized that "this will most likely lead to an economic result that may be more performant - or that can at least approximate it." In the roughly ten years since he introduced his management model to the Torfs company (including the financial crisis and its aftermath), the company's turnover quadrupled and its net profit rose 363%.

Mr. Torfs likewise saw an evolution towards a company-of-the-future with greater attention for all stakeholders, including co-workers, whom he predicted will require treatment of equal-worthiness, though not necessarily equal treatment. Mr. van Vuuren equally put forward a distribution of wealth that is "not equal but fair". He argued that workers are not out to take away shareholders' wealth, but that they do expect fair remuneration and an acceptable and non-discriminatory wage gap. Note that reason-able means 'able to provide reasons'[14] - in this context, a convincing justification for such wage gap. Mr. Ugeux made the link between executive compensation and trust: "Trust will remain an issue as long as a CEO has excessive remuneration," he argued. A mere cost-benefit calculus may not offer a reason-able justification for executive bonuses and wage gaps: the cost-benefit argument that reducing all executive salaries by half would make little impact in the world "totally misses the point of the principles involved," Mr. van Vuuren argued (a point furthermore supported by

[12] 'Medewerker' in Dutch/Flemish.

[13] For a similar comment on value creation and value distribution, see Huse (2007, p. xiv).

[14] I'm grateful to André Cloots for pointing this out to me during one of the many interesting discussions on rationality and reason.

empirical studies on employee motivation and pay gaps).[15] Mr. van Vuuren mentioned transparency and fairness in one breath, echoing what was said above about how corporate disclosure may have come to serve the dual purpose of providing information to both shareholders and the broader society (for better or for worse).

Mr. Van Hoecke recounted how new recruits would often enter the company highly distrustful of their employer, which he attributed to the culture of self-interest and greed in previous workplaces. This would go counter to Mr. Colmant's view of the neoclassical model as more 'natural' and behavioural approaches to cooperation as 'conditioning': Mr. Van Hoecke's account sketched one in which employees were conditioned to distrust employers and 'relaxed' under Van Hoecke's company culture. (Note that this is, of course, a conclusion based on Mr. Van Hoecke's self-reporting. Critics could easily argue that such self-reporting is a useless account of self-aggrandizing and that 'of course' a manager will defend his own management style against an alternative business model. That is a valid point. Recall, however, that the purpose of this dissertation is not to say that a particular model is necessarily better than the dominant one independently of circumstances, but that empirical studies should pay more attention to these alternative models and data to test the assumptions of the NIE model and not only the hypotheses formulated within the NIE model. In this case, whether Mr. Van Hoecke's remarks more closely resemble the facts than critics' objections about managerial self-aggrandizement is a question of empirical testing, not axiomatic statements). The company's Factory of the Future award, which takes into account a company's focus on employee involvement and autonomy, could indicate that the company has successfully internalized an artificial, pro-communitarian conditioning of employees' self-interested nature. A more likely hypothesis, however, is that the opposite is true - or at least that reality is more complex than that. One interviewee saw trust as part of the values of the company he worked for because it was part of the value of its founder. Two other interviewees mentioned trust in the same breath as 'competitive advantage'. Even where trust is instrumentalized for commercial gain, however, narrative matters, as mentioned in the previous chapters, as it can become self-fulfilling and perpetuating (for better or for worse).

An interesting point made by two interviewees was that employee representation on boards or employee-centred management models do not automatically translate into greater attention to the well-being of employees further down the supply chain. Another interviewee noted that, nevertheless, "I think the chances of that happening

[15] See Chapter 5.

are stronger than anywhere else. And I think they are more open to that discussion." The narrative of well-being of the company's own employees could indeed shape a sensitivity to well-being of employees in the supply chain.

Mr. Curaba said he observed goodwill from employees who themselves were met by goodwill from management - reminiscent of Gintis' 'conditional reciprocity'. He described himself as very demanding towards his employees, but when they put in their best efforts, he would put them ahead of clients. He recalled how he decided to terminate a client contract after an unpleasant lashing out by the client against his employees. Clients can be replaced, but without his people, the company would not exist, he explained. Mr. Curaba wants his employees to become the company's ambassadors. Managing requires courage, in his view - a view echoed in Mr. Ugeux's criticism of financial market players as lacking courage. Mr. Van Hoecke criticized management language of 'extreme customer centricity' as often forgetting about the company's 'internal customers': employees. Both Mr. Van Hoecke and Mr. Curaba relied on their co-workers' expertise to improve the company's operations and procedures, evocative of the 'Toyota Way'.[16]

A few interviewees mentioned the change in mindset of the younger generation, for whom a stable job and wage may no longer be sufficient. Andrew Hill made a similar point when asked about the future of management: he wondered whether the younger generation, once in power, will put into practice its higher sensitivity towards social and environmental concerns. There may be a tipping point, he argued, for example when it comes to women on boards. Aware of Pfeffer's[17] criticism that management is about power and talk of progressive management is wishful thinking, Mr. Hill nevertheless saw an alternative way of managing people creeping into board rooms. Zappos' holacracy,[18] for example, was at first greeted with incredulity, but had ripple effects throughout the company's suppliers, management journals, journalists, etc. Mr. Van Hoecke warned against a management model that sees employees as arriving at work only to put their brain in a locker before work and pick it up after their shift finishes. "Let the human be human," he said, in a statement similar to Peter Drucker's warning to GM's CEO Sloan in the 1940s.[19] These are aspects of company life which do not receive much attention in the NIE model of the company.

[16]Toyota's business model, in which responsibility for improvements was laid in the hands of employees, was itself inspired by Peter Drucker's management models. Both, in turn, inspired the literature on 'lean' management.

[17]See, e.g., Pfeffer (2015).

[18]See the Zappos website or holacracy management literature such as Robertson (2015).

[19]Drucker (2017).

The question whether they should be re-valued, is addressed below.

Several interviewees agreed that a reputation as a responsible corporate actor facilitated both attracting and retaining employees, increasing their morale and intrinsic motivation. Some agreed that it had also helped attract capital, though fewer interviewees appeared to have considered that question.

Mr. Van Hoecke recalled the story of a bright young recruit who left for a better-paid job, only to return before long, willing to take a sizeable pay cut to return to what that person perceived as a good place to work. Two interviewees, from a large and mid-sized listed company operating transnationally, respectively, mentioned the importance of being trusted by their suppliers. This requires treating them not as mere commodities but as partners for their operations, with one of them viewing it, again, as a clear competitive advantage. Interviewees active as CEO or director of a smaller to medium-sized company (whether listed or privately held, under family control or not, and active in only one or multiple countries) repeated the importance of 'their people' for the success of the company. This stands in marked contrast with company law models in which employees feature either marginally or not at all. One interviewee even said he himself had left his private sector job for 'a better value proposition' elsewhere.

A manager at an international consumer goods company lamented the greater scrutiny to which multinationals are subjected, as compared to local competitors in some host countries, both from public opinion as well as home and host regulators. B2C companies practically have to become law-enforcers due to weak host government enforcement, reversing the roles of the state and business, the interviewee said. Another concurred, proposing to strengthen enforcement of existing laws-on-the-books rather than adding additional layers of regulation after particular events.

A couple of interviewees made the link between events such as Brexit and the election of US president Trump, on the one hand, and economic and corporate practices and policies, on the other. This is suggestive of Aoki's observation that the economic and social-political exchanges are linked. Mr. van Vuuren interpreted those events as demonstrating that "there is a desperation out there". Mr. Ugeux, Mr. Torfs and Mr. Van Hoecke likewise identified a causal relationship between corporate-economic practices and such political events.[20] These comments relate to how company behaviour can shape social-political conditions. Mr. Hill looked at the other side of the equation, namely how the social-political conditions can impact the company - and in

[20] Mr. Ugeux, for example, saw the rise in populism as a call for ethics.

particular, its risk management. He was surprised at how few managers had planned for the political risk of such events: "So even quite a small risk in a very big investment country would be a big risk. That is basic. It surprised me at the time, and I guess I was surprised again with Trump and Brexit, that companies weren't [looking at this] ... even a slight bit of instability in the politics of Britain or the US would have a figurative knock-on effect on companies..."

Mr. Hill made a slightly surprising comment on the embeddedness of the company in a wider socio-political environment. Referring to US president Trump's scathing tweets regarding Ford's planned construction of a new facility in Mexico, at least it "reorders board priorities," Mr.Hill argued, putting on the table a broader set of considerations beyond sheer cost. He talked about a potential tipping point for companies' social license to operate and argued that UK Prime Minister May's talk about CEO remuneration may be sufficient to alter dynamics, even without formal legislative intervention. He also made a comment that linked board decision-making to wider cultural criteria, such as the lawsuit-prone shareholder culture of Delaware.

Mr. Torfs and another interviewee made remarks that would seem to contradict an embeddedness-view. One interviewee argued that, while customers claim they want more responsibly sourced products, "I don't think we can say it's 100% reflected in their buying patterns". Likewise, Mr. Torfs found that "citizens and consumers are two different things," invoking the "dictates of consumers" multiple times. He recalled an anecdote from a colleague who received critical questions from a journalist regarding his apparel company's sustainability record, only to see the same journalist a few hours later at the cashier of a low-cost competitor, "known in the industry for not caring" about sweatshops or unsafe labour conditions.

Does this mean that managers rejecting corporate responsibility initiatives based on arguments of inevitable 'economic laws' correctly identify a wedge between corporate-economic and socio-political spheres? Does Mr. Curaba's comment that those are mere excuses hold true? This is not the only possible conclusion and probably not even an adequate one. Two interviewees from large listed companies stated that their respective companies attempt to create a greater demand for responsible products, even where their (business) customer does not face a market pressure to do so or where the (end) consumer is unwilling to pay higher prices. One interviewee estimated that only 20% of customers are willing to pay a higher price, while Stephen Leighton, the CEO of UK-based HasBean cross-subsidized the sustainability of lower-quality products with higher-priced products. The fact that large, listed multinationals can even attempt to create demand for responsible products may likely imply that there is a socio-political sensitivity for those issues, even if not (yet) translated in widespread willingness to pay or legislative interventions. These responses speak to Aoki's idea that the economic and social-political exchanges are linked. Some corporate players may pick up on changing expectations from the social-political domain where other social actors have not yet done so (or have left space for corporate action); or their actions may reinforce those of other actors in the social-political domain (e.g., NGOs). To make a link with Gintis, corporate actors could act as one type of choreographer to achieve a higher equilibrium.

Three interviewees, all three from listed companies with an important family or management shareholding, hinted at the difficulty of having such 'choreographer': they underscored the need for industry support, as they could not affect the necessary change by themselves. Another interviewee, however, warned about the potential risk that law can impede development towards a more progressive corporate model. Companies may content themselves with box-checking for legal compliance, stifling industry initiatives to move beyond legal requirements. These comments reflect the view of a world in flux, a dynamic corporate landscape in constant development, contrary to the more static single-equilibrium view of the NIE model.

Finally, when asked whether the financial crisis had affected the dominant NIE approach to efficiency, Mr. Van Hoecke concluded it had not had any impact. Mr. Torfs concluded things had only gotten worse. Legally, many legislative reforms have been implemented since the crisis, but the remarks from these two interviewees imply that the legal reforms have failed to generate a change in narrative. The reason for this failure could be explained in terms of power disparities, though several interviewees hinted at another obstacle to an alternative model: measurement problems.

6.7 Measurement

It takes a theory to beat a theory[21] - but to make a theory that can beat a theory, a minimum level of empirical support is required. The strength of the NIE-model of the company is its elegant simplicity and the straightforward metrics on which it can rely. An alternative model may more closely reflect reality, but how valuable is such alternative model if it creates additional measurement problems? What if

[21] Lo quoted this saying several times, in support of his attempt to formulate the Adaptive Markets hypothesis as an alternative theory to the Efficient Market Hypothesis (Lo 2017).

certain aspects of corporate performance cannot be measured - as captured by one interviewee's response mentioned above ("it's chemistry between people, you cannot model that")?

Mr. Ugeux opened the discussion with the question of the definition of shareholder interests: is it the stock price? Dividends? Short-term or long-term interests? Another interviewee equally asked what exactly is being measured. For example, sustainability, in his view, means that corporate practices can be sustained, not only in terms of natural resources "but also between people". Employee turnover could be one indicator. Mr. Nieuwenkamp equally challenged standard empirical measurements, which typically measure what is easiest to measure, either methodologically or in terms of data availability. Without denying the need to measure other factors beyond standard NIE metrics, he pointed to the methodological difficulties of such endeavour. Mr. Hill equally commented on "the difficulty between hard and soft ways of companies assessing things". Mr. Nieuwenkamp pointed to initiatives attempting to calculate a company's 'true cost',[22] although it must be said that the impact of such initiatives on shareholder buying patterns would seem negligible.

The simple (perhaps simplistic) answer to this measurement concerns is that, if we keep measuring corporate performance by share price (or related straightforward balance-sheet metrics), it will be quite difficult to formulate, test and refine alternative metrics. As long as share price is used as a yardstick for any type of performance measurement, there is little career incentive (for either managers or academics) to develop alternative metrics. However, as long as there are no convincing alternative metrics, share price has little prospect of being dethroned. Mr. Hill argued: "If everyone is being conditioned to think of money of being a measure of how they are doing, then even in a knowledge-intensive business, that [developing alternative metrics] may turn out to be a thing that is [unlikely]".

He furthermore warned that a homogeneous mindset of board members may hamper a willingness to consider alternative metrics:

> I think, and I have not tested this on enough people to know whether this is the case, but it seems to me to be likely that when a board [appraises its] culture ... their intention is cramped by it less than if someone presented a pack of data about the latest investment. Because those types of people are the people who will dig in to the data ... Obviously bad culture can be more damaging most of the time than bad data can be for companies.

[22]See the True Costs Initiative, www.truecostsinitiative.org.

> But I think the risk that a company or a chief executive or a board says: "we are going with the data, because that is hard and analytical and is in black and white," and they cannot measure their culture in quite the same way ... Of course there are a lot of internal measures of staff engagement ... as things that will give you a hint.

Mr. Hill referred to the experiment of Anthony Jenkins, former CEO of Barclays, to compensate executives based on a balanced scorecard, which required the collection of a number of non-financial data measuring impact on the environment, society, staff and customers.

Not only are there different ways to create value,[23] there are also different ways to measure value. Even where a full-fledged alternative model or set of alternative metrics is missing, there are various (admittedly partial) measurement tools that may shape discussions and research questions.

Earlier, I referred to Mr. Torfs' statement that, in the roughly ten years since he introduced his management model to the Torfs company (including the financial crisis and its aftermath), the company's turnover quadrupled and its net profit rose 363%. This at least serves as an indication to him that his non-traditional management approach is positively correlated to the company's performance. One interviewee at a large multinational said empirical studies on non-financial metrics were taken into account in the company's decision-making, though regretted such data are quite limited. Another interviewee hoped that some bright minds would develop non-financial metrics, preferably compatible with existing informal reporting standards. Perhaps noteworthy is that, like Torfs, Van Hoecke and EASI, this interviewee's company's long-term oriented business model has been accompanied by steady growth and an increase in company fundamentals. This is one potential indicator of the validity of such alternative management model, deserving of further empirical research.

Another interviewee argued that partial benchmarking (such as the Corporate Human Rights Benchmark Initiative) is a welcome development for his company: although a very rudimentary metric, it makes his company's sustainability efforts more visible and tangible. Awards can be another rudimentary way of comparing cross-company performance on non-financial indicators, such as the 'Great Place to Work' awards achieved by Torfs and EASI. Especially if coupled to strong corporate perfor-

[23] Huse mentions entrepreneurship and CSR as aspects of value creation (Huse 2005, p. xiii). It is a useful reminder that there are other value creation tools than restructuring or increasing production volumes.

mance, as is the case for these two companies, this at least suggests the relationship between financial and non-financial metrics may be underestimated in the standard NIE model. An executive at a multinational commodities company discussed the vital need for his company to have a 'social license to operate'. Asked whether his company attempts to put a value on non-financial responsibility efforts, he acknowledged: "we do not, in short." A manager of another multinational also saw the need for internal change: the company recently hired an accountant to make the "internal business case" for corporate responsibility. Without what he called 'total value accounting', he said it was impossible to scale up. The move was an effort to bolster internal support for the corporate responsibility department's initiatives on non-financial metrics, to convince financial-oriented colleagues. He acknowledged the company may not yet have "married the two up." His approach suggests it is mandatory to at least try to convert some non-financial concerns into clear metrics. Another interviewee, however, echoed concerns that non-financial reporting standards can be overly complex and costly to implement and warned for duplicative and non-compatible informal standards and benchmarks.

An important question to keep in mind is whether non-financial data can and should be measured, as discussed in Chapter 5. Mr. Van Hoecke warned against spending too much time and effort on developing metrics and sophisticated models: "take that time to just have a chat with your people" to see how they are doing, reiterating that certain things cannot be measured. Mr. Curaba measured efficiency as being organized: he implicitly views smoothly running operations, good quality products, good teams, etc. as metrics of performance. Mr. Curaba thought himself lucky not to have read management books and preferred the common-sense approach over the measure-and-monitor approach.

One interviewee, an economist, argued that the framing of empirical research questions in the standard economic approach to company regulation is itself a non-starter, as it often asks the wrong question. By framing the empirical or policy question in a certain way, economists or policy-makers themselves artificially create a problem. Framing an empirical question regarding employer-employee relationships in a particular way provides ammunition for the claim that labour law is ineffective. The interviewee argued this plays out in favour of right-wing policies by providing an argument against government intervention. "We present our data as if we have to choose between different groups of people, suggesting that 'we need to make a tough choice here'. But this is not the real problem. You create your own problem here". Company law, he argued, is very 'micro' oriented, focusing on the level of individual behaviour, where data are abundant. Instead, we should look at the 'big picture'.

In sum, the interviewee argued, lots of data are available, though these are left largely untouched as there isn't really a theoretical framework to assess them from. Such theoretical alternative "is still very much taboo in economics," he concluded. The problem, in his view, is that economists throw large sets of raw data into the world, without providing an alternative theoretical framework that could point to which data one should look for or what research questions one should attempt to answer. His perception of standard economic debates was that "there are many questions, no one is really happy," though few dared to venture beyond the current models.[24]

One more piece of down-to-earth advice on measurement of non-financial data from Mr. Van Hoecke was very simple: what about the cost of hiring the wrong person? Talking from experience, he exclaimed: "try to see how costly that is!" The problem, he continued, is that *in tempore non suspecto*, managers are unwilling to spend much money on hiring the right people or making sure the team runs smoothly. It's only when troubles start arising, that the business case for hiring expensive consultants is made. "But by then the cost is 5-fold, 10-fold of what it would have been [otherwise]." Indeed, the question of *what* is measured in standard models is perhaps as important as the numbers. Although acknowledging the methodological difficulties of assessing non-financial metrics, most interviewees seemed convinced these non-financial concerns will only become more important in the company-of-the-future.

6.8 The role of management and directors: leadership, innovation and narrative

Interviewees' responses on how they perceive the role of management and directors are another, perhaps more practical, way to understand their views on the NIE model of the company. Most interviewees implicitly seemed to view the tasks of management and directors alike as directed towards the company, more than shareholders per se (in line with s 172 CA's wording of "the success of the company").

[24] Going beyond the confines of the formal interviews, I note that this point was also made by several Cambridge economics PhD students in informal conversations: career incentives very much encourage using traditional models; and a large collection of data would be required to prove the standard model wrong and formulate a convincing alternative. In an academic environment of publish-or-perish, there is little incentive to even attempt to follow this path.

6.8.1 The role of a CEO

Economist Bruno Colmant described a CEO's role in traditional NIE terms: to render the company frictionless. Most other interviewees, in particular those from family-owned companies, linked a CEO's role to leadership characteristics (vision, inspiration, culture-setting). The chairman of the board of a listed company described the CEO's role as, firstly, guarding the company's values, its core objective and vision; and, secondly, looking at the future. Mr. Torfs described his role as the leader of a jazz band, setting the tone.[25] The CEO is an organ of the company, not of shareholders, he added, though "the economic system has organised everything around the shareholder." Mr. Van Hoecke used a dance-floor analogy: the only role of a team leader, including a CEO, is "to ensure that your people know where the dance floor is and make sure they have the right shoes to dance and that they know their dance moves." For him, leading a team requires the patience to allow your team members to make mistakes while learning to 'dance'. He adds that this model depends on one crucial condition: that you take time during the recruitment process to select (to use Jim Collins' words[26]) the 'right people on the bus'.

The same idea of employee empowerment was echoed by Mr. Curaba, who saw his role as CEO more in leadership than in management terms, as one of inspiring his employees. "The role of a real leader is to form other leaders and, one day, let them pass in front of you." He went so far as to no longer attend board meetings: mindful of his influence as the company's founder, he decided that, "to give even more well-being to my directors and to make them grow and evolve even more, it is better that I no longer participate." He found pride in knowing his board was preparing a takeover, without him even knowing the name of the target. "That is real autonomy, responsibility, trust, which are really important for well-being." Instead, he saw his role as (i) internally, being available for managers when they desired his advice and (ii) externally, promoting the company's visibility and third party relations. In short, Mr. Curaba saw his role as CEO not so much in terms of monitoring managers to ensure they, in turn, monitor employees; but as ensuring managers help employees do well.

[25]See also Torfs (2014).
[26]Collins (2001).

6.8.2 The role of the board

A board chairman saw his board's role as that of a sounding board - a term also used by Mr. Torfs.[27] It is probably no coincidence that the analogy of 'sounding board' is used by directors of two family-owned companies, whereas listed companies with dispersed shareholding may lean more towards the NIE-role of a board as monitoring shareholder interests. A senior executive of a listed multinational highlighted the challenge for investors to ensure board quality. "Because [shareholders] are never in the boardroom ... it is really difficult to get a handle on it." Instead, shareholders use proxies to vet board members, which can be quite blunt. Interestingly, he saw excessive executive pay as one proxy used by shareholders to identify ineffective non-executive board members: "because if a company is messing up the executive pay, it is a pretty good sign that the non-executive part of the board is not actually doing a great job." Whereas high executive remuneration is typically justified by alleged demands of the executive market, this statement points to a different explanation.

The fiduciary duty of corporate directors should therefore be expanded, Mr. Nieuwenkamp argued. In his view, the fiduciary duty has already been expanded morally, though not yet legally. He drew the comparison with the evolution of the anti-corruption legal framework, which moved from soft norms to hard laws over time, in the wake of high-profile corporate scandals. This implies re-assessing the materiality criterion for disclosure purposes, moving beyond materiality-for-the-company to materiality-for-tort-victims, he argued.[28]

6.8.3 Diversity and business model experimentation

Some interviewees shared their thoughts on a potential alternative model. Mr. van Vuuren stated he "certainly would like to see a third model, which is the one on a whole new value proposition. But which is in my mind closer to the stakeholder focused one." He pointed to the model of Scandinavian countries as an alternative, "which are still private sector driven, government-supported, but their models are very much around the value proposition of social enterprises ... and those are the countries that are leading the pack. And people don't realise why." He added, however, that

[27] Torfs (2014).

[28] "Because, of course, if you have a short-term approach to fiduciary duty and you only look at the internal aspect of the case ... It can be that three fatal casualties in a mining company, which is an enormous impact on those people obviously, but for the company ... you can settle it for two pounds. Therefore there is no materiality for the company, but there is for those people."

this model will likely not replace the standard model, but provide an alternative. Mr. Torfs interestingly argued that the search for an alternative model should not necessarily come from legal changes or shareholder demands. He argued that small-scale change can be initiated by a visionary CEO. While short-term pressures from shareholders may be tangible, a visionary CEO is one capable of proposing a vision that appeals to shareholders, rather than waiting for shareholder demands. "That is the opposite path," starting with a small radar within the system, one company, and attracting shareholders and customers who buy into that vision, he argued. But even without resorting to an alternative model, he said: "you can no longer, I think, pretend that you could manage your business in isolation ... and that you have no other responsibility."

6.8.4 Managing and leading

Other interviewees underlined the need to combine both decision-making (getting things done) and support-generating (getting people on board), as a balancing act between numbers and narrative. They see the role of a manager as a very active one, one that is not only shaped by its environment but also actively shapes it (including by shaping consumer preferences or feeding 'best practices' to governments). One interviewee did not see its business model as merely being 'dictated' by inevitable market pressures, but mainly the result of the CEO's vision. Mr. Van Hoecke likewise emphasized the importance of management reconciling and balancing different aims (e.g., the desire to provide autonomy to employees, even though it may mean they ask for company cars, which go against the company's preferred 'greener' cycling policy). He added: "you cannot do it all. You cannot have cost leadership, innovation leadership, that's not possible, you have to choose." Mr. Torfs, although referring to the 'dictate of the consumer,' called for shared leadership, which requires a manager to relinquish his ego and enrich his executive expertise with that of other co-workers.

'Learning' was a word used often by interviewees, which features little or not at all in the standard NIE model. It chimes in with Huse's perception of the role of a board not only to reduce transaction costs, but to ensure learning, coordination, innovation, etc.,[29] which are all concepts featuring much more prominently in management literature than in standard corporate law literature. 'Fairness' is another word mentioned at multiple occasions during the interviews, viewed by some executive interviewees as

[29] Huse (2007, p. 11).

crucial for managing a company's long-term success, as it facilitates cooperation and innovation.

A couple of interviewees admitted law did not play an important part in their day-to-day management. Without necessarily following Mr. Colmant's view of a company as a legal fiction, they did not see the law as impacting their management vision. One interviewee stated the law was not on his mind when starting up his company. Torfs argued his management vision did not have much to do with law. He concluded that "there is not a single legal framework that encourages me [to adopt his current management model]. Not a single." Himself trained as a lawyer, he emphasized the importance of management developments *outside* of law. Another interviewee saw a potential risk in law impeding management models to evolve. This suggests that it may indeed be desirable for company law to take into account insights from management experience, as both attempt to ensure coordination within a company to create value, from different angles.

What management literature can add to legal theory is perhaps not necessarily content but process: how process impacts motivation, creativity, knowledge transmission, efficiency, cooperation and performance. Mr. van Vuuren made this point, defining process as engagement. Mr. Van Hoecke relied on his team leaders to "stand before, behind and among" other team members.[30] This helps achieve the full potential of each employee and improve corporate procedures and operations where possible. Ensuring the full potential of the company's talent is important not only in management studies, but is of obvious importance even to a NIE legal model of the company. The practical insights of managers on how to achieve this goal is therefore important to acknowledge in company law as well.

6.8.5 Risk management

Turning to risk management, Mr. Torfs acknowledged not having given much thought to this topic. He perceived risk management mainly as an avoidance strategy fuelled by fear, which does not necessarily help achieve much. Another interviewee recalled a serious incident on-site, which was managed according to existing risk-management contingency plans. However, referring to the entrepreneurial spirit of management and the company, the risk could have been managed adequately even in the absence of such contingency plans, he argued. Note that this incident mainly related to risks to the

[30] In his view, a team leader's job is to lead team members, stand behind them when they need support and stand among them to know what is on their mind.

company rather than risks to third-parties. Another interviewee of a listed company recalled several investors asking whether 'material risks' identified in the company's responsibility report were the same as those identified in the annual report. A sensible question, though the answer was that "they overlap, but are not identical." From a risk management perspective, this appears to indicate that both types of risks are still assessed on different scales.

6.8.6 Recommendations for the next generation of managers

I asked a number of interviewees, in particular those with actual management experience, about their tips & tricks for the younger generation of managers. What important lesson had they learned over the years that they would want to convey to their successors? The responses were perhaps more illuminative of their vision on the role of management than responses to more technical questions. There was little mention of the corner stones of the NIE legal model. One interviewee recommended setting numerical goals to free up space "for the important things": quality of products, communication with customers, etc. Mr. Van Hoecke recommended: "start with your people". Mr. Torfs suggested to "follow your passion" and remain faithful to your personal values. Mr. Colmant suggested to walk the Camino de Santiago path and "certainly, certainly" not work for companies. Mr. Curaba listed five recommendations: hire people who share your values, organise well, work hard, share, be happy and make sure those working around you are happy. But his main advice was: "well, that is perhaps what I would tell young people: you should absolutely not chase profits."

6.9 A brief digression into financial markets

A theme that has received little explicit attention in this dissertation but nevertheless unceasingly looms over it, is the link between the NIE-based legal model of the company and financial markets. The link to financial market pressures is important even for non-listed companies, whose suppliers or customers may be listed and subject to financial market pressures.

A brief diversion into interviewees' remarks on financial markets therefore may be warranted here. A thread running through the interviews was not the NIE-view of managers as agents of shareholder-owners, but their task to manage a company's value creation strategy *notwithstanding* short-term market pressures.

A few interviewees were active in the financial industry. One interviewee in particular discussed the shortcomings of current financial market practices and regulation: Brad Katsuyama, CEO and co-founder of the recently[31] registered stock exchange IEX.

Numerous books on financial market regulation and practices have been published. It is beyond the confines of this thesis to delve into this area of law and finance. Two reasons impacted the decision to briefly talk about financial markets nevertheless. The first is that so many company law debates result in the cliffhanger of 'the dictates of the stock market', suggesting company law reforms need to adapt to certain laws of financial markets or risk obsolescence. Recall, for example, the discussion in Chapter 4 on the implications that extended shareholder liability for corporate torts may have on stock markets. Furthermore, the main metric for empirical studies or standard discussions on corporate performance would still seem to be share price, which assumes stock markets embody particular characteristics (e.g., the efficient markets hypothesis). Suggestions for company law reform (such as an amended or alternative corporate legal theory) thus require a basic understanding of how they would tie in with stock market rules and practices. The logical follow-up research project for this dissertation, then, would be to analyse how the suggestions in this dissertation regarding the NIE-based legal theory of the company fit in with stock market theory, regulation and practices. The second reason for this brief digression into financial markets is that several of the interviewees made repeated references to financial markets. It is as if 'all roads lead to the stock exchange'. If both standard company law theory as well as the individuals interviewed kept linking company law or management issues to financial markets, a reformed legal theory of the company needs to be cognizant of the functioning of financial markets.

Even though it seems unlikely that there will be any major changes to the general regulatory approach to stock exchanges and financial markets in the near future, an interesting research question is whether any gradual change can be observed in financial market literature similar to the one identified by interviewees in company law and management models. If a gradual shift away from the dominant dogma of financial market regulation can be observed, is it one in sync with the change slowly occurring in company law debates or not? If no seed of change can be observed in the financial market model, how much reform can be undertaken in company law or management

[31] The SEC approved IEX's request to become a registered national stock exchange in June 2016.

studies without a corresponding shift in perspective in financial markets?

The interview with Brad Katsuyama is summarized separately in the following paragraphs, even though some of the remarks relate to particular aspects of NIE, company law or management discussed above. The topic of financial markets and stock exchanges merits attention by itself, but moreover many of the remarks made by interviewees are summed up in the IEX story.

IEX received a boost of attention when Michael Lewis published his best-selling book *Flash Boys*, identifying flaws in the functioning of stock markets (e.g., 'front-running' and conflicts of interests between broker-dealers and clients such as dark pool order executions). After much controversy and vigorous opposition from other stock exchanges, the SEC approved IEX's application to become a national registered stock exchange. The procedure leading up to that moment is interesting as it laid bare many of the perceived shortcomings and strengths of financial markets, but also of the corporate world at large.

IEX's central characteristic is a 350 microsecond 'speed bump' placed between its exchanged and member-broker dealers. Its purpose is to mitigate speed advantages enjoyed by certain high-powered traders, in particular predatory high-frequency traders (HFTs), who pay large sums to collocate their servers in close physical proximity to the servers of a stock exchange (e.g., NYSE or BATS). This speed advantage creates profitable opportunities, such as latency arbitrage. The practice can be compared to the ambiguous role of some banks in the run-up to the financial crisis, which sold clients certain derivatives that they simultaneously privately shorted. While Mr. Colmant was adamant that an exchange's only role is to create liquidity,[32] Mr. Katsuyama suggested that the word 'liquidity' is often used without a clear understanding of what it means. Liquidity is not the same as volume, he added, referencing the SEC and CFTC's joint report on the May 2010 'flash crash' to make the case.[33] Mr. Katsuyama welcomed a principle-based approach to regulation: principles have universal

[32]Mr. Ugeux considered the role of an exchange to "just monitor the rules."

[33]*Findings Regarding the Market Events of May 6, 2010*, Report of the Staffs of the CFTC and SEC to the Joint Advisory Committee on Emerging Regulatory Issues, 30 September 2010. See in particular p. 14-15: "Thus, at this time, HFTs stopped providing liquidity and instead began to take liquidity." See also, p. 15: "In fact, especially in times of significant volatility high trading volume is not a reliable indicator of market liquidity." Academic literature has also cast doubt on the unqualified claim that HFTs add liquidity. See, e.g., (finding that "while it may be true that HFT add liquidity, they do not do so at times when it is most needed: HFT on average, supply liquidity on the thick side of the order book (where it is not needed) and demand liquidity from the thin side (where it is needed)" and concluding that "HFT impose a welfare externality by crowding out slower non-HFT limit orders.") See also Moore and Petrin (2017, p. 125).

application, while prescriptive rules typically allow for legal loopholes, which can then be exploited by those market actors with the greatest resources at their disposal to hire the best lawyers and lobbyists. For example, the NBBO-principle[34] is hollowed out by the rule allowing exchanges to sell collocation rights to third parties, such as HFTs.

Whereas the standard narrative of NIE is that of rational actors ensuring overall market efficiency, Mr. Katsuyama argued that the current level of incentives in place for broker-dealers on stock exchanges can make such rationality defunct. The question of 'rationality' begs the follow-up question: rational for whom? For private broker-dealers facing incentives to act against their clients' best interests, it may be rational to view a potential sanction as a mere cost of business - one that is moreover unlikely to be imposed in view of overstretched regulators. However, such individual rationality does not mean there is system-wide rationality, Katsuyama argued. This is an argument similar to the one made in Chapter 3, in particular the arguments made by Lo[35] on the distinction between individual (micro) and collective (macro) rationality. Micro-level economic arguments about rational individual responses to particular incentives may not automatically result in system-wide efficiency. While there have been testimonies of IEX clients[36] confirming the advantageous order execution on IEX compared to other exchanges, IEX's market share is still relatively low. Is it irrational not to route orders through IEX? While investors supporting IEX (e.g., Norges Bank and T. Rowe Price) would argue so, other incentives could make it rational for investors (or rather, their brokers) *not* to route orders through IEX. For example, institutional investors' reliance on brokers to subscribe to an attractive IPO (think of the SnapChat IPO, for example), or receive valuable research reports, may make it rational to rely on broker-dealers for securities trading, where the broker-dealer gets better kickbacks from other exchanges than IEX (which does not offer rebates).

IEX's application process with the SEC to become a national exchange also illustrated the problem of conflicts of interests on financial markets - a problem that has also been highlighted as undermining corporate law reform (such as the revolving door problem between regulators and the regulated companies).[37] Financial reporters and

[34] The National Best Bid and Offer rule requires brokers to execute orders for clients in such a way that clients receive the best ask or bid price available at the time of the transaction.

[35] Lo (2017).

[36] See, e.g., Britt Harris, Chief Investment Officer, and Bernie Bozzelli, CFA, Head Trader, The Teacher Retirement System of Texas, Austin, Texas, comment submitted to the SEC on IEX's application to register as a national securities exchange, 13 January 2016, see SEC File No. 10222-320.

[37] One comment submitted to the SEC, for example, listed a number of conflicts of interests for

news providers furthermore rely on brokers for news updates, which may discourage such financial news outlets to give unbiased coverage of IEX's business model, as it risks alienating brokers.

A level of similarity can be observed between the IEX story and the criticisms lodged against the NIE-model of the company described in the previous chapters, some of which have been repeated by interviewees. One allegation is that of a simplistic narrative. For the legal theory of the company, one criticism is that of an overly simplistic narrative of shareholders-know-best combined with trickle-down-economics arguments or simplistic assumptions of zero externalities or transaction costs. For financial markets, there is a similar reliance on simplistic concepts as 'liquidity' or 'efficiency', without a clear definition of liquidity for whom or efficiency of what. Simultaneously, however, there is an increasingly sophisticated web of intermediaries. Whereas one interviewee pointed to the risk of botched proxy voting (e.g., at Dell[38]) due to complex shareholding intermediaries, Mr. Katsuyama pointed to the complexity of having potentially multiple layers of intermediaries between an individual and the stock exchange (broker-dealers, potentially with their own dark-pool trading; asset managers; and institutional investors such as pension funds). Simplifying these relationships may decrease inefficiencies from such complex intermediary relations. Mr. Katsuyama compared it to asking someone else to ask a friend how a concert was, instead of being inside the concert hall listening to the music oneself. He also made an analogy with a football game: we want the referee (a metaphor for a stock exchange) to be independent and would scoff at the idea of a referee selling advantages to one of the teams. Mr. Katsuyama wondered if anonymous trading has made traders more indignant to the consequences of their actions, as compared to historical face-to-face trading on trading floors. This remark is similar to the one David Peace made on directors and financial-incentives: greater distance between senior executives and the 'factory floor' may remove a layer of non-financial satisfaction, tilting the balance more in favour of financial remuneration and, potentially, self-interested behaviour.

particularly negative comments on IEX' application (including a negative comment from a Harvard professor, after HFT firm Citadel made the largest ever single contribution to Harvard College - such suggestion does not, however, prove the causal link between this donation and the negative content of the comment submitted to the SEC, though the party submitting the amicus brief surely perceived such link to be possible or even likely). One of the SEC officials in charge of analysing IEX's application, moreover, left the SEC to work for hedge fund Citadel (the group that Ben Bernanke, former US Federal Reserve Chair, also joined in 2015) (Michaels 2017).

[38]T. Rowe Price accidentally entered voting instructions for proxy votes it held in relation to a leveraged buy-out of Dell Inc. as "for" the buy-out rather than "against", as it had been instructed. It consequently paid close to US$200 million in compensation to its clients for the error.

Furthermore, in a corporate environment in which people are given little time to read, there is an incentive to rely on expert advice for financial decision-making, Mr. Katsuyama added. It may not be rational for overall efficiency and value-creation, but it is rational for a particular individual taking into account job pressures and incentives. Again, the question is: efficiency of what? And for whom? The anonymization of business relations furthermore allows people to hide behind job duties ("I'm only doing my job"), Mr. Katsuyama said. Moreover, he pointed to something highlighted by other interviewees above, namely that the 'best' (most profit-generating) traders are most likely to climb up the ladder, end up in management positions and thus reinforce a particular culture. In fact, rather than saying 'all roads lead to financial markets,' it may be more accurate to conclude that 'all roads lead to people.'[39] In the end, whatever the incentives or processes, making companies and markets work for their intended purpose depends solely on the people running them.

6.10 Conclusion

The roughly 15 hours of discussions with interviewees broadly confirmed the criticisms described in this dissertation regarding the NIE-based legal theory of the company and what it can learn from management perspectives. However, not all interviewees agreed with its criticisms and some were more supportive of the NIE model, while a few others would probably think the criticisms in this dissertation are not radical enough. The interviews also brought to light shortcomings of company law theory that the previous chapters had not yet identified. While there is indeed a great deal of governance taking place "in the shadow of the law,"[40] a surprising finding in some interviews was how much managerial experimentation takes place *notwithstanding* a more conservative company law model. This dissertation has argued for a greater regulatory role, albeit preferably not in the form of detailed prescriptions but a more principle-based approach. Some of the interviewees however correctly warned that law may become an obstacle to progressive management, where practical features of corporate regulation (e.g., lobbying or public pressure to act swiftly in the wake of a corporate scandal) lead to regulation that is highly conservative, inconsistent or prone to loopholes that can be exploited by those with the greatest resources at their disposal.

[39] Bowles (2016).
[40] See Moore (2013).

The main conclusion from the interviews is that most participants were well aware of the pressures of the dominant corporate model (with some also underlining its strengths), though there is a surprising variety of managerial models already in operation. One may not necessarily realize this based on company law literature. Crucial for a company's success, according to managers interviewed (in particular those of small to medium-sized family-owned or insider-controlled companies, whether listed or not), is cooperation, which, in turn, gives a central role to employees and other actors, in addition to ordinary share investors. The role of managers was described more as a choreographer, conductor or value-inspiring leader than as a passive shareholder agent. As opposed to a relatively static NIE-model, interviewees sketched the need for a dynamic, agile and adaptive organization, with greater attention for employees and their potential contribution to improve corporate operations.

The limited empirical data in this chapter can be complemented with the empirical data found in financial newspapers on a daily basis, such as the increased shareholder revolt against executive pay. Some concerns may be 'self-regulating' in the sense that shareholders will eventually react against obvious intrusions on their financial interests; or that certain highly sought-after employees may be more likely to choose an employer with a strong corporate responsibility reputation. However, interviewees also highlighted the need for a level playing field, which may require greater government intervention than has been fashionable in the past few decades (though preferably not in the form of ever-more-detailed technical rules). Since cooperation in companies depends on people, and since the effectiveness of contractual arrangements relies to a great extent on voluntary compliance, the behavioural insights discussed by some interviewees (in particular on perceived fairness of wealth-sharing and non-financial motivators) at least merits greater attention by company lawyers. This must not mean throwing overboard the strengths of the NIE-model, but addressing its weaknesses. Whether this is by means of an amended NIE-model or (more likely) an alternative model remains to be seen, though interviewees almost unanimously saw the company-of-the-future as quite different from the model currently dominating our company law discussions.

No model can fully be accurate, as it is by definition a stylized way to represent reality (rather than *being* reality). A Popperian scientific approach to attempt to invalidate a model requires it to generate hypotheses that can be tested empirically. Not all hypotheses may be worth considering: hypotheses based on assumptions that are too disconnected from reality (in Coase's words, not "corresponding to the real world"[41]) may provide neat responses to the wrong questions. Empirical data should therefore also test the assumptions of a model, not just hypotheses formulated in the model. Although a Friedmanite approach would argue that only the predictive power of a model matters,[42] not the realism of its assumptions, the interviews reveal why such approach is fraught. As Vernon Smith argued, the Friedmanite approach to model testing is premised on the "implicit belief that our parables capture what is most essential about what we observe."[43] Whereas shareholder-focused empirical studies may find shareholder return increases from shareholder-focused measures, interviewees' in-depth responses show why such studies may not be measuring what matters most for efficient corporate value creation.[44]

To couple the findings in this chapter back to the previous chapters: the shareholder-oriented model of NIE company law theory is very much theory-driven and would benefit in descriptive (and predictive) power by becoming more data-driven.[45] Companies, and company law, may serve many more roles than the traditional 'functional' agency-based explanation can capture.[46] The interviews have shed light on important aspects not captured by the NIE shareholder-focused model. Interviewees emphasized in particular the importance of enduring relations, trust, recognition and knowledge (decision-making is improved if there are multi-directional feedback loops).

The interviews furthermore accentuate that the shareholder-oriented model may not be the most suitable for all companies, in all circumstances. They highlight that the model can be inefficient and value-destructing, if shareholder-oriented metrics are looked at in isolation. Value creation, as measured by traditional financial metrics (EBIDTA, earnings per share), cannot capture the wider infrastructure that needs to be in place to sustain a profitable company. Shareholder metrics do not necessarily give an accurate snapshot of the value-creating potential of a company. Moreover, a shareholder-model is not merely a 'camera' but an 'engine'[47] that can negatively affect the overall value-creating potential of the company as a complex, dynamic institution.

Even though the limited sample size does not allow for a representative (but po-

[41] Chapter 3, note 300 and Chapter 4, note 42.

[42] Chapter 3, note 300.

[43] Chapter 4, note 203.

[44] Juselius argues that a theory-driven approach, standard in econometrics, will "almost by construction, be less open to signals in the data suggesting the theory is incorrect or in need of modification and will, therefore, run the risk of producing empirically irrelevant and misleading results" (Juselius 2011, p. 425).

[45] Deakin (2012, p. 346), drawing on Juselius (2011).

[46] Kraakman et al. (2017).

[47] MacKenzie (2008).

tentially superficial) macro-overview, it does present important micro-level findings. If the interviews give any indication on how non-listed, (mainly) non-US companies operate in practice, they confirm the conclusion presented in previous chapters: the finance-based agency model of the company is largely oblivious to the important organizational dynamics that actually create corporate value (rather than only compensating contractual input providers).

Such in-depth interview data therefore matter: they reveal important functions of the company that a stylized NIE model does not capture.[48] "We think in generalities but we live in details."[49] How we live and perceive corporate reality should be reflected in how we model that reality.

[48]The standard model may more closely reflect the large (listed) multinational, for which data are more readily available for empirical research. The impact of these multinationals is substantial although, in number, they are less important than small and mid-sized companies. Hermann Simon therefore looks at a number of these "hidden champions" (Simon 2009). Scholarship such as Simon's can further help us understand the diversity of drivers, beyond standard shareholder primacy, that creates and sustains such "hidden champions".

[49]Quotation attributed to Alfred North Whitehead in Auden and Kronenberger (1966).

Chapter 7

Conclusion

7.1 To summarize...

7.1.1 Research questions

The overall research question of the dissertation was **whether the orthodox shareholder-oriented Anglo-American company law model is the best available model to create corporate value efficiently and increase aggregate wealth in the present environment**.

After an introduction and a chapter on the dissertation's methodology, Chapters 3-6 each addressed a particular set of sub-questions.

The dissertation's structure can be visualized as follows:

Chapter 1

- Introduction

Chapter 2

- Methodology

Chapter 3

- Does NIE offer the best available methodology to assess the efficacy of the legal theory of the company?
- Does the use of the orthodox NIE methodology to assess the legal theory of the company generate hypotheses for empirical testing?
- Can the economic analysis of company law and its efficiency-increasing potential be enhanced through insights from other economic approaches?
- Is the orthodox NIE methodology useful for the legal theory of the company from a normative perspective?

Chapter 4

- Is the NIE-based orthodox shareholder primacy model sufficiently grounded in the existing state of company law?
- Is there a viable alternative to the orthodox, shareholder-oriented model in Anglo-American company law? Can such alternative bolster company laws potential to enhance aggregate efficiency?
- Is the shareholder primacy norm in Anglo-American company law useful from a normative perspective?

Chapter 5

- Is the orthodox shareholder-oriented model of NIE company law theory sufficiently grounded in management studies, in particular risk management and behavioural management literature?
- In developing alternatives to the shareholder-oriented model, what can we learn from the discipline of management studies?

Chapter 6

- Is the NIE-based orthodox shareholder-oriented company law model sufficiently grounded in managerial practice?
- In developing alternatives to the shareholder-oriented model, what can we learn from the perceptions of managers themselves?

Chapter 7

- Conclusion

7.1.2 Synopsis of the argument

The aim of the dissertation was to evaluate the shareholder primacy model which underlies the current orthodoxy in Anglo-American company law theory. The thesis argued that, in line with generally accepted definitions of efficiency in new institutional economics (NIE), the objective of company law should be to increase aggregate (that is, social or total) welfare.[1] The dissertation then examined whether there is sufficient theoretical and empirical corroboration for the efficiency claims of the orthodox company law model to hold. Finding that these claims do not generally hold, the dissertation then addressed the question of whether the model can be enriched to increase the value-creating potential of company law.

Chapter 1 introduced the dissertation's overall research question, namely whether the orthodox shareholder-oriented company law model is the best tool under present conditions to create corporate value efficiently and increase total wealth, and outlined its relevance in the broader literature. Whereas there is little disagreement in the literature that the purpose of company law is to contribute to aggregate wealth, the question is which model is most suitable to achieve this goal. The legitimacy of a company law model will depend on its capacity to contribute to this overall goal. Orthodox Anglo-American company law theory views the shareholder primacy model as the tool most fit for purpose. The argument advanced in this dissertation, however, is that such argument is premised on an inadequate understanding of efficiency and partial empiricism.

Chapter 2 explained how the thesis would proceed to re-assess the axiom of shareholder primacy superiority. It addressed the reason to focus on the dominant Anglo-American model of the company and explained how it is based on New Institutional Economics. It outlined the contours of an alternative model for company law that is better able to lead to efficient outcomes than the orthodox NIE model, namely a data-driven, co-evolutionary model accommodating multiple equilibria. This model is better than the standard NIE approach for at least the following five reasons: the proposed model (i) has greater explanatory power, (ii) is more realistic, (iii) bridges the fact-value divide by endogenizing fairness, (iv) is more capable of generating hypotheses for empirical testing and (v) offers a normatively useful contribution by avoiding a one-size-fits-all approach and instead embracing multiple equilibria and diversity of the corporate landscape. The chapter furthermore elucidated the strengths and weak-

[1] Kraakman et al. (2017, p. 22); see also Friedman (2002, p. 4-5).

nesses of complementing theoretical analysis with qualitative research in the form of semi-structured interviews to address the thesis' research questions. The chapter furthermore expounded the interview methodology. It also clarified that the decision to focus on efficiency-based arguments do not purport to diminish the validity of a morality-based analysis of the legal theory of the company.

Chapter 3 delved into the New Institutional Economics foundations of the Anglo-American theory of the company. The NIE model builds on neoclassical economics and adds an evolutionary layer that acknowledges the role of institutions. Nevertheless, it insufficiently acknowledges how institutions also shape corporate behaviour. The call for empirical testing taken from neoclassical economics is a useful complement to traditional (doctrinal) legal scholarship on company law. Its empirical corroboration potential has however not been fully implemented. An extensive literature is available that tests hypotheses formulated *within* the model, but the assumptions of the model itself have not been tested as rigorously. This is a missed opportunity to allow for a data-driven and co-evolutionary model and can lead to inefficient normative claims.[2] The methodological individualism it adopts ignores the efficiency-enhancing potential of certain inter-active (social) norms. Indeed, the model may even be counter-productive by crowding out certain pro-cooperative norms. The chapter analysed three economic models (Binmore, Aoki and Gintis) that attempt to capture the relevance of social norms for efficiency purposes.

Binmore's game theoretic approach suggests an evolutionary explanation for fairness norms from a Rawlsian hypothetical social contract perspective. The strengths of his theory lie in the acknowledgement that efficiency is not the only criterion to be assessed for a societal ordering (he adds fairness and stability) and that a greater role should be given to the evolutionary value of fairness. His social contract approach is nevertheless very much Anglosaxon-biased (he assumes an innate Original Position bargaining trait that would 'naturally' result in particular Anglo-American procedural values). The juxtaposition of efficiency, fairness and stability underestimates how fairness may be constitutive for efficiency and how both fairness and efficiency may be constitutive for stability.

Aoki's theory of equilibrium linkages across the economic and social games is a more technical but more nuanced account that is better able to explain the dynamic diversity of corporate models. It calls for a model that can accommodate multiple equilibria, which is better suited to describe the complexity and dynamic evolution of

[2] On the 'is-ought' relationship in company law, see Moore (2013, p. 4).

company law than the static, single equilibrium model assumed by NIE-based company law theory. Aoki's model is descriptive rather than normative (contrary to the NIE model of company law that is presented as normatively superior). Moreover, his model can better explain (and predict) the evolution of corporate forms as adaptive systems. His description of the 'reciprocal essentialities' mode of the company provides a better acknowledgement of the role of associative cognition for corporate performance.[3] It allows for greater emphasis on the organizational role of companies, rather than the finance-based reduction of companies as vehicles for investor returns. This allows for a more positive appraisal of cooperation as opposed to conflictual juxtaposition of different group interests implied in standard corporate debates. However, Aoki views social norms as mere conventional public indicators, which may again be too reductionist to capture our current knowledge about the complex role of social norms in human society.

Gintis explains social norms from a gene-culture co-evolution perspective, drawing upon a diverse set of insights from different disciplines. His theory gives greater recognition to the role of social norms as potential choreographers that can guide actors towards a correlated equilibrium (as opposed to a less efficient coordination on a Nash equilibrium). What behavioural economists may discard as irrational biases, Gintis explains through our sociality. His is a model that allows for a rationality-in-context, as supported also by Gigerenzer, Vernon Smith, Mercier & Sperber or Bowles. Different tools may be suitable for different environments.

Chapter 4 analysed what the conclusions of Chapter 3 may mean for company law.

The first part of the chapter assessed whether company law can be enriched by allowing for a data-driven, co-evolutionary model that can accommodate multiple equilibria. Although law allows for a diversity of legal forms, other (non-company law) legal and non-legal pressures can nudge companies into a particular corporate form and, more importantly, into a shareholder-oriented *business model* that limits the legal diversity of corporate forms in practice and undermines the task of management to enhance the company's 'collective potential'. Limited corporate diversity means limited learning opportunities for company law (and companies) to adapt to, and co-evolve with, changing contexts. The chapter refrained from proposing any particular substantive model as inherently superior but rather suggested a *methodology* to assess

[3] On the role of workers in a firm's decision-making process based on knowledge and innovative capital, as opposed to a mere conflictual counterbalance to shareholder power, see Zumbansen (2007, p. 476).

the efficiency and desirability of shareholder primacy and alternative models under changing circumstances. It offers an agenda for future research rather than definite answers.

The second part of the chapter assessed a number of examples from UK company to make the analysis more concrete. It concluded that certain aspects of UK company law (e.g., takeover law) reflect NIE-based assumptions more than others (where cost-benefit analysis was complemented or even superseded by fairness considerations). The section also assessed the rule of shareholder limited liability for corporate torts. The chances of legal reforms to extend shareholder liability may be very slim indeed, and the topic rather controversial. Nonetheless, the chapter concluded that the deemed efficiency advantages of this bedrock of company law cannot be taken for granted. Whereas the regime may have served a particular need when introduced, this is no guarantee that it still serves its purpose in our current environment. Historically, the controversial step of granting limited liability was justified by the need to allow retail shareholders to help finance public goods-projects. This may no longer be a sufficient justification at present. Moreover, the fact that limited liability was introduced at a time that corporate groups could not be formed requires a re-assessment of its empirical suitability in a world where corporate groups are ubiquitous. Whereas legitimacy of shareholder power was initially justified by shareholder liability (i.e., power was legitimized through responsibility), present-day questions regarding the legitimacy of corporate power and shareholder benefits may require an alternative legitimating rationale that shareholder supremacy is unable to provide. The traditional risk-reward justification, as well as the residual claimants-argument, are insufficient explanations and justifications for limiting shareholder liability for corporate torts. If shareholder rights are premised on the assumption that shareholders have the greatest incentive to monitor management, a moral argument against liability for widely held companies cannot convince. The chapter assessed the need to complement fiduciary duties of management (whether interpreted as owed towards the company or to shareholders) with a general rule of extended (proportional) shareholder liability for corporate torts. Extending enterprise liability for corporate torts is an alternative or complementary approach, although one not further assessed in the chapter.

Chapter 5 argued that management literature, in particular risk management literature including behavioural insights, can enrich the legal theory of the company. It allows to complement the finance-view of the company (prescribing shareholder primacy; perceiving managers as shareholder-agents and companies as investor-remuneration devices) with an organizational view (managers as choreographers; the company as an instrument for aggregate value creation)[4]. Risk management has come to acknowledge the adaptive company, embedded in a particular environment. This calls for an adaptive management that must go beyond shareholder agency models. Efficient corporate value creation requires a greater role for 'interactionist'[5] concepts that methodological individualism cannot capture, such as fairness, morale or trust. These concepts cannot be fully explained by a self-interested rational actor model. Ignoring them means ignoring an important aspect of efficient human interaction that could enrich our company law model (e.g., by reducing monitoring costs or increasing cooperativeness and creativity). Such interactionist factors may have largely been ignored by standard economics and company law models because they do not neatly fit the requirements of mathematical modelling.[6] While convenient for theory-building, too reductionist a model cannot have sufficient explanatory and predictive power for a company as a complex adaptive phenomenon. Measurement issues are valid concerns, though different types of data can be employed to measure different aspects of a company law model. Lo argues that investors and markets behave "more like biology than physics", with "far-reaching implications," such as the "principles of evolution - competition, innovation, reproduction and adaptation - [being] more useful ... than physics-like principles of rational economic analysis."[7]

Chapter 6 presented the responses from a number of interviewees, each with a particular exposure to the corporate world relevant to assess the validity and desirability of the NIE model for companies. Responses acknowledged strengths of the NIE model for companies, such as the power of shareholder-driven capitalism to keep management on its toes. They however also emphasized weaknesses, with the most commonly mentioned deficiency being the lack of recognition for worker contributions to the company's success. Several interviewees argued for a fair return for shareholders, though saw shareholder primacy as destroying value through short-term financial pressures (and potentially contributing to political instability). Worker recognition, trust and fair distribution of resources were described by some interviewees as crucial for a company's sustainable performance. The anonymous force of financial markets was positively regarded by at least one interviewee (as a strong disciplinary and in-

[4]See Davies, above, Chapter 5, note 2.

[5]Mercier and Sperber (2017, p. 9).

[6]Ghoshal (2005, p. 80-81) and Daneke and Sager (2015, p. 40).

[7]Lo (2017, p. 2). Lo's summary is not novel in itself, though he presents a convincing state-of-the-art overview in a widely accessible book. We need not rely on naturalist perceptions of the company as a 'biology'-like system to acknowledge its adaptive and evolutionary character.

formational force), while most others regarded it as threatening value creation. This was particularly the case for smaller to mid-sized companies, including family-owned companies. This suggests that a single model (shareholder primacy) may not be the most appropriate model in such corporate environments. It may well be that trust and face-to-face interactions reduce the need for self-interested, rational actor-based incentives that may work better in anonymous market settings. Some interviewees stated that a shareholder-oriented company law model is irreconcilable with a business model that they perceived as more efficient (some company managers also pointed to strong, sustained financial results of their company to make the case).

7.2 Main themes and future research agenda

A number of general principles emerge from the preceding chapters.

Efficiency One general theme touches upon our understanding of efficiency: efficiency of what? And for whom? The understanding of efficiency in the NIE-based legal theory of the company is incomplete. It relies on too narrow a metric to measure something highly complex. Shareholder returns can be one tool to measure corporate value creation and shareholder value creation can be one tool to increase efficiency, but we cannot axiomatically assume that it is the only, or even the best, tool. To what extent shareholder value creation is an accurate proxy for efficiency, and to what extent share prices and dividends are a proxy for shareholder value creation, are a matter for empirical testing. There is insufficient empirical data to corroborate the shareholder primacy norm. The traditional functional analysis does disservice to a number of other potential explanatory factors, such as path dependency, simplicity and elegance for mathematical modelling or power considerations.[8] As Coase remarked decades ago, it is mandatory that economists make their assumptions explicit - and so should company lawyers who rely on economic theories. This should be part of the future research agenda for company lawyers to avoid additional resources from going into a model that may not be the most fit for purpose in the current environment. Testing alternative models (including Deakin's company as a commons, Aoki's associative-cognition model of reciprocal essentialities or Zumbansen's knowledge-based decision-making governance model) and their suitability for different environments is part of

[8] Veldman and Willmott (2013, p. 200).

such effort. Even where no systematic alternative model can be presented,[9] we should start refining our current legal theory of the company through a more data-driven approach to the NIE model.

The NIE approach to company law does not object to viewing company law as a tool to achieve wider societal aims. Even Friedman frames his economic and business views in light of a higher objective (freedom, in his case). It is mandatory for debates on the legal theory of the company, and for company lawyers, to remain mindful of these objectives, especially when undertaking empirical studies with normative conclusions.

Company law can only be part of the solution. Important for the future research agenda for company lawyers is to look beyond the bounds of law to understand how non-legal mechanisms are required or desirable for efficient corporate value creation (and how a company law model can affect such non-legal mechanisms).[10] The reason post-financial crisis legal reforms may not have changed corporate behaviour fundamentally, may be precisely because reforms have focused too heavily on legal reforms in business law that remain wedded to the standard model, without a full grasp of how the standard model affects inter-actionist norms, narrative and expectations.

Data-driven, non-reductionist models instead of 'as-if' parables Every model is necessarily reductionist, but the NIE model has become an overly simplistic model that lacks sufficient explanatory or predictive power. Even if one would follow Friedman's claim that a model should only be assessed based on its predictive power[11] (a claim dismissed in this dissertation), the NIE-based legal theory of the firm fails to pass even such test. Chapter 6 mentioned Bewley's study on downwards wage rigidity as one illustration of how NIE-based predictions may be incorrect. Chapter 3 equally illustrated how NIE predictions that the 'market' would reduce corporate externalities to a desirable (efficient) level proves illusory. The financial crisis furthermore highlighted the shortcomings of NIE-based predictions.

A model consists of a set of assumptions (themselves to be tested empirically) that generate a number of hypotheses for empirical testing. A model is informed by a theoretical framework, though empirical data can challenge and help refine the

[9]Stout argues that "sometimes a bad theory is worse than no theory. This is because a bad theory guides behavior in destructive directions" (Stout 2013b, p. 64).

[10]Company law can be one tool to foster trust among contracting parties (Deakin and Michie 1997, p. 106).

[11]See above, Chapter 3, note 300 and Chapter 4, note 42.

framework. The previous chapters argued that the NIE-based legal model of the company should become more data-driven. If not, we risk wasting time and resources to type-3 errors (the right answers to the wrong questions).[12] Efficient allocation of scarce academic resources indeed demands that we formulate assumptions and working hypotheses carefully and explicitly.

For the legal theory of the company, this means giving up economic 'as-if parables'.[13] While useful as starting blocks for an economic theory, 'as-if' parables are unsuitable as a normative basis for policy-making in a complex, constantly evolving world. They are unsuitable as a foundation for company law-in-context. Our legal theory of the company should still be economics-informed, but not NIE-dictated. As Orts argued, company law is complex because it reflects a complex set of values.[14] Efficiency is one, though not the only value that should inform our legal model of the company. Even where we insist on efficiency as the decisive criterion, the legal theory of the company needs to incorporate a wider set of data beyond shareholder-centred metrics based on methodological individualism and self-centred rational assumptions to bolster its explanatory power and increase overall corporate efficiency and aggregate welfare.

A more interactionist legal theory does not require giving up (bounded) rationality assumptions. However, it calls for rationality-in-context, which gives a more prominent role to rationality-as-learning. Mercier and Sperber emphasize that rationality is not the only cognitive tool for human interaction.[15] The NIE model may be suitable only for a subset of corporate interactions. A number of empirical studies indicate that anonymous market transactions may be more likely to be explained by the NIE model than face-to-face transactions. This is also reflected in the interviews in Chapter 6, some of which suggest the limitations of arms-length, anonymous market transactions and their unsuitability for non-anonymous corporate transactions that place greater reliance on trust and informal feedback mechanisms. The NIE model may not be fit for purpose for such corporate environments. The shareholder primacy norm may thus need to be limited to particular corporate transactions (potentially constituting only a

[12] See above, Chapter 4, note 30.

[13] Smith (2003, p. 468).

[14] Orts argues that the complexity of corporate law stems not from the complexity of underlying relationships, but, at least in part, from the "normative complexity of its purposes ... The policies underlying corporate law cannot be reduced to a unidimensional value, such as the economic objective of 'maximizing shareholders' wealth' or even, more generally, 'economic efficiency."' (Orts 1993, p. 1587). See also Strine on the company as a social institution and values beyond profits, quoted in Zumbansen (2007, p. 492).

[15] Mercier and Sperber (2017).

minority of corporate transactions). Future research should attempt to map in which environments NIE's company law model may be desirable and when it is not. This requires greater attention to smaller, non-listed companies[16] rather than a convenient focus on the largest listed companies for which data are more readily available.

Co-evolutionary company law The foregoing implies that we should not presume the normative superiority of a single model regardless of circumstances. Particular models are more suitable for particular circumstances. The NIE-based company law model, with its normative appraisal of shareholder primacy, is too rigid and restrictive. The link between the company as an institution and the environment in which it is embedded (as emphasized in reflexive law) implies that the search for its internal equilibria will depend on equilibrium linkages beyond the confines of its company walls, industry or even the market. As Aoki concludes, "corporate governance must be such as to generate corporate behavior that is largely consistent and coherent with societal institutional arrangements."[17] Management literature, and risk management literature in particular, more explicitly recognizes the need for a company to constantly adapt to changes in its environment - be they technological, political, cultural or market changes. The company as a complex adaptive system requires an adaptive management.

The NIE-based legal theory of the company proclaims a market-oriented philosophy. Nonetheless, the normative dominance of shareholder primacy limits the room for management to fulfil its organizational task: to ensure the company can remain competitive by producing the goods and services that fulfil changing needs in a way that meets changing expectations. Even though different corporate forms coexist in law, in practice the options are limited, not just as to the forms permitted by law, but by other factors such as lack of investor familiarity with alternative forms that may be more suitable to the company's needs.[18]

Moreover, to the extent that judicial interpretation entrenches a widely held narrative in favour of shareholder primacy, this may limit the creativity with which market actors fulfil their responsibilities or policy makers weigh alternative regulatory regimes.

[16]For a historical challenge to the Chandlerian approach to business history and an insistence on the importance of smaller companies for industrial development, see Lamoreaux et al. (2003). For an account of the success of smaller, less well-known companies as 'hidden champions', see Simon (2009).

[17]Aoki (2010, p. 12).

[18]Liao (2018).

A more market-driven approach would allow greater experimentation[19] by corporate directors and management to adapt to changing expectations - an adaptation which detailed legal intervention cannot mimic due to the time lag of legal intervention. A more principle-based company law may be one part of the solution. An alternative approach is suggested by Conti-Brown by allowing companies to choose between increased capital requirements or shareholder liability (his proposal is limited to a bailout scenario). Further research is needed to assess the different options on the table. Blackham suggests the Delphi method could be a valuable tool to inform the process of law reform,[20] which is one possible way of generating suggestions of how the doctrinal-interpretive and qualitative empirical insights from this dissertation could drive company law reform. What should be clear is that a single shareholder-oriented company law model is hardly compatible with emergent company law or adaptive management. A more activist board may concern those who fear managerial self-serving. Nonetheless, such fear needs to assess whether the (justified) risk of managerial self-serving is greater than the risk of shareholder self-serving. The option is not a simple binary one, as Berle & Means already emphasized. Even if we conclude that the risk of managerial self-serving is paramount, shareholder monitoring rights over management do not necessarily justify that the company be managed only in shareholders' interests.

Methodological individualism This dissertation has taken aim at methodological individualism. It was argued above how such methodology is incompatible with the necessary recognition of interactionist factors such as trust, cooperation and fairness as well as the co-evolution between individuals and institutions. Taking the individual as the ultimate unit of analysis cannot account for the important role of such interaction and co-evolution. Explaining altruistic punishment, for example, by reference to self-interest cannot fully explain such phenomenon. Other-regarding preferences cannot be reduced to indirect self-regarding preferences. Methodological individualism risks reducing certain behaviour to irrationality, while it is in fact a rationality-in-context too refined to be captured by our current models. Behavioural models of the company proposed in the past do not sufficiently capture this insight. Further research is needed to integrate behavioural insights into the legal theory of the company, without going from one extreme (self-interested rational actor) to another (irrational behaviour requiring minute legal intervention).

[19] Zumbansen (2007, p. 496).

[20] Blackham (2016, p. 41). On the Delphi method, see Linstone and Turoff (1977) and Brady (2015).

Narrative matters A shareholder primacy model is not a neutral measuring device. To use MacKenzie's analogy, a model is not only a camera but also an engine.[21] A model can be internalized and shape what is being observed. The NIE narrative has permeated the minds of policy makers, executives and directors, judges, educators and so on. This affects the creativity with which we can respond to challenges. Ghoshal is correct that adding a CSR or business ethics course to business school curricula can only have a limited effect as long as the rest of the curriculum preaches a NIE model.[22] This is especially the case if the model is furthermore promoted by shareholders, policy makers, think tanks, the financial press and so on. Increasing awareness of the descriptive and normative assumptions of NIE in the legal theory of the company can enrich an anaemic public discourse that takes the shareholder primacy model for granted as a descriptive and normative framework. Alternatives are feasible. Corporate law literature is one way to enhance our creative imagination for alternative models.

A changing narrative may also increase corporate legitimacy.[23] Whereas corporate legitimacy was historically justified by unlimited shareholder liability or, thereafter, by reference to the need for public good investments, the current shareholder primacy model cannot benefit from such legitimacy.

Hurst juxtaposed corporate legitimacy derived from utility and from responsibility.[24] Both are required. An inefficient company law regime would have limited legitimacy. However, so does a regime perceived as irresponsible. This dissertation has attempted to demonstrate how the two can be different sides of the same coin.

An important limitation of this thesis is that it makes an argument largely based on efficiency grounds only. Fairness and other norms have been defended on the basis that they are important even for a purely efficiency-based company law model. However, this should not be read to imply that the only goal of company law is to increase efficiency. Law is both an 'instrument' and an 'aspiration'.[25] Orts' description of company law as a fusion of different objectives and values is more likely to accurately describe company law than a mere efficiency-based discourse.[26] Eisenberg's conclusion that company law already reflects social norms (e.g., the fiduciary duty) is duly

[21] MacKenzie (2008).
[22] Ghoshal (2005, p. 88).
[23] Moore and Petrin (2017, p. 206).
[24] Hurst (1970, p. 156).
[25] Simmonds (2007, p. 37).
[26] Orts (1993, p. 1567). See also Johnston (2009, p. 2).

noted.[27] Indeed, "[l]egal rules may also serve to clarify social norms by providing focal points for their meaning."[28]

The purpose of this dissertation's approach was an attempt to convince even those who insist on efficiency as the sole criterion to judge a company model's validity. It does not purport to suggest that this is an appropriate view - on the contrary. However, the moral criticism on shareholder primacy has been articulated eloquently by other authors. This dissertation's contribution to the literature is a complement (rather than an alternative) to such literature.

7.2.1 Research questions

It should be clear from the above what the conclusions are for the overarching research question of this dissertation, namely whether the orthodox NIE-based, shareholder-oriented Anglo-American company law model is the best available tool to create corporate value efficiently and increase total wealth in the present environment. The dissertation concludes there is insufficient theoretical and empirical corroboration for such claim.

The sub-questions addressed throughout the chapters can be summarized as follows:

1. Is NIE's methodology to assess the efficacy of the legal theory of the company, as well as the orthodox shareholder-oriented model, sufficiently grounded in (i) the existing state of company law, (ii) management studies and (iii) managerial practice?

2. Does the use of NIE's methodology to assess the legal theory of the company, as well as the orthodox shareholder-oriented model, generate sufficient hypotheses for empirical testing?

3. Is NIE's methodology, as well as the orthodox shareholder-oriented model, useful from a normative perspective?

First, the standard NIE-legal model of the company does not fully and accurately describe Anglo-American company law.[29] It may more accurately capture aspects of anonymous market transactions, but it has less explanatory and predictive power

[27] Eisenberg (1999, p. 1265).
[28] Eisenberg (1999, p. 1270).
[29] Moore (2013) and Deakin (2012).

for the meso-level of the company. With insufficient descriptive power, we should be wary of claims of normative superiority. The standard NIE functional explanation of the shareholder primacy model needs to be complemented by a variety of other factors, including path dependency, power relations or convenience of modelling and theory-building. Methodological individualism cannot fully capture the complex, multi-layered and dynamic environment of human interaction. The efficient functioning of company law requires interactionist phenomena largely ignored in the NIE model to be taken into account. The model is also insufficiently grounded in (risk) management practice. Chapter 5 showed how interactionist phenomena and the embeddedness of a company in a particular environment have received greater appreciation in risk management literature and behavioural management insights than in the NIE model. Interviewees' responses in Chapter 6 confirmed such greater appreciation is not confined to academic literature but acknowledged by those working closely with or in companies.

Second, the NIE model of company law allows for the formulation of empirical hypotheses, but only partially so. It tests hypotheses *within* the shareholder supremacy framework. Future research should test the validity of the framework itself. NIE insists on empirical testing, but the current dominance of its narrative suggests an ideology[30] rather than a theory. Management literature, in particular risk management literature, should inform future research in company law on how corporate performance and corporate risk are related and how both should be taken into account to test the efficiency of a particular framework. Behavioural economics can further enrich our company law model, though this approach, much like the shareholder primacy approach, has its limits. It can help refine assumptions and formulate useful additional research hypotheses.

Third, the standard NIE model of the company is also not the most desirable model for current needs. As mentioned, it may be a suitable model for a subset of transactions, but it is counter-productive in its current dominance as a normative standard regardless of the needs and conditions of the company, market or society. As a descriptive model, its validity is more limited than standard company law debates acknowledge. As a normative model, it risks discouraging (crowding-out) important aspects of human interaction on which company law relies to efficiently ensure cooperation for corporate value creation. It entails the risk of a self-fulfilling prophecy by tailoring incentives on an incomplete understanding of human interaction. The lack

[30] Stout (2011, preface).

of empirical corroboration of its efficiency-enhancing claims weakens its legitimacy. Some interviewees emphasized that this can erode trust and could at least partially explain the recent political developments in the US and the UK. An inadequate consideration of negative corporate externalities furthermore undermines the risk-reward argument put forward to strengthen shareholders' position within the company. The NIE model creates an impoverished academic and public discourse on company law, its goals, strengths and weaknesses, the evaluation of its efficiency claims and the overall impact on social well-being.

This dissertation has argued for a legal theory of the company that is data-driven, co-evolutionary and can accommodate multiple equilibria. It is a better model as it has greater explanatory force, is more realistic, is better capable of generating hypotheses for empirical testing, bridges the fact-value divide by endogenizing fairness and offers a normatively useful contribution by allowing for multiple equilibria, which facilitates learning and diversity and avoids the pitfalls of a one-size-fits-all approach. This does not mean that we should throw overboard every aspect of NIE. (Bounded) rationality, modelling and an economics-informed understanding of company law will remain salient. Rather, the insights presented in this dissertation from the disciplines of law, economics and management as well as the qualitative-empirical perspective can help us re-formulate the relevant research questions for company law. As Whitehead concluded, "[t]he art of progress is to preserve order amid change and to preserve change amid order." Company law is a necessary conduit to structure and guide experimentation and innovation at the corporate level in light of the overall objective of social wealth improvements. The proposed model is an attempt to make company law more fit for purpose.

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