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Developing Countries in the Era of Financialisation: From Deficit Accumulation to Reserve Accumulation

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Abstract

This paper examines the effects of financialisation on developing countries by considering international capital flows and reserve accumulation. Analytical focus lies on the international financial transactions of developing countries since 2000, especially in relation to the US economy. The paper shows that international capital flows have grown substantially, while at the same time developing countries have accumulated huge international reserves. The outcome has been net flows of capital from developing to developed countries. These phenomena are analysed within a Marxist framework that stresses the role of world money as well as the tendency of capitalist finance toward crisis. It is shown that the strategy of reserve accumulation, adopted by developing countries after the financial crises of the late 1990s, was a response to speculative and unstable capital flows. The strategy has resulted in substantial social costs for developing countries because it has facilitated net international transfer of capital from the poor to the rich, instead of promoting investment for purposes of economic development. The USA was the main beneficiary of these trends, thus revealing the problematic and exploitative character of the dollar as contemporary world money.

1. Introduction

Financialisation represents a profound transformation of capitalist economies based on changes in real accumulation since the early 1970s (Lapavitsas 2009). Financial activities have spread into several new economic sectors and areas of daily life – housing, pensions, consumption, and so on. Growth of finance has provided fresh scope for the form of value to expand, mainly in developed capitalist countries. Important elements of this process have been the privatisation of activities and capital assets that were previously under state control, as well as the deregulation of financial markets and institutions. Moreover, deregulation of labour markets has contributed to fostering "financial discipline" among workers.

This paper takes the analysis of financialisation further by addressing its impact on developing countries. The focus of the paper lies on the international financial transactions of developing countries since 2000, particularly in relation to the US economy. It is shown that international capital flows have grown, but developing countries have also accumulated enormous international reserves. The outcome has been net flows of capital from developing to developed countries. The social costs of this aspect of financialisation for developing countries have been very large, while developed countries, and especially the USA, have drawn considerable benefits. Financialisation in the 2000s has brought net gains to the USA as issuer of quasi-world-money at the expense of developing countries. This is an aspect of financial exploitation characteristic of the period.

In a little more detail, the paper addresses the inter-relationship between international capital flows, reserve accumulation and US financial conditions, analysing the consequences for developing countries and the benefits for key developed countries. The paper also examines the spread of financialisation in the domestic economies of developing countries, showing that financial institutions have become steadily more important. It is further established that developing countries have gone through two distinct periods since their financialisation effectively commenced in the early 1990s. The first period was characterised by substantial private capital flows and large current account deficits; the second period has been marked by reserve accumulation and net capital flows to developed countries.

The paper is organised as follows. Section 2 examines theoretical arguments in favour of financial liberalisation in developing countries as well as political economy critiques of the process. It shows that financial liberalisation is an integral aspect of the financialisation of capitalism more generally. Section 3 is the core of the paper and considers the strategy of international reserve accumulation which developing countries adopted (or had forced on them) after the financial crises of the late 1990s. The strategy was a reaction to speculative and unstable capital flows, revealing the problematic nature of contemporary world money. Section 4 discusses the substantial social costs imposed on developing countries by reserve accumulation. Reserves have facilitated net transfers of capital from developing to developed countries, and have acted as a mechanism of exploitation of developing by developed countries, above all, the USA.

Section 5 recapitulates arguments of Marxist political economy in connection with finance and development, paying particular attention to world money and international financial crises. The objective is to obtain a fuller theoretical understanding of the swing of developing countries from deficit accumulation in the 1990s, to reserve accumulation in the 2000s. Section 6 concludes.

2. Emergence of financial liberalisation in developing countries and the crises of 1997-8 [1]

Financial liberalisation is part of the structural reforms typical of the neoliberal approach to development in the last three decades. It is also a vital aspect of financialisation since it has increased the exposure of national economies to the activities of the global financial system since the 1990s. This section considers mainstream theoretical claims in favour of financial liberalisation in developing countries. The objective is to establish the background on financial liberalisation by analysing its key characteristics as well some of its empirical consequences. This provides necessary historical and analytical perspective on what has happened since the beginning of 2000s.

The flow of capital from poor to rich and the huge costs imposed on developing countries by reserve accumulation in the 2000s (discussed in sections 3 and 4) are evidence of the pernicious effect that financial liberalisation has had on developing countries. The beneficiaries have been developed countries, primarily the USA. Further theoretical analysis is undertaken in section 5 through discussion of Marxist political economy of international finance.

The initial aim of financial liberalisation in the 1970s was to lift constraints on financial activities in order to facilitate the flow of domestic savings to investment. Opening the capital account of the balance of payments was not a concern of the liberalisers. But financial liberalisation was gradually extended to the capital account, thus promoting the growth of international capital flows. In the 1990s and 2000s, opening national economies to the international financial markets became a fundamental element of financial liberalisation.

Liberalisation of the international movement of capital denotes greater ease and flexibility for domestic residents to take positions in assets and liabilities denominated in foreign currency, as well for non-domestic residents to operate in domestic financial markets. According to Akyuz (1992), the financial opening of developing countries includes liberalising the inflow and outflow of capital as well as allowing easy convertibility of currency.[2]

Pressure on developing countries to implement these changes has come from multilateral international organisations, such as the IMF and World Bank. However, private international financial institutions were also in favour for two reasons. First, the changes allowed developing countries to refinance existing external debt in terms determined in open markets, and thus more favourable to private capital. Second, liberalisation of the capital account opened domestic economies to international financial operations.

Liberalising the capital account was one of the main conditions of the Brady Plan that restructured the external debt of several developing countries in the early 1990s (mostly in Latin America). The Brady plan played a crucial role in creating sovereign debt markets among developing countries, the so-called emerging market bonds. From the point of view of developing countries, the Brady Plan can be considered the beginning of their

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[1] It is important to clarify that the term "developing countries" is used heuristically in this paper. The author is fully aware of the class implications and imperialist dimension of "development". From a Marxist, and particularly Leninist, perspective the relationship between "developed" and "developing" countries contains exploitative and imperialist aspects. This relationship is also shaped by the overall tempo of the international accumulation of capital. In essence, this paper demonstrates some new aspects of international exploitation that have emerged through financialisation, free capital flows, reserve accumulation and use of the dollar as quasi world money.

[2] The inflow of capital refers to residents borrowing from foreign markets for reasons not connected to international trade, as well as non-residents offering credit in the domestic financial markets. The outflow of capital refers to residents transferring capital and acquiring financial assets abroad, as well as non-residents issuing liabilities in domestic market. Currency convertibility refers to legal permission to undertake credit relations among residents in a foreign currency, including bank deposits and lending.

financialisation. By adopting it, developing countries were opened to huge capital inflows as well as becoming effectively committed to further financial liberalisation reforms.

It is notable that mainstream economics does not provide very strong theoretical justification for capital account liberalisation. The original theoretical advocates of financial liberalisation, McKinnon (1973) and Shaw (1973), treated financial 'repression' as any government constraint that limits the efficient functioning of domestic financial markets. [3] But gradually the concept of financial 'repression' was also applied to legal restrictions on the mobility of domestic and international financial capital. According to neoclassical economic theory, savings should flow from capital-abundant (developed) countries to capital-scarce (developing) countries because of differentials in expected capital returns. It could be argued, therefore, that international restrictions on the movement of capital and controls on the convertibility of domestic currency (i.e. external financial 'repression') presumably hinder such beneficial flows.

According to this approach, financial opening would improve the flow of foreign savings in countries facing capital scarcity. It would also reduce risks for investors, domestics and foreign, due to the possibility of asset diversification. Financial opening would also help countries deal with balance of payments problems, thus allowing for flexible adjustment of domestic demand. Finally, the efficiency of domestic financial systems would rise due to competition between foreign and domestic financial institutions, and possibly due to exposure to the international financial market.[4]

A further important argument by the mainstream in pushing for financial opening was that free mobility of capital would lessen the autonomy of developing countries in forming economic policy. Apparently, this would reduce the damage caused by inappropriate economic policies in the context of financial globalisation. [5] Greater homogenisation of 'good' economic policies would thus occur in the global economy.

It is also important to note that advocacy of financial liberalisation has passed from a period of favouring 'shock treatment' to another favouring sequential implementation of reform. [6] The original 'shock treatment' was not concerned with the sequencing of liberalisation measures, focusing only on its putative benefits. [7] In contrast, sequential reformers claim that the first step should be domestic 'de-repression' of interest rates and financial activities. [8] Deregulating the foreign exchange market should take place next to avoid discrimination against exporters and/or importers. [9] Following this, foreign trade should become freer and, finally, there should be liberalisation of the capital account. [10] The sequential approach has come to dominate actual liberalisation policy.

However, the reality of the first major wave of liberalising the capital account and opening up to international trade in the 1990s proved very different for a broad range of

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[3] Such constraints typically refer to regulating the activities of banking and non-banking financial institutions, setting compulsory reserves for many types of banking deposits, and fixing the level of market interest rates.

[4] Levine 1996, p. 225 and Poret 2001, p. 3.

[5] See Mathieson and Rojas-Suárez 1992, p. 3 and Eichengreen et. al. 1998, p. 14, and 1999.

[6] See McKinnon 1973, chapters 1-6, and 1991.

[7] See McKinnon 1973.

[8] Fiscal reform should also take place to control public deficits, thus allowing for improved refinancing of the public debt and, supposedly, reducing short-term interest rates.

[9] The main objective is to eliminate exchange rate controls that supported import substitution and export promotion as part of the industrialisation strategy of developing countries.

[10] There is consensus that the last element to be liberalised should be the capital account, see Williamson and Molly 1998.

developing countries. The result was huge increases in capital inflows, on the one hand, and accumulation of current account deficits, on the other. [11] This combination led to severe financial and foreign exchange crises in developing countries in the late 1990s and early 2000s, above all, South Korea and other Asian countries (1997-8), Russia (1998) and Brazil (1999). Further currency crises also took place in Argentina (2001) and Turkey (2001). The effects of these crises were severe, causing increases in unemployment, falls of GDP, and collapse in consumption and investment. The costs were enormous, in societies that were already relatively poor.

There is no doubt that these crises had complex corporate, banking, foreign currency and sovereign payments aspects, which varied according to the structural and institutional characteristics of each economy. In East Asia, for instance, the currency crisis of 1997-8 found most economies already facing serious problems in their corporate and financial sectors. A feature that many developing countries had in common, however, was that they had typically adopted a pegged exchange rate regime. For these countries, the interruption of external finance - coupled with problems specific to each - caused major exchange rate crises. The salient features of these crises were sudden reversal of capital flows and collapse of pegged exchange rates regimes. For our purposes, then, financial liberalisation in the 1990s acted as catalyst for currency and financial crises in general, while also encouraging rapid contagion among developing countries.

There have been several attempts to account for developing country crises of the late 1990s and early 2000s. One approach, drawing on the mainstream theory of asymmetric information, emphasised the imbalances existing within the private sector of developing countries, including financial market failures and interventionist government policies. [12] These are sometimes called "third-generation" crisis models. [13]

Perhaps the most prominent exponent is Krugman 1998, who presented the Asian currency crisis as result of crony capitalism. The crisis apparently emerged due to moral hazard created by implicit government guarantees on the liabilities of financial intermediaries, which were moreover unregulated. This encouraged excessively risky lending by financial intermediaries, temporarily boosting the business sector and capital assets, and thus reacting positively back on the intermediaries. This circular process generated a situation of overinvestment and overpricing in some capital assets, such as land. Along similar lines, Corseti et. al. 1998 offered a further explanation of the crisis based on the existence of implicit government guarantees also for the corporate sector.

Mainstream accounts were opposed by influential non-Marxist political economy explanations of the crises. [14] For Chang et. al., the South Korean crisis occurred because of dismantling the government mechanisms of coordination of industrial policy and financial regulation. In the same spirit, Taylor 1998 stresses that the main reason for the East Asian financial crises was government withdrawal from regulating the real economy, the financial market, and mainly the capital account. For Wade 1998, finally, financial liberalisation seriously affected seriously the capacity of state to coordinate foreign private borrowing.

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[11] Average net lending to developing and emerging countries between 1994 and 2001 was 0.7% of the aggregated GDP. However, during 1993-1999 the average stood at 1.5%. (IMF, 2008a and 2008b).

[12] This interpretation came out to explain the East Asian financial crisis and is also denominated of "third-generation" crisis model. In simple words, the first crisis model is associated with an unsustainable fiscal policy. In the second generation model, the crisis is a self-fulfilling process where the financial institutions in order to protect themselves against the currency depreciation precipitate the foreign exchange crisis.

[13] See Krugman 1998 and also Chang and Velasco 1998 and 1999, Mishkin 1996, Calvo and Reinhart 2000 and Corseti et. al. 1998.

[14] See Chang, Park and Yoo 1998, Taylor 1998 and Wade 1998.

Since controlling the flow of funds for investment became more complex and difficult, the Asian model of development became less sustainable.

Other prominent non-Marxist political economy explanations drew on financial instability theory, mostly associated with Minsky. According to this line of argument, the cause of the Asian crises lies in Ponzi-type indebtedness, where short-term over-leveraged positions were financing investment projects with long gestation lags in sectors that already faced overcapacity. Financial instability is an endogenous process in which there is convergence of perspectives between corporate sector and financial institutions regarding returns and performance during the business cycle. At the start of the cycle, the need to refinance capital assets through financial institutions is very low or null. However, once the upswing of cycle is apparent and well established, the economy moves gradually toward speculative positions in which the need to refinance increases and the maturity of lending and borrowing operations becomes shorter and shorter.

Applying this approach, the increase in external liabilities in East Asia could be seen as due to the confidence of economic agents in the stability (or appreciation) of the exchange rate and continuing low cost of external borrowing. Financial liberalisation exacerbated indebtedness by facilitating financial operations between domestic and foreign investors. For Kregel 1998, this brought a decrease in the margins of safety (liquid assets) as exchange rates appreciated. The reversal of capital flows exposed the fragility of the low margins. Along similar lines, Arestis and Glickman 2002 have also claimed that financial liberalisation was fundamental to financial instability in Southeast Asia countries.

These non-Marxist political economy analyses share a common emphasis on the fundamental role of financial liberalisation in causing the crises. The main difference between them is that the former current focuses on loss of capacity by the state to coordinate the economy, while the Minskian current focuses on the speculative outcomes of liberalising the domestic financial system and opening the capital account. Still, they all stress the systemic aspect of the crises. This makes them far more insightful than mainstream explanations, for which moral hazard or information problems were presumably at the root of the trouble.

Nevertheless, the relationship between real accumulation and financial development is not fully analysed by the non-Marxist political economy approaches. In particular, they have little to say on the endogenous way in which development of the capitalist economy induces development of the financial system, which then fosters further capitalist development. It seems intuitive that financial crises are generally associated with such a process. Moreover, the non-Marxist accounts offer even less regarding the role of international money in the flows of global finance, and the resultant relations of power, hierarchy and exploitation. Yet these are vital aspects of relations between developed and developing countries.

For these reasons, non-Marxist political economy gives little theoretical insight into the gigantic swing of developing countries toward reserve accumulation in the 2000s. It also offers little insight into the ensuing, systematic transfers of value from developing to developed countries. International reserves of the dollar as quasi-world-money played a pivotal role in both the crises of the 1990s and the reverse capital flows of the 2000s. The empirical dimensions of these phenomena are analysed in sections 3 and 4. Following this analysis, section 5 puts forth elements of a Marxist explanation of international financial crises.

3. Advanced financialisation of developing countries

3.1 Global growth of financial assets and rise of domestic indebtedness in developing countries

The global crisis of 2007-9 was caused primarily by financial speculation in the US subprime mortgage market, against the general transformation of the financial system of developed countries. [15] In this sense, the causes of the global financial crisis can be found in the internal behaviour of developed country financial systems. However, speculative activities in the US financial system have mattered internationally because they took place in the economy that generates the main reserve currency, or quasi-world-money. The impact of the US housing market collapse on developing countries was further magnified by the growth of global finance during the last three decades, which has been a key feature of financialisation.

Table 1 shows the growth of global financial assets since 1980. Note that the ratio of financial assets to global GDP rose from 109% in 1980, to 201% in 1990, to 294% in 2000, and to 346% in 2006. In short, there has been pronounced 'financial deepening' since 1980, which has accelerated after 1990 (McKinsey 2008, p. 10). The growth of financial assets of developing and emerging economies has also been very pronounced: from $3.9 trillion in 1995 to $23.6 trillion in 2006. [16] The share of emerging markets in total financial assets has increased from 6% in 1995 to 14% in 2006.

Table 1: Global Financial Assets[1] ($ trillion)

	Government Debt Securities	Total Financial Assets	Government debt as % of total
1980	2	12	17%
1990	8	43	19%
1995	13	66	20%
2005	24	142	17%
2006	26	167	16%

[1]Financial assets include equity securities, private debt securities, government debt securities and bank deposits

Source: Mackinsey 2008

Table 1 also shows that government debt has been vital to growth of finance, never dropping below 15% of the total since 1980. Even more important for our purposes is table 2, which shows that, in 1995, domestic public sector debt of developing countries was 8.8% that of developed countries. By 2005 the proportion had risen enormously and stood at 34.5%. [17] From 1995 to 2005, for instance, domestic public debt relative to GDP in Brazil, Mexico, Korea and China increased from, respectively, 21%, 6%, 9% and 0% to 53%, 20%, 66% and 28%. BIS (2007) further confirms that since 2002 developing countries have witnessed huge increases in domestic public debt and a shift in the denomination of debt from foreign exchange to local currency. In short, in the 2000s, developing countries became hugely indebted internally.

[15] See Lapavitsas 2009 and dos Santos 2009. For a explanation based on lack of regulation and mispricing of risk see Goodhart and Persaud 2008.

[16] Mackinsey 2008, p. 11.

[17] In the next section, it is shown that the increase of domestic public debt in developing countries is an outcome of international reserve accumulation.

Table 2: Total emerging markets debt outstanding[1] ($ billions)												
Regions	1995				2000				2005			
	Total	Internat.[2]	Domestic public sector[3]	Domestic private sector[4]	Total	Internat.[2]	Domestic public sector[3]	Domestic private sector[4]	Total	Internat.[2]	Domestic public sector[3]	Domestic private sector[4]
Latin America	430	186	221	24	806	299	432	74	1282	272	797	212
Asian, larger economies[5]	198	45	94	59	962	70	505	387	2426	122	1532	772
Total EM	1002	294	593	114	2463	504	1430	530	4927	621	3196	1110
Industrial countries[6]	15471	985	6743	7743	22059	3461	6344	12255	35851	8267	9270	18314

[1]Includes bonds, notes and money-market instruments

[2]International bonds, notes and money market instruments from the BIS database

[3]Sum of: Central Government, Other Government, Central Bank, Quasi-government and Non-resident offcial issuers

[4]Sum of: Banking sector, Non-bank financial institutions, Non-financial corporate sector other than quasi-government and other non-resident issuers

[5]China, India, Korea and Taiwan (China)

[6] Australia, Belgium, Canada, Germany, Spain, the UK and the USA.

Source: BIS 2007

Financialisation in developing countries in the 2000s was based on the growth of public debt. [18] The most striking aspect of this phenomenon, however, is that public debt grew in order to support flows of capital *from developing to developed countries*. [19] Financialisation has meant that developing countries became more heavily indebted internally precisely in order to send capital to developed countries, primarily the USA. This has been the most striking development in global finance since 1997-8.

The main holders of the enormously expanded public securities in developing countries have been financial institutions (banks and other). In 2000, financial institutions held 57% of total domestic debt while by 2005 this percentage had reached 80%. In particular, the holding of public securities by banks increased across developing countries. [20] The implication is that the economic power of financial institutions has increased substantially within developing countries economies. This has also reshaped the class structure and the distribution of income and wealth in developing countries. [21] The social and economic implications for developing countries have been severe, as is shown below.

3.2 Reserve accumulation after 1997-8 and capital flows from developing to developed countries

For most of the 2000s capital has flowed from developing to developed countries. Table 3 below shows that net lending by developing to developed countries has been positive and rising after 2002. The figure for net lending derives from balancing out sources and uses of

[18] The role of government securities has been broader that fostering domestic financialisation. They have are been vital to the global OTC (over the counter) derivatives markets, in which the most heavily traded contracts are based on interest and exchange rates that are largely influenced by macroeconomic policies. Thus, in the foreign exchange (FX) market in April 2007, the US dollar stood as the leading currency with 89% of all contracts having, at least, one "leg" denominated in that currency, see BIS 2007a, p. 15. This is also an expression of the role of the US dollar as world money, discussed in the following sections.

[19] It is shown in section 4 that this is the opposite of what is expected by supporters of financial liberalisation.

[20] See BIS 2007, p. 68-69.

[21] Full analysis of domestic financialisation in developing countries lies beyond the scope of this paper.

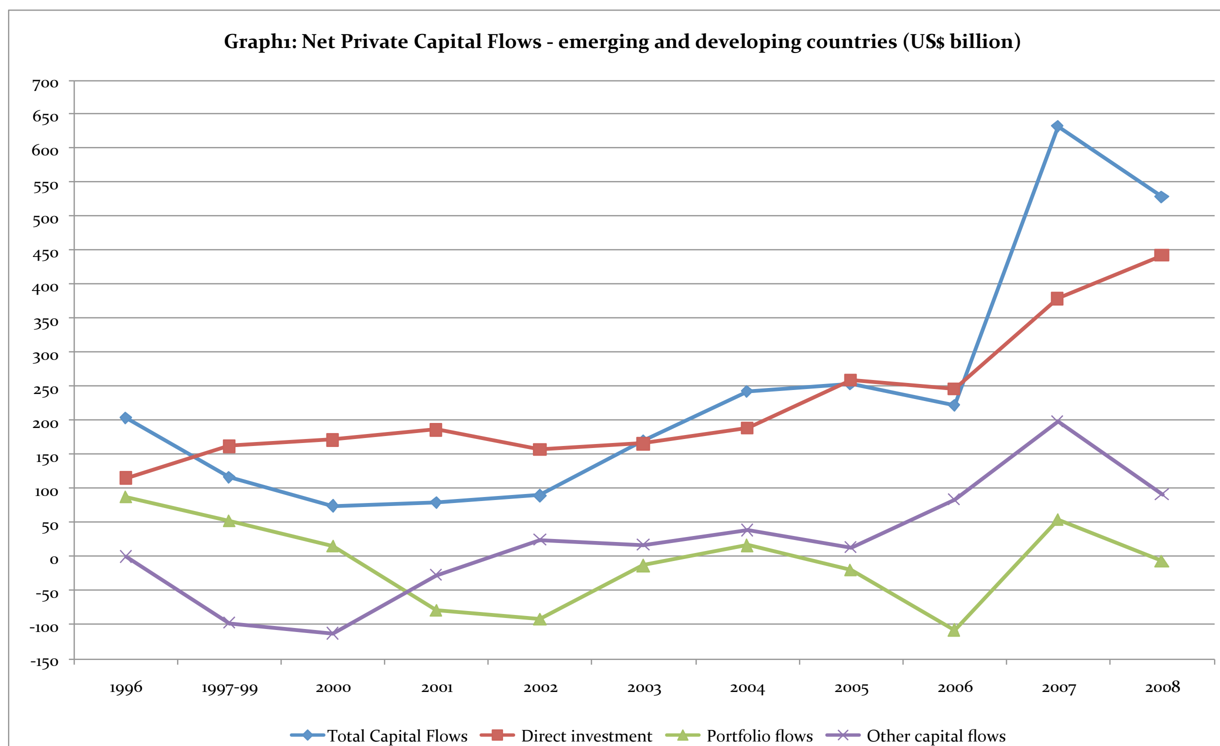
the available resources of each national economy. Negative net lending means that the national economy needs funds (from external sources) to cover its domestic expenditures; positive net lending means that the domestic economy is exporting national resources to the rest of world. This directly contradicts mainstream arguments regarding the desirability of international financial liberalisation.

Table 3: Net Lending - Sources and Uses of World Savings (% of GDP)

	Average 1994-2001	2002	2003	2004	2005	2006	2007
Advanced Economies	-0.2	-0.7	-0.8	-0.7	-1.2	-1.4	-1.1
USA	-2.6	-4.2	-5.1	-5.5	-6	-5.9	-5.1
Japan	2.3	2.9	3.2	3.7	3.6	3.9	4.8
UK	-1.3	-1.6	-1.3	-1.6	-2.5	-3.9	-4.9
Euro Area	0.3	0.7	0.6	1.1	0.2	-0.2	-0.4
NI Asian economies	3.1	5	6.8	6.3	5.3	5.3	6.3
Emerging and developing economies	-0.7	1.2	1.9	2.4	4.1	4.8	4.2

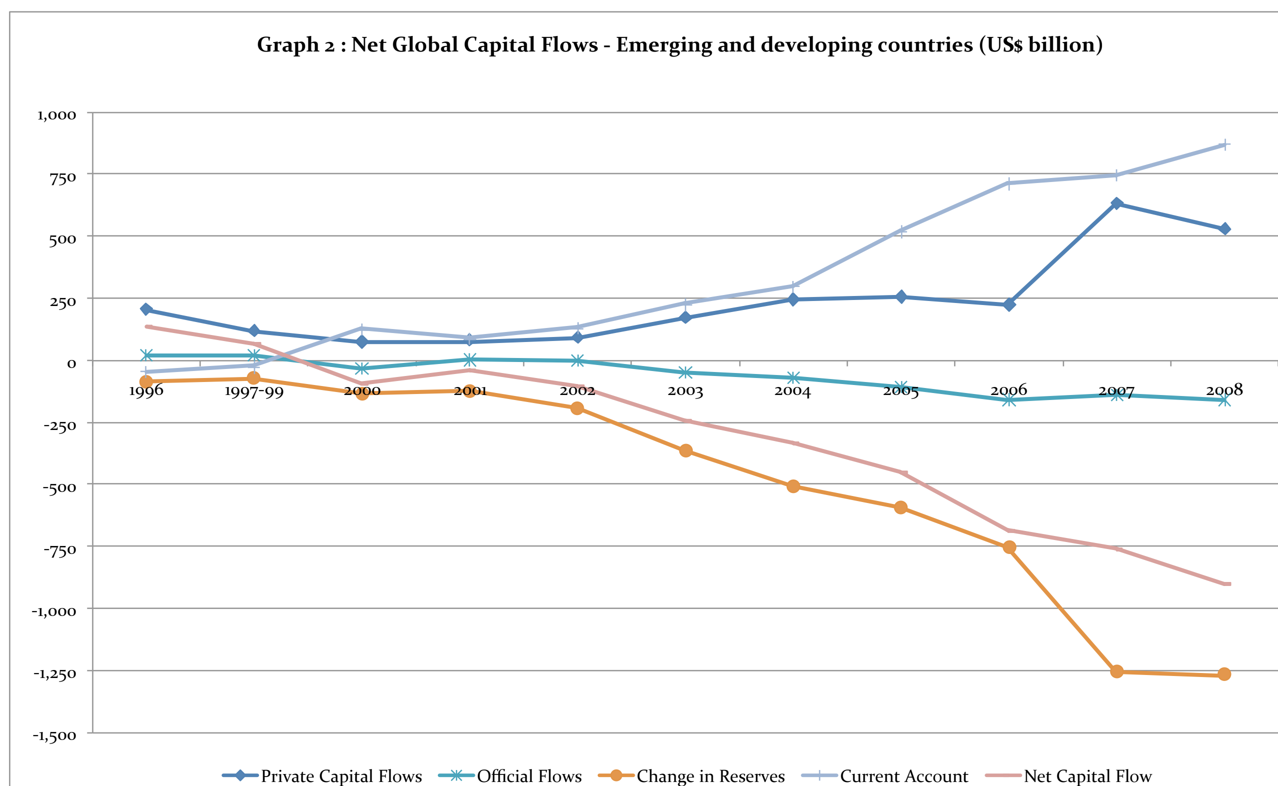
Source: IMF 2008a

Figures 1 and 2 provide further detail on international capital flows to developing countries in the last decade. Figure 1 shows that, after the crises of the late 1990s and early 2000s, private capital returned to developing countries in the form of direct investment and other capital flows. In particular, foreign direct investment kept constant even during the crises, and has increased substantially since 2002.[22] In 2008, as consequence of the current financial crisis, total capital flows dropped as a result of decline in their more volatile components.



[22] In somehow, it shows that the process of "shift" in the capitalist production from West to East was not so damaged with the developing countries' crises. The foreign direct investment flow therefore shows that the global productive capacity has been partly transferred for developing countries. The huge current account surplus, as can be seen in the graph 2, is also an important aspect of that "shift". However, the analysis of that dimension of global accumulation of capital is not the addressed in the paper.

Source: IMF 2008a



Source: IMF 2008a

As Figure 2 shows, however, the most important aspect of international capital flows has been the huge increase in international reserves. Reserve assets are typically held by monetary authorities and comprise various types of deposits and securities, gold, repurchase agreements and derivatives. The sources of reserves are found in funds streaming in as current account surpluses as well as private capital flows.

Thus, instead of using incoming funds productively, developing countries have deployed them to accumulate huge foreign exchange reserves. There are two reasons for adopting this strategy: first, to defend the stability of exchange rates and, second, as defence against sudden reversals of capital flows. [23] Both of these problems were characteristic of the crises of the late 1990s. Developing countries have gone down this path partly under pressure from international organisations, such as the IMF, and partly due to the painful experience of the earlier crises. Table 4 shows how widespread reserve accumulation has been among developing countries, even in impoverished Africa.

[23] For developing countries, especially some East Asian countries, stability of exchange rates is related to maintaining competitiveness in foreign trade.

Table 4: International reserves – selected countries

($ billions)

	2000	2003	2006	2007
Developing Asia	**320.7**	**669.7**	**1489.1**	**2108.4**
China	168.9	409.2	1069.5	1531.4
India	38.4	99.5	171.3	256.8
Excluding China and India	113.4	161.1	248.2	320.2
Russia	24.8	73.8	296.2	445.3
Brazil	31.5	49.1	85.6	180.1
Mexico	35.5	59.0	76.3	86.6
Africa	54.0	90.2	221.3	282.7

Source: IMF 2008a

Massive reserve accumulation led to a negative net capital flow, as is shown on graph 2. [24] Foreign reserves are necessarily invested in the safest assets in global financial markets, and these are issued by developed countries. The mainstay of reserves is US Treasury securities, since they provide the safest access to dollars. In short, despite huge private capital flows to developing countries since the early 2000s, net capital flows have been negative. The primary reason is that the international reserve currency is generated mainly by the USA. [25]

Reserve accumulation has been accompanied by a large increase in domestic debt in developing countries, as is shown in table 5. The main reason is that developing countries had to engage in monetary sterilisation to offset the inflationary impact of foreign capital inflows. Sterilisation is the practice of issuing public debt by the Treasury or the central bank with the aim of absorbing increases in domestic liquidity (the money supply) due to surpluses of foreign exchange. Developing countries were forced to sterilise in order to comply with the inflation targeting regime characteristic of macroeconomic orthodoxy in recent years. [26] In other words, developing countries increased their domestic borrowing not in order to engage in investment but to avoid increases in the money supply that might have made them miss tight inflation targets.

Table 5: Changes in stocks of domestic bonds and notes

Annualised, in $ billions

	1995-99	2000-04	2005	2006
Latin America	**42.0**	**36.2**	**83.2**	**88.4**
Asia, larger economies	**90.1**	**161.4**	**202.6**	**218.4**
Other Asia	**20.8**	**22.2**	**23.6**	**26.3**
Central Europe	**7.3**	**14.1**	**24.0**	**23.1**
Other countries	**24.5**	**35.4**	**38.8**	**25.2**
Total	**184.7**	**269.3**	**372.2**	**381.4**

Source: BIS 2007

To recap, the strategy of reserve accumulation has had two major implications for developing countries. First, it has led to capital transfers (positive net lending) from developing countries to developed countries. Second, it has contributed to large increases in

[24] The net capital flow includes private capital and official flows as well as the change in reserves.

[25] In the end of 2006, 65.3% of international reserves were denominated in US dollars (IMF, International Financial Statistics).

[26] See Papadatos 2009.

domestic public debt because of monetary sterilisation rather than to support national development.

3.3 The impact of reserve accumulation on the USA

Since the US dollar is the main form of contemporary reserve currency (or quasi-world-money), international reserve accumulation has had significant implications for the US economy. [27] Evidence of its impact comes from the monthly survey conducted by the US Treasury International Capital (TIC) system. This has notorious limitations and distortions but nonetheless provides a reasonable picture of the role of foreign investors in the US securities markets. [28] In March 2000 foreign holdings of long-term US public securities stood at $3.6 trillion, while in June 2007 they had risen to $9.1 trillion.[29] Table 6 shows that foreign holdings as proportion of total US long-term securities (public and private) rose from 9.7% in March 2000 to 16.7% in June 2006. The proportion stood at 18.8% in June 2007.

Table 6: Foreign Holdings of US long-term securities
(in percent of the total securities)

	Mar-00	Jun-06
Equity	6.9	10.2
US Treasury debt	35.2	52
US Government Agency	7.3	16.8
Corporate and other debt	12.3	20.4
Total	9.7	16.7

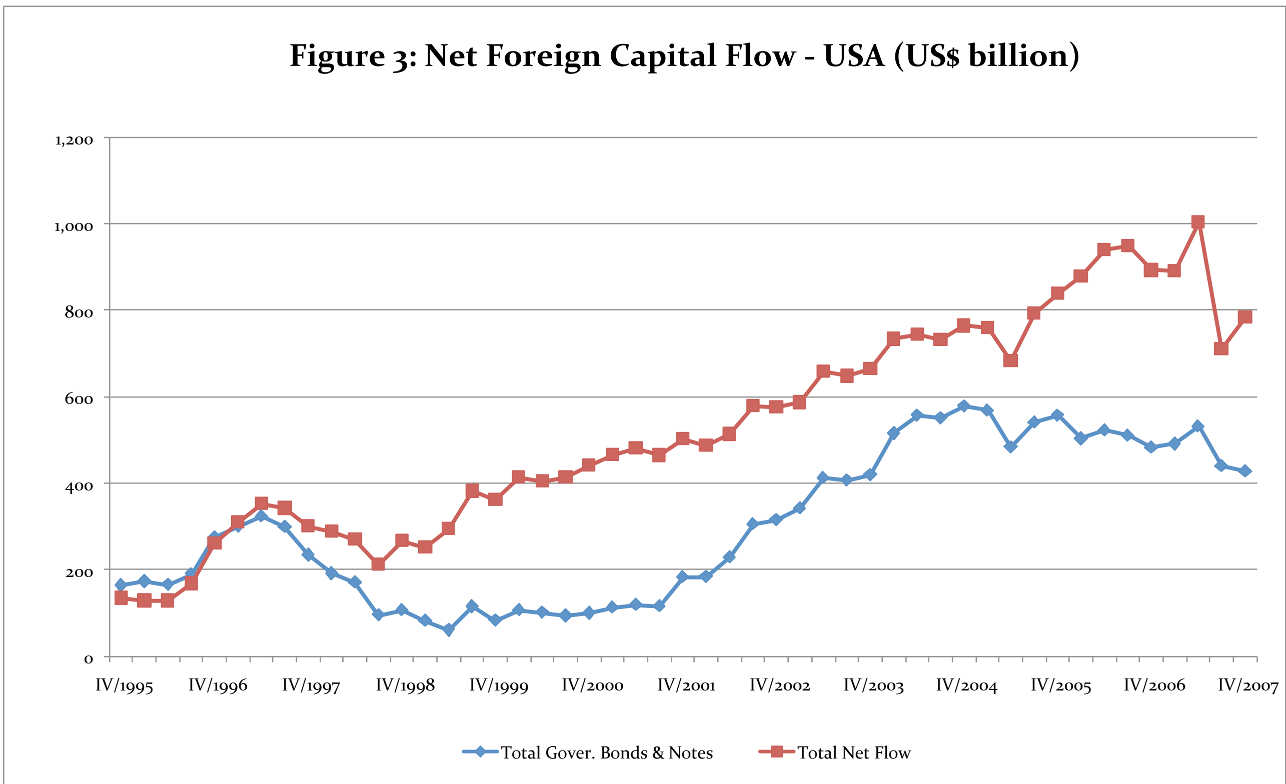
Source: US Treasury 2007

Figure 3 shows the relationship between the flow of foreign capital and US public debt from the middle of the 1990s to 2007. The correlation is particularly close at the end of the 1990s and during 2002-2005.

[27] The huge current account deficits generated by the US economy in the last years are also important to explaining the direction of global capital flows. However, the focus of this section is on the impact of global flows on the USA.

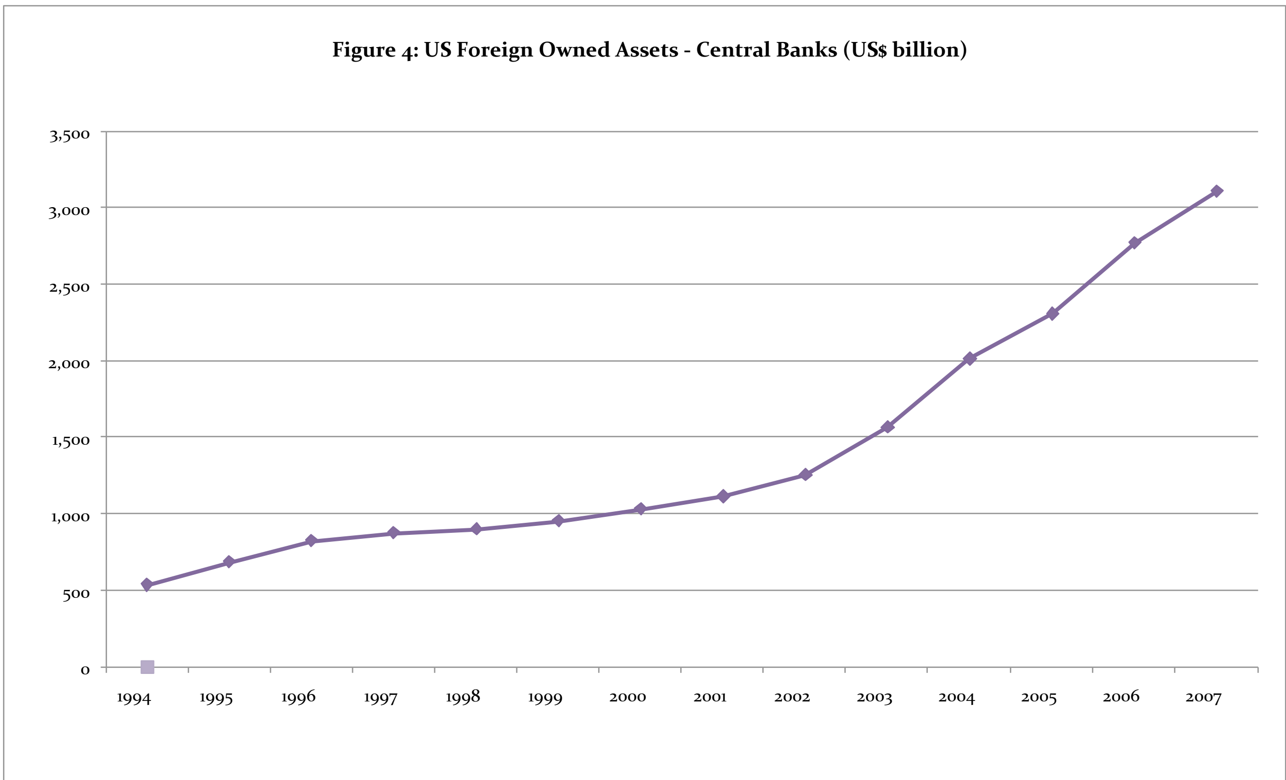
[28] TIC weaknesses are due to the methods of data collection, relying on surveys among US financial institutions about holdings and transactions of US state securities by foreign investors. Surveys suffer from disclosure problems among financial institutions as well as absence of law enforcement on financial institutions. Hence the foreign holdings of US state securities - mainly by central banks - are probably underestimated (Frey and Moec 2005).

[29] These securities originate in the US Treasury as well as government agencies, such as Federal National Mortgage Association (Fannie Mae) and Federal Home Loan Mortgage Corporation (Freddie Mac), which are the main Government Sponsored Enterprises (GSEs).



Source: US Treasury 2008

The main foreign holders of US public debt in recent years have been official institutions, that is, mostly central banks. During 2000-2007, the share of central banks in total foreign holdings of US debt rose from 18.3% to 28.1%. Figure 4 shows the huge increases in US liabilities (mostly public debt) held by foreign central banks after 2001.



Source: Thomson Datastream

In a little more detail, the total of outstanding US Treasury securities in March 2000 stood at $2.5 trillion, rising to $3.5 trillion in June 2007. During the same period, the holdings of foreign investors rose from $0.9 trillion to $2 trillion. The main buyers were central banks, whose holdings went from $0.5 trillion to $1.45 trillion. [30] Central banks also increased their holdings of US agency debt during the same period. While the total of agency debt increased from $3.6 trillion to $6.1 trillion, holdings by foreign investors rose from $300 billion to $1.3 trillion, while those by central banks jumped from $90 billion to $750 billion. Since the debt of US government agencies is directly related to the US housing market, purchases by foreign central banks were important to the housing bubble of 2001-6. [31]

The importance of international capital flows for the US economy has not escaped the attention of mainstream economics. According to Frey and Moec (2005, p. 21), since 2002: "the increase in net purchases by foreigners has resumed, driven this time by the official sector. This trend can mainly be ascribed to the fact that Asian central banks have built up their foreign reserves with a view to curbing the appreciation of their currencies against the dollar." The increased supply of loanable funds in the US markets is estimated to have reduced the yield on long-term financial assets by as much as 1% in the summer of 2004.

Warnock and Warnock (2005) also estimate that funds supplied by foreign investors to the USA have reduced long-term yields, perhaps by up to 1.5% in 2004 and 2005. Roubini and Setser (2005) put the impact at 2%, caused mainly by central bank flows. Note that the holdings of central banks continued to rise until June 2007. The dampening effect on interest rates, therefore, continued throughout the period of the housing bubble, and has had a major impact on general conditions in US financial markets. [32]

In sum, since the early 2000s foreign central banks (mainly from Asia) have invested their international reserves heavily in US public debt. By doing so they have helped to lower long-term yields on US debt. Therefore, there is a direct connection between boom conditions prevailing in US financial markets during 2001-7 and the international reserves of developing countries. By the same token, there is a direct connection between the US housing bubble and the huge savings generated in developing countries since the early 2000s (mainly in East Asia).

The trade surpluses that many developing countries have generated in recent years are partly due to the structural shift in the allocation of productive capacity across the world in recent years. This shift has resulted in huge increases in the exploitation of labour in East Asia and elsewhere in the developing world. The result has been a net flow of capital from poor to rich countries in the world economy, primarily to the USA. The US financial markets have been among the main beneficiaries of these flows, eventually leading to the emergence of a gigantic bubble in 2001-7.

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[30] The data are based on US Treasury 2008, pp. 8-14.

[31] As consequence of the 2007-8 financial crisis, the short-term funding practices of the two major government agencies (Fannie Mae and Freddie Mac) have been seriously affected. In July 2008 the US government put together a rescue plan using public money. Justified criticism has been levelled against the plan on the grounds that it commits taxpayers money to rescuing speculators. But the alternative would have been to let the bondholders of these agencies take losses. As these include foreign investors and central banks from developing countries, this would have directly affected the role of the US dollar as world money. It is not surprising that this option has not been adopted by the US authorities.

[32] Japanese international reserves have also had a significant impact on the holdings of US debt abroad (Frey and Moec 2005). However, since early 2004, the central banks of developing countries have clearly surpassed the Bank of Japan as sources of capital for US financial markets, see BOJ 2008.

The flows of capital to the USA are due to the role of the dollar as international reserve currency (quasi-world-money). Moreover, the ability to create dollars has allowed the USA to run very large trade deficits throughout this period. Essentially the USA has been paying for its growing imports through issuing public debt securities that rest on government promises to pay dollars. At the same time, US deficits have provided a source of demand for the world economy and sustained global growth. Truman (2005) estimates that they contributed at least 0.3% to annual global growth during 2000-2004.

Financialisation has thus resulted in the absurd situation of the poor financing the rich in the world economy, while allowing the USA to run vast trade deficits. This bizarre configuration of trends cannot last forever. According to King (2006): "[t]he rise in the US current account deficit to more than 6% of national income has raised fears of how the inevitable correction will eventually be achieved. [f]or much of the past twenty years, as evidenced by the Asian crisis of the late 1990s, we have worried about emerging market countries accumulating excessive dollar liabilities. Now we seem to be worried about their accumulating excessive dollar assets. Capital has flowed "uphill" from poor to rich countries. The invisible hand of international capital markets has not successfully coordinated monetary and exchange rate policies." It is likely that there will be a readjustment of consumption and capital flows globally. This has probably started already due to the crisis of 2007-9.

4. The costs of reserve accumulation for developing countries

The social and economic costs to developing countries from the strategy of reserve accumulation have been enormous. Fully to appreciate the significance of these costs it is necessary to refer briefly to mainstream debates on the optimal level of international reserves. Three indicators are employed: first, the ratio of reserves to imports, second, the ratio of reserves to short-term external debt and, third, the ratio of reserves to the money supply (typically M2). [33]

The first indicator focuses on reserves in connection with unexpected deteriorations of the balance of trade. Thus, it typically expects countries to keep reserves that could cover at least three months of imports. The second indicator, known as the Greenspan-Guidotti rule, emerged in the early 2000s as a response to the crises of the late 1990s, and focuses on short-term external debt. It expects that countries should have enough reserves to cover all of their short-term external debt. The third indicator is also a response to the crises of the late 1990s, but is broader than the second. It focuses on sudden capital outflows and expects that countries will keep reserves at least equal to 20% of their money supply (M2).

The third indicator is normally higher than the second, which is higher than the first. This is because increases in financial activities (assets and liabilities) in recent years have far exceeded increases in trade. Since the third indicator necessitates the highest level of foreign reserves, it has been the favourite of the international financial system. The indicator acts as a form of insurance for international capital entering developing countries. It is notable that in recent years the actual levels of international reserves have been even higher than the third indicator.

Against this background, Rodrik (2006) pioneered the measurement of the social cost of reserve accumulation. Rodrik suggests that the cost should be measured by the difference between interest on short-term borrowing abroad (since countries hold reserves equivalent at least to their short-term borrowing) and the yield on international reserves (since these are invested in assets abroad). The former is obviously higher than the latter. On this basis,

[33] On short-term debt as target, see Bussiere and Mulder 1999 and Garcia and Souto 2004. For the effects on exchange rates see Hviding et. al. 2005.

Rodrik estimates the annual loss to developing countries at close to 1% of GDP – a very large sum. Akyuz (2008) also offers a measure of the cost of reserves, but considers reserves to impose costs only if they are due to borrowing rather than trade. Even so, Akyuz's estimate of the annual cost is around $100bn.

Rodrik (2006) has also raised the issue of why developing countries have not tried to reduce their short-term foreign liabilities since the early 2000s. Had they done so, they could have reduced the cost of holding foreign reserves, without necessarily losing liquidity. This is an important puzzle and it is not clear where the answer lies. It is likely that the rise of short-term external debt is associated with the tendency of the developing country exchange rates to appreciate in recent years. This tendency has affected the behaviour of international capital flows, and prevented developing countries from reducing their short-term borrowing.

To be specific, once the tendency toward exchange rate appreciation became established for particular developing countries, investors began to borrow in the international financial markets in order to invest in domestic capital assets, such as domestic public and private bonds, stocks, real estate and others securities. It is important to note that such investors could also be domestic, originating in both the financial and the non-financial sector. Assuming that the domestic currency appreciated, they could repay their external financing under better terms, or simply roll it over. Put differently, investors would sell assets in a weak currency with relatively low interest rates, and then use the funds to buy assets in a strong currency, yielding higher interest rates. Such operations have been called the 'carry trade', and have generated huge profits for international financial investors (IMF 2008a).

As financialisation progressed, the financial assets of developing countries have become susceptible to the 'carry trade'. Interest rates in developing economies have been generally higher than in developed economies in recent years, while fixed investment as proportion of GDP has declined. Since 1990, there has also been an increase in financial assets relative to GDP in developing countries, as was shown in section 2. Thus, while developing country international reserves have increased enormously, their short-term external debt has also risen substantially. The result has been intensification of the financial exploitation of developing countries, partly captured by the measurement of the social costs of international reserves.

5. Elements of a Marxist analysis of international finance and its crises

As was shown in the previous sections, issuing debt denominated in dollars has allowed the USA to attract financial flows while extracting net financial benefits from developing countries. Further insight into these crisis-ridden and exploitative processes that characterise financialisation could be obtained through Marxist political economy. This would also facilitate the understanding of reserve accumulation in the 2000s.

Analysis of financial liberalisation from a Marxist perspective requires establishing some principles regarding the development and role of the financial system in the capitalist economy. A key point here is that capitalist finance relies on the continuous generation of idle, or stagnant, sums of money capital in the normal course of the turnover of capital. These resources of idle money provide the foundation of the capitalist credit system. For Itoh and Lapavitsas (1999, p. 61) "the credit system mobilises the stagnant money generated in the course of capitalist reproduction, transforms it into interest-bearing (loanable) capital and redirects it toward accumulation." Thus, finance and economic development are integrally related, with real accumulation providing the underpinnings of finance.

The fundamental relationship between finance and the real economy can be usefully analysed in terms of the functioning of money as money and as capital. [34] Finance is a set of institutions, markets and assets that necessarily emerges in a capitalist economy and facilitates the transformation of money into money capital across society. More specifically, finance involves transactions in loanable (or interest-bearing) capital. This is capital existing always in the money form, available for lending to those engaged in real accumulation, earning interest rather than profit. It also predates the capitalist mode of production (Marx 1973, p. 376). The banking system plays a pivotal role in the movement of loanable capital, thus being linked to real accumulation and earning returns out of the self-expansion of value in production.

The banking system is the backbone of the capitalist financial system, and regulates the impact of loanable capital on the capitalist economy. Historically, the process of emergence of banks was connected to the development of commercial and industrial capital. Thus, banking activities are related to trade credit and money-dealing. Analysing the economic foundations for the emergence of the banking system, Lapavitsas (2007, p. 424) proposes that "[a]t the core of advanced capitalist banking lie activities that relate to both trade credit and money-dealing. This approach offers two analytical advantages. First, it postulates a specific link between banking lending and money-dealing, the latter covering foreign exchange, account management, clearing, money transmission and safe-keeping of assets ... Second, the approach fits well with banks' tendency to concentrate in commercial centres where trade credit transactions and instruments proliferate." In this light, banks are specialists in the monetary and financial aspects of capitalist circulation who reduce the turnover time of the industrial capitals and lessen circulation costs.

The financial system is also fundamental to crises, which are an integral aspect of the capitalist economy. Marx (1976, Capital vol. I) showed that capital incorporates the inherent contradiction between money as general form and commodities as particular forms of value. Capitalist crises are extreme forms of this contradiction since in a crisis commodities cannot be turned into money. The fundamental reasons for crises lie within real accumulation and are summed up in falling profit rates. Typically, constant becomes too large relative to variable capital, or the proportions between different sectors of the economy are disturbed. But since the financial system mediates the flows of loanable capital and thus the expansion of output (which is impossible to sell in a crisis), capitalist crises inevitably have financial and monetary aspects. These frequently involve the difficulty of obtaining fresh money to repay debts.

In this light, Marxist political economy distinguishes between financial crises that are integrally related to the process of production, and those that occur due to overstretching of finance caused by the internal operations of the financial system. The latter reflect the inherent autonomy of finance from real accumulation. Crises that are integrally related to the process of production are called Type I, and those that are due to the financial system alone are called Type II. [35]

In Marx's own words (1976, p. 236): "the monetary crisis, defined in the text as a particular phase of every general industrial and commercial crisis, must be clearly distinguished from the special sort of crisis, also called a monetary crisis, which may appear independently of the rest, and only affects industry and commerce by its backwash. The centre of movement of these crises is to be found in money capital, and their immediate sphere is therefore banking, the stock exchanges and finance." This distinction is very important for analysis of contemporary crises of financialisation, which owe much to the

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[34] As will be seen below, this relationship is contradictory and provides the basis for two different types of financial crises analysed by Marxist political economy.

[35] This typology can be seen in Itoh and Lapavitsas 1999, chapter 6.

internal operations of finance, and reflect the growing autonomy of the financial system in the last three decades. The present financial crisis can be considered as type II crisis since its causes lie in the operations of financial institutions in the US housing market. [36] But it also has roots in the process of real accumulation, given that financialisation has permeated the economy. In other words, the trigger and proximate causes of the current financial crisis lie within the financial system, but its deeper roots are to be found in the transformation of real accumulation.

However, further analytical requirements are necessary to understanding developing country crises in the late 1990s and the shift toward reserve accumulation. These are global events occurring in the world market, which is structurally different from the domestic market. The world market has fewer homogenising mechanisms of law, institutional practice, custom and regulation compared to the domestic market. Moreover, there is no globally integrated credit system with a central bank at its heart that could support the world market. International finance is fundamental to the world market but, unlike domestic finance, it does not comprise a structured and layered set of institutions. Finally, the world market contains relations of states as well as private capitals, thus incorporating relations of power and national exploitation (Lapavitsas 2006). Consequently, money in the world market has very special weight, significance, and meaning.

For Marxist political economy, money is the universal equivalent that performs certain functions linked directly or indirectly to the process of commodity exchange. Those directly related to commodity exchange are measure of value and means of exchange; those indirectly related are hoarding, means of payments and world money, which Marx called “money as money” (Itoh and Lapavitsas 1999, pp. 45-52). According to Marx (1976, p. 242), world money “serves as the universal means of payment, as the universal means of purchase, and as the absolute social materialisation of wealth as such. Its predominant function is as means of payment in the settling of international balances.” World money supports the world market, and provides the organising impetus that this market lacks compared to domestic markets. For the same reason, world money crystallises the tensions present in the world market and is the focus of global crises.

Historically, world money has taken the form of commodity money, primarily gold. The operations of the global monetary and financial system, consequently, used to depend on the accumulation and transfer of gold hoards kept by capitalist countries. Global capitalist crises were characterised by sharp swings in gold hoards, while market participants had difficulty obtaining money, or selling their commodities in the world market. For Marx (1976, p. 244), “whenever these hoards are strikingly above their average level, this is, with some exceptions, an indication of stagnation in the circulation of commodities.”

However, in the contemporary international monetary and financial system, holdings of world money play a more complex role. Commodity money has been reduced to a hoard of last resort, and the US dollar functions as quasi-world-money. One of the main challenges for political economy today is fully to explain the role of the dollar as quasi-world-money. Among other important points, according to Itoh (2006, p. 110), it is vital to note that the dollar has become universal money without any formal international agreement, while its exchange-value has been relatively stable despite the constant danger of a collapse in its value.

For our purposes, this transformation has meant that the hoards of reserve currency have become a matter of monetary policy as well as management of the national currency of the leading country in the world market. This is a vital privilege for the USA in the world market allowing it to extract exclusive benefits. It is also an exploitative relationship with

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[36] See Lapavitsas 2009 for full analysis.

other countries, particularly developing ones. Earlier sections of this article have established the expropriating aspect of quasi-world-money in the current configuration of the world market. Issuing quasi-world-money has become an international mechanism for the rich to extract value from the poor in the context of financialisation and free capital flows. In this sense, reserve accumulation is an exploitative process, a form of tribute accruing passively to the issuer of quasi-world-money.

6 – Conclusion

In the era of financialisation, of which financial liberalisation is a fundamental aspect, there have been two distinct periods of international capital flows relating to developing countries. The first took place in the 1990s and was characterised by the eventual reversal turn of flows, current account deficits and the spread of financial and foreign exchange crises. In contrast, the second period commenced in the early 2000s and has been characterised by the accumulation of international reserves. These aim at protecting developing countries from sudden reversal of international capital flows, while allowing them more actively to participate in the global financial markets.

This article has established that, for different reasons, both periods have entailed enormous social and economic costs for developing countries. For the former, costs arose due to the devastating effect of financial and currency crises, while for the latter costs have resulted primarily from the low yield of foreign exchange reserves relative to borrowed funds. Financialisation since the early 2000s has meant that developing countries have held huge reserves of quasi-world-money thus facilitating their financial exploitation by developed countries, primarily the USA. As the crisis of 2007-9 unfolds, it is possible that further losses will accumulate as US financial assets lose value.

It is clear that developing countries need stronger social controls over the policy of reserve accumulation, whose results have been extremely costly. Moreover, participating in free capital flows has fostered domestic financialisation, thus exacerbating the power and influence of financial institutions in developing countries. The development implications of these trends are deeply problematic. It is a tragedy that such policies have been forced on developing countries given their poverty and huge social needs.

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