The economic and financial crisis of 2008-2010: the international dimension

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THE ECONOMIC AND FINANCIAL CRISIS OF 2008-2010: THE INTERNATIONAL DIMENSION

1. Introduction

My remit in this paper is to examine specifically the international dimensions of the current economic and financial crisis in order to help understand its dynamics. This crisis has been truly international and has affected countries around the globe. It might have started as a relatively minor disturbance in the US property and financial markets (the bursting of the sub-prime mortgage bubble), but it soon spread to most countries, rich as well as poor. One purpose of this paper is to analyse this process of globalisation of the crisis, which as will be explained below is closely linked to financial globalization. These matters will be taken up in Section 2.

Although it is too soon after the event for there to be a consensus among economists concerning the causes of the crisis, a widely held theory is that the crisis was caused mainly by growing financial imbalances between nation states in the world economy. This as we shall see is not a view held by all economists. There is a sizeable body of opinion, which does not regard the financial imbalances to have been the primary cause of the crisis. This is because these scholars suggest that the crisis was not accompanied by other relevant events such as volatile movements in major currencies or interruption in the use of the reserve currency, namely the US dollar. Financial imbalances are therefore unlikely to be a major source of the crisis, and so the argument goes. This debate will be reviewed in Section 3.

A further important question raised by the current crisis is why the world slump of 2008-10 has been so mild compared to the apocalyptic scenarios set out by the vast majority of mainstream economists in the wake of the fall of Lehman Brothers in September 2008. These forecasts often suggested that the current US economic downturn might be of a similar order of magnitude to that which afflicted that country's economy in the 1930s. Although in 2009 the meltdown of the financial system was prevented at a huge expense by governments around the world, the real economy did not suffer an overall decline comparable to the 1930s depression. These issues will be discussed in Section 4 together with the role of the international factors in the economic outcomes in the two crises periods (the current and the 1930s). Sections 5 and 6 will report on the simulations based on a UN world econometric model on different scenarios concerning the world economy. This discussion will further emphasise the role of international factors in determining the likely course of the current crisis and what will be the optimal policy framework for ensuring fast and sustainable growth of the world economy in different countries and regions.

Not surprisingly, there exists by now a large literature on the 2008-2010 crisis, its causes and its policy implications among other aspects. This paper contributes by departing from existing literature in the following ways. First, it considers all issues squarely from the perspective of emerging countries; its main objective is to analyze the options for these countries faced with the current global crisis and the implied slowdown in world trade and growth. Secondly, the paper departs from both mainstream as well as many heterodox economists by suggesting that the pre-crisis financial system had some tangible merits, which should not be overlooked in the reform process. A balanced picture of the entire financial system is important if correct policy conclusions are to be drawn from it. Thirdly, taking India and China as models of developing countries and the United States as the representative of industrial countries, the paper asks how would changes in the pattern and speed of growth in the two most populous developing countries in the world affect economic variables in the US and other countries. This question is asked both in the context of long-term evolution of the world economy as well as in terms of the experience during the current downturn. The main purpose of these investigations is to see whether fast growth in India and China as desired by the governments of those countries is compatible with the objective of full employment growth in the US. This analysis, although necessarily brief in this paper, will hopefully shed light on the nature of the possible north/south conflict.

An important result of this analysis and simulations is that even if China and India were to abandon their policies of export led growth (which is more applicable to China than to India in any case), and shift towards internal income distribution and domestic demand oriented policy, this would not be sufficient to correct global imbalances either in developed or developing countries.[1] The world economy is so complex and already so integrated, a much deeper role of the government is required to co-ordinate policy in the management of income

[1] These simulations are reported in two recent papers , Cripps Izurieta and Singh (2011) and Izurieta and Singh (2010). These results, to the extent that they are relevant to this paper, are explained in the following sections.

distribution as well as to reduce instability of exchange rates and commodity markets. Far greater co-operation between nation states, rich as well as poor countries, is necessary in order for them to achieve their full productive potential and sustainable growth, reduce poverty and increase the living standards of the people. Without such a high degree of cooperation there is a danger the world economy may plunge into a cascade of sovereign debt defaults, double dip economic downturns and, worse still, a prolonged recession or a fully-fledged depression. This paper will argue that what is required today is developmental globalisation rather than free market globalisation. These issues will be taken up in the last part of the paper (Sections 5 and 6).

The paper is organised into sections as indicated above.

2. Sub- prime mortgages and the crisis of the global economy

Although there are still a few economists who do not regard the sub-prime mortgages and the associated economic events in the US as the trigger for the current crisis in the US as well as the world economy, this view is not widely shared. Most scholars accept these as the proximate cause of the crisis. Baker (2010_however argues that sub-prime mortgages played only a minor role in causing the crisis. For other views, consisting of both the mainstream and heterodox contributions on the crisis see the following: [Aiginger (2009), Arestis and Singh (2009), Cambridge Journal of Economics (2009 and 2010), IMF (2008a, 2008b, 2009a, 2009b, 2009c, 2010a, 2010b), Krugman (2008, 2010), Ormerod (2010), Palma (2010), Solow (2009), UNCTAD (2008, 2009, 2010), UNDESA (2008, 2009, 2010), the US Council of Economic Advisers (2010)].

Complex financial instruments that incorporated sub-prime house mortgages lost their value as the housing bubble burst following ten years of continuous price rises based on expectations of a continuation of such increases. This housing bubble occurred despite the fact that during the previous two decades the supply of housing had increased appreciably (Solow, 2009). In brief, house prices had risen because interest rates were low and credit was easily available, and prices were expected to continue to increase, much as in the case of the classic tulip mania and bubble in the early 17th century when, at its peak, the price of a tulip bulb in Holland was equivalent to that of a three-storey town house.

There is, however, an apparent puzzle here. It was not the first time in US economic history that there had been a bursting of the housing bubble. This did not invariably lead to a depression in the US economy, let alone in the whole world. Moreover the initial losses from the sub-prime bubble were relatively small, about 250 billion dollars Blanchard (2009). He also estimated that within a year the decrease in world stock market capitalisation amounted to more than 2.5 trillion dollars, a hundred times larger figure. The consequential reductions in world GDP during the period of 2008 to 2015 were estimated by Blanchard to be of the order of 5 trillion dollars. Robert Solow (2009) noted that the combined result of the housing and the stock market shocks was a fall in US household wealth from US$ 64.4 trillion in mid-2007 (before the crisis) to US$ 51.5 trillion at the end of 2008. Thus 13 trillion dollars of household wealth disappeared in the space of about one year. Solow rightly observed that nothing very much had changed; people had not lost their skills, the machines were still working and were capable of producing the same goods and services, and yet the public had 20% less wealth at the end of 2008 than they had 12 months earlier.

Equally interesting is the spread of the economic and financial decline from the US to the rest of the world. This was entirely due to "financial globalisation" in the previous two decades when the world's financial markets began to integrate as a result of liberalisation of regulations[2] on the operations of the financial institutions. The following facts are revealing:

1) The McKinsey Global Institute data indicate that the ratio of global financial assets to annual world output increased from 109% in 1980 to 316% in 2005. This increase in financial depth has been particularly marked in rich countries: in the Eurozone the ratio of financial assets to gross domestic product grew from 180% in 1995 to 303% in 2005. In the UK and the US, in the same period this variable rose from 278% to 359%, in the UK, and from 303% to 403%, in the US.
2) Wolf (2007) also notes that the nature of financing has changed. In 1980 bank deposits made up 42% of all financial securities. By 2005 this had fallen to 27%.
3) The capital markets increasingly perform the intermediation functions of the banking system.
4) There has been widespread financial innovation which has brought to the market, derivatives, options futures, and swaps, among other devices.

[2] The following facts are based on Wolf (2007)

5) As a consequence of financial globalisation the inter-connectedness between banks and other financial institutions in different countries greatly increased. At an early stage, observers noted, for example, the surprisingly large exposure of regional German banks to US subprime loans. More rigorous data bearing on this point is provided by the IMF: foreign claims by banks from 5 major advanced countries rose from $6.3 trillion in 2000 to $22 trillion in June 2008.

The financial globalisation above is not an accident but a project backed by financial interests, banks, insurance companies, stock market, investment banks in the US and other advanced countries. One of the major triumphs of globalisation was the repeal in 1999 of the US Glass Steagle Act which had limited the size and scope of the financial institutions.

It was not just the financial lobbies' pressure which led to liberalisation of global finance. There was strong ideological conviction at the highest levels of US government that financial innovation is good for the economy and the best way to promote it is to regulate it lightly, if at all. This was the view strongly held by Alan Greenspan and leading Wall Street executives. In a speech given in April 2005 Greenspan (2005) outlined how innovation had brought about a multitude of new products, speaking approvingly of how such "improvements" had led to a rapid growth in sub-prime mortgage lending.

The New York Times, reporting on Greenspan's evidence before a 2008 US Congressional Committee, wrote, '…Mr. Greenspan conceded error on regulation, stating that he had "put too much faith" in the self-correcting powers of free markets… refused to accept blame for the crisis but acknowledged that his belief in deregulation had been shaken." (Andrews 2008). In testifying before the 2010 U.S. Congress Financial Crisis Inquiry Committee (established to investigate the sub-prime mortgage crisis) Greenspan defended himself against the dual charge that he was responsible for (a) the housing bubble due to his low interest rate policy and for (b) not puncturing the bubble before it reached a level that would cause serious systemic difficulties. Greenspan suggested that his critics had short memories as many of them had earlier applauded sub-prime mortgages as being of tremendous benefit to low-income Americans. Furthermore, he suggested that at the time many people would have questioned whether there was indeed a housing bubble and asked how, in any case, the Federal Reserve would know the answer to this question better than the market. He also told the committee that regulators were helpless to stop the economic meltdown and the sub-prime mortgage crisis (Greenspan, 2010).

The net result of this mindset was the evolution of a largely unregulated parallel banking system performing the functions of banks but without being subject to banking regulations (Krugman, 2008).

Robust responses to Greenspan's arguments have been made by James Galbraith (2010), Paul Krugman (2010) and Robert Solow (2009), among others. They suggest that the securitization of sub-prime mortgages through their marketing as a combined financial product was little understood by the market. This, together with complex credit default swaps, as well as several other financial innovations, should be regarded as fraudulent practice that should have been tightly regulated. Krugman (2010) suggests that, had the wide-ranging reforms currently under discussion in the US Congress been in place earlier, "a handful of lavishly-paid leaders of the financial industry would not have been able to mislead and exploit consumers and investors."

How the crisis arose is now well understood and the process is succinctly summarised by Blanchard. He describes how the initial conditions on the eve of the crisis transformed the relatively small subprime mortgage losses from the fall in housing prices in the US into much bigger losses through the fall in share prices on the US stock market. Moreover, because of financial interconnectedness between countries these losses were further increased by declining share prices all over the world. Blanchard (2008, 2009) argues that for this sequence of events to occur it was necessary to have four initial conditions with respect to the rules of the game and two amplifying factors as outlined below.

1) Assets were created, sold, and bought, which appeared much less risky than they truly were. Blanchard offers a Minskeynsian explanation for this condition to prevail. He writes 'history teaches that benign economic environments often lead to credit booms and to the creation of marginal assets and the issuance of marginal loans.

2) Securitization led to complex and hard to value assets on the balance sheets of financial institutions. It was supposed to lead to more efficient allocation of risk and thereby

reduced risk overall. In practice, however, the opposite happened. Blanchard admits that he himself believed that the US economy would withstand a fall in house prices better than most – the shock will be absorbed by a larger set of investors because of securitization. However, because of the complexity and opacity of the process this expectation was not fulfilled.

3) Securitization was also supposed to spread risk between countries and thereby lead to a safer environment overall. Again the opposite happened in practice. This is a phenomenon which is difficult to comprehend within the orthodox framework of analysis. Why should increasing the number of countries increase risk, and not lower it. This paradox which is empirically much observed in practice has recently been analysed by Stiglitz (2011) in a pathbreaking contribution. He argues that in some circumstances, adding countries to the existing international financial system may make it unsafe for everybody just as adding a bad egg in a basket endangers all the other eggs. A simple economic example would probably be one where a country with higher leverage joins up with countries with lower leverage to reduce the risk of default. However, depending on particular conditions it is possible to suggest that the high leverage country may increase the risk of default for all countries in the group. Stiglitz (2011) presents a rigorous theoretical analysis of this issue.

4) Leverage increased within the financial system. Blanchard notes that financial institutions finance their portfolios with less and less capital thus increasing the rate of return on capital. Because of globalisation and liberalisation, the world economy was subject to much more intense competition than before, in product markets, in capital markets, in the markets for managers, in fact in most markets. This compelled the fund managers to seek highest returns in whatever way they could. The banks were assisted by the authorities who made several regulatory concessions. As indicated by Blanchard, banks, for instance, were allowed to reduce their capital requirements by moving assets off their balance sheets. In 2006 the value of the off-balance assets of Citi Group were $2.1 trillion compared with a value of assets on the balance sheet of $1.8 trillion. The all-round increase in leverage in the economy made the institutions and individuals much more subject to the danger of insolvency.

To sum up, the above analysis indicates how the international dimension (specifically financial globalisation) produced a vicious circle of circular and cumulative causation, leading to the worldwide spread of the contagion from the failure of the market in the sub-prime mortgages in the US.

3. Comparative Economic performance: The current crisis and the Great Depression

Having noted one of the important ways in which the international dimension has harmed the US as well as the world economy, it may be useful at this stage to bring in the positive side of international dimension associated with the present crisis. It is illustrated here in this section by exploring the analytical issue of why the US and the world economy performed apparently so much better than they did during the great depression of the 1930s. It will be recalled that in September 2008, following the demise of Lehmann Brothers, a Wall Street icon, many leading commentators both from the academic world and the media argued that the current crisis is likely to be as bad as that of the 1930s. In contrast the economy in the recent period has shown remarkable resilience and there has been an apparent v-shaped recovery: a short downturn followed by a quick economic upturn. This is not to deny that the current recovery is lopsided in which the emerging countries are on the whole doing well, while the industrial countries are doing not so well. The economic performance of developing countries has been vigorous and has continued at much the same trend as before whilst that of advanced countries has been rather tepid and these nations could easily slip back into a double dip recession.

Nevertheless, the present downturn compares very favourably with the economic situation in the 1930s. Despite the uncertain nature of the present recovery the record is reasonably clear. The reasons for such diverse outcomes in the two periods are interesting to analyse from the perspective of this paper as these embody a distinct international dimension. The following facts make this point clear.[3] In the current downturn, falls in GDP in US, Europe and the world economy have been of a much lower order than during the depression years. Although the numbers of unemployed, underemployed and discouraged workers have increased during the current crisis, the rise has been far less than during the 1930s depression.[4]

[3] This is documented in IMF 2010, UNCTAD 2010 and UNDESA 2010.
[4] The only OECD country to reach the unemployment level experienced by the US in the 1930s is Spain, with a current unemployment rate of 19 per cent (Economist, Economic and Financial Indicators, May 1 2010).

In 2009, for the first time in 50 years, world GDP shrank, but it was only by two per cent, and had returned to positive growth in 2010 (UNDESA, 2010). Whether or not this growth is sustained and leads to resumption of the pre-crisis growth path is as yet an open question. It will depend on a number of factors including the debt and solvency crises in Greece, Spain, and Ireland.

Although the decline in GDP for individual advanced countries has been greater than that for the world as a whole, none of these have reached the proportions of the 1930s depression. The maximum reduction in GDP growth in 2009 in advanced countries has ranged between two per cent and six per cent. Furthermore, IMF data and projections indicate that most countries will have positive growth by the year 2010.

The comparison with the performance during the great depression could not be more striking. The largest fall in US GDP in a 12-month period during the depression was of the order of 30 per cent. In the same 12-month period employment fell by 25 per cent.

These comparative data raise the prior question whether the relatively good performance of the US and the world economy in the current period is better than that for the 1920s and 1930s due to the fact that the shocks to the economy in the earlier period were much less severe. Many students of the subject argue that the shocks that hit the US economy in the autumn of 2008 were at least as large as those experienced in 1929. A salient shock in both crises was the fall in household wealth: this fell by 17 per cent between December 2007 and December 2008 in the US. This was more than five times the decrease in 1929.

An important negative feature of the current crisis compared with that of the 1930s is the role and nature of banks and the collapse of inter-bank relations and that of trade credit for big and small businesses. Banks have refused to lend to other banks or to non-bank financial institutions. Similarly asset price volatility in the US has been greater in the current crisis than in the past. A great deal of research indicates that such volatility has an adverse effect on the level of investment.

What explains the seeming ability of the world economy in the current period to avert a depression as serious as that in the 1930s? Evidence and analysis suggest three main reasons. The first is the outstanding record of India, China and other emerging countries both before and during the crisis. As Wolf (2008) suggests: “emerging economies had been an engine of growth for the past five years. China accounted for a quarter, Brazil Russia and India for another quarter, and all emerging and developing countries together for about two thirds. World growth is measured here in PPP exchange rates." Despite the crisis these countries, particularly India and China, have been able to continue on their fast long-term growth path. They may therefore be expected to remain as long-term positive factors in the evolution of the world economy: fast growth in these countries helps the US and other countries by maintaining high levels of world demand.

The second major factor explaining the relatively good performance of the world economy during the present downturn has been the unexpected and welcome degree of cooperation between countries, symbolized by their adoption of coordinated global measures through the creation of the G20. This grouping includes all leading advanced countries and a number of emerging nations that together constitute about 85 per cent of world production and about two thirds of the world population. In 2009 the G20 agreed to a huge international stimulus even when many of them already had fiscal deficits. It was also agreed to cut interest rates and to strengthen the IMF and World Bank in order to help developing countries. This high degree of cooperation stands in striking contrast to the lack of cooperation and beggar-thy-neighbour policies that characterized nation states' behaviour in the 1930s.[5] See further Felix (2002), Nurkse (1944) and Madison (1985).

As mentioned above, a striking feature of the response to the current crisis has been an aggregate coordinated fiscal stimulus amounting in 2008-2009 to an enormous 2.6 billion US dollars, equivalent to 3.4 per cent of world GDP[6]. As a proportion of their GDP, developing countries in general have had a greater stimulus than developed countries.

There is evidence that the stimulus has been successful in the sense that, in general, the greater the stimulus received, the greater was countries economic growth (US Council of Economic Advisers, 2010). Nevertheless, alongside this positive effect of the stimulus, the stimulus created fiscal difficulties for governments, leading to calls for the stimulus to be withdrawn or diminished in size. This would**,** however, be a serious mistake as a premature withdrawal of the stimulus when the world economy has not yet achieved reasonable

[5] However, it can be argued that the G20 is far from an ideal vehicle for international cooperation as it excludes more than 150 countries. Nevertheless, some argue that a group bigger than the G20 may not be a practical device for agreeing and implementing decisive measures to cope with the crisis.
[6] The source of these figures is UNDESA (2010 table 4 page 12).

economic growth (let alone reverted to its long-term growth rate) may push economies further into recession or even into full-scale depression if there are negative effects on expectations. It is therefore all the more important that the cooperation achieved so far in the G20 arrangement should continue so that there is a coordinated and well organized withdrawal of the fiscal stimulus at the appropriate time. The US experience between 1937 and 1940 (Romer, 2009) and that of Japan more recently should be a warning to present-day policymakers in this respect.

The third positive factor that has also helped improve the performance of world economy in relation to the present crisis can be described as an issue of governance. It so happened that economic leadership in the US in this period of crisis was held by an intellectually and politically close group of economists. These were conventional US Keynesian economists who defined the essential problem facing the world economy as being that of a shortage of aggregate demand. Unlike the Chicago economists, they also believed that government induced stimuli could correct the demand deficits and thereby could help the real economy. The cohesive economic outlook of this team of economic advisors helped ensure clarity or purpose in the stimulus programme and its implementation.

Not only were these economists well versed in economic theory, but also, equally importantly, some of them, including Ben Bernanke (Chairman of the Federal Reserve) and Christina Romer (Chair, US Council of Economic Advisers), were serious students of the history of the Great Depression and were determined not to repeat the serious policy mistakes made during that period.

To sum up, three factors -- namely continuing fast growth in India, China and other developing countries, unprecedented cooperation between countries symbolized by the G20, and governance by like-minded people of a corrective economic policy programme -- have made positive differences in the recent evolution of the world economy. Hopefully, these factors will continue to operate in this direction, even if certain other developments present obstacles to widespread resumption of reasonable growth rates.

4. Global financial imbalances

Having seen in the previous two sections how in different circumstances the international dimension has both harmed and helped the US and the world economy, we now come to the pivotal role of these and certain other international factors in determining the course which the world economy has taken in recent years and one it may take in the foreseeable future. The main reason for the prominence of international interactions in such analyses is financial globalisation so, unless the later is reversed, as happened in the 1930s, international factors will continue to be at the heart of the economic processes at work in the world and national economies. This is particularly true of the so-called international financial imbalances which, as we have seen, have characterised the world economy in the recent period. These have further interacted with certain national imbalances leading to adverse outcomes in some countries and regions and good outcomes in others. The rest of this section will focus on the nature and significance of international financial imbalances. The following section will take up the questions of international and inter regional differential performances.

Even those who do not see the international financial imbalances as a prime cause of the 2008-2010 economic crisis, would concede that these do lead to fragility in the world economy, which in turn could degenerate into the crisis of the kind we have recently experienced. Keynes (1980) was extremely concerned about the processes of adjustment of balance of payments between nation states:

> "The problem of maintaining equilibrium in the balance of payments between countries has never been solved….the failure to solve this problem has been a major cause of impoverishment and social discontent and even wars and revolutions…to suppose that there exists some smoothly functioning automatic mechanism of adjustment which preserves equilibrium if only we trust to matters of *laissez faire* is a doctrinaire delusion which disregards the lessons of historical experience without having behind it the support of sound theory." (Keynes 1980, pages 21-22)

Keynes' 1941 plan of international clearing union was designed to overcome the problem of global imbalances of that time. Ironically, the US was the offending country then. It thwarted the adjustment of payments balances by a tendency to accumulate gold reserves which imposed deflation on the rest of the world. (Skidelsky 2011). Keynes further cautioned about the asymmetries of adjustment between the creditor and debtor countries. He noted in 1941,

> "….the process of adjustment is compulsory for the debtor and voluntary for the creditor. If the creditor does not choose to make, or allow, his share of the adjustment, he suffers no inconveniences. For a whilst a country's reserve cannot fall below zero, there is no ceiling which sets an upper limit.

> The same is true if international loans are to be the means of adjustment. The debtor must borrow; the creditor is under no…compulsion [to lend]." (Keynes 1980, p.28).

In the present context, Skidelsky argues that the increased desire to save by the Chinese has subjected the US economy to deflation, which in turn was offset by the Chinese purchase of US treasury bills which enabled the Federal Reserve to keep US interest rates low. This did not however lead to higher investment levels in the US, but rather a consumption-led boom which ultimately led to crises as outlined earlier.

Mayer (2010) notes that in examining international financial imbalances, most economists use the following accounting identities:

$$CA = X - M + NFI = S^N - I = \Delta NFA,$$

where *CA* is the current-account balance, *X* and *M* are exports and imports of goods and services, *NFI* is the balance on income (net foreign incomes from abroad), S^N is national saving, *I* is national investment, and ΔNFA are changes in net foreign assets.

Different writers stress different parts of these identities, with some concentrating on the balance of payments and on savings and investment, whilst others put emphasis on the trade balance and capital flows. We, however, follow here an analysis of the global economy and global imbalances set out in two recent papers Cripps, Izurieta and Singh (2011) and Izurieta and Singh (2010). These papers have examined the global imbalances in more rigorous terms with the help of the UN global econometric model.

The three authors use a stock-flow methodology, different to that of conventional analysis, by allowing for holding gains and losses due to changes in the price level and in share prices to be taken into account. The key equation in the analysis is that of the net acquisition of financial assets which in their model is the outcome of 3 factors:

$$NA_{j_t} = \left(Y_{j_t} - Y^e_{j_t}\right) + \rho_j . \left(W^*_{j_t} - K^e_{j_t} - A_{j_{t-1}}\right)$$

where

i) unanticipated changes in income $Y - Y^e$

ii) the gap between the wealth target W^* and the expected value of real capital K^e
iii) whether the wealth gap (ii) exceeds or falls short of the inherited financial position A_{-1}.

Cripps, Izurieta and Singh (2011) use this logical framework outlined above to provide a comprehensive analysis of the world economy under different scenarios. Most of that discussion is beyond the scope of this paper. However, what is most relevant from the perspective of the present paper are the results that the three authors obtained from the model simulations on the basis of some specific assumptions.

5. Empirical results under alternative assumptions

Cripps, Izurieta and Singh (2011) first consider a baseline scenario which is predicated on the continuation of the current observed relationships between the relevant variables. This scenario essentially shows a slowdown in the growth of demand in the main developed countries but no decline in global financial imbalances. In addition the analysis suggests that the US will become over time a very large debtor with net liabilities rising to 100% of GDP.

The second scenario has similar assumptions to that of the first, except that China and India are constrained to have a growth rate of 8 per cent. each. This is accompanied by a change in the basic development strategy of the two countries from an export-led growth strategy (which was particularly true in the case of China) towards internal income redistribution and domestic demand orientated strategies. However, the results indicate that this will not be sufficient to correct global imbalances or to induce faster growth in other developing regions.

A third scenario which is named as the global development scenario is defined by the three authors in terms of a combination of:

- targets for government expenditure, public and private investment that supposedly facilitate a more equitable distribution of employment and income,
- stable real exchange rates and greater efforts towards formation of regional trade areas in developing regions,
- selective incentives and support for exports of commodities, manufactures and services by countries that lack a sufficient export base, and

- cooperation in management of energy resources and markets to maintain incentives for producers and users of energy to invest in green technologies and reduce long-run dependence on fossil fuels (p.27)

Cripps, Izurieta and Singh's (2011) simulations on the UN global model indicate that the cooperative solution, with far reaching detailed government interventions does yield helpful results. As figure 1 shows all groups of countries benefit reducing global inequality without a reduction in growth rates in high income countries. There is thus a high potential for raising economic performance of poor countries to converge towards higher incomes of richer countries but this requires a degree of policy coordination which has not been achieved or even attempted in the past.

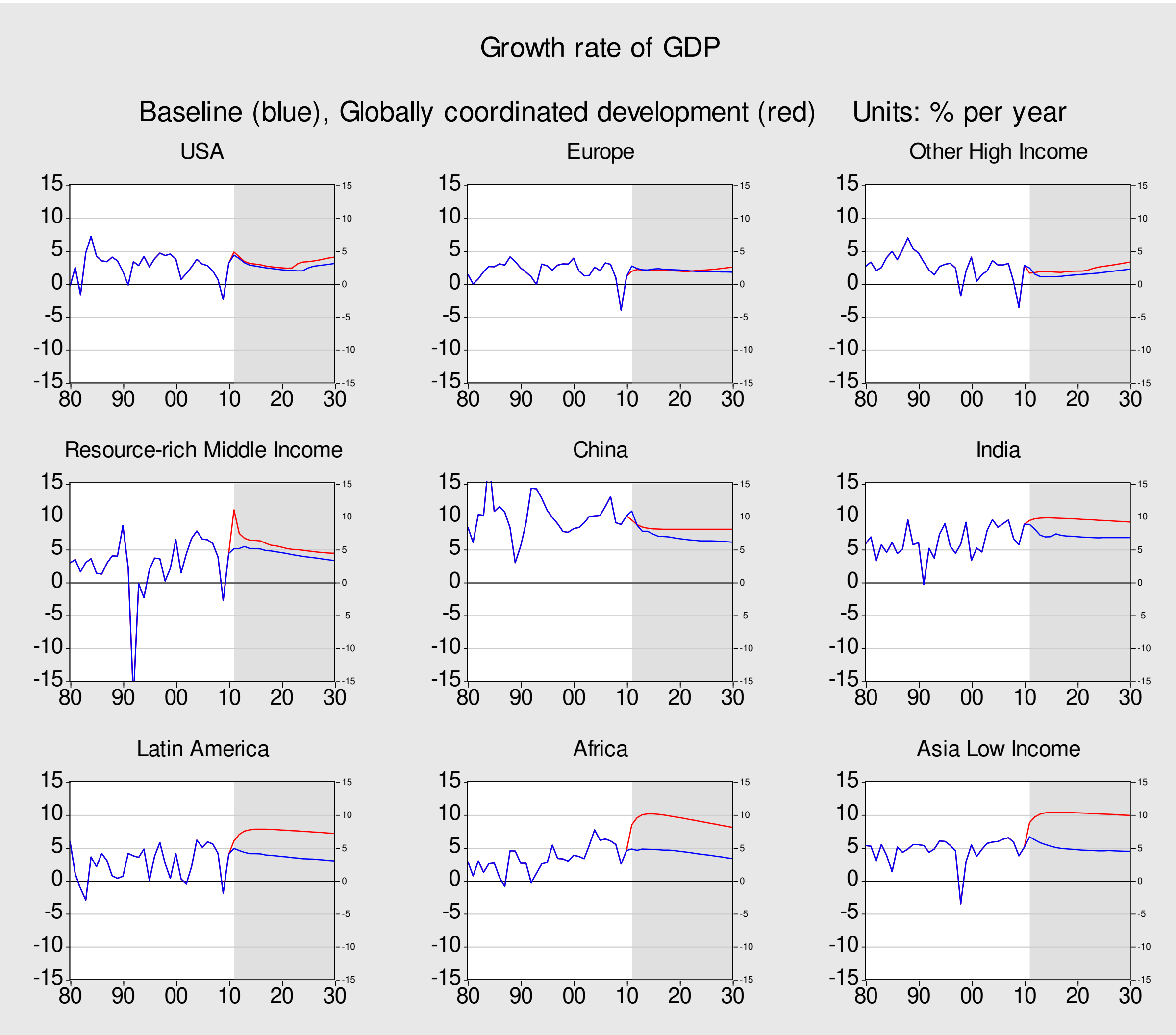
6. Conclusion

To sum up, in terms of economic policy, the international dimension in the form of international cooperation acquires new significance in relation not only to resolving the problem of financial imbalances but also in thinking about the future development of the world economy. This would require building new institutions to enhance international policy coordination and international cooperation in general. As Keynes has taught us the world economy represents a highly complex phenomenon of which we understand very little. It is important to carefully study the reasons for the current crisis, where the fault lines lay and significantly whether there was anything positive to be said for the pre-crisis organisation of the economy. The data indicate that, significantly, the real world economy did extremely well in the pre-crisis years 2000-2007. It achieved a faster rate of growth than ever before. Developing countries expanded at twice the rate of the developed countries. For the first time the number of people in absolute poverty declined to less than a billion.

The truth of the matter is that globalisation helped some countries and not others. Among developing countries India and China, the world's most populous and hitherto very poor countries were the stellar performers. The US was the star performer in terms of GDP and productivity growth among the rich countries. Just as millions of people in the third world escaped absolute poverty, so were the sub-prime mortgages helpful in bringing housing to millions of poor Americans. Although the whole experiment ended in failure, leading to diverse international financial imbalances, the positive side should not be totally forgotten. What was achieved in the pre-crisis period was fast growth but at the expense of stability. It will be ironic if stability were now to eclipse growth altogether. The billion people in absolute poverty and millions in rich countries facing high unemployment need a faster rate of growth of the world economy.

Although the growth path for the world economy for the period 2000-07 was ultimately unsustainable, it is certainly arguable that it took the global economy a long way forward. This exercise certainly established that the world economic potential is much bigger than previously considered. To achieve that potential international cooperation at a detailed level, in the sense outlined above, will be essential.

Figure 1: Convergence of growth rates without sacrifices



Source: Cripps, Izurieta and Singh 2010

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