FINANCIAL GLOBALISATION AND HUMAN DEVELOPMENT

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by

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Abstract

This paper is concerned essentially with the question, how does financial globalisation affect welfare? Orthodox theory suggests that because of greater risk-sharing between countries that financial liberalisation entails, there should be no welfare losses. Greater risk sharing should lead to greater smoothing of consumption and/or growth trajectories for developing countries. Yet there is widespread evidence of crises following liberalisation. Apart from these international macro-economic issues, it is argued here that financial globalization changes the very nature of capitalism from managerial to finance capitalism. This profoundly affects at the micro-economic level corporate governance, corporate finance and income distribution. Both macro- and micro-economic factors outlined here influence human development.

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1 INTRODUCTION

This paper is concerned with the complex and controversial subject of financial globalisation. This is a large topic which raises important theoretical, empirical and policy issues outlined in this introduction. A few of these will be examined in detail in the main body of the paper.

One of my remits for this paper is to examine also the relationship between financial globalisation and human development. This is a subject on which there is very little direct empirical information available. One is therefore obliged to use more a priori reasoning as well as surrogates for the relevant empirical variables in arriving at reasonable conclusions. This part of the paper therefore does not get as much space as the discussion on financial globalisation in emerging and developing countries. Indeed if there had been no injunction to study the impact of financial globalisation on human development, an appropriate title for the paper would have been "financial globalisation and emerging countries".

We shall start the discussion of financial globalisation with the simplest question: What constitutes this phenomenon? What is its nature and extent in developing countries? A slightly less simple question is 'How does financial liberalisation differ from trade liberalisation'. Does trade liberalisation for instance lead to greater global welfare than financial liberalisation, other things being equal?

More complex issues pertain to the political economy of financial liberalisation¹. Has the latter been encouraged by the international financial institutions to promote global efficiency and welfare? or is it simply a device whereby the US Treasury and Wall Street seek to control economic destinies of developing countries, as some scholars allege.

Financial liberalisation can affect human development through a number of fairly obvious channels:

- a. Its influence on economic growth
- b. On economic fluctuations
- c. Distribution of income.

What light does economic analysis and empirical evidence such as is it, shed on these issues?

There are also other important issues which deserve attention in a fuller analysis of financial globalisation. One significant question in this context is whether

financial globalisation makes it easier or more difficult to achieve balance of payments equilibria between countries while ensuring full employment in all countries? A corollary of the above question is whether financial globalisation is in general more efficient at resolving financial imbalances between countries? The motivation for the above question comes from Keynes's famous observation:

"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)

It will be appreciated that many of the above issues can be subsumed under an overarching question: What is the effect on economic welfare of the free movement of capital between countries? On this issue, textbooks economics suggests a huge disconnect between orthodox economic theory and the empirical evidence. Orthodox theory suggests that because of greater risk sharing between countries, which financial liberalisation leads to, there should be no ill effects of liberalisation on the welfare of participating countries. Greater risk sharing should lead to greater smoothing of consumption and/or growth trajectories for developing countries. It will be easier to absorb ceteris paribus a negative shock to the world's economy which is organised for instance in larger regional groups of countries than in smaller groups. Yet the empirical evidence over the last three decades suggests frequent crises and sharp falls in welfare as a result of specific measures of financial liberalisation adopted by individual countries.

Apart from these international macro-economic issues, it will be argued here that financial globalization has pervasive effects on the economy and the society at the micro-economic as well as the mesa-economic levels. Indeed it changes the nature of capitalism from managerial to finance capitalism. The highly active role of the stock markets, the greater power of shareholders, the influence of institutional investors and ultimately the institutional device of hostile takeovers characterise capitalism under financial globalisation. At the microeconomic level these dimensions of financial globalisation have a profound effect on corporate governance and corporate finance.

This paper will provide analysis and evidence on many of the above questions and, as noted earlier, also discuss policy implications for human development. In the international macro-economic discussion of the various aspects of financial globalization special attention will be given to the 2008-2010 global economic crisis. A significant part of the literature tends to blame the recent economic and financial crisis on financial globalization. The present paper contributes by departing from this view and suggesting that financial liberalisation has positive as well as negative effects on the world economy, both of which should be taken into account in arriving at a balanced picture of the phenomenon. The policy challenge lies in creating institutional frameworks which can harness the positive features of this inherently powerful phenomenon. It will be argued here that in principle, under the right conditions financial globalisation can induce faster economic growth, reducing world poverty and promoting sustainable human development. The latter positive effects of financial globalization tend to be ignored in much of the literature which thereby provides an unbalanced view of the effects of financial globalization. The paper also makes a contribution by its explicit analysis of the micro-economic and mesa- economic aspects of financial globalisation which are often neglected in many analyses of the subject.

The paper is organised as follows. Section two discusses the issue of subprime mortgages which are generally thought to have been the triggers for the crisis. Section three attempts to answer the simple questions about the nature and extent of financial globalization in rich and poor countries. Section four examines the orthodox case for financial globalisation in the form of complete capital account liberalisation in all countries. This case has been championed by the IMF and by Larry Summers the former US treasury secretary as well as by other high US officials. This section also discusses the analytical case against the IMF- Summers view that unfettered capital movements are essential for maximising world welfare. Section five examines the relationship between financial globalization and the performance of the real world economy between 2000 and 2007 and suggests that there is an important positive relationship between the two variables. Section six reviews international evidence on the effects of financial globalization at the micro-economic and mesa-economic Special attention is given to countries which have coordinated levels. capitalism, such as Japan, Germany and France and to the two countries of free market capitalism, the UK and the US. The implications of the analysis for emerging countries are spelt out. Section seven considers the new IMF doctrine on capital flows and capital controls. Section eight sums up the effects of financial globalization on human development and includes the issue of income distribution and employment concludes.

2 FINANCIAL GLOBALISATION AND THE CURRENT CRISIS

Contrary to the statement of the benefits of financial liberalisation due to risk sharing and consumption smoothing, it is highly significant the recent global crisis provides almost experimental evidence on how aspects of such globalisation can adversely affect economic welfare. There is a general consensus among students of the subject that the trigger for the global economic crisis of 2008-2010 (the great recession) was provided by the difficulties of the US housing sector – the so-called subprime mortgages market². Blanchard (2008, 2009) has done important research on this subject. He notes that by October 2007 the estimated loss on US subprime loans and securities was of the order of \$250 billion. However, the decline in stock markets values, measured as the sum of all markets of the fall in stock market capitalisation from July 2007 to November 2008 was estimated to equal about \$26,400 billion. This is a hundred times the initial loss caused by subprime mortgages. Blanchard provides another statistic which is equally interesting. He estimates, under plausible assumptions, the expected cumulative loss in world output associated with the global crisis based on current forecasts. This loss is constructed as a sum over all countries, of the expected cumulative deviation of output from trend in each country, based on IMF estimates and forecasts of output as made in November 2008, for the years 2008 to 2015. Based on these estimates the cumulative loss is forecast to run at \$4,700 billion. This is about twenty times the initial subprime loss.

The question is, how could such a relatively limited and localised event have effects of such magnitude on the world economy? This was not after all 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. 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. As Solow (2009) rightly observes:

"Nothing concrete had changed. Buildings still stood; factories were still capable of functioning; people had not lost their ability to work or their skills or their knowledge of technology. But a population that thought in 2007 that they had 64.4 trillion dollars with which to plan their lives discovered in 2008 that they have lost 20 per cent of that."

The spread of the decline in stock market prices from the US to the rest of the world, it will be argued, was entirely due to "financial globalisation" in the previous two decades when the world's financial markets began a process of integration as a result of extensive de-regulation ³ of the operations of the

financial institutions. The reasons for this institutional change will be explained in the next section.

This episode reveals that contrary to neoclassical analysis of risk sharing which may be expected from greater financial integration, this apparently did not happen or its influence was overwhelmed by other factors. Indeed, the opposite appears to have occurred with financial globalisation leading to a fall in asset prices all over the world. Such a contagion effect may in certain circumstances be far more powerful than the risk sharing aspect. In the following sections we will examine the case of financial globalisation taken as a whole in all its various aspects and consider its impact on the global real economy. We will find that contrary to the subprime mortgages case the overall impact of the financial liberalisation on globalisation was probably positive.

3 THE NATURE AND EXTENT OF FINANCIAL GLOBALISATION

Financial globalisation has come to dominate the world economy over the last two to three decades. In its present form it started with the demise of the Bretton Woods system in the early 70's and the floating of the US dollar. It took a big step forward with the restitution of the convertibility of pound sterling by Mrs Thatcher in the UK in 1979. Similar liberalisation measures were emulated by other advanced countries. It is important to remember that liberalisation and globalisation tend to be additive cumulative processes. Financial liberalisation occurs at different speeds in different countries during various periods.

Broadly speaking industrial countries have been operating under a regime of financial liberalisation since the mid- 1980s and many developing countries since the mid-1990s (see further Arestis and Singh 2010; Singh *forthcoming*). An important part of the financial liberalisation process has been the fast development of stock markets around the world particularly in emerging countries. The IMF and World Bank have for a long time been advocating another aspect of financial liberalisation, namely capital account liberalisation to all countries including developing ones. In the mid-1990s the IMF proposed that its articles of agreement should be changed to make capital account liberalisation one of the main duties of the organisation. However this proposal was later abandoned in view of the Asian financial crisis.

Apart from the IMF and the World Bank the movement towards liberalisation of internal and external markets has been strongly supported by financial interests, banks, insurance companies in the US and also in other advanced countries. One of the major triumphs of globalisation was the repeal in 1999 of the US

Glass-Steagall Act which had limited the size and scope of the financial institutions.

It was, however, 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.⁴

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) which greatly contributed to the crisis. Turning to the extent of financial globalisation this paper follows Wolf 2007 in reporting the following main features:

- 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.
- 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 per cent. The capital markets increasingly perform the intermediation functions of the banking system. The latter, in turn, has shifted from commercial banking, with its long-term lending to clients and durable relations with customers, towards investment banking.
- 3. The capital markets increasingly perform the intermediation functions of the banking system.
- 4. The increase in financial depth has been particularly marked in the Eurozone: the ratio of financial assets to gross domestic product there jumped from 180 per cent in 1995 to 303 per cent in 2005. Over the same period it grew from 278 per cent to 359 per cent in the UK and from 303 per cent to 405 per cent in the US.
- 5. There has been widespread financial innovation which has brought to the market, derivatives, options futures, and swaps, among other devices.

- 6. 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.
- 7. The extent of globalization of finance is further indicated by the fact that foreign claims by banks from 5 major advanced countries rose from \$6.3 trillion in 2000 to \$22 trillion in June 2008. There are many players in the markets notably the hedge funds and private equity funds.
- 8. Another indicator of the extent of the financial globalization is the fact that the international financial assets and liabilities owned (and owed) by residents of high-income countries jumped from 50 per cent of aggregate GDP in 1970 to 100 per cent in the mid-1980s and about 330 per cent in 2004.
- 9. In more historical terms, Wolf suggests that we are witnessing much of the transformation of mid-20th century managerial capitalism into global financial capitalism.

How various aspects of financial globalisation contributed to the current international global economic crisis is now well understood and is well summarised by Blanchard in a series of contributions published by the IMF. See for example Blanchard 2008 and 2009. 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, as noted earlier, because of financial interconnectedness between countries these losses were further increased by declining share prices all over the world.

4 THE CASE FOR AND AGAINST FINANCIAL LIBERALISATION⁵

The above is a cautionary tale of how under financial liberalisation, difficulties in one small market (eg. subprime market) through its interconnection with other markets may reduce global welfare. Orthodox economics is nevertheless convinced about the economic efficiency of the global integration of financial markets.

The case for international economic integration through capital account liberalisation in individual countries was authoritatively put forward by Stanley Fischer, the former deputy managing director of the IMF, in 1997. Fischer suggested that, at a theoretical level, capital account liberalisation would lead to global economic efficiency, allocation of world savings to those who were able to use them most productively, and would thereby increase social welfare. Citizens of countries with free capital movements would be able to diversify their portfolios and thereby increase their risk-adjusted rates of return. It would enable corporations in these countries to raise capital in international markets at a lower cost. It is suggested, moreover, that such liberalisation leads to further development of a country's financial system which in turn is thought to enhance productivity in the real economy by facilitating transactions and by better allocation of resources. Some argue further that free capital movements will help increase world welfare through another channel, namely transferring resources from ageing populations and lower rates of return in advanced countries to younger populations and higher rates of return in newly industrialising economies. Such resource transfers will be Pareto optimal as both rich and poor countries would gain.

Summers (2000) succinctly sums up the core point of the orthodox perspective as follows: "... the abstract argument for a competitive financial system parallels the argument for competitive markets in general ... Just as trade in goods across jurisdictions has benefits, so too will intertemporal trade and trade that shares risks across jurisdictions have benefits."

The theoretical case against the Fischer –Summers' view that unfettered capital movements are essential for maximising world economic welfare and that financial liberalisation is analogous to trade liberalisation has been made by a number of economists from different schools of thought. First within the neoclassical tradition itself, Stiglitz (2000) argues that the concept of free movements of capital is fundamentally different from that of free trade in goods. Capital flows are subject to asymmetric information, agency problems, adverse selection and moral hazard. Although such problems may occur also in trade in goods and services, they are intrinsic to financial flows and are far more important.

Significantly, there are also diverging views about the price formation process in asset markets such as the stock market and the currency markets. Orthodox economists subscribe to the theory of efficient markets. In this view, prices are a collective outcome of actions of a multitude of individual economic agents whose behaviour is assumed to be based on utility maximisation and rational expectations. This price formation process is thought to lead to efficient prices in these markets. A powerful counter-view is that put forward by John Maynard Keynes (1936) in chapter 12 of the General Theory and which is encapsulated in his well-known "beauty contest" analogy which highlights the role of speculation in determining prices.

Thus, in Keynesian analysis, which has been formalised in recent theoretical contributions, price formation in asset markets may often be dominated by

speculators or noise traders in modern parlance. Moreover, theoretical work on Darwinian selection mechanisms indicates that the classic Friedman (1953) assertion that rational investors will always wipe out speculators is far from being valid in all situations.⁶

Further the critical school emphasises that financial markets are particularly prone to co-ordination failures and often generate multiple equilibria, some good, some bad. In the absence of appropriate coordination by the government or international authorities, an economy may languish in a low level equilibrium, producing sub-optimal output and employment levels.

In contrast, the case for free trade in goods is far more robust. Chakravarty and Singh (1988) suggest such a case for free trade is best put in terms of the two fundamental theorems of welfare economics. According to the first welfare theorem, a competitive equilibrium in the absence of externalities and non-satiation constitutes a Pareto optimum. The second theorem, which is more relevant for our purposes, states that any Pareto optimum can be realised as a competitive equilibrium in the presence of all-around convexity, provided suitable lump-sum transfers can be arranged among the participants. These are demanding assumptions and are not easily met in the real world. Nevertheless, neo-classical economists suggest that such considerations do not destroy the case for trade openness but only change the nature of the argument. Thus Krugman (1987) concludes his classic defence of free trade in terms of modern theory as follows: "this is not the argument that free trade is optimal because markets are efficient. Instead it is a sadder but wiser argument for free trade as a rule of thumb in a world whose polities are as imperfect as its markets."

As suggested by Chakravarty and Singh (1988), there is, however, a more robust economic case for a managed trade openness (rather than free trade) which would explicitly take into account increasing returns to scale and imperfect competition. It would also stress the role of learning through economic interactions with the rest of the world. However, it would need to assume that the level of aggregate demand in the world and national economies was adequate to provide continuous full utilisation of resources and full employment. Within this kind of setting, managed trade openness can be a source of great advantage for an economy for any one of the following reasons:

- (a) it may enable a country to concentrate its relatively specialised resources in areas of production where the world demand is highly income and price elastic;
- (b) it may lead to diffusion of knowledge of a nature which can lead to considerable upgradation of the <u>quality</u> of local factors of production;
- (c) it may lead to sufficient competitive pressure to eliminate X-inefficiency;

- (d) trade may lead to changes in the distribution of income which can lead to a greater share of accumulation in national income;
- (e) trade may facilitate what Schumpeter stressed so much: an accelerated process of creative destruction.

In general, trade openness works positively if the phenomenon of "learning" from contacts with the rest of the world are institutionalised through suitable adaptations on the supply side involving appropriate government interventions which make the domestic economy more responsive to change. This is a main lesson that emerges from the outstanding industrial success of East Asian economies during the second half of the 20th Century.⁷

To sum up, there is thus substance in Jagdish Bhagwati's allegation that financial globalisation is favoured by Wall Street and the U.S. Treasury in order not to promote global welfare but for other less worthy motives i.e. keep financial control over developing countries. Bhagwati would prefer developing countries to adopt trade globalisation and not worry about financial globalisation when they have reached a high level of economic and financial development. This view is however, to some extent, negated by the fact that most developing countries have not abandoned financial globalisation but instead have tried to adapt to it.

There is, however, an important point which Keynes has made with respect to the relationship between trade and financial globalisation which deserves attention. Skidelsky (2011) states that according to Keynes unless the international monetary system is fixed, free trade will languish and globalisation will go into reverse. Skidelsky observes there are signs that this is now happening – in the congressional demand in the US to impose trade sanctions on currency manipulators and in proposals for the regional lender of last resort.

5. FINANCIAL GLOBALISATION AND THE REAL WORLD ECONOMY

In this section, we consider the effects of financial globalisation in all its aspects on the real world economy. We consider the interval 2000-2007, the period before the 2008-2010 global economic and financial crisis (which is normally regarded as starting from the bankruptcy of the Lehmann Brothers in September 2008). We ask the question, did globalisation of finance considered in comprehensive terms have a positive or negative effect on the international economy. The results are surprising and extremely interesting. The world economy had the fastest growth rate ever during 2005-2007. The world economy expanded at an unprecedented rate of more than 5% per annum in purchasing power parity terms. It is also significant that developing countries grew faster than developed countries. India and China had stellar performances, recording growth rate of near 10%. The number of people living in absolute poverty declined by a wide margin.

The question arises whether this outstanding performance of the world economy can be ascribed to globalisation or attributed to other factors. Some economists argue that globalisation had little to do with this outstanding performance. However, there are opposite arguments. China's phenomenal success was due to export-led growth, where clearly China's membership of the WTO allowed the country to have a very high rate of growth of manufactured-exports which led to its outstanding success. There are, however, other factors which were also important. Financial globalisation allowed countries like the US and UK, which were running current account deficits to grow at a fast rate. This in turn hastened the speed of growth of the world economy. It is nevertheless also true to say that countries like China and India were able to grow fast because they did not abolish all their controls and in particular, regulated the foreign capital flows so as to maximise the national gain. Nevertheless, between 2000 and 2007 the world operated as close to a free-trade and free-capital movements regime as was feasible - it was not that different from the regime before the First World War.

It is clear that without the fast growth of the world economy, developing countries would not have been able to grow at the rate they did. The emphasis on stability in the post-crisis reform of the international system is therefore somewhat unfortunate for developing countries. It is arguable that stability is more in the interest of the developed countries, while fast growth is of greater benefit to developing countries in order to reduce poverty and increase the living standards of people⁸.

Singh and Zammit (2010) noted that the financial system and the conduct of monetary policy prior to the eruption of the financial crisis and onset of economic recession in 2008 have received thoroughly deserved criticism for allowing the development of the subprime mortgage bubble, the stock-market bubble and asset prices bubbles and not puncturing these in time or minimizing the damage. There were however important benefits from this regime for the real economy as seen above. It is important to have a balanced picture of merits and demerits of the pre-crisis financial system.

6 MANAGERIAL vs FINANCE CAPITALISM

Financial globalisation does not just affect financial variables at the national macroeconomic and at international levels so far discussed in this essay, but it also has profound effects at the micro-economic as well as mesa-economic levels in individual countries. It has already led to major changes in economic regimes particularly in advanced countries. These profound developments have been best summed up by Wolf (2007) when he suggests that the economic environment in the free market industrial countries such as the US and the UK has changed from managerial to finance capitalism during the second half of the twentieth century.

In economic terms, this evolution of the economic regime has been associated with the emergence of a market for corporate control. The latter in turn has imposed on corporate managers the goal of share-holder wealth maximisation, subject to a take-overs constraint on the stock-market. Financial globalisation has thus been associated with the increased power of share-holders, the greater influence of institutional investors on the corporations, and widespread adoption, indeed an internalization by corporate managers of the goal of shareholder wealth maximisation. Over time, the managers' own interests have come to coincide with that of share owners, not least because of the stock options which have come to dominate the managerial remuneration packages. Finance capitalism in this form is spreading throughout the world at greater or slower speeds.

The question arises whether the increasing role of stock markets, the influence of the market for corporate control and financial innovations of the last two decades are in the best interests of developing countries in their quest for fast industrialisation. Evidence on these issues is not reassuring from a developing country perspective. Both analyses and evidence suggest that the enhanced role of stock market in an economy leads to short-termism and a preference for quick profits at the expense of longer term investment, see Singh (1997) and Deakin and Singh (2009). An important reason for this negative effects of financial globalisation lies in the short-comings of both the pricing and takeover mechanisms on the stock market. These two mechanisms are the key channels through which the stock market influences economic outcomes. Each of these will be briefly commenting upon below.

Taking the takeover mechanism first, a vast body of research indicates that the market for corporate control, although it has a potential for the firm level as well as global economic efficiency, it does not in fact achieve those objectives. There are in principle two ways in which the takeover mechanism can lead to greater efficiency. The first is through the threat of takeover which can

discipline less efficient firms. The second is that social value may be added even if all firms are operating at their highest level of efficiency. Amalgamation of some of these firms may lead to greater value through synergy than otherwise would be the case.

Unfortunately, however, neither of these mechanisms works very well in practice. Empirical results from a half century of research indicate that although selection in the market for corporate control takes place in part on the basis of performance (i.e. shareholder value) it also takes place to a large extent on the basis of size⁹. Thus, a small profitable firm has a greater chance of being acquired than a large relatively unprofitable one¹⁰.

Since third world firms are likely to be small compared with those from advanced countries, in a free market for corporate control, the smaller firms are likely to be at a disadvantage. In practical terms this means that if there was complete capital account liberalisation the small often more efficient and technologically progressive domestic firms will be subject to takeover by the larger and relatively less efficient advanced country firms. This is one of the reasons why developing countries should have the power to impose capital controls, importantly including against FDI. In orthodox analysis FDI is regarded as being sacrosanct but research shows that under globalisation it has also been subject to enormous fluctuations and is likely to generate financial fragility almost as much as other types of capital flows (see Singh 2005 and IMF 2011 a and b). These countries should therefore vigorously oppose the socalled multilateral agreement on investment.

This agreement was proposed by advanced countries at the WTO. It would give multinationals complete freedom to invest where they like, when they like and in what they like. Such globalisation is clearly not in the interests of developing countries and was therefore duly opposed. However although the proposal was effectively defeated, it is still on the table (see further Singh (2005).

Having examined the many deficiencies of the market for corporate control, we will now turn briefly to the pricing mechanism on the stock market. This suffers from its own deficits including frequent and prolonged mispricing of shares. The traditional efficient markets hypothesis (EMH) as a description of stock market share prices has been subject to important criticisms. During the last two decades the EMH has been thought to be incompatible with a number of events in the real world stock markets, a) the US stock market crash in 1987, b) the melt-down in the Asian stock markets in the late 1990s, c) the technology bubble in the US in 2000, d) the virtual melt-down of the US stock market in the wake of the difficulties of subprime mortgages market during the current global financial crisis. As Alan Greenspan observed with respect to the 1987 US stock market crash:

"The US experienced such a sudden change with the decline in stock prices of more than 20 per cent on October 19, 1987. There is no credible scenario that can readily explain so abrupt a change in the fundamentals of long-term valuations on that one day".

Tobin (1984) made an analytically useful distinction between two kinds of efficiency of stock markets, (a) the information arbitrage efficiency that ensures that all information concerning a firm's shares immediately percolates to all stock market participants, ensuring that no participant can make a profit on such public information; (b) fundamental valuation efficiency, that is, share prices accurately reflect a firm's fundamentals, namely the long-term expected profitability. The growing consensus view is that, in these terms, stock markets may at best be regarded as being efficient in the sense of (a) but far from being efficient in the economically more important sense (b). Thus EMH, as identified in a, is compatible with share prices not reflecting fundamental values.

In addition to the deficiencies of the takeover mechanism and the basic pricing process on the stock market, the rise of finance capitalism can in a general sense result in the unhealthy ascendancy of finance over production. Similarly finance capitalism leads up financial engineering taking precedence over the normal long run entrepreneur tasks of introducing technical change, reducing costs and improving products. The operation of stock markets particularly the market for corporate control also has adverse consequences for income and wealth distribution. Huge fortunes are made and lost on the stock market and on the market for corporate control. Managerial stock options are an important source of economic inequality.

7 IMF's NEW DOCTRINE ON CAPITAL CONTROLS

After a long protracted struggle with independent economists and third world policy makers, the IMF has finally accepted that free-flow of capital in many circumstances can damage developing countries (IMF 2011 a and b)¹¹. Moreover IMF accepted that there are cases where the adoption of capital controls by developing countries has resulted in improved economic performance. While conceding the case for the capital controls, the institution has sought to limit the kind of controls which it thinks are appropriate for developing countries in different states of the world. The IMF also suggests extreme caution in relation to the period for which capital controls are imposed – they should be removed as quickly as possible.

The IMF's new doctrine on capital flows and capital controls should be welcomed but it must be recognised that there is a long way to go before a fully satisfactory policy regime emerges in this area. It will be recalled that in the pre-Second World War period, the League of Nations economists (*eg.* Nurkse, 1944) had argued on the basis of experience of smaller European countries that the free capital flows are not in the best interests of these countries. This was the reason why in the IMF articles of agreement negotiated at Bretton Woods, there was a strong injunction against countries promoting free capital flows. In the original agreements it was the free capital flows rather than the capital controls which were frowned upon. However the IMF throughout much of the post – Second World War period did quite the opposite encouraging countries to liberalise their financial markets. Ultimately in 1997 at the Hong Kong meeting of the IMF, the institution's staff proposed that the Fund should have one of its principle duties to establish free capital movements in all countries in an orderly fashion. As the Asian crisis intervened this proposal was quietly shelved.

Developing countries are not satisfied with the present extent of change in the Fund's position embodied in the institution's new doctrine. Developing countries would like the Fund to go further and help them with designing capital controls on a multilateral basis which will stem harmful and volatile capital flows. Although it is early days, at the very least this evolution of events suggests a large dis-satisfaction among developing countries about financial globalisation. Any greater dis-satisfaction runs the risk of the rejection of the entire doctrine of free capital flows. This would effectively stop the financial globalisation process as it happened in 1930s. However, as argued in this paper, that will be a mistake from the perspective of developing countries themselves. Regulated capital flows are much better than no capital flow at all.

8 FINANCIAL GLOBALISATION AND HUMAN DEVELOPMENT

As noted in the introduction, one of the remits for this paper has been the instruction to examine the relationship between financial globalisation and human development. This is an exceptionally difficult task because as far as I am aware there are no direct studies of human development and financial globalisation. Therefore, one has to use the best available surrogates for these variables in order to acquire some understanding of the issues involved.

There are a number of studies which examine the relationship between financial liberalisation and poverty. If poverty reduction is taken as an index of the improvement in human development – which is by no means far-fetched – then a number of studies can be cited. The main players in these analyses have included the IMF and Joseph Stiglitz. The IMF and its staff have tended to produce results indicating that financial liberalisation or more precisely, capital account liberalisation benefits the poor and reduces poverty. To illustrate, an

IMF Board document by Prasad et al (2003) suggested that capital account liberalisation increases economic growth. This is achieved through high investment resulting from higher returns to capital flows, through increased efficiency via transfer of technology and managerial know-how, and by the introduction of organisational changes in finance and banking. All these may be expected to follow in the wake of capital account liberalisation, which in turn The literature also mentions the disciplinary effects of reduce poverty. obliged to pursue liberalisation on governments which are better macroeconomic policies. This line of analyses has been severely criticised by Stiglitz (2004) who concluded by suggesting:

"The IMF should change from pressuring countries into liberalising their capital markets into working with countries on how to design interventions in the capital markets which stabilize capital flows, or even better, ensure that they move counter-cyclically. It should be working harder to address the underlying failures in capital markets, devising ways by which more of the risk of interest-rate and exchange-rate fluctuations can be shifted to developed countries and international financial institutions. And, in the future, it should rely more on evidence and less on ideology in developing its policy agenda" (Stiglitz 2004, pages 65-66)

Overall it is fair to say that the results of the empirical studies on capital account liberalisation and economic growth are mixed and inconclusive. The research findings are however, more clear cut on the question of the effects of financial liberalisation on fluctuations in economic activity. These fluctuations are harmful to poor people and particularly, to women. As Singh and Zammit (2000) pointed out, economic recessions increase the unpaid work of women, while their remuneration from and the quantity of paid work declined. On the question of income inequality, Cornia (2004) suggests that capital account liberalisation has the strongest impact on widening inequality within individual countries. Cornia also suggests that further domestic financial liberalisation has a negative effect on the poor.

In the same vein, Mah-Hui and Chin (2010) report that in the US between 1993 and 2006, the top one per cent income earners captured half of the overall economic growth. In terms of wealth distribution, the top 1 per cent of households owned 33 per cent of the total wealth in 2001, twice the amount owed by the bottom 80 per cent. They reckon that economic inequality gives rise to two kinds of bubbles – a debt bubble assumed by households whose incomes have stagnated and whose consumption can only be met through taking on more debt; and an asset price bubble that is the consequence of the rich chasing the higher yields. It is not surprising that despite the greater economic efficiency which capital account liberalisation may entail, income distribution

may worsen because the efficiency benefits of well-functioning capital markets go to the rich rather than the poor in many developing countries.

In order for human development to improve, it is necessary for the government to intervene through creation of public services to improve citizens' health, education and other indicators of human development. This of course requires increased government revenues which economic growth can provide but that is not a sufficient condition for improving human development. It may not even be a necessary one. In view of the fact that financial globalisation does not have an unambiguous effect on economic growth, one need not pursue this avenue any further.

Another study which requires discussion here is that by Arestis and Caner (2010). This is one of the econometrically more sophisticated studies on the subject. It pays careful attention to causation, to the data (they only use data from the developing countries) and notably, the authors directly relate capital account liberalisation to poverty without going through the intermediate steps of exploring the relationship between capital account liberalisation and growth and subsequently that of growth and poverty. In econometric terms, their direct approach to this question in the context of the literature on the subject is invaluable. Arestis and Caner's results may be summarised as follows. Firstly, they find no statistically significant relationship between the degree of capital account liberalisation during the period and the poverty rate. Secondly, they also find developing countries with higher institutional quality have lower poverty rates, but the effect has low statistical significance. Thirdly, they find a higher degree of capital account liberalisation results in a lower income share for the poor.

To sum up, if reduction in poverty is taken as a surrogate for improvement in human development, then the balance of evidence cited in this section on the basis of partial studies, suggests that financial globalisation does not enhance human development. However, this result needs to be assessed also in the light of the earlier discussion which suggested that financial globalisation led to fast world economic growth and generated sizeable reduction in poverty in low-income developing countries such as India and China. Thus, the overall conclusion is that financial globalisation is a powerful force which can both help or hinder human development. It is best likely to help human development (*i.e.* reduce poverty) if there is a high rate of growth of world demand and fast growth of world economy, it will also help if the governments use appropriate policy measures to improve income distribution and to promote employment.

High unemployment, particularly youth unemployment constitute some of the greatest challenges facing the vast majority of developing countries. ILO (2011) rightly notes that the governments can take steps to simultaneously improve income distribution and employment. One of the important stylised facts about

the world economy today is that the share of labour in national income has declined sizeably and that of capital has increased in most economies throughout the world. ILO rightly argues that if this was put right and the share of labour was increased, this would increase world demand and hence, employment. These and similar ideas need careful attention from developing countries themselves but equally importantly from international organisations concerned with development.

Financial globalisation has allowed developing countries to take a giant step forward in the last 10 years by its positive impact on world demand and growth. Developing countries need to build on this in cooperation with other countries by pursuing co-ordinated economic expansion at a global level while at the same time reducing the negative effects of finance capitalism at the micro-and mesa economic levels as outlined earlier in this paper¹².

Notes

1 Unless the context indicates otherwise the words financial liberalisation and financial globalisation have been used interchangeably throughout the paper

2 For differing views of the crisis from mainstream and heterodox economists, see the following: Aiginger (2009), Arestis and Singh (2010), Cambridge Journal of Economics (2009 and 2010), Campbell (2011), Eatwell and Mill Gate (2011), IMF (2008a, 2008b, 2009a, 2009b, 2009c, 2010a, 2010b), Krugman (2008, 2010), Ormerod (2010), Palma (2009), Solow (2009), Taylor 2010, UNCTAD (2008, 2009, 2010), UNDESA (2008, 2009, 2010), the US Council of Economic Advisers (2010).

3 The following facts are based on Wolf (2007)

4 The New York Times, reporting on Greenspan's evidence before a 2008 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 US 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 a t 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).

5 The analysis of this section draws on and updates my paper Singh 2002

6 On this set of issues, see for example, Stiglitz (1994); Allen and Gale (2000); Glen, Lee and Singh (2000).

7 See further Freeman (1989); Chang and Rowthorn (1995); Singh (1995).

8 The experience of Latin American countries in the 1990s indicated that although many of them achieved stability in the sense of low rate of inflation; they were unable to attain fast growth.

9 There is a huge literature on the subject. The classic references are Singh (1975, 1992, 1998), Jensen (1988) Scherer (1998), and Mueller (2003). The more recent literature is summed up by Cosh and Hughes (2008), Tichy (2002), Gugler et al (2004), and Scherer (2006).

10 The other mechanism, by which mergers can benefit society, is through the act of merger itself as outlined in the text. Overall empirical evidence on this channel is not very helpful either from the perspective of those who emphasise the virtues of the market for corporate control. Both studies based on accounting data as well as stock market data have been examined in detail in a large literature and the consensus is that mergers do not lead to greater efficiency through this route. See further Mueller (2003), Scherer (2006), Tichy (2002), and Deakin and Singh (2009).

11 See for example, the controversy between Professor Stiglitz and the IMF in the next section.

12 How this coordination can be achieved is discussed in detail in Izurieta and Singh (2010) and Cripps, Izurieta and Singh (2011)

References

- Aiginger, K. (2009) "The Current Economic Crisis: Causes, Cures and Consequences", WIFO Working Papers No. 431, August, Osterreichisches Institut fur Wirtshaftschung
- Allen, F. and D. Gale (2000) "Financial Contagion", *The Journal of Political Economy*, Vol.108, No.1, February 2000
- Andrews, Edmund L. (2008) 'Greenspan Concedes Error on Regulation', NewYork Times, October 23
- Arestis, P. and A. Caner (2010) "*Capital account liberalisation and poverty: how close is the link?*," Cambridge Journal of Economics, Oxford University Press, Vol. 34(2), pages 295-323, March
- Arestis, P. and A. Singh (2010) "Financial globalisation and crisis, institutional transformation and equity", *Cambridge Journal of Economics*, 2010, Vol. 34, Issue 2, pages 225-238
- Bhagwati, J. (2000) The Wind of the Hundred Days. Boston: MIT Press; 2000
- Blanchard, O.J. (2008) "The State of Macro", *NBER Working Paper Series* 14259, NBER, Massachusetts
- Blanchard, O.J. (2009) "The crisis: basic mechanisms, and appropriate policies", IMF Working Paper WP/09/80, IMF Research Department, April 2009
- Cambridge Journal of Economics (2009) "The Global Financial Crisis", Cambridge Journal of Economics: Special Issue, Vol.33, Issue 4, July 2009

- Cambridge Journal of Economics (2010) "Globalisation, Institutional Transformation and Equity", *Cambridge Journal of Economics: Special Focus*, Vol.34, Issue 2, March 2010
- Chakravarty, S. and A.Singh (1988) "The Desirable Forms of Economic Openness in the South", World Institute for Development Economics Research, WIDER, Helsinki
- Chang, H-J. and R.Rowthorn (1995) "The Role of the State in Economic Change", United Nations University, Oxford University Press, USA
- Cornia, G.A. (2004) "Inequality, Growth, and Poverty in an Era of Liberalization and Globalization", UNU-WIDER Studies in Development Economics, Helsinki, Oxford University Press
- Cosh, A. and A. Hughes (2008) "Takeovers After Takeovers", Centre for Business Research Working Paper No.363, CBR, University of Cambridge, June 2008. Also published in P.Arestis and J.Eatwell (eds.) Issues in Economic Development and Globalization: Essays in Honour of Ajit Singh, Palgrave Macmillan, 2008
- Cripps, F., A. Izurieta and A. Singh (2011) "Global Imbalances, Underconsumption and Over-borrowing: The State of the World Economy and Future Policies", Development and Change, Vol. 42, Issue 1, pages 228– 261, January 2011
- Deakin, S. and A. Singh (2009) "The Stock Market, the Market for Corporate Control and the Theory of the Firm: Legal and Economic Perspectives and Implications for Public Policy", in Par-Olof Bjuggren and Dennis Mueller (eds.), *The Modern Firm, Corporate Governance and Investments*, Edward Elgar Publishing, London
- Eatwell, J. and M. Milgate (2011) "*The Fall and Rise of Keynesian Economics*", Oxford University Press

- Fischer, S., (1997), "*Capital Account Liberalisation and the Role of the IMF*," Paper presented at the seminar Asia and the IMF, held in Hong Kong, China, September 19, 1997
- Freeman, C., (1989)," New Technology and Catching Up, *European Journal of Development Research*, Vol. 1, Issue 1
- Friedman, M. (1953) "The Case for Flexible Exchange Rates", *Essays in Positive Economics*, University of Chicago Press, pages 157-203
- Glen, J., K. Lee and A.Singh. (2000) "Competition, Corporate Governance and Financing of Corporate Growth in Emerging Markets", *Discussion Papers in Accounting and Finance. No. AF46*, Department of Applied Economics, Cambridge
- Greenspan, A. (2005) "*Current account*", Speech at the Advancing Enterprise 2005 Conference, London
- Greenspan, A. (2010) "Evidence given to the U.S. Congress Financial Crisis Inquiry Committee (established to investigate the sub-prime mortgage crisis)", U.S. Government, Washington D.C
- Gugler,K., D. Mueller, and B. Yurtoglu (2004). 'Corporate Governance and Globalization'. Oxford Review of Economic Policy: Special Issue on Globalisation, Vol.20, Issue 1, 129-156
- International Monetary Fund (2008a) World Economic Outlook: Housing and the Business Cycle, IMF, Washington D.C., February 2008
- International Monetary Fund (2008b) World Economic Outlook: Financial Stress, Downturns and Recovery, IMF Washington D.C., October 2008
- International Monetary Fund (2009a) World Economic Outlook Update: Contractionary Forces Receding But Weak Recovery Ahead, IMF, Washington D.C., July 8

- International Monetary Fund (2009b) World Economic Outlook : Crisis and Recovery, IMF, Washington D.C., April 2009
- International Monetary Fund (2009c) *World Economic Outlook. Sustaining the Recovery.* October 15. IMF, Washington D.C.
- International Monetary Fund (2010a) *World Economic Outlook: A Policy* Driven, Multispeed Recovery, IMF, Washington D.C., January 26
- International Monetary Fund (2010b) World Economic Outlook: Rebalancing Growth, IMF, Washington D.C., April 21

International Monetary Fund (2011a) World Economic Outlook (WEO)

Tensions from the Two-Speed Recovery: Unemployment, Commodities, and Capital Flows, IMF, Washington D.C, April 2011

- International Monetary Fund (2011b) World Economic and Financial Surveys Global Financial Stability Report: Durable Financial Stability - Getting There From Here, IMF, Washington D.C, April 2011
- Izurieta, A. and A. Singh (2010) "Does Fast Growth in India and China Help or Harm US Workers?", *Journal of Human Development and Capabilities: A Multi-Disciplinary Journal for People-Centered Development*, Vol. 11, Issue 1, Pages 115 - 141
- Jensen, M. (1988) "Take-overs: their causes and consequences", Journal of Economic Perspectives, Vol.2, Issue 1,pages 21–48
- Keynes, J.M. (1936) "The General Theory of Employment, Interest and Money", Macmillan, London
- Keynes, J.M. (1980) " *The Collected Writings of John Maynard Keynes*", Vol. 25, Cambridge University Press

Krugman, P.R. (1987) " Is free trade passé?" in *Journal of Economic Perspectives*, Vol.1, No. 2, pages 131-143, Fall 1987

Krugman, P.R. (2008) "The Big Meltdown", New York Times, March 2

- Krugman, P.R. (2010) "Goldman Sachs, salaried looters", *The Indian Express, Chandigarh*, April 24
- Mah-Hui, L. and L.Chin (2010) "Nowhere to Hide: The Great Financial Crisis and Challenges for Asia", Institute of South-east Asian Studies, Singapore
- Mueller. D. (2003) 'The fiancés literature on mergers: a critical survey,' in M.
 Waterson, (ed.), *Competition, Monopoly and Corporate Governance*, Edward Elgar Publishing, London, pages 161-205
- Nurkse, R., (1944), International Currency Experience: Lessons of the Interwar Period. Princeton: League of Nations
- Ormerod, P. (2010) "The Current Crisis and the Culpability of Macroeconomic Theory", 21st Century Society, Journal of the Academy of Social Sciences, Vol. 5, No. 1, pages 5-18
- Palma, J.G. (2009) "The Revenge on the Market of the Rentiers: why neoliberal reports of the end of history turned out to be premature", *Cambridge Journal of Economics*, Vol.39, Issue No.4, pages 829-869
- Prasad, E., R. Rogoff, S-J.Wei, and M.A. Kose (2003) "Effects of Financial Globalisation on Developing Countries: Some Empirical Evidence", *IMF Board Document*, Washington DC, IMF
- Scherer, F.M. (1998) 'Corporate take-overs: The efficiency argument' *Journal* of Economic Perspectives, Vol.2 pages 69 82

- Scherer, F. M. (2006) 'A New Retrospective on Mergers', *Review of Industrial* Organization, Volume 28, Issue 4, June 2006, 327-341
- Schumpeter, J.A. (1942) "Creative Destruction". From Capitalism, Socialism and Democracy", Original publication 1942; re-published by Harper, New York 1975
- Singh, A. (*forthcoming*) 'Globalization, Openness and Economic Nationalism'. Centre for Business Research Working Paper Series, CBR, Cambridge
- Singh, A. (1975) "Takeovers, Economic Natural Selection, and the Theory of the Firm: Evidence from Postwar United Kingdom Experience", *Economic Journal*, Vol.85, No.339, pages 497-515, September
- Singh, A. (1992) 'Corporate Take-Overs.'. In J. Eatwell, M.Milgate and P.Newman (eds.), *The New Palgrave Dictionary of Money and Finance*, London, Macmillan, pages 480-486
- Singh, A. (1995) 'Corporate Financial Patterns in Industrialising Economies. A Comparative International Study'. *IFC Technical Paper No.2*, The World Bank, Washington, DC
- Singh, A. (1997) 'Financial Liberalisation, Stock Markets and Economic Development'. *Economic Journal*, Vol.107, pages 771-782
- Singh, A. (1998) 'Liberalisation, The Stock Market and the Market for Corporate Control: A Bridge Too Far for the Indian Economy?' In Ishar Judge Ahluwalia and IMD Little (eds.), *India's Economic Reforms and Development: Essays for Manmohan Singh*, Oxford University Press, Oxford. pages 169-196
- Singh, A. (2002) 'Capital Account Liberalization, Free Long-Term Capital Flows, Financial Crises and Economic Development' Centre for Business Research Working Paper Series No. 245

- Singh, A. (2005) 'Globalisation and the Regulation of FDI: New Proposals from the European Community and Japan', *Contributions to Political Economy*, Vol. 24, pages 99-121.
- Singh, A.(2008) 'Stock Market in Low and Middle Income Countries', presented at the Workshop on Debt, Finance and Emerging Issues in Financial Integration, 8-9 April 2008, United Nations Headquarters, New York
- Singh, A. and A. Zammit (2000) "International capital flows: Identifying the gender dimension." *World Development*, Vol. 28, No.7, pages 1249-1268
- Singh, A. and A. Zammit (2010) "The global economic and financial crisis: A review and commentary." *Centre for Business Research*, Working Paper 415, December
- Skidelsky, R. (2011) 'The Relevance of Keynes' *Cambridge Journal of Economics*, Vol 35, pages 1-13, January
- Solow, R. (2009) "How to Understand the Disaster", *The New York Review of Books*, May 14.
- Stiglitz, J.E., (1994) "The Role of the State in Financial Markets", *Proceedings* of the World Bank Annual Conference on Development Economics, The World Bank, Washington, DC
- Stiglitz, J.E., (2000), "Capital Market Liberalization, Economic Growth, and Instability." *World Development*, Vol.28, Issue 6, pages 1075-1086
- Stiglitz, J.E. (2004) "Capital market-liberalisation, Globalization, and the IMF", *Oxford Review of Economic Policy*, Vol.20, No.1, pages 57-71
- Summers, L., (2000). " International Financial Crises: Causes, Prevention and Cures." American Economics Review Papers and Proceedings, Vol. 90, Issue 2, pages 1-16

- Taylor, L. (2010) "Maynard's Revenge: The Collapse of Freemarket Economy", Harvard University Press, USA
- Tichy, G. (2002) "What do we know about the success and failure of mergers?", *Journal of Industry, Competition and Trade*, Vol.1, Issue 4
- Tobin, J. (1984) "On the Efficiency of the Financial System", *Lloyds Bank Review*, pages 1-15, July

UNCTAD (2008) "Trade and Development Report", United Nations, Geneva

UNCTAD (2009) "Trade and Development Report", United Nations, Geneva

UNCTAD (2010) "Trade and Development Report", United Nations, Geneva

UNDESA (2008) "Global Economic Outlook", United Nations, New York

UNDESA (2009) "Global Economic Outlook", United Nations, New York

UNDESA (2010) "Global Economic Outlook", United Nations, New York

- US Council of Economic Advisers (2010) "Annual Report of the Council of Economic Advisers", US Government Printing Office, Washington DC
- Wolf, M. (2007) "Unfettered finance is fast reshaping the global economy", *Financial Times*, June 18 2007