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Global Rebalancing:
US Protection versus Europe-led reflation

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1. Introduction

Current global imbalances are unprecedented, with the US running the biggest deficit ever seen; an annualized USD 900bn in the fourth quarter of 2005. Nearly all commentators agree that US overseas indebtedness cannot continue growing indefinitely and that, in the absence of policy change, a global collapse could ensue. According to some, weakening US indicators suggest a domestic recession could start as early as 2007 (Roubini, 2006).

Below we examine various reasons why this state of affairs has come about. Initially we discuss the ‘global savings glut’ argument and set out what we consider to be a better explanation: the disarray of global aggregate demand. In section three it is stressed that the current structure of global demand is unsustainable. However, in section four we evaluate the apparent neglect by policy makers in the main blocs and highlight that ‘trade protection’ appears as a ‘policy of last resort’. Thus, section five evaluates a hypothetical scenario driven by protection implemented initially in the US and leading to retaliation in Europe. Section seven presents a more congenial alternative in which Western Europe would take a leading role in pursuing a pro-reflation agenda with considerable pro-development virtues such as promoting infrastructure and industrial investment in Africa and Eastern Europe. We conclude that although there is much talk of ‘making poverty history’, little has been said about its importance as a trigger of global economic linkages, which is precisely where the notion of reflation becomes meaningful.

2. The problem: global savings glut or global demand disarray?

It has recently been suggested that global financial imbalances are caused by a global savings glut and that the US deficit merely accommodates this state of affairs. In its simplest version, the argument suggests that there is nothing US authorities can do about

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global imbalances since the crux of the problem lies in the excessive saving of the Asian countries, and of China in particular (The Economist, 2005). A more sophisticated version (Dumas and Choyleva, 2006) holds that the Asian savings glut is indeed the culprit, but that it must be seen as part of Asian countries' determination to avoid a repetition of the 1997 financial crisis by ensuring that they run a current surplus. Both versions of the story focus emphatically on the supply of savings and the need for exchange rate adjustment by the major Asian capital exporting nations (Wolf, 2006).

At one level, the 'savings glut' argument is tautological since the US deficit must be offset by a similar surplus elsewhere if world financial flows are to balance. The point typically missed by both proponents and opponents of the savings glut thesis is that the root cause of the current crisis is not illuminated by asking whether Asians save too much or Americans too little. While it is clear that somewhat slower US growth will help curtail absorption, it is equally clear that higher growth abroad will be needed to absorb additional US exports if a recession is to be avoided. As argued below, real exchange rate changes alone cannot be relied upon to bring about expenditure switching on the required scale within an acceptable time frame. The central point is that the extra growth cannot come entirely or even chiefly from Asia (where resources are already stretched to the limit), but must come from a combination of renewed EU growth and growth-inducing policies towards the rest of the developing world, particularly Eastern and African neighbours.

At another level, the global savings glut argument is misleading since it entirely ignores changes in the structure of aggregate demand in the US and the rest of the world over the past fifteen years. Current macro-financial imbalances are quite different from the usual 'balance of payments problem'.¹ First, measured in terms of current account deficits (or counterpart surpluses) they are amongst the largest recorded. Secondly, they are geographically more concentrated. Thirdly, they are not transitory but have been building up for a long time. Fourthly, instead of resulting from the failure of trade and financial liberalization reforms, the current imbalances have emerged as part of the process of trade liberalization and the globalization of finance. Finally, instead of reflecting financial

¹ In the earlier literature, three broad categories seemed to cover all the ground: the 'elasticities approach' which focused on the determination of the market clearing level of equilibrium exchange rate; the 'absorption approach' that emphasised changes in real domestic income and the exchange rate; and the 'monetary approach' that treated the problem as essentially a monetary phenomenon to be approached by using tools of monetary theory (Isard, 1995). In all these cases, market forces (at times helped by monetary fine-tuning) would restore balances in relatively short time without excessive pain.

constraints, they appear to reflect a high degree of international financial liquidity and, what is more, an unprecedented accumulation of portfolio assets in global markets.

An in-depth analysis of these unique characteristics is beyond the scope of this paper. However, we would stress that that useful insights can be obtained by looking more closely at the interactions between public and private sector behaviour and the impact that these had in the composition of aggregate demand in the US and Europe.

Since the early 1990s, the US economy has enjoyed a relatively favourable growth record, more so than Europe. However, unlike previous periods of sustained growth, current US growth has been largely fuelled by an extraordinary expansion of credit to the private sector. The net additions to aggregate demand by the private sector ---measured as the increases of total expenditure over the increases of disposable income, or net dis-saving--- from the first quarter of 1992 to the third quarter of 2003 was equal to 12 per cent of GDP (the equivalent of USD 1,575bn at today's prices). Put another way, the net saving of the private sector moved from *plus* 6 per cent of GDP in 1992 to *minus* 6 per cent of GDP in 2000. Not only did net saving move systematically away from the historic norm of about a +2.5 % of GDP but it also turned negative for first time in post-war history. This process was paralleled by growing current account deficits.

The emergence of private sector dis-saving was associated with the rise of a public sector surplus. In essence, the weakening of aggregate demand caused by fiscal tightening was fully offset by the accelerating pace of private sector spending made possible by growing indebtedness. As explained elsewhere, this process could not last indefinitely (Godley, 1999, 2000; Godley and Martin, 2001; Godley and Izurieta, 2001a,b; Martin, 2001; Papadimitriou, Shaikh, Dos Santos and Zezza, 2003, 2004). When the US corporate sector (though not the household sector) experienced tighter credit and was compelled to restore the balance sheet to health by cutting spending, the resulting shortfall in aggregate demand triggered the beginning of a recession.

To avoid a lasting recession, the fiscal stimulus administered was the most aggressive since the Second World War. But to conclude from this that the external deficit is a consequence of the public sector deficit is misleading and conveys a potentially fatal policy prescription. If the personal sector in the US slows down spending in order to restore balance sheet health, which may likely occur in the wake of housing and stock market dis-inflation, then

what the U.S. needs in order to avoid a lasting recession is greater fiscal deficits, unless that net demand suddenly rises abroad.

Meanwhile, in the Eurozone member-states, as in most other OECD economies and in many emerging countries (particularly those prone to external shocks and subject to IMF-style reforms), policy has been driven in view of achieving current account surpluses. The conventional view is that Government needs merely to pursue prudent fiscal and monetary policies to bring the external account into surplus². Countries longing for 'healthier balances' in all accounts (personal, corporate and public sectors) can only escape from outright recession if they are pulled by strong and sustained net external demand.

A closer examination of institutional cycles in Europe reveals that the 'aggregate public sector' exhibits a counter-cyclical role to the spending patterns of corporations. But the net effect of both sectors together since the Maastricht Treaty is either negative or neutral.³ The main drivers of growth in Europe during the last decade or more have been the external sector and the personal sector. If the personal sector opts for a cautious, pro-saving financial strategy, the configuration of demand is deflationary. By contrast, if the personal sector opts for stronger spending, this may compensate for the negative effect on demand of the other two domestic sectors, but will cause current account deficits.

This is indeed what makes the orthodoxy in Brussels (and to an extent in the UK Treasury as well) so counter-productive.⁴ First, low growth and persistent unemployment threaten the EU's political coherence and social stability. Second, the success of tight fiscal and monetary policies has become entirely dependent on export demand from the US and a few

² Amongst the most influential views is the 'Monetary Approach to the Balance of Payments', MABP (Polak, 1957, 1995) which is at the core of Financial Programming of the IMF. The MABP asserts that at the root of external imbalances lies an excess of domestic credit creation. The resulting acceleration of inflation makes it impossible to bring the economy back to balance. The model singles out public sector deficit as the critical variable for reining in domestic demand and reducing inflationary pressures. It is in this sense that many proponents consider MABP to be in effect a 'fiscal approach to the balance of payments'. Another influential view is the so-called "Lawson Doctrine". The former UK Chancellor of the Exchequer, Nigel Lawson, argued in the late 1980s that the emergence of a large current account deficit should not be a cause of concern as long as the public sector was running a surplus. If the private sector was in deficit it must have judged that it was optimal to invest more than it saved (Williamson and Mahar, 1998). The Stability and Growth Pact and the "Golden Rule" that govern fiscal policy in the Eurozone and in the UK respectively are more sophisticated views of these doctrines, providing limited 'room' for public sector deficits. In the Eurozone the cap is in the form of a percent of national income; in the UK it is accounting conventions separating government investment from current spending. Further, in the SGP there is a maximum of three years in which the fiscal budget can exceed the agreed limit (implicitly adhering to some notion of cycles). Meanwhile, in the UK the notion of the cycle is more explicitly recognized as a macroeconomic phenomenon affecting the public budget. But in essence, all these programmes postulate controlling the size of the governments and moderating private spending as the ultimate recipe for stability and growth.

³ See Irvin and Izurieta (2007, forthcoming).

⁴ See for example Irvin (2006).

other deficit countries. Since this pattern is concurrent with the accumulation of dollar assets in surplus countries (which are liabilities for the US) and with the accumulation of personal sector debt in the US, the world economy becomes increasingly vulnerable to a potential dollar crisis or credit tightening in deficit countries. By clinging to the belief that net export demand will always be buoyant and the success of deflationary fiscal rules, Europe may be making its way to a *cul-de-sac*.

3. Can such a global demand disarray be sustained for much longer?

The world economy has entered a precarious period indeed. The main deficit country, by spending 6-7 percent a year more than it earns, continues to increase its net liability position. By the same token, the personal sector in the US, whose excess of total spending over income is nearly 9 percent of its income, continues to increase its debt burden. Moreover, surplus countries are becoming increasingly dependent on the US as consumer of last resort and continue to accumulate dollar assets. Why has this process continued unchecked for so long?

Paradoxically, the net indebtedness of the US has not increased as much as one might imagine over recent years, despite its growing current account deficit. Indeed, two factors have affected the *value* of the external position. First, the dollar devaluation over the period 2002-2004 (17 percent against trade partners, 30 percent against major capital markets, and 50 percent against the euro) increased the value of assets abroad of US residents by an amount nearly equal to the accumulated current account deficits. Secondly, changes of value in stock and bond markets abroad, *relative* to those in the US markets, added more than one and a half trillion dollars to US investors' wealth. Were it not for such dramatic valuation changes, the net liability position of the US would have increased from USD 2340bn at the end of 2001 to USD 4795bn at the end of 2005, which is equivalent to about 37.5 percent of current US GDP.⁵

A very similar phenomenon can be observed for the main debtor in the US economy: the personal sector. Unprecedented asset appreciation in both the stock market and real estate markets since the mid-1990s has increased the sector's wealth (Izurietta and McKinley, 2006). Even after the stock market crash in 2001, the net worth of the personal sector increased from about 4.75 times its income in mid-1990s to about 5.75 times its income at

⁵ Obtained by a straightforward addition of current account deficits of USD bn. 470, 530, 655 and 790 (years 2002 to 2005 respectively) to the net liability position of USD 2340bn at the end of 2001.

present, mainly due to the housing boom. Compared with debt, net worth deteriorated dramatically with the crash of 2001, but since then it has hardly been affected, even though the growth of household indebtedness has accelerated over recent years.

For the surplus economies, likewise, the landscape appears less bleak than one might expect. Export performance is continuously improving; surplus countries accumulate dollar-denominated assets; their domestic sectors feel richer because their asset markets are appreciating at a nearly unprecedented pace, and neither their governments nor their private sectors appear to be in danger of falling into a debt trap.

Such mechanisms, however effective they have proved to date for keeping the imbalances in check, could easily turn perverse. First, asset markets bubbles typically end up bursting (or at least deflating). The high degree of internationalization of financial markets and their incredible size---about five times global GDP---means that a serious market crash in one of the world's financial centres would in all likelihood spread rapidly, with unforeseen consequences.

Secondly, the holding gains described above do not just affect balance sheets; they also influence behaviour (Izurietta, 2005). US households can only continue to be the main driver of aggregate demand in the US and the rest of the world if asset appreciation of the order of five percent a year *in real terms* is assured. But such a rate of asset price increase (only seen at the peak of past stock market bubbles) would also have 'wealth effects' on domestic agents, sucking in more imports and causing an ever deeper current account deficit. In turn, the external deficits would add rapidly to the net liability position of the US. Such a process makes the US increasingly vulnerable to a major correction in asset prices.

Thirdly, holding gains partially offset the traditional effect of exchange rate depreciation in helping to restore trade balance. A dollar devaluation, for example, increases the wealth of US households who hold assets abroad, thus increasing consumption and imports. This is one reason why many observers believe that rebalancing cannot occur solely by means of exchange rate adjustment.

Fourthly, in order for the US to avoid a deterioration of its net debt position, US owned assets in the main capital markets abroad must appreciate faster than in the domestic capital market. This implies an asset price bubble in global markets.

Fifthly, were this to occur then global investors would increasingly move away from markets in the US and towards the main centres in Europe, Japan and perhaps in emerging markets. A shift out of the US market might precipitate a dollar collapse and a chain of stock market crises, which brings us back to our first point.

Finally, if a shift in preferences towards, say, European markets did not significantly affect the dollar, another more troublesome behavioural response might take place. Asset holders in Europe, just like their US counterparts, might increase their spending as a result of positive wealth effects. But we have seen that this would not necessarily lead to a net increase in aggregate demand since much of the extra spending would add to the current account deficit; ie, leak out of the circular flow of income. Much as in the US, such a process would feed into ever rising asset prices and debt accumulation by the household sector. Such a process, we reckon, has already taken hold in several European markets (even to the extent that the Eurozone as a whole is starting to show a current account deficit). Ultimately, the current state of global imbalances would be exacerbated, aided by an ever growing expansion of credit increasingly more dependent on stock appreciation elsewhere.

In sum, the processes that have made possible a painless continuation of global imbalances---namely credit expansion and asset appreciation---are making the world economy increasingly vulnerable to sudden credit tightening or asset deflation. A wobble in one part of the world could lead to a crash whose outcome could be more global, more unpredictable, and perhaps more adverse than anything seen before.

4. Does Washington have a response... other than trade protection?

The response of the Bush administration to growing external debt has been confused. Both the outgoing Treasury Secretary and his successor appear to believe in a 'strong dollar' solution sustained by increases in productivity that result from a synergy between the foreign capital keen to invest in the US and the 'resilience of corporate America'. The Federal Reserve appears keener on market-led exchange rate adjustment. This response is best represented by the recent efforts led by the IMF towards achieving 'international co-ordination'. The IMF does not mean 'co-ordination' of the 'Plaza Accord' variety; rather, what the IMF wants is for Asian countries to cease intervening in foreign exchange

markets.⁶ Such an option is attractive in orthodox circles because it is consistent with the view that the best policy is no policy at all. In this context, co-ordinated action would allow market forces to operate smoothly so as to bring about an orderly dollar devaluation enabling global balance to be restored.

Various commentators have questioned whether devaluation alone can bring about a meaningful correction of current imbalances (Brittan, 2005; Dodge, 2005; Dooley et al, 2003, 2005; Genberg et al, 2005; Persaud, 2005; Truman, 2006). It is not surprising that the devaluation argument has been unpersuasive. A number of US trading partners, like China, Malaysia and Hong-Kong, have effectively pegged their currencies to the dollar and are unlikely to be persuaded to accept the slowdown in export-led growth that currency revaluation would entail. Meanwhile, the real fall in the dollar relative to the 1990s (17 percent effective depreciation on trade weighted basis and significantly more against major currencies) has not led to an external account improvement (Cripps et al, 2005). Finally, the trade gap is simply too large. On our estimate, exports would need to grow 3 percent faster than imports for fifteen years merely to bring US exports and imports to balance. Such a turn-around could not be engineered by price-adjustment alone but would require constraining import growth via a slowdown in economic activity, or by protectionist measures.

Meanwhile, a strategy gaining ground in some circles in Washington is trade protection. ‘Keeping out cheap foreign imports’ is a slogan which mobilises support on both sides of the political spectrum and is seen as legally defensible.⁷

⁶ The *Plaza Accord* was signed on September 22, 1985 by the then G5 nations (France, West Germany, Japan, the United States and the United Kingdom). The G5 agreed to intervene in currency markets in order to trigger a US dollar devaluation *vis à vis* the Japanese yen and the German Deutsche Mark (and other European currencies in turn). Such unusual support for government intervention was seen as the right response to an unusual situation: a US current account deficit of about 3.5% of GDP, combined with an initial slowdown which many feared could end up as a ‘triple-dip’ recession which might be transmitted to the other G5 nations. Implementation in terms of dollar devaluation was effective but the correction of the US deficit was slow and, more importantly, uneven (mostly absorbed by European economies). Thus, on February 22, 1987, the *Louvre Accord* was signed by the then G6 (France, West Germany, Japan, Canada, the United States and the United Kingdom), aimed at stabilising the international currency markets and halting the decline of the US Dollar.

⁷ Article XIX of the GATT agreement, Round 1994 (prevailing at the WTO) includes a safeguard provision that allows protectionist measures to be taken in order to deal with emergencies, unlawful practices elsewhere or in general export practices elsewhere that injure domestic producers and have significant effects on welfare and employment. As far as the US is concerned, Section 301 of the 1974 Trade Act authorizes the US President to enforce unilaterally perceived US rights under international trade agreements to respond to “unfair” foreign practices (Schwartz, 2003). So far, US manufacturers have filed a petition with the US Trade Representative’s Office to get the WTO to apply trade sanctions against China because of its widening bilateral trade surplus with the US.

The prospect of trade protection in the US is considered by many to be undesirable, not least because of the potential for retaliation, political discrimination and the breakdown in the free-market globalization project. Political-economy considerations aside, we find it useful to construct a plausible ‘protection scenario’ and explore its macroeconomic implications. As will be shown, even though protection might be considered preferable to a recession, such a strategy falls short of delivering sustained improvements in the US deficit because of its adverse affects on long term growth, both in the US and the rest-of-the-world (RoW).

5. Assessing a protectionist scenario

The protection scenario (like the reflation scenario discussed in the next section) is constructed using a revised and expanded version of the Alphametries World Model of Income and Trade, henceforth ‘CAM’, described in Izurieta and McKinley (2006).⁸ The solutions are obtained as follows. The model is anchored in a fully consistent global accounting framework. The world is divided into 13 countries and/or blocs, and all trade accounts add up. Four types of commodities are specified: food, raw materials, energy and manufactures. Demand per bloc is disaggregated into domestic expenditure (public and private) and net export demand. Stylized patterns of spending and import demand are obtained by econometric estimation; residuals are adjusted when it is evident that the variables drift away from the norm.

The model is calibrated by simulating recent history. The projection of the current situation into the future is achieved simply by projecting trends in the exogenous variables, and this projection constitutes a ‘baseline’. Policy-driven scenarios are obtained by target-instrument iterations. For each desired target an instrument is chosen. The value of the instrument should be that which assures that the target is achieved. When various pairs of targets and instruments are part of a single scenario, the model is resolved all at once to ensure that interactions and feedbacks are fully taken into account.

⁸ Various stages in the development of this model can be singled out. It was originally constructed by Francis Cripps at the Cambridge Economic Policy Group (CEPG) and as such is described in Cripps, Gudgin and Rhodes (1979). Subsequently the model was expanded and revised by Alphametries, under the guidance of F. Cripps, and is outlined in F. Cripps, 1987, ‘The Alphametries Model of the World Economy’, mimeo: Alphametries. A more recent effort to update and extend such model is currently implemented by a joint project of the Cambridge Endowment for Research in Finance (CERF) and Alphametries, with support from the United Nations Development Programme, specifically the International Poverty Centre in Brasilia. Concurrently, the model is expanded to incorporate trade and income with financial flows, payments and stock accumulation of 83 countries and blocs using data from 1970 onwards. Advances and results will be produced in the coming months, thanks to the continuing support of UNDP’s International Poverty Centre, Brasilia.

The protection scenario can be described as follows. Protectionism takes off in the US with the aim of reducing the trade deficit ('target'), measured in constant dollars, at about 2 percent per year in volume terms. This is a very moderate target, but it implies a drastic change with respect to recent years since the trade deficit has been growing at about 10 percent per year on average. The growth of imports ('instrument') is constrained to the extent required to reach the target. There will be effects on national income and spending because 'import substitutes' will not be one-to-one due to lags and resource constraints.

We contemplate that it is in the best interests of the US to grant exemption from protection to its neighbour and main trading partner, Canada (which in the current model structure is part of the bloc 'other developed')⁹. Thus, while total imports are reduced, imports from this bloc remain at par with the trend, which implies that all other countries experience a relatively sharper fall of their exports to the US.

Another important component of the 'protection scenario' is to allow for policy responses by blocs affected by this hypothetical 'unilateralist' agenda of the US. We reckon that those blocs having significant political or economic leverage could sustain a defensive response. To keep things simple, we assume that the only bloc to intervene explicitly will be Western Europe (WE),¹⁰ where macroeconomic performance has become heavily dependent on demand from the US (at present, exports of manufactures of WE represent 24 percent of manufacturing imports of the US and slightly more than 10 percent of WE exports). The protectionist measures described above will reduce WE exports to the US to only 16 percent of US imports and 5 percent of WE exports. In retaliation, WE is assumed to replace imports from the US by goods made within the European bloc. The share of trade internal to the WE bloc rises to the extent necessary to secure a trend rate of economic growth of about 3 percent per annum. It is assumed that, just as in the case of the US and Canada, WE will give preferential treatment to its Eastern European neighbours (EE),¹¹ some of which already belong to the European Union. A moderate but acceptable economic growth rate of about 4 percent is the target for Eastern Europe induced by

⁹ The other members of this bloc are Australia, New Zealand, Israel and South Africa.

¹⁰ In the current model, the WE bloc encompasses the most developed countries of the region; namely, Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

¹¹ Eastern Europe (EE) comprises the European states formerly under the influence of the USSR (except Eastern Germany which is part of WE). This includes: Albania, Bulgaria, former Czechoslovakia (*Czech Rep.*, Slovakia), Hungary, Poland, Romania, Slovakia, and former Yugoslavian states (*Bosnia and Herzegovina, Croatia, Macedonia, Serbia and Montenegro, Kosovo, Slovenia*).

allowing these countries a greater share of Western European imports, especially in manufacturing, supported by FDI.

While the main concern for the US is to reduce its deficit, in Europe the aim is to secure an acceptable growth rate and to avoid the adverse effects of US protectionism. Analogously, neighbouring blocs, which are important trading partners and whose economic performance cannot be ignored, are assumed to receive preferential treatment.

The projected outcomes depend on trade and income linkages operating in a global context as estimated in the model solution. A direct implication of both sets of conditions (protection in the US and retaliation in WE) is that growth in rest of the world (RoW)---, excluding the US, Other Developed, Western and Eastern Europe---will be significantly affected because their export performance will deteriorate¹². In addition, the previously strong income and trade linkages between the US and WE will be diffused into indirect and weaker linkages via the blocs left out. In other words, exports of North America partners (the US and Canada) will depend less on economic growth in WE than before and more on growth from other blocs (and vice versa). Thus, sluggish growth performance in the RoW countries resulting from the protectionist agenda will inevitably affect both the US and Europe, as will later rounds of iterative interaction.

Turning to the quantitative results, economic growth in the US will initially rise to about 6 percent a year because the improvement in the external balance is tantamount to an improvement in the net flow of national income. But as growth in other blocs slows, US export demand can no longer be sustained at 10 percent per annum and must slow to about 5 percent per annum. In consequence, US economic growth needs to slow to less than 2 percent per annum to achieve the targeted reduction of the trade deficit.

Growth rates in WE and EE in principle are not affected because these variables are treated as targets. But the implied changes in the 'instruments' required to compensate for both US protection and sluggish growth elsewhere turn out to be implausible. This is particularly the case for the share of internal WE trade, which is the instrument used to secure targeted

¹² We have not assumed that the other countries which would be affected by trade protection in the US and Europe would in turn implement measures to retaliate and intensify intra-regional agreement. There is no end to the amount of successive runs of complications in such a setting and thus we have taken the most parsimonious, yet plausible, approach.

growth in WE. The model's solution indicates that internal trade will need to rise sharply from about 66 percent of WE total trade at present to nearly 80 percent within few years.¹³

The rate of economic growth of the world as a whole will be increasingly affected, even if WE and EE grow at par with the trend. As US growth slows from its peak of 6 percent per year, the loss of potential growth within few years will be around 1.5 percent per year.

Amongst the countries most affected will be Japan (with growth declining again to near zero rates) and developing America (from about 5 percent per annum to 2.5 percent). The rest of developing areas in Asia and Africa (including China and oil exporting countries in those regions respectively) will lose between 1.5 to 2 percent in growth rate potential.

In sum, in our trade protection scenario, the world will definitely not be a better place --- and may indeed be worse than what our model outcome suggests if more complex retaliatory measures are devised. The persistence of macro-financial imbalances, combined with the increasingly integrated state of the global economy of today, makes an adjustment via protection and 'beggar my neighbour' policies as painful and uneven as a market-led crisis resulting from benign neglect.

6. Countering the orthodoxy: a Europe-driven reflation scenario

The obvious question is what type of policy response can be implemented which would be both politically feasible and appropriate to the nature of the problem. The possibilities mentioned above (US recession, dollar devaluation, protection) seem impracticable and suggest that there is little that the US can do. While it seems clear that the US needs the world's help, it is also true that current global imbalances were not caused by the 'extravagance' of deficit countries like the US alone. Their import-orientated predisposition would not have materialized if it was not to other blocs' advantage to devise export oriented strategies and preach prudence.¹⁴ Moreover, from the analysis of the structure of aggregate demand in the US and Europe posited above, one can identify another convergence of interests emerging in the early 1990s that helps explain the current impasse; namely, orthodox fiscal tightening *at global level*.

¹³ Such level of 'integration' was last achieved in the 1970s; returning to such a level seems incompatible with the effects of globalisation.

¹⁴ In Irvin's words: "This basic principle is often forgotten in comparing the US and EU growth records" (2006: 43).

US Congressional insistence on the desirability of public sector surpluses was a familiar theme during the 1990s. Of course, US policy makers might have reverted to fiscal deficits as soon as the first signs of a slowdown appeared in response to fiscal tightening. But the US economy, instead of a slowing down, started to grow relatively quickly on the back of asset appreciation and the rapid increase in credit to the private sector. By spending in a ‘deficit-prone’ fashion, private agents filled the gap left by the fiscal sector. Policy-makers implicitly adhered to the ‘Lawson doctrine’---according to which current account deficits that result from a shift in private sector behaviour should not be a public policy concern. The ‘ideal’ structural conditions were set for continuing economic growth: buoyant demand, high productivity, low inflation, wage moderation, low unemployment, high profits, stock market (and other asset) appreciation and ...public sector discipline. The model, described by some as the ‘Goldilocks Economy,’ was ready to be copied by other industrialized nations¹⁵.

So it was. With the exception of Japan---where the recession of the early 1990s (caused in part by a similar model, with emphasis on property appreciation) was still being countered with fiscal policy and monetary easing---most other economies adopted, with variations, the US model. For Europe, the success of the Goldilocks economy seemed to guarantee that the principles laid down in the Stability and Growth Pact (and subsequently the ‘Golden Rule’ in the UK) would deliver prosperity if applied with rigour¹⁶. But the performance of the fiscal tightening experiment in the Eurozone turned out to be disappointing, and in some cases actually triggered or prolonged recession. A number of authors have pointed out ‘gaps’ in the institutional setting as main causes, like the absence of a meaningful ‘federal’ budget for the EU, or the rigidity of the ‘inflation targeting’ model (Arrestis and Sawyer, 2003; Bibow, 2004; Irvin, 2005). In addition, except for the UK¹⁷, Ireland and few other continental countries (Spain, Italy, Denmark, Finland, Greece and France), the personal sector did not shift to a spending pattern strong enough to compensate for fiscal tightening as had happened in the US. Policy-makers in Europe have

¹⁵ Developing countries, meanwhile, were imbued into the fiscal orthodox doctrine since the early 1980s at least. Since such time, external debt crises brought many to their knees and creditors, aid donors and multilateral organizations conditioned their support on the strict application of the ‘monetary approach to the balance of payments’, a doctrine centred on fiscal tightening (see Footnote 5).

¹⁶ For a full historic account and institutional analysis of the macroeconomic model governing fiscal policy (and the management of domestic demand by large) in Europe, see Irvin (2006).

¹⁷ The striking similarities in the macroeconomic picture in the UK and the US vindicates William Keegan’s observation that: “Gordon Brown and Ed Balls studied the US system before election and had the usual Treasury official stationed in the Washington Embassy from mid-1997, one of whose principal tasks was to study the US experience, learn the lessons and pass them on” (2003: pp.239).

not sufficiently appreciated that fiscal policy was summoned to the rescue in the US at the first signs of deficient aggregate demand (Godley and McCarthy, 1998).

At this stage, it is crucial to emphasize the need to avert a weakening of aggregate demand in the global system. But sustaining world aggregate demand cannot be based on credit expansion of the kind seen in the US, the UK, Spain and elsewhere. Further growth in the personal sector debt burden of these countries seems hard to imagine---and an adjustment can be expected at any time. Personal sector dis-saving in the US is running at *minus 7* percent of GDP per annum. It is now evident that domestic demand management alone cannot bring about a correction to its historic norm of about a *positive 2* percent of GDP. If a ‘US-led global slowdown’ is to be avoided, the obvious solution seems that of a sustained reflation outside the US with Europe playing a pivotal role.

Izurieta and McKinley (2006) present a global reflation scenario which addresses such concerns. Arguably, their solution requires a very high degree of global macroeconomic policy co-ordination. To achieve such co-ordination, either a severe crisis would have to occur, or else a more modest experiment which is more easily implemented would need to be attempted. Such an experiment with encouraging global implications can be built around a Europe-led reflation. Why Europe? An important reason is that, given the poor performance of domestic demand in the 1990s, the region might have run into severe and lasting recession had it not been for buoyant net export demand from the US. And an even a more convincing reason is that “[while] belt tightening in the US will mean slowing US demand and thus growth—a policy which risks slowing the world economy---[reflation in Europe] means faster world growth and particularly faster Eurozone growth.” (Irvin, 2006: 44). Furthermore, as the CAM simulation described below confirms, the global impact of a Europe-led reflation is re-enforced by the strong income and trade linkages with middle-income and poor regions of the world (eg, Eastern Europe, Latin America and Africa)¹⁸.

An EU-led reflation supposes a set of demand-management instruments aimed at improving growth and income distribution and requiring co-ordination between Europe, Eastern Europe and Africa. In addition, some degree of success in negotiating energy-saving measures on a global scale can be expected. We reckon that the key assumptions

¹⁸ It is worth emphasising that the design of the world model currently in use has a fixed bloc structure which in particular aggregates all the countries of Western Europe (WE) into a single bloc (see note 16). In this context, a Europe-led reflation is broader than reflation in Eurozone countries alone. Furthermore, the model simulation described here envisages reflation in Eastern European (EE) countries as well.

made in our simulation are very much in line with the proposals advanced, amongst others, by the UK Chancellor, Gordon Brown (see for example Brown, 2006).

Just as in the previous scenario, a target rate of economic growth for Europe is posited. But instead of trying to achieve this by protection or by faster export growth, the critical instrument is domestic absorption. Net additions to aggregate demand required to achieve the desired target are of the order of 3 percent of GDP. To put things in perspective, the average net increment in domestic absorption during the 1990s was about 2 percent of GDP. In other words, the proposed scenario is perfectly realistic.

To be sure, such a result can be achieved not just because domestic absorption accelerates by about one percent of GDP with respect to the norm in recent years. Official development assistance and foreign direct investment aimed at improving manufacturing capacity and raising income in Eastern Europe and Africa are critical components of this policy package. Injections of about one third the net increments of domestic absorption posited above (ie, one percent of the EU-15's GDP) would be sufficient to help Eastern Europe to achieve rates of economic growth of around 6 percent and---some years from now---as much as 10 percent for several African countries¹⁹. The aid target implied is roughly equivalent to the 0.7 percent of GDP that G-8 nations committed themselves to at Gleneagles.

As far as domestic demand management is concerned, the final component of this scenario requires tuning domestic absorption in Eastern Europe to ensure that external balance is achieved within a few years. Balance could be achieved by postulating that an increasing share of the injection---from half to about two-thirds or three-quarters---would be invested in export-oriented industries and in closely related infrastructure and public investment projects.

The other important component of this scenario is the pressure on resource utilisation, particularly energy. The model on the basis of which we constructed this scenario can be used to assess the demand for energy and raw materials (and derived prices) for given rates of global economic growth, assuming similar trends of energy efficiency improvements as

¹⁹ The fact that net injections of about 1 percent of Europe's GDP targeted at manufacturing and extraction capacity in Europe and Africa could achieve such results should not be surprising. The combined national income of Eastern Europe and Africa is about one quarter of Western Europe's. The injections in those blocs will initially encounter incremental capital output ratios (ICOR) of about four to five (diminishing over the years by a half). Considering employment and demand linkages, plus the synergies and the trade linkages within each bloc and with Europe itself the initial effects will be magnified.

in the recent past. A non-recessionary scenario would require that energy use increases at a rate of about 5 percent per annum on average, while the rate at present is about 2 percent per annum (Izurietta and McKinley, 2006). The resulting price increases, in real terms, will be far higher than the current rates (which are already at record levels). Such an outcome would be unacceptable. Thus, in this scenario, we incorporate the restriction that energy demand should not rise faster than 2 percent per annum. There are various ways of achieving this outcome, our preferred alternative being a 'green tax' on energy use, to be substituted for either social/ development related expenditure or tax rebates on employment creation. The principle is that any chosen package of restrictions and incentives in use should be 'fiscally neutral' with respect to the underlying conditions of this scenario (which are indeed expansionary).

Meeting the energy saving constraint may be the most ambitious component of this scenario. Policy-makers in Europe will need to place this issue at the top of the agenda---a logical follow-up to the commitment to Kyoto which addresses such concerns.²⁰ To maintain the current rate of energy utilization and still allow for global economic growth will require far more energy saving measures than have so far been contemplated. In short, Europe has a leading role to play in promoting not just growth, but energy-efficient growth.

The overall results of this scenario are instructive, particularly considering that apart from the postulated conditions for WE, EE and AF, no other bloc is required to implement adjustments. The world economy will be growing about 1 percent faster than the projected baseline and more than 2 percent faster than in the previous 'protection' scenario.

External balances would be more in harmony with rates of economic growth and financing. Of particular interest in this regard is the evolution of WE and the US. Western Europe will show a (manageable) external deficit of the order of 1-1.5 percent of combined GDP. This reflects stronger economic growth than in the recent past, and also the fact that injections are largely driven by domestic reflation rather than being dependent on US demand alone. It is also worth noting that while WE increases its investment in its neighbours, it also imports more from them.

²⁰ At present 164 countries have ratified the "Kyoto Protocol", which all together encompass about two thirds of global carbon emissions .Amongst the most heavy users of energy which have not ratified are the US and Australia.

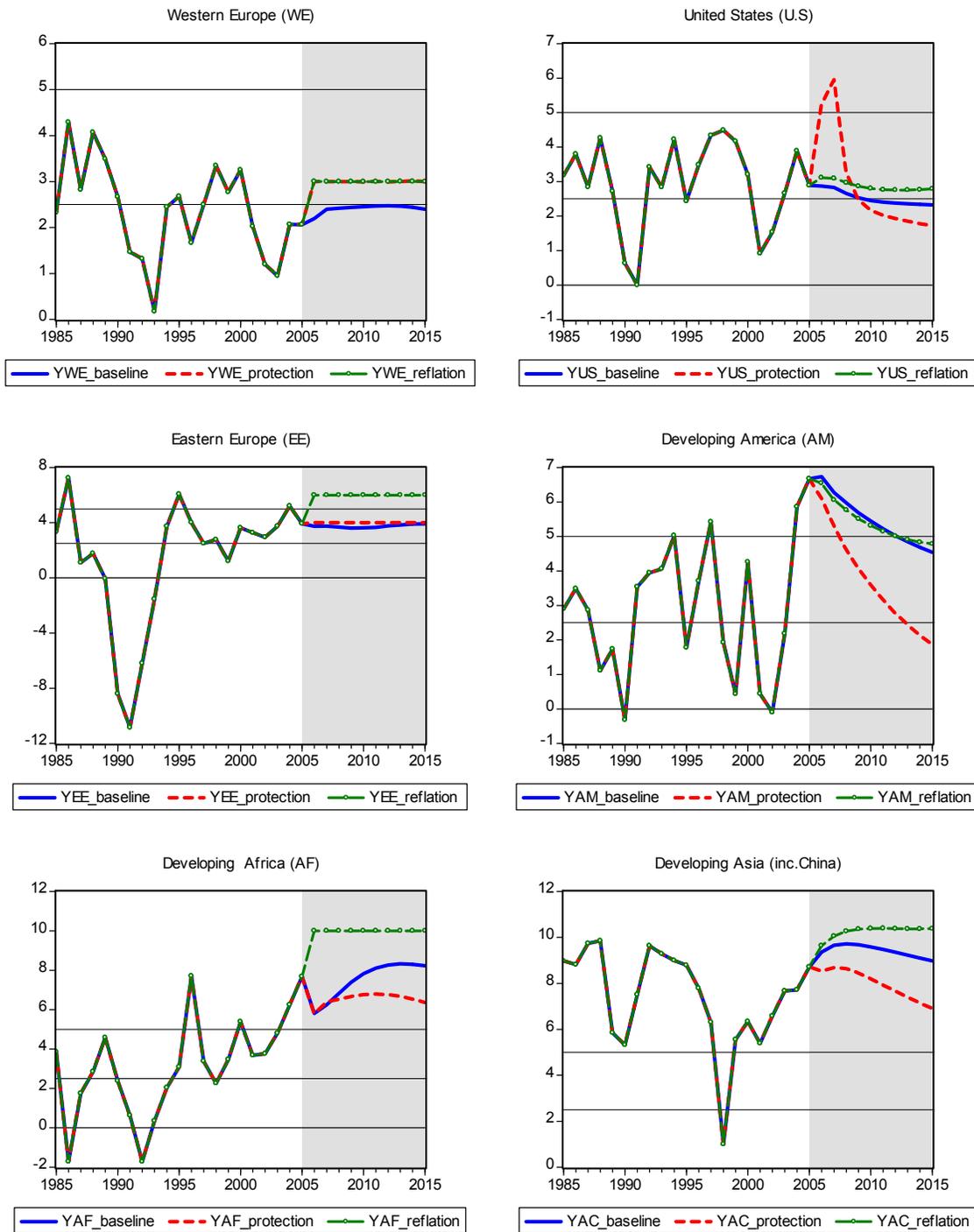
The structural change in the US external balance is equally revealing: instead of the current account deficit continuing to rise, the balance will gradually improve as a proportion of (growing) GDP. The result is encouraging, particularly considering that no adjustment via recession, substantial dollar devaluation or protection is required in this scenario.

The two sets of plots shown below compare the rates of growth and the current account balances of the main blocs concerned under three scenarios: ‘baseline’, protection and reflation²¹. Admittedly, growth in WE, EE and AF follows from the set target, and in this sense economic growth and external balances are altogether superior than in the baseline case. The central difference is that the instruments used to trigger growth in the reflation case are preferable to those used in the protection case. Both reflation in WE and investment in EE and AF are pro-growth in their own right; equally, reflation implies that the linkages with other blocs, including the US and developing regions, will become stronger.

With regard to the US, the plots make it evident that the ‘protectionist solution’ is unpersuasive compared with the reflation scenario. The ‘protectionist’ US current account adjustment results more from the economic slowdown triggered by slower global growth than from the ‘trade switching’ effect of protection. In this scenario, the detrimental effect on world growth would be even greater were more aggressive retaliatory measures adopted than those assumed in our model. Conversely, growth of the world economy---and US growth as well---would be significantly higher if pro-development policies are adopted not just by WE, but by other developed regions, by the FSU, by oil exporters and so on.

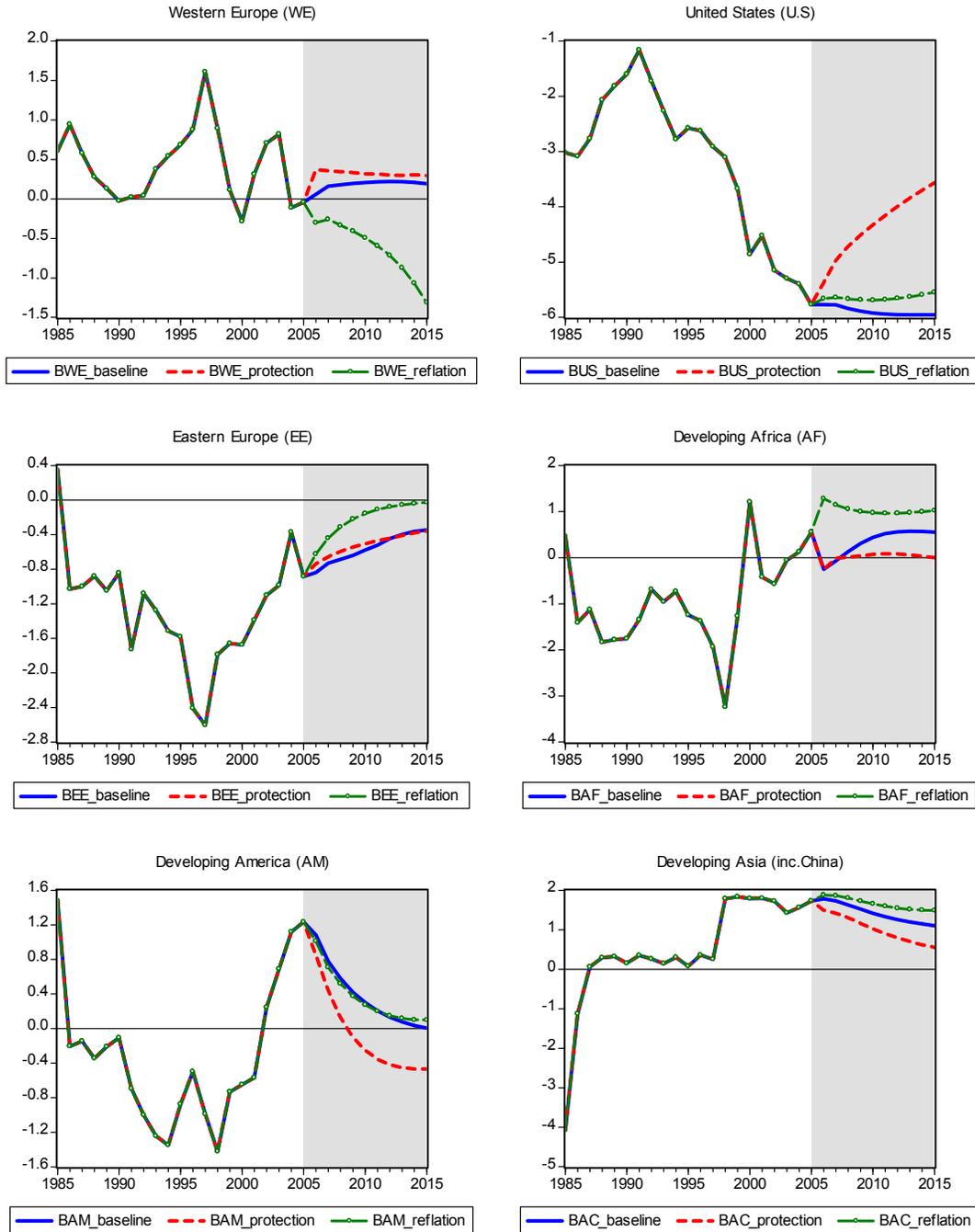
²¹ As noted earlier, the baseline represents projected trends in the exogenous model variables and generates solutions by considering structural conditions obtained from the econometric results. A further qualification worth mentioning concerns ‘structural conditions’. As explained in Izurieta and McKinley (2006), expenditure functions depend on both income and accumulated wealth, following the tradition of econometric modelling in the Cambridge Economic Policy Group (CEPG). Since the model at its current stage of development does not yet generate financial wealth per country / bloc, the stock flow restriction typical of the ‘CEPG expenditure function’ is introduced by considering a ‘mean lag adjustment’. In other words, domestic expenditure as a whole is constrained by the recurrence of accumulated external deficits, in the same way as private expenditure may slowly reach a plateau when net worth deteriorates due to the growing debt burden. In this regard, our baseline can be considered a ‘structurally conditioned’ baseline. A totally unrestricted baseline would merely follow the trends and would be consistent with what ‘consensus forecasts’ would postulate. Such an unrestricted baseline would lead to ever growing current account deficits in the US, of the order of 10 per cent of GDP within a decade.

Figure 1: Rates of economic growth in main blocs
[Three scenarios compared: baseline, protection, reflation]



Source: Historic period: compilation from UN and IMF statistics. Projection: (CAM) model simulations

**Figure 1: Trade balances in main blocs as percent of GDP
[Three scenarios compared: baseline, protection, reflation]**



Source: Historic period: compilation from UN and IMF statistics. Projection: (CAM) model simulations

In assessing the merit of this scenario, it should be recalled that our concern is not to create a ‘best’ or ‘dream’ solution but rather to focus on measures that are plausible and within the reach of policy-makers in Europe and in neighbouring blocs. It should be self-evident that countries in Eastern Europe and Africa are themselves keen to embark on a

development agenda leading more balanced and sustainable growth. Western Europe will benefit as well. Many of the policy principles have already been agreed (raising official development assistance) or else are envisaged as part of the longer term expansion of the EU. In this sense, the model yields results which are ‘modest’ and ‘realistic’. The only ambitious component relates to achieving energy efficiency, but we think it plausible that R&D in Europe should privilege such a crucial aspect of policy,

7. Conclusion

Above, we have explored the structural conditions under which the world economy is operating in the light of historic trends and apparent changes which have occurred in the past fifteen years. During this period, the US experienced a reasonable rate of economic growth and the Eurozone adopted measures to promote fiscal and monetary harmonisation between member states. However, economic growth in the US has been accompanied by unprecedented external and internal imbalances. Growth in Europe (and other blocs) has generally been disappointing and has relied excessively on external demand. These developments are largely the result of economic policies based on prevailing economic orthodoxy; namely, that greater public sector discipline is of central concern since private sector behaviour is subject to market discipline and by definition is self-correcting.

Such a framework is critically limited. Public sector prudence may end up being severely contractionary, as Eurozone experience shows, unless private spending accelerates to unprecedented and potentially hazardous rates. In turn, private sector-driven growth has come to be correlated with excessive debt burdens, both internally and externally, as the experience in the US confirms.

The mid-term future cannot be a simple continuation of the past. For this reason, we use a parsimonious model framework capable of capturing key structural conditions of the world economy in order to explore a number of plausible scenarios. We have chosen to discard two potential outcomes resulting from no policy at all, namely a severe global economic slowdown and a market-driven adjustment based entirely on exchange rate re-alignment. The former is obviously unattractive; the latter is unrealistic.

Treating financial, portfolio and market liberalization as a panacea, while focusing on contractionary policies in the name of prudence, has led to a sub-optimal situation. If

current imbalances are left to work themselves out through market forces alone, the result could be literally calamitous.

An alternative solution to current global imbalances is the recourse to protection. Such a course of action, controversial as it may be, is considered attractive by a number of leading policy figures in the US. In consequence, we devise a plausible protectionist strategy originating in the US with a minimum set of potential retaliatory measures in Europe. The macroeconomic implications of such a scenario, we conclude, are very disappointing.

A more congenial scenario does exist for the world economy; notably Europe, the US and the developing regions. Such a scenario requires only moderate structural changes aimed at kick-starting Europe-wide economic growth accompanied by income generating effects in developing regions, particularly Africa. Our 'reflation' scenario amply demonstrates the potential offered by the income, trade and investment linkages embedded in the structure of the world economy. The model simulations presented here and elsewhere suggest that the full potential of these linkages needs to be explored further.

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