

Heikki Patomaki

I. Economics of Financial Instability

Since the beginning of the 18th century and the Enlightenment, there emerged a recognised international agreement among the great powers (including the United States and Russia) that all currencies were fixed to a universal standard, gold. The pivotal and regulatory centre of that system was the Bank of England. In general this agreement lasted until 1914. Although the late 19th and early 20th century was the Golden Age of *haute finance*, international banks and booming – and often crises-ridden – stock exchanges, there were no proper foreign exchange markets before the 20th century because the Gold Standard fixed the rates.¹

After World War I, interconnected global financial markets emerged and, simultaneously, floating rates prevailed for a while. It became reasonable to hedge against exchange rate changes and possible to gamble also on the prices of currencies (and indeed many did, at least in London and New York). Because of nostalgia for the lost stability of the 19th century, countries such as Great Britain attempted a return to the Gold Standard in the 1920s, but with little success. And then the boom of the financial markets in New York, London and elsewhere ended in 1929.

Soon after the Crash of 1929, in the early 1930s, countries such as Great Britain were forced to return to the non-regulated floating regime. This period was short-lived and characterised by a slow, ambivalent and painful recovery from the Great Depression, with a number of countries turning to nationalism and protectionism. In 1939 the world economy fragmented again. The Bretton Woods system was created in the middle of World War II, in a series of negotiations between Great Britain, which was under the intellectual and diplomatic leadership of J.M. Keynes, and the US, with Harry Dexter White as their main negotiator.

The Bretton Woods system preserved an essential element of the Gold Standard. It provided fixed exchange rates to the US dollar, which in turn was exchangeable to gold in fixed terms (USD35 per ounce). Moreover, all capital movements were strictly controlled by the nation-states. There was little reason for hedging and relatively few opportunities for speculation. Currency transactions tended to be linked to real economy transactions. However, occasional fluctuations in the demand and supply of a currency

did occur. States had the option to resort to sudden devaluations; some states used that option quite regularly.

Within a generation, the global situation has become radically different. Eurodollar markets developed quickly in the 1960's. The US abandoned the Bretton Woods system of fixed exchange rates in 1971. Following a series of political decisions, influenced by the pressure imposed by the US, the World Bank, the IMF and the new offshore financial centres, countries have liberalised (further) their financial markets since the 1970s. Orthodox economic theory has functioned as a justification for financial deregulation and the re-emergence and growth of the global financial markets (for details of the monetarist argument for floating exchange rates, see Appendix 1).

However, in the absence of a proper analysis of the real world, there can be no adequate regard of the real consequences of imposing the orthodox ideal of "free markets".² In the following, first I assess and explain the variability and volatility of the global financial markets since the early 1970's; secondly I sketch a causal explanation of financial crises that have occurred since the early 1980's; and finally, discuss the socio-economic consequences of financial instability.

On the basis of available evidence, the de-regulated and globalising financial markets appear tendentially unstable and volatile. In this book, I am focussing on exchange rates, but the argument also necessarily extends to bond and share markets and bank loans, for these financial markets function in an inseparable manner. Already in the 1980's, exchange rate fluctuations had grown three-fold compared to the 1960's. Since the 1980's, the power of financial markets to undermine the economic path of states has grown manifold, but there has also occurred a political race to cope with the growth of the power of the financial markets.

The crises of the 1990's, in particular, have had drastic real economy consequences for a multiplicity of states and economies, as well as for hundreds of millions of people. An examination of the real world conditions of some of these crises indicates that the financial markets themselves tend to generate volatility and crises. How do the financial markets work? What are the essential *mechanisms* of the markets, in which currencies, loans, bonds, shares and other assets are being exchanged around the world and the clock? The bulk of this chapter is dedicated to building *a conceptual model of the mechanisms of financial markets*. The model is based on the notion of

radical uncertainty in the face of openness and unpredictability of the future; as well as on the idea that all economic demi-regularities (contingent, tendential “laws”) depend upon unique, transitory, institutional arrangements. The model indicates that agency is inter- and system-dependent; and that financial decisions must be explained in terms of sensitive trust or confidence on developments and highly reflexive strategic considerations.

Although many aspects of both agents and structures could always have been otherwise in any given crisis, the systemic explanation reveals how the *financial multiplication process*, which tends to grow with rather vague and ambiguous connections to the material world of economic developments, is itself a crucial cause of financial instability. It is not only that the multiplication process – or in standard financial terminology, leverage building and indebtedment – can easily grow into “bubble” in particular places and markets, but any anticipation of problems and changes can easily trigger the financial markets to *produce* a crisis.

In the following, the discussion on the mechanisms of global financial markets is followed by a brief analysis of the socio-economic consequences of financial instability. It is argued that although financial markets have become *partially* detached from the economy where non-financial goods and services are produced, both the arbitrariness of price-formation and occasional drastic fluctuations have far-reaching consequences to the social and economic conditions of numerous actors. A more thorough analysis of the power of the global financial markets will be, however, left to Chapters 2 and 3.

Instability and volatility in the 1980’s and 1990’s

In their OECD Working Paper, Edey and Hviding argue that an assessment on date on monthly movements in exchange markets suggests that there has been no general trend increase within the post-deregulation period since the 1970’s, although “of course exchange rates are substantially more variable than when they were directly controlled”.³ This OECD data is reproduced in Table 1, with average counted first for all and then for the most important currencies. The OECD figures seem to indicate that on average these currencies have been three times more volatile since the early 1970’s.⁴ There

appears to have been a jump to a new level of volatility, but no radical changes after that. Obviously, this data does not cover the world outside the OECD area; that is, most countries of the world are excluded. However, by far most forex trade takes place between the OECD currencies.

Table 1: Volatility of effective exchange rates

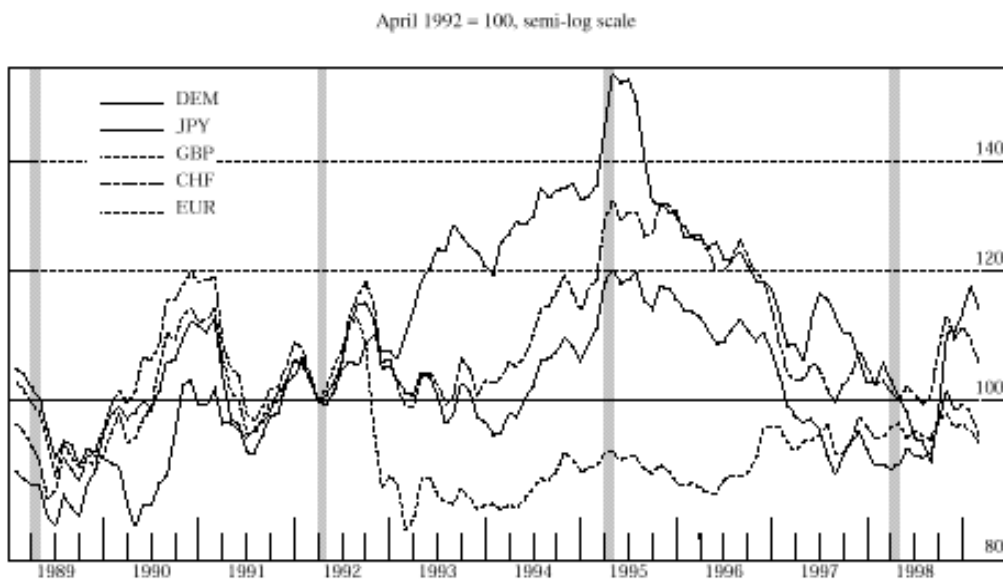
(Standard deviation of monthly changes)					
	1960-69	1970-79	1980-85	1986-89	1990-94
United States	0.2	1.1	1.8	2.1	1.5
Japan	0.3	1.9	2.4	2.4	2.4
Germany	0.7	1.9	2.4	2.4	2.4
France	1	1.2	1.1	0.8	0.7
Italy	0.3	1.7	0.7	0.6	1.9
United Kingdom	1	1.5	2	1.8	2
Canada	0.2	1.1	0.9	1	1.1
Australia	0.6	2	2.3	3	2.2
Austria	0.4	0.7	0.7	0.5	0.6
Belgium	0.3	0.8	1.1	0.8	0.9
Denmark	0.4	1.1	1	0.8	1
Finland	2.1	1	0.9	0.6	2.1
Greece	0.2	1.5	2.9	0.9	0.8
Iceland	4.4	3.7	3.4	1.6	1.1
Ireland	0.5	0.7	1.4	1.2	1.4
Netherlands	0.3	0.8	0.9	0.7	0.8
New Zealand	1.3	1.6	2.4	3	1.4
Norway	0.4	1	0.9	1.4	0.7
Portugal	0.4	1.9	1.7	0.8	0.9
Spain	1.2	2	1.4	1.1	1.5
Sweden	0.9	1.1	1.7	0.5	2
Switzerland	0.4	1.6	1.5	1.2	1.5
Turkey	0.3	6.7	3.8	2.7	6.7
Average	0.773913	1.678261	1.708696	1.386957	1.634783
Average of G7 (excl. Italy) + Australia + Switzerland	0.55	1.5375	1.8	1.8375	1.725

Source: OECD 1995

Would there be any other statistical evidence about the exchange rate variability and volatility? In the available graphical illustrations, the

development from the early 1970's until the late 1980's emerges as quite dramatic⁵, but at least in the 1990's the picture indeed remains more or less unchanged, with a constantly high volatility and variability, as shown in Figure 1.

Figure 1. Bilateral exchange rates with the US dollar in the 1990's



Note: shaded area designates survey months.

Source: BIS 1998: 5.

That conclusion would be premature, however. The exponential growth of the global forex markets indicates *the growing power* of these markets to shake and undermine any given currency. In 1977, daily global forex turnover was only \$18.3 billion, whereas by 1986 the volume of the forex markets had reached the level of \$270 billion a day. In twelve years, the daily volume of transactions has again grown six-fold, being now about \$1600 billion.⁶ Table 2 combines Felix's 1995 calculations and the most recent BIS 1998 Survey and 1999 Annual Report statistics, and also estimates future growth.

In the late 1970's and the 1980's, the forex markets grew explosively. In the 1990's, annual growth slowed down to 9-12%, which is still very high. However, because the volumes are measured in terms of given dollar rates,

no precise conclusions can be drawn from the average annual growth rates. Hence, using April 1998 (instead of Spring 1999) exchange rates, the picture of the developments in the 1990's appears quite different. The growth rate would be 9% for 1992-1995 and 14% for 1995-98.⁷ With 12% growth, the *daily* volume of forex transactions will be over \$6000 billion in 2010, which is likely to be about 15% of world GDP⁸. That is, the value of world GDP will be traded in less than seven days.

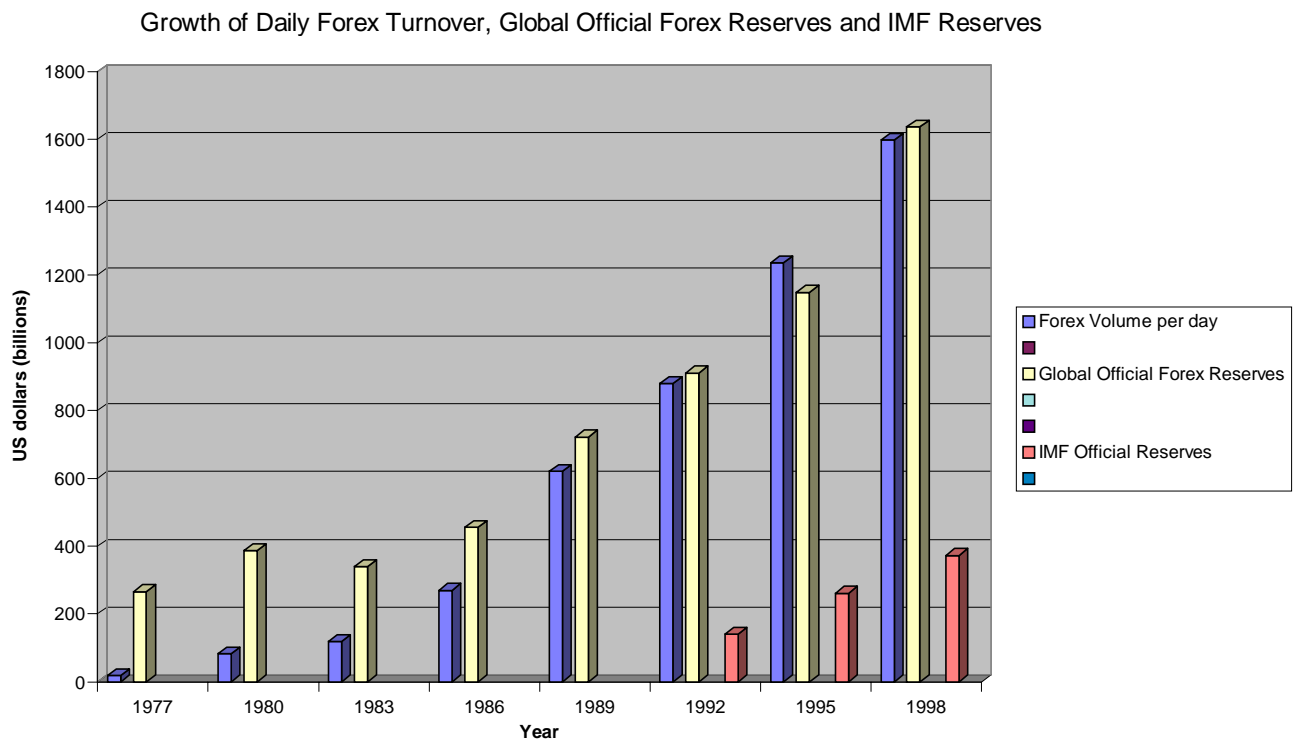
Table 2. The power of financial markets: daily forex trading volume

All figures in billions of US dollars				
Year	Forex volume per day*	Average annual growth %	Global official forex reserves**	Ratio of reserves/forex
1977	18.3		265.8	14.52
1980	82.5	65.20	386.6	4.69
1983	119	12.99	339.7	2.85
1986	270	31.40	456	1.69
1989	620	31.93	722.3	1.17
1992	880	12.38	910.8	1.04
1995	1249	11.99	1148.8	0.92
1998	1599	8.92	1636.1	1.02
Projected forex figures, assuming annual growth of:				
	7%	12%		
2004	2400	3160		
2010	3600	6230		
* Figures for 1977-1992, Felix 1995: 16; and for 1995-1998, calculated from BIS 1999a: Tables A-3 and B2, 3 and 8 respectively (estimated global turnover + currency swaps and options).			** Figures for 1977-1992, Felix 1995: 16; and for 1995-1998, BIS 1999b: Table VI.4, 118.	

The derivatives markets for forex and currencies constitute two thirds of the markets. Derivatives are important, even when the neutralisation or modification of derivatives contracts involves entering into new contracts: they expose participants to risks and have an effect on the prices of currencies. The notional amounts outstanding are astonishing: for total derivatives contracts, at the end of June 1998, 72000 billion US dollars, of which forex contracts are 22000 billion US dollars. That is, the forex derivatives amounts outstanding are almost at the value of the world GDP. Most of these are forex swaps.⁹ US investment banks dominate the markets

worldwide. Most of the derivatives activity is taking place in London and New York, but also Tokyo, Singapore, Paris, Frankfurt and Zürich are significant locations. The daily turnover of forex derivatives is almost 1000 billion US dollars; and the gross market value of these contracts is also about 1000 billion US dollars.¹⁰

Figure 2: Growth of forex turnover and global reserves



Until 1989, the global official forex reserves grew only modestly – or not at all – and consequently the ratio of reserves to daily forex volume declined dramatically from about 15 to 1. This evidently implies a reduced capability of monetary authorities to moderate and control fluctuations of exchange rates. As shown in Figure 2, since 1989, global official reserves have been rising much more rapidly than before and more in pace with the forex volume, thus the ratio has remained at the level of 1.¹¹ To merely keep up with the growth of the forex transactions, the reserves must be rapidly increased from the current 5% to 15% of the world GDP by 2010.

It is also noteworthy that in most industrial countries – with the partial exception of Japan – cross-border transactions in bonds and equities are now many times their GDP, although in 1975 they were less than 5% in every country. This phenomenal growth has occurred, particularly in the 1990's, due to liberalisation and also because bonds have partially substituted traditional bank loans.¹²

Table 3. The Power of Financial Markets: Bonds and Equities

Cross-border transactions in bonds and equities*												
	1975	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997	1998
	as percentage of GDP											
United States	4	9	35	89	96	107	129	131	135	159	213	230
Japan	2	8	62	119	92	72	78	60	65	79	96	91
Germany	5	7	33	57	55	85	170	158	172	200	257	334
France	n.a.	5	21	54	79	122	187	197	187	258	314	415
Italy	1	1	4	27	60	92	192	207	253	470	677	640
Canada	3	9	27	65	83	114	153	206	187	251	355	331

*Gross Purchases and sales of securities between residents and non-residents.
Source: BIS 1999b: Table VI.5, 118.

Compared to material, productive investments, transactions in bonds and equities – like currency transactions – are mobile. The value of bonds, equities and related derivatives also depend on exchange rates; and exchange rates depend, to an increasing extent, on the trading of bonds issued always in a particular currency. This is because the non-trade-related acquisition of foreign exchange is undertaken in pursuit of financial gain from a combination of movements in the exchange rate and differential rates of return from interest and capital gains.¹³ These links also create potential for cumulative, escalatory and explosive processes.

Real world counter-tendencies and processes

Already at the empirical level, it is evident that the system of flexible exchange rates has not decreased volatility and variability. Rather, there has been more volatility and variability since the early 1970's. It seems that free currency markets have not acted as buffer zones, as was supposed by the advocated flexible rates and free financial markets (see Appendix 1).

Statistical traces do not, however, reveal anything about how the outcomes have come about. In open systems, different tendencies – including conscious attempts to resolve economic problems – can counteract each other and different spatio-temporal processes may overlap, intersect, interlope, and/or clash.¹⁴ In the following, I will briefly discuss four tendencies and processes that seemed to have intervened in the functioning of global financial markets.

An important reason why fluctuations and volatility within the OECD area have stayed relatively constant since the late 1980's is that states, regional integration organisations and global authorities have been struggling against the tendency of increased volatility. These practices seem to question the normative justifications for the *de jure* retreat from intervening in the “free markets”. Monetary reserves have increased or been increased; new ways of international co-ordination have been found; and interventions to prevent or alleviate crises have been more frequent than ever. There have also been at least partially successful attempts at monetary unification. EMU is the most obvious example. In addition, many countries have fixed their currencies either to US dollar or euro (previously Deutsche mark or French franc).

Moreover, the globally imposed norm of “sound macroeconomic policies” has not only encouraged further liberalisation but also homogenised economic policies and expectations. And last but not least, the advocates of the Washington consensus have, in a sense, moved from Friedman towards Polanyi. As a response to the financial crises, it has been realised that markets have to be governed by appropriate rules in order to exist and function properly. Hence the attempt to re-regulate the recently liberalised financial markets, albeit mainly by persuading and putting pressure on the states to regulate the domestic sphere of each country, and without touching the fundamental idea of “free markets”.

Mostly these processes are the results of attempts to stabilise the instability that has emerged within the financial markets. They should be seen as purposeful responses to mounting problems. However, although some of them have in fact reduced the volume, variability and volatility of the forex markets, none of them constitutes a collective measure addressing the essence of the problem.

Monetary interventions

Monetary reserves of the central banks can be used for short-term adjustments. In a deregulated system that is based on flexible exchange rates states, in fact, have few other means available.

There has been a greater frequency of crisis interventions by G-5 and G-7 monetary authorities.¹⁵ This has also led to new multilateral responses and the institutionalisation of *ad hoc* rescue packages. By early 1985, the leading Western powers had realised that the foreign exchange markets were so big that only a concerted intervention by all the major central banks could have any effect. Worried about the dollar's rise, key central bankers led by Paul Volcker, head of the US Federal Reserve, made a secret agreement. On Wednesday morning, 27 February 1985, they struck, selling dollars simultaneously. By the end of the day, the dollar had fallen from DM3.50 to DM 3.30. This operation was followed by the famous Plaza Agreement, named after the Plaza Hotel in Washington D.C. where the G5 meeting took place in 1985. Again the agreement was to bring dollar down, and again it worked. In later years there were other meetings (for example, the 'Louvre Accord' in February 1987). Usually, they were designed to push the dollar up and were not as successful.¹⁶

As depicted in Table 2 and Figure 2, national monetary reserves have been vastly expanded since the 1980's as a response to volatility in the currency markets. In the 1990's the annual growth rate has been about 10%. The ratio of reserves to exports has risen from 20% in 1977 to 26% in 1998, and in relation to the world GDP the growth has been much faster.¹⁷

New crises have constantly prompted new record levels of IMF lending. The 1997-1998 Asian crisis led to the creation of a new lending facility (the Supplemental Reserve Facility). By July 1998, the international community had already committed \$118 billion in response to the Asian crisis, of which

\$36 billion was from the IMF, \$27 billion by other multilateral organisations, and \$55 billion bilaterally.¹⁸

As a permanent solution, the attempt to increase national and multilateral reserves is likely to fail. Assuming 12% annual growth of the volume of financial transactions, the reserves must be rapidly increased from the current 5% to 15% of the world GDP by 2010 merely to keep up with the growth of the forex transactions. However, the reserves do not help in countering movements of large magnitude and long duration. Nonetheless, I think we can safely assume that, thus far, the increased reserves have contributed to counteracting the tendency towards increased variability and volatility.

Monetary unification

Obviously, in a world with a single currency there would be no fluctuations or volatility of exchange rates. In the absence of global monetary unification, states can alleviate the problem either by regional monetary integration or by pegging their currencies to the dominant ones.

EMU has been part and parcel of the project of European common market and integration since the 1950's, but it has gained further political impetus from the collapse of the Bretton Woods system and the turmoil of global financial markets. After discussions in the Commission in 1968-69, the Werner Report came out in October 1970. It outlined the first detailed plan for materialising the EMU. The Werner Report also presented the EMU as a response to the emerging speculative movements in global financial markets.¹⁹ However, due to the lack of political will for a single currency, the less ambitious 'currency snake' was introduced in 1972. The European Monetary System (EMS) became reality in 1979.

The EMS reduced intra-European variability and volatility. Before 1993 the ERM was widely credited with having achieved its primary goal of creating monetary stability amongst participating states. It also functioned as a buffer zone against the fluctuations of the US dollar.²⁰

In the 1980's, the political will emerged to continue the plans to create a single European currency and central bank. The first stage of the EMU started in 1990. At the time of the political struggles about the fate of the

Maastricht Treaty, financial turmoil – the events of ‘Black Wednesday’ on 16 September 1992 – forced both the pound and lira out of the Exchange-Rate Mechanism (ERM) and the peseta to be devalued by 5%. This speculation was prompted at least in part by the fragile political situation. On 2 August 1993 further large-scale speculation all but destroyed the ERM. The wide band was increased to 15% and extended to all currencies.

These developments in fact gave further political impetus to realising the plans of the Maastricht Treaty. Although the politics of EMU are complicated and multifaceted and it should by no means be seen merely as a device to stabilise currency fluctuations,²¹ it is a fact that the introduction of the euro as of 1 January 1999 has eliminated all intra-EMU currency transactions (including those with Deutsche mark, French franc and Italian lira). This has contributed to the relative stabilisation of the OECD figures.

Outside Europe, there is no formal monetary co-operation along the lines of the EMS and the EMU. However, there is the “poor man’s version” of the Exchange-Rate Mechanism. Countries can anchor their currencies to the rate of one of the major currencies of the world. In most cases, the link has been made to the US dollar – examples include Argentina and Panama in Latin America, and Indonesia and Thailand in South East Asia²² – but some African countries have preferred to peg their currency to the European ones (now transformed into euro). These peggings have not affected the statistics about the volume, variability and volatility of forex transactions; neither do they help against massive attacks against a currency (many would argue to the contrary that it is exactly a non-realistic peg that typically evokes speculative attacks). Nevertheless, at least in more stable periods, they have contributed to the monetary stability of these particular countries.

Homogenisation of economic policies

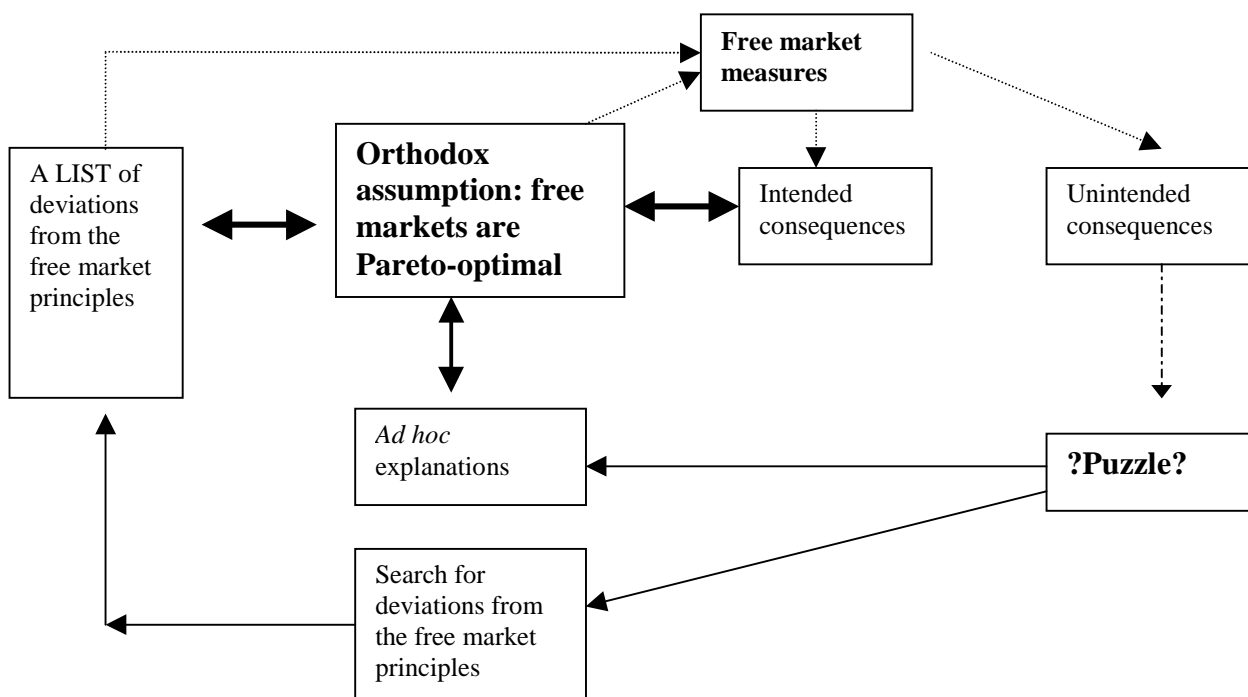
If we accept the orthodox logic, any fluctuation or collapse of the value of a currency must be due to the “economic fundamentals” (whatever that is supposed to mean) of the country in question. The consequent cure is to restore the confidence of investors by correcting these alleged fundamentals. The recipe of “sound macroeconomic policies” is always the same: privatisation and liberalisation coupled with strict budget constraints and tight monetary policy.

This prescription has been at work, and globally efficacious, for more than 20 years.²³ As a result the economic policies of states have been homogenised. This should have stabilised expectations of the investors. However, whenever a problem arises, upon a closer inspection, it is always possible to find *de facto* deviations from the right course.

Indeed, with hindsight and a firm commitment to orthodox theory, it is always possible to find a variety of arbitrary explanations or a list of deviations from the sound free-market principles. “The fundamentals were, after all, wrong, even if we did not see it beforehand.” Perhaps there were some hidden problems in the balance of payments or exchange? Perhaps political compromises between different nationalities within the state meant that parts of the economy were over-subsidised? Perhaps capitalism in those countries was “crony”, meaning that some firms and banks were favoured over others? Perhaps there was also straightforward corruption? Or perhaps the state was after all involved too much in crucial investment decisions and everyday practices of banks and firms? The rate of taxation might have been too high as well. Or it may be that there were underlying weaknesses in the state budget, even though they went unnoticed for a long time. Or perhaps there were weaknesses in the way the state had liberalised its trade or financial markets?

The closed circle of operation of the orthodoxy is sketched in Figure 3. In accordance with this logic, the political solution is invariably to impose the theoretical ideal even more vigorously (“the IMF’s experience with its member countries has shown that deeper and broader-based reforms are necessary to achieve high-quality growth”²⁴). No evidence can undermine the fundamental belief that free markets are, in general, Pareto-optimal (i.e. no arrangement can improve the position of anyone without making worse the position of somebody else). The long-run vision seems to be that the day will finally arrive when all the investors of the world will have equal confidence in the “soundness” of economic policies of all the countries of the world. Thence, there will be no more financial crises.

Figure 3: The closed circle of operation of the orthodoxy



Has this movement towards homogenisation of economic policies actually reduced the variability and volatility of exchange rates? For an individual country in trouble, the IMF (etc.) prescriptions may indeed work – at least in the short run, and partially because the financial actors themselves believe in the orthodoxy – to restore the “confidence of investors”. But there is no way of concluding that the homogenisation of economic policies has actually contributed to global financial stability. There are and will remain two fundamental obstacles:

- **Material economy of production and exchange:** There is an increasing divergence of real economy conditions, in the global context of slackening economic growth and rapidly rising inequalities, both within and between countries. As will be explained in more detail in Chapter 2, orthodox prescriptions have actually contributed to these developments.
- **Politics of economy:** Even neo-constitutional multilateral arrangements and semi-authoritarian domestic practices²⁵ do not

guarantee that everybody will be content with merely expressing their belief in the wisdom and inevitability of the orthodoxy; hence, the orthodox measures will remain politically highly contested; it is also possible that countries will continue or re-start to apply non-orthodox measures.

Among other things, these two real world obstacles will ensure that investors will continue to have diverse, conflicting and vacillating expectations in the future. Also for these reasons, unintended consequences and unexpected outcomes will continue to prevail in the global financial markets.

Re-regulation

A crisis has often followed financial deregulation and liberalisation (in fact, not only in countries, but also in sectors of banking and financial activities). Some states have resorted to re-regulation in order to stabilise the exchange rate and the financial conditions of other economic activities. Examples include Chile, which was perhaps the first country to follow neoliberal policies (under the Pinochet junta). The first round of financial liberalisation ended in 1982, resulting in Chile's deepest recession since the 1930s, with real output falling 14 percent. Despite the government's ideological commitment to the orthodox economic philosophy, it had to re-nationalise all the banks and impose strict control over forex markets.

The second round of liberalisation in the late 1980's was conducted under state-control and involved developing a strict regulatory framework. Chile has introduced a nominal exchange rate band, with the Reference Exchange Rate reset monthly by the Central Bank of Chile, taking internal and external inflation into account. This is adjusted daily to reflect variations in parities between the Chilean peso and each of the US dollar, the Japanese yen and the euro. Moreover, Chile applies controls over short-term capital inflows. There is a minimum of 20% reserve requirement on new short-term foreign credit, foreign currency bank deposits and investments.²⁶ Throughout the 1990's, Chile's exchange rate has remained quite stable. In the late 1990's, Colombia has followed Chile's example.²⁷

Malaysia is another country that returned to strict regulation and governmental controls of financial markets after a major crisis. In 1998, the Prime Minister Mahathir said Malaysia had to act in face of speculative

Box 1: Paradoxes of Malaysia

The policies of Prime Minister Mahathir of Malaysia seem to be paradoxical in many ways. His defence of “Asian values” appears to be in conflict with human rights and liberal-democratic aspirations in Malaysia, yet in the West it is often the democratic left that seems to be more empathic towards his position of cultural relativism and relatively independent, state-based economic policies. The financial crisis of 1997-1998 occurred simultaneously with fierce power struggles and campaigns in semi-democratic elections in Malaysia. In September 1997, in the World Bank meeting in Hong Kong, he “compared today’s global capital markets to ‘a jungle of ferocious beasts’, and implied that they were directed by a Jewish cabal” (Friedman 1999, 93).

Mahathir’s strong attacks against the external speculators and his resort to re-regulatory measures have, in turn, provoked a fervent reaction from the neoliberal and liberal-democratic circles of the West against him. He has been accused of a contradictory anti-globalisation rhetorics and *de facto* reliance on the benefits of globalisation (ibid.). Malaysia had chosen an export-oriented development strategy based on attempts to attract foreign capital, also by means of establishing export-processing zones and, even, an offshore financial centre. However, Malaysia has always set strict conditions to foreign investors. Also the Labuan offshore centre, which was inaugurated in 1990, has been carefully regulated and does not, for instance, allow money launderers in. Nonetheless it also represents a strategic move in the competitive game of regulatory laxity. (See Abbott 1999).

attacks: “Until the international community agrees on an international regime that will remove the kind of dangers we have been exposed to, we will have to continue with our controls”²⁸. Malaysia decided in 1997 to peg its currency, the ringgit, with the US dollar. Malaysia also made the currency untradeable offshore to stem speculation and introduced a number of other exchange controls and regulations over the stock market (e.g. against short-selling and insider trading).

In February 1999, however, “in view of increasing concerns raised by foreign investors over the 12-month holding period requirement” as well as to facilitate portfolio investment from abroad, the Malaysian government revised the exchange controls. Consequently, the 12-month holding period requirement was replaced by a graduated exit tax (levy on the repatriation of portfolio capital).²⁹ Since the imposition of the controls, the exchange rate of the ringgit remained fixed to the US dollar. Moreover, almost all the economic indicators improved: exports, reserves and domestic demand are up and both inflation and interest

rates are down. The -6.7% decline in GDP in 1998 was turned into positive growth again.³⁰

As Malaysia's Prime Minister's insistence that he will lift the capital controls only when there is a new global financial architecture indicates, the call for *international reforms* became particularly strong after the series of crises that started from Asia in 1997. This call has led, in the practices of global governance, to a slight theoretical *transition from the orthodoxy towards Polanyi*. Or more precisely, the multilateral organisations and Western leaders have started to emphasise the importance of constructing and regulating the markets in the right way, as defined by them.

In his seminal book *The Great Transformation*, Polanyi criticised the liberalist faith in the naturalness of self-regulating markets and spontaneous progress. The role of the modern European state was decisive in the 18th and 19th century socio-historical construction of capitalist *laissez-faire* market economy. This "great transformation" brought about the conditions for a self-regulating market economy:

[...] The gearing of markets into a self-regulating system of tremendous power was not the result of any inherent tendency of markets towards excrescence, but rather the highly artificial stimulants administered to the body social [...]. Only in the institutional setting of market economy are market laws relevant.³¹

In the Bank for International Settlements (BIS) centered regime, the central bankers have met since the mid-1970s to construct a set of norms, rules and regulations and decision-making procedures for preventing and handling financial crises. In response to the Latin American debt crisis of the early 1980s, which shook the US banks in particular, the Basle Committee, under the auspices of the BIS, eventually agreed in the late 1980s on the uniform rules on banking, including the risk-adjusted capital/asset ratio of 8%. The Basle Agreement applies to G-10 countries (G-7 plus Sweden, Belgium, Holland and Switzerland).

Similarly, the attempts of the late 1990s to relieve the tendency for currency and financial crises presuppose that the conditions for properly self-regulating markets have to be artificially created. It does not suffice to simply de-regulate and liberalise; new mentalities, administrative bodies and regulations have to be produced as well. In line with the orthodoxy, however, the idea is that only such policies and regulations are in order which help to ensure the self-regulation of the market.

The IMF, in collaboration with the World Bank, has in the late 1990s been championing what it calls “second-generation reforms” in its member countries, enacted through its surveillance, technical assistance, and financing. These include a demand for more transparency in economic policies (the investors must know what the states are doing); and for establishing a simple and transparent regulatory environment and a professional and independent judicial system that will uphold the rule of law, including property rights (this is meant to facilitate and simplify financial transactions).³²

The idea seems to be that by giving the investors better and more accurate information about the economic conditions of states and by establishing simple, well-functioning and unchanging rules of the game, the laws of the market will finally start to work as they should (efficiently and optimally, guaranteeing stability). However, unlike the regulations introduced by Chile and Malaysia, these rules are meant, first and foremost, to guide states rather than investors and traders in the forex and stock markets.

Will the “second-generation” reforms help to reduce fluctuations in the forex markets? Apart from the major problem that the emphasis is on regulating states, not the market actors, the answer depends on how we explain the recurrence of financial crisis.

Explaining the recurring financial crises

One of the first crisis hit the Southern Cone of Latin America in the early 1980's. Another well-known crisis is that of the Black Monday of October 1987, when the Wall Street went down for a while. Europe was struggling with a series of crises in the early 1990's (both the EMS and the Nordic countries). Soon it was the turn of Mexico in 1994-95. The most recent series of well-known crises started in Asia in 1997, spread to Russia in August 1998, and finally to Brazil in late 1998, with repercussions elsewhere in Latin America. Japan has been delving deeper and deeper into a deflationary spiral, also because of its banking crisis. And these are only examples of some 70 banking crises and 90 currency crises since the 1970s. The next major crisis may well occur again in the US, given that a collapse of its stock markets is already long overdue.

In the North, including Japan, these episodes have often involved either banking or currency crises (although there have been cases of both occurring simultaneously); but in the South they have typically been a combination of the two. They have been associated with borrowed funds based on financial *multiplication* of – typically short-term – investments in assets and real estate. This multiplication can be created within a national banking and investments funds system itself, and/or can be based on the leverage of global financial markets, assuming the form of short-term capital inflows. These developments can also be interrelated. Thus, the transformations and increased competition of commercial banking in the major industrial countries has created, in the context of financial liberalisation, much of the impetus for the increased capital inflows in the South.³³

The value of paper or electronic money and assets is based on *trust*.³⁴ At the heart of all financial crisis is the sudden disappearance of sufficient trust or confidence on a bundle of assets (including currency, bonds, equities etc.). Somebody takes a lead and starts to sell in large quantities, others follow. Suddenly, the previously shared – and often taken-for-granted – trust disappears and panic hits those who still hold these assets, particularly so if they have them in large quantities and are existentially dependent on their values. Disappearance of trust is often contagious, particularly if reinforced by complex investment strategies, which may make values of seemingly separate assets strictly interdependent. Everything that is associated, for one reason or another, with a bundle of assets suddenly becomes quite suspicious and uncertain as well. And so it goes on until some kind of a bottom is reached or authorities start to do something decisive (if they can).

The disappearance of trust or confidence is at the heart of the problem. Suppose that it was X that collapsed this time. We have two possible, different *ex post actu* explanations:

- 1) **Blame the victim explanation**³⁵: Disappearance of trust or confidence in X was due to the problems with the economic fundamentals of X. Had X lived up to the criteria of correct fundamentals, there would have been no disappearance of trust and confidence.
- 2) **Blame the system explanation**³⁶: In a system constructed like the powerful global financial markets, confidence in X, Y, Z etc. is bound to disappear every now and then, perhaps with an increased

frequency; the constellation of more or less arbitrary factors, including highly speculative decisions of many investors, determined that it was X's turn this time.

There are thus two possible ways of approaching the problem of explaining these crises. In fact, a number of syntheses are possible as well.

Blaming the victim

The first explanation obviously assumes that the investors are rational in the very strong and objectivist sense that they react correctly and responsibly to the changes in *objective* economic conditions and developments. This assumption is perhaps the essential element of orthodox economics.

The 'blame the victim' explanation raises a number of questions. Firstly, if the explanation is always constructed *ex post actu* (after the events), and if the perception of the 'real problems' and the reactions to them are not separable, this explanation becomes conceptually tautological. Had there been no collapse of X, would there still have been a fundamental problem with X? The argument becomes, indeed, easily circular (cf. Figure 3 above). Quite correctly, Krugman warns about the seduction of "twenty-twenty hindsight". For example, "now that we know that Japan and Korea have experienced a devastating economic setback, we start to imagine that we always knew that they had feet of clay"³⁷.

As always, orthodox theory dictates that any deviation of practices from the ideals it has set is a problem – not for the theory but for the practices. At some point, this fundamentalist belief should be allowed to be problematised, too. Tautological determinism imposed upon episodes that have already taken place does not do.

Secondly, in the 'blame the victim' explanation, there is a fundamental ontological problem: there is no explication of the *mechanisms* that would mediate between the supposed economic "fundamentals", however specified, and the concrete reactions of the actors in the financial markets. More realistically, we should ask how the contextual realities of dealers, bankers and fund managers are in fact constructed.

Constitution of actors

First, we should have an understanding of the actors. Most importantly, the financial actors and their powers are based on a complicated *process of multiplication* of loans, assets and transactions. Many investors are investing for very small margins. Often they have obtained loans on their assets in order to be able to invest more to yield bigger revenues from the small margins. This is called *leverage* in the jargon of financial markets. In the US, the financial sector debt relative to GDP had risen from the negligible 2-3% in the early 1950s to 60% by the mid-1990s. Presumably, the development has been similar elsewhere in the OECD area.³⁸ The borrowed funds have been invested, in turn, on other assets, possibly on shares in other investment funds such as investment banks (many of them brands of established commercial banks), mutual funds or hedge funds. Often these promise much higher rates of return than any companies producing non-financial goods or services. These higher rates of return are, in turn, a consequence of the financial multiplication process.

A large part of the accumulated debt remains serviceable only as long as there is no major downturn in any of the crucial areas of the financial markets. Many assets remain valuable only as long as other, cross-invested assets remain valuable. That is, the same actors can be, as debtors or investors, dependent on the yields of other actors in the financial markets. Like the value of money itself, the whole financial system is based on *trust* (confidence) that the prices of most assets will rise or at least remain relatively stable also in the future, that the values do not disappear. The quite rational fear of sudden major fluctuations or collapses, once materialised, can be existential for small and big investors alike, and consequently lead to a chain-reaction, which, if it is a far-reaching one, constitute a crisis.³⁹

So the actors are themselves products of the rules, options and interdependencies of the financial markets and the consequent process of financial multiplication. But more concretely, who are the actors in the global forex, bond and equities markets? (For a more systematic analysis of the actors and their resources, see Chapter 2). Markets of both currency exchanges and OTC derivatives are regulated by states, although the OTC derivatives markets is less standardised and thus more lax in its rules. In the context of most countries, including many, perhaps most offshores⁴⁰, only exchange brokers and the dealers of the banks are authorised to make forex deals, and they have to keep accounts on their transactions and positions.

They also have to report all their activities to the central bank and/or to the Bank of International Settlements. They can implement the orders of their customers or make transactions on their own initiative.

In fact, most forex transactions are short-term dealer-to-dealer transactions made in major international currencies and geographically located in major financial centres. Bahrain, Singapore, Luxembourg, the United Kingdom and Hong Kong have clearly specialized in global foreign exchange trading. In contrast, in markets where domestic currency business accounts for around 70% or more of turnover, this may be due partly to the use of domestic currency as a vehicle (United States, Germany, Japan) and partly to the greater prominence of transactions driven by cross-border trade and financial flows rather than cross-currency arbitrage and hedging (Italy, South Africa, Canada, Portugal, Spain).⁴¹

Almost \$1000 billion is processed daily as dealer-to-dealer transactions, a large part of it for very small and very short-term margins. Of the outright forwards, however, more than half takes place between a dealer and a customer; these “customers” play a role also in other OTC derivatives markets.⁴² The customers – such as multinational corporations or investment funds, which are not authorised to make deals themselves – may, however, be deeply involved in financial activities themselves, and in the markets on outright forwards, futures, options and swaps the line between hedging and speculation is thin. Many corporations have their own financial offices and, despite their claims to the contrary, seem to not only to engage in costly hedging operations but also take risks and speculate with currency fluctuations, anticipated devaluations and changes in interest rates.⁴³

Apart from dealers spreading risks and speculating with currencies among themselves, a large part of the forex markets transactions stem from movements originating in the decisions of other financial actors such as banks, mutual funds or hedge funds. The biggest of them belong to Switzerland, the US, Japan and the UK. In 1997, the world’s top ten fund managers controlled \$4220 billion worth of assets.⁴⁴ Sometimes the currency transaction is only an intermediate process, a step between, say, liquidating a US Treasury bond and buying shares of Matsushita in its place. However, banks, mutual funds, hedge funds and other institutional investors have increasingly been treating forex as an asset class in itself, separate from any underlying asset or bond.⁴⁵ They seem to have become prominent players also in the forex derivatives markets.⁴⁶ It is also the case that more and more

often, investments are also complex hybrids, with a forex transaction as an element of the overall cross-border investment deal.

The flows and assets of global financial markets are themselves products of the multiplication process. In 1999, world GDP was about \$30000 billion. That is, currency dealers exchange among themselves an amount equivalent to the world GDP in less than 30 trading days. Largely this is not real in the sense that these funds could be materialised in any more concrete form, that is, in terms of turning them into money that can be translated into production of goods and services or their consumption. Or in more technical terms, these assets are mostly liquid for any given (insignificant) participant in almost any given time, but not for a large number of them simultaneously.⁴⁷

The same assets may make many across-the-borders roundtrips a day, in some cases with practically no risk and minimal margins (these flows can be considered as insignificant in their consequences). Many of can be and are used as underlying assets for derivatives, and derivatives of derivatives, all with different maturities etc. And they can be, and are, used also as guarantees for loans, which in turn can be invested in assets. Yet, these figures are indicative of the magnitude and power of these flows.

It is also noteworthy that the ten top fund managers control assets equivalent to 13% of the world GDP. This is approximately the combined GDP of France, Germany and the UK, or the combined GDP of world's 80 poorest countries, including China, India, Indonesia, Nigeria and Russia, the five countries which together account for almost half of the world population.

Modelling the system

The being, actions and contexts of the financial actors are constituted (i) by the interdependent resources they command; (ii) by the trust on the persistence of the value of assets and liabilities; (iii) by the rules and regulations of the markets within which they act; and (iv) by the reflective rules of rationality that guide their anticipations, strategic calculations and actions. In general, it can be claimed that the more liquid the assets and the shorter the time horizon, the less the decisions have to do with the economy of production, consumption, trade and state budgets, and more with the internal dynamics of the financial markets themselves.

Box 2: Keynes's "beauty contest"

J.M. Keynes himself was an active participant in the speculative game of stock exchange in the 1920s (when he lost his fortune) and the 1930 (when he rebuilt it). In his analysis of financial markets, he was not content with abstract and unrealistic assumptions about the nature, rationality and knowledge of financial actors. Rather, he started with an understanding of the practices of financial markets as he had experienced them. As a participant in these markets, what is the rational way to make money? In his *General Theory of Employment, Interest and Money*, Keynes (1961/1936, 158) says there are in fact two ways: **enterprise** and **speculation**.

Enterprise is "the activity of forecasting the prospective yields of assets over their whole life"; whereas speculation is "the activity of forecasting the psychology of the market". He argues that "as the organisation of investment markets improves, the risk of the predominance of speculation does increase".

Implicitly on the basis of his own experiences from the 1920s and the 1930s, he claims that in "New York the influence of speculation is enormous". This is simply because liquid investments – "hoarding or lending money – often pay better off, at least in the short-run, than real long-term investments in production. He also claims that this is "an inevitable result of an investment market organised" in a manner making investments liquid (ibid., 155).

He likens the behaviour of investors in these kinds of markets to "newspaper competitions in which the competitors have to pick out the six prettiest faces from a hundred of photographs, the prize being awarded to the competitor whose choice most nearly corresponds to the average preferences of the competitors as a whole". However, in this strategic game, everybody knows that everybody else is looking at the problem from the same point of view. "It is not the case of choosing those which, to the best of one's judgement, are really the prettiest, nor even those which average opinion genuinely thinks the prettiest. We have reached the third degree where we devote our intelligences to anticipating what the average opinion expects the average opinion to be. And there are some, I believe, who practice the fourth, fifth and higher degrees." (Ibid., 156).

Of course, if we, again tautologically, *assume* that the prices of these assets *must* correspond to developments in economic "fundamentals", however specified, there can be no problem of mediation or detachment. Yet, contra orthodoxy, we should study the *mechanisms* that produce the outcomes. Even in what Keynes calls "enterprise activities" – dealing with financing productive, non-financial investments – in the financial markets, there must be a mechanism of mediation between the material economy of goods and services and the financial markets decision-making. This entails the possibility of a relative detachment, even without the prevalence of speculation. As far as speculation is concerned (covering in fact both the hedging against risks and gambling on risks), Keynes's analogy to a beauty contest, in which each player tries to guess or anticipate the preferences of the others, knowing that everybody is doing the same thing, helps to

understand and explain why financial activities are partially detached from the reality of production and exchange of goods and services.

The few available accounts of the global financial market *practices* of the turn of the century indicate at least the following points:⁴⁸

- Normally, there is an indirect link to the material economy of work, production, consumption, trade and state budgets through the assessments of the IMF or the rating agencies such as Standard & Poor Corp. and Moody's Investors Services.⁴⁹ Also the reports and actions of the IMF and BIS play a role in constituting actions. These private or public expert systems are highly dependent upon mathematical models, available statistical data and computer systems. With the exception of a broad outline of the development of a few variables under "normal" circumstances, *they cannot predict* anymore than any economic theory can; typically these models have been built on unrealistic orthodox assumptions.⁵⁰ As Keynes has already made clear, "human decisions affecting the future, whether personal or political or economic, cannot depend on strict mathematical expectation, since the basis for such expectation does not exist"⁵¹.
- Decisions must be based on anticipation of the (immediate) future in the context of high uncertainty, and they have to acquire information from anywhere they can. For dealers and investors with short-term horizons, whatever happens to the largely fictitious prices of assets for whatever reasons is in fact quite real, and they have to act consequently. Fortunes may come and go with these fluctuations. The more prevalent the perception is that these fluctuations have only little to do with non-financial activities and processes, the less there is reason to care about the assessments of the non-financial developments.⁵² The public assessments of rating agencies etc. are thus not sufficient (and sometimes not even considered relevant or read). For traders and investors, shared moods about the overall situation; partially shared, partially private analyses of uncertain political situations; rumours about economic and political developments and other investors' decisions; as well as assessments about the possibility of speculative attacks and self-fulfilling prophecies; are all very real, with potentially far-reaching consequences.
- Therefore, what matters for financial decision-making on assets that appear liquid is, given a sufficiently deepened and extended process of

financial multiplication and, also, laxity of regulations, anticipation of the moves of other players *within* the financial markets. In most contexts, the concerns of exporters, importers and those making direct foreign investments or, more generally, the prospects of the firms producing goods and services, whose shares are sold in stock exchanges, are quite secondary. In some segments of the financial activities, they may not enter the decision-making process at all.

- However, it is often better to be a step ahead of the others – although not too much, for then you would lose as well. The more professional macro hedge funds, for instance, may base their strategies on macroeconomic models, which try to anticipate devaluations or drastic changes in interest rates. If depreciation of a currency is expected, they may, for instance, sell that currency forward or buy a put option. Anticipation of changes – particularly if many others follow the market leaders’ actions – may in fact contribute bringing about those changes; this is the phenomenon of self-fulfilling prophecies. However, whatever happens at least partially of one’s own accord, is, in many situations, potentially profitable, certainly more profitable than simply reacting, after others, to episodes and developments that have already taken place. For the latecomers, prices have changed already, occasionally with dramatic consequences.
- The stories actors tell about the market situation – possibly partially based on sophisticated models of market developments – and their choices constitute the strategic game they are playing (within the rules and regulations of the market). This strategic game is typically highly reflective, partially communicative and often also self-referential. Yet, however sophisticated and leveraged the markets, these stories continue to make – even if only vague and ambiguous – references to the non-financial world (to the economic prospects of X; changes in economic policies of X etc.). Thus an external process, as perceived and interpreted by the leading actors, may trigger a downward process. At a certain point, the game may turn out to resemble a Prisoner’s Dilemma game.⁵³ If the confidence on the prospects of X is gone, the individually rational choice “sell as quickly as you can” amounts to a collectively catastrophic outcome of a collapse, although collectively most actors would be better off by not selling for the time being. For any individual actor the worst outcome is to co-operate now while (most) others defect. By not selling as quickly as they can, they would be easily left with nothing. Hence the occasional bursts of panics.

For a country or a group of countries to get into trouble, it is in principle enough that a minuscule part of the global flows and funds are diverted from their currencies, bonds and assets, typically after an undue expansion. What exactly will be the geographical space and context in which, at least in retrospect, there has occurred an undue and untenable process of financial multiplication? It is part of the nature of these crises that the bubbles are difficult to identify beforehand – given the ubiquity of financial multiplication – and their bursts are unpredictable in any precise, scientific sense of the term. A credible assessment of a “bubble” would in itself be a likely cause of a run away from those assets/markets. In a sense, the global financial markets as a whole is a big bubble, and it is possible that also the global financial system as a whole may one-day collapse:

A local monetary system may collapse completely, as happened in Germany in the 1920's; in some circumstances which we might not envisage at all, this might perhaps happen to the global monetary order, with disastrous consequences for billions of people.⁵⁴

In open systems, precise predictions are in principle always impossible (for methodological details, see Appendix 1). Anticipations of futures are possible, but they are also very much part of the game in financial markets. Also learning takes place, perhaps in cycles of myopic optimism, associated with excessive leverage-building and indebtedment, until a bad financial crisis scares players into prudence – for a while.⁵⁵ National, regional and global authorities do their best to assure the trust and confidence of investors. Typically, it is very hard do this without creating “a game of heads I win, tails the taxpayer loses”⁵⁶. This game will encourage “morally hazardous” lending and investments and then counterproductively stimulates undue expansions. From the perspective of political authorities, this may be a Catch-22 situation. If you do not back the financial actors up, crises are more likely and also likely to be more severe. If you back them up, you are encouraging them to take excessive risks and thereby creating conditions for crises (besides paying for the gambling of these financial actors).

In addition, there are particular actors – rating agencies, investment consultants etc. – who make their revenues by assessing the prospects of countries, markets and assets. If believed by a sufficient number of actors, any prophecy about the doom of a given market can trigger exactly what it predicts and become self-fulfilling. These prophecies are believed more easily if the actions of the market leaders are decisive enough, and if other

processual elements of the overall context appear sufficiently – given the *shared conceptual framework* of explaining economic developments – to support the interpretation on which the prophecy is based.

Contingency of agents, actions and structures

Quite obviously, this argument seems to be in line with the ‘blame the system’ explanation. Yet, also the systemic explanation is somewhat problematic. It is, first of all, too deterministic. With a Polanyin insight, it is possible to argue that rules and institutional settings constitute the system. Thus by re-constructing these rules and settings, it is indeed possible to eliminate some of the obvious possibilities for the emergence of financial bubbles and crises, and thereby make them less likely (in the absence of counter-tendencies, that, again, would make them more likely).

Although Europe, North America and Japan have experienced crises as well, many crises in different geographical spaces and contexts have thus far occurred soon after liberalisation and deregulation of the financial markets. These experiences have led to learning and also partial re-regulation of the markets. It seems that it is particularly crucial to regulate the *process of financial multiplication*. In particular, it is essential to control the level and quality of risks, indebtedness (leverage), and the chains of interdependencies between actors. Moreover, all the options of selling something that one does not have or manipulating and orchestrating fluctuations for one’s own benefit must be closed as well, to the extent possible.

The less one wants to problematise and/or study concretely the elements of a given context, the more in line with theoretical expectations these factors may appear (at least *ex post actu*). It is, on the one hand, highly plausible to interpret the Asian crisis as a mere product of the global financial system, because almost all the “usual macroeconomic suspects” seem to have been absent. All the main East Asian economies displayed in 1994-1996 low inflation, fiscal surpluses or balances, limited public debt, high savings and investment rates, and substantial foreign exchange reserves, with no signs of significant deterioration before the crisis. The only worrying sign was the mounting trade deficit, mostly ignored by analysts. Just before the crisis, both the IMF and the World Bank praised these countries for “sound macroeconomic fundamentals”.⁵⁷ Despite the strength of “Asian tigers”, somehow the global financial system seems to have produced the crisis.

Box 3: LTCM and “crony capitalism”

As unregulated speculative vehicles for “high net-worth individuals” and institutional investors, hedge funds are free to hold whatever financial instruments they wish and to pursue whatever investment or trading strategies they choose. LTCM (Long-Term Capital Management) is an investment partnership started in 1994. It was very successful having annual returns in excess of 40% in 1995 and 1996, although somewhat less in 1997. Aided by the reputations of well-known economists (including two Nobel-prize winners) and traders, it was able to raise its leverage up to 40 times its original funds, or more. Relying on insights generated by sophisticated mathematical models, and by building complex investment strategies, LTCM made bets on the changes in the relative prizes of bonds in the US and abroad due to changes in the risk premia. (See Edwards 1999)

The announcement of the Russian government on 17 August 1998 of devaluation and debt moratorium triggered a massive flight to safer assets. Top economists and sophisticated models notwithstanding, this surprised LTCM. Very high leverage and large open positions of USD 200 billion produced losses that the fund could not sustain. In two weeks, LTCM had to send a letter to its investors revealing that it had lost 52% of its value. It had lost its original funds and emerged suddenly as a systematic risk to a number of financial actors. (Ibid.)

The Federal Reserve Bank of New York orchestrated a private rescue operation by 14 banks and other financial firms. LTCM was re-capitalised by a total amount of USD 3.5 billion. Soon this led to a reversal of accusations of “crony capitalism”. World Bank chief economist Joseph Stiglitz stated: “While South Korea, Thailand and Indonesia were heavily criticized for acquiring mountains of debt, the magnitude of debt at LTC M was unbelievable” (AFP News 1998). Martin Khor (1999) went even further: “This episode brings to light Western banks’ reckless lending practices and the substantial use of leverage by these funds giving them considerable power to move financial markets. The bailout of LTCM has, in turn, left US financial authorities open to accusations of practising the very ‘crony capitalism’ they have often attributed to the afflicted Asian countries in crisis.” Indeed, the LTCM bailout was a matter of a small circle of friends and high officials of banks who had also invested their personal money in the LTCM.

Yet, there are always actors and their practices and choices involved. The causal responsibility may be located in different ways. The Asian financial crisis may also be presented as a crisis of the Asian developmental model. Opacity of information, over-investment and loan-funded investments in non-productive assets, real estate etc. may look as if they stemmed from the Asian model leaning towards “crony capitalism”. Indeed, the rationale of the (mostly speculative) finance companies that boomed before the crises in Thailand and elsewhere seem to have been based on political connections.⁵⁸

On the other hand, the money to these finance companies was pumped in from abroad. Consequently, it has been claimed that the bubble was in large part produced by Western and Japanese banks operating in South East Asia, partially outside the normal regulations of the

Basle Agreement. Before the crisis that started in Summer 1997, there was a rise in short-term lending (up to and including one year maturity) to Asian and East Europeans. The banks were active in acquiring “non-traditional” assets such as in higher-yielding local money markets and other debt securities. There was also an increase in lending to the private non-bank borrowers, the finance companies and the like, with this share rising to 45% at the end of June 1997. Increased competition and low-interest rates had driven the Western banks to search for new, profitable opportunities. Already before the beginning of the crisis, the Bank for International Settlement had drawn attention to the way funds were being lent to “emerging” economy borrowers, with little or no premiums, and had raised questions about this.⁵⁹

Any crisis, including the Asian one, occurs at a highly complex intersection of different processes. This makes different theoretical interpretations possible. It is telling that economists looking for regularities in closed systems have in fact followed, *ex post actu*, the real world historical developments. First they developed the so-called first-generation explanations of financial crises on the basis of the Latin American experiences in the early 1980’s (“crises are due to irresponsible macroeconomic policies”).⁶⁰ After the European experiences of the early 1990’s, they constructed the second-generation theories (“a speculative attack on a currency can develop either as a result of a predicted future deterioration in fundamentals, or purely through self-fulfilling prophecy”).⁶¹ In the later 1990s, after having found these to be inadequate to explain the Asian, Russian and Brazilian crises, they are in the process of devising more complicated explanations combining different elements of earlier models with the peculiarities of the Asian crisis.⁶²

An attempt to tackle real world complexities is certainly an improvement. However, these economists would do even better by acknowledging that a constellation of processes and highly reflective and often overtly self-referential reactions to them, leading to a particular financial crisis, is unpredictable, although not unexplainable. This despite the possibility of explicating certain characteristic signs of local and perhaps also global developments towards crises, such as rapid increase in short-term indebtedness. As explicated above in the conceptual model of the functioning of the global financial system, what is crucial – besides the quality of the financial multiplication process – is the way the economic and political developments are *interpreted* by different actors in highly interdependent,

strategic contexts of financial markets, and how these interpretations are acted upon. In principle, any development can emerge as a trigger for a series of downward processes. The emergence of a trigger becomes easier the more cross-invested and leveraged the financial markets, and the more weight a handful of market leaders have assumed.

Because the systems are open and there are always many actors playing a role, it is true for any narrow explanation that the processes leading to a financial crisis can always be equally well understood in terms of a competing theoretical framework. This is not necessarily irrational. It is a consequence of the openness of systems and contextuality of action that many things could have been otherwise in any given episode. Any of these elements can then be taken up as *the* explanation; the rest of the context is, then, either reified as exogenous “facts” or misrepresented. The attempt to stick to one simple explanation only is not always totally wrong, just short-sighted and narrow-minded. From a more wholistic perspective, however, *cause* is an insufficient but necessary part of a *complex* which is itself unnecessary but sufficient for the *production* of a result, i.e. the INUS-condition.⁶³ That is, there are always many elements taking part in producing the outcome; and many of these elements could, in any given context, have been otherwise.

Take again the Asian crisis. From a novel theoretical perspective, it may turn out, against the ‘blame the victim’, ‘blame the financial actors’ and ‘blame the system’ explanations, that the crucial factor was, after all, the transformative capacity of the Asian states. The states that faced the crisis had either failed to develop, or in many cases, renounced their industrial planning capabilities and, in particular, controls over financial markets (in fact, they also did this in response to the pressures coming from the Washington consensus). Had they *not* failed to develop or maintain these crucial transformative capacities, the path of economic development in the second-generation NICs would have been different and they should have been able to avoid the crisis.⁶⁴ It is noteworthy that Taiwan and China did not liberalise, kept capital controls and avoided the crisis (although Taiwan’s currency, too, depreciated during the crisis).

Actors, including states, can act otherwise and systems can be reformed. Yet, despite its limitations, *the systemic explanation of financial crises is strong* in a sense that it reveals something essential about the power and functioning of global financial markets. The growth of the global financial

markets and their power is based on the financial multiplication process, which tends to grow mostly with indirect and typically rather vague and ambiguous connections to the world of economic developments in production, exchange, distribution and consumption. The global financial markets should be seen as a *system of social relations* that creates particular resources, enables certain kinds of actors and actions and makes possible certain kinds of interdependent episodes. As it had developed by the mid-1990s, the characteristic functioning of the system based on financial multiplication was a *necessary* – although not in itself sufficient – *part* of a complex, that was *sufficient* but not necessary for the production of the Asian crisis. In other words, it was a crucial cause of the crisis.

The socio-economic consequences of financial crises

After a sudden turn or a crisis, the recovery or stabilisation may also appear as relatively quick. Return to the previous values – or to an approximation of them, or to new relatively “stable” values – of exchange rates or bonds and equities have been in some cases only a matter of a few months, although sometimes it takes years. Obviously, the depth and length of crisis also depends on the relative capabilities and actions of the authorities; in the 1990s on the increasingly sizeable mobilisation of financial resources by the OECD countries, the IMF, the World Bank and regional organisations.

However, even in the case of apparently quick recovery or stabilisation, financial crises tend to have far-reaching socio-economic consequences. In the process of financial reorganisation of economy, many activities and life prospects of millions of people are seriously affected, in many cases for a long time or permanently. The crisis has been produced in the *secondary markets* in which stocks, bonds, forex contracts etc. are being exchanged. Yet, the unexpected reversal of financial multiplication – the implosion of the values of assets, and/or the flight of funds – also has an effect on the *primary markets* of savings, loans and forex. The primary markets, in turn, co-determine the conditions for many other economic activities. The recovery of the economy as a whole takes usually 1½ - 6 years. The links are always dependent on the institutional arrangements of the countries and regions concerned. The following list should thus be read merely as indicative of the mechanisms that we should be looking for:

- **Interest rate:** higher interest rates mean that debts become (much) more expensive; in some cases, after a crisis, the interest rate has been raised to 40% or more (and for a short while, it could have been even thousands of percents). Since most households and firms in (late)modern capitalist economies are indebted, this, by raising the costs of debt-servicing, restrains their economic activities and tends to contribute to redundancies, unemployment and bankruptcies. Consequently, fewer new loans are taken under the strained conditions. Hence there will be less investments and demand for investment goods.
- **Value of property** such as real estate: not all assets are “just paper” (or signs on a screen); a sudden drop of the value of these assets may contribute to the *de facto* insolvency of many actors.
- **Price and demand for products:** within a national economy, the demand for goods and services will be reduced because of the consequences of high interest rates and the implosion of the value of assets. Suddenly, many people and firms have much less money to buy things with. Since other actors are dependent on their investment and consumption decisions, the conditions of the dependent actors will get worse as well, further reducing demand. Output goes down significantly and unemployment increases. However, externally the devaluation of a currency in particular, but also the implosion of values, will increase demand. For the outsiders, the goods and assets, including firms, of a crisis-ridden country have suddenly become very cheap. But for the consumers inside, the imported goods become much more expensive. Which means declining real income and less domestic demand.
- **State budget:** because of the cost of attempts to defend the value of currencies or bailout banks and other financial actors, the state is already short of money before the secondary impacts of a crisis. The secondary impact translates into a reduction of tax revenues and increase in the state social expenditure etc. If the IMF and other multilateral organisations and/or states condition their rescue packages and loans on balanced state budgets, the tertiary impacts, too, will be far-reaching, and typically include privatisation and, perhaps most importantly, reductions in social expenditure, health and education. It has been claimed that the severity of the Asian crisis was mostly due to the IMF response of tightening budget and drawing liquidity away from the markets, *when, given the Asian institutional arrangements, it should have been exactly the opposite.*⁶⁵

Moreover, the loans of the rescue packages have to be paid back with interest, which creates a long-term constraint on state actions.

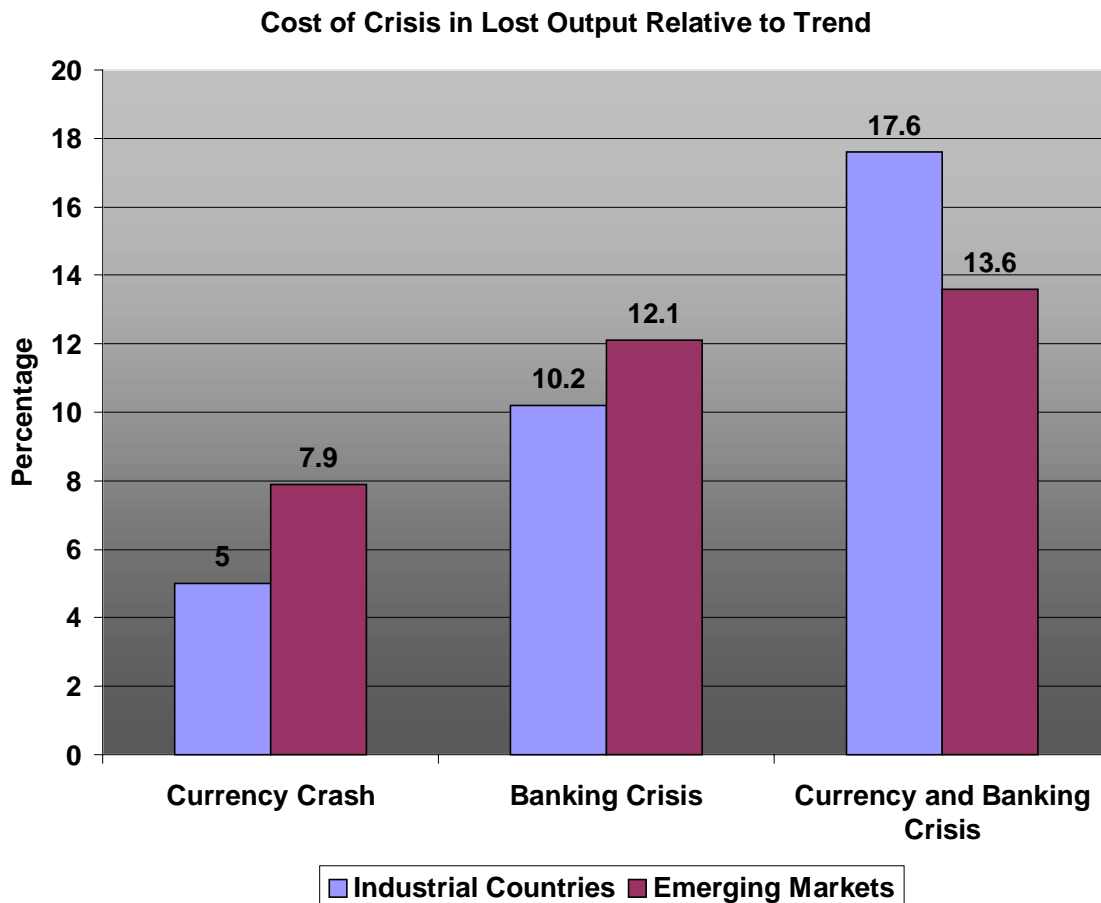
- **“Confidence”** of potential direct investors: not only will the short-term funds flight the country (or the effected sectors), but also the potential long-term investors will have to rethink, given the tendency to a downward spiral and reduced demand. However, simultaneously, the fall of prices will make the purchase of already existing means of production and assets much cheaper, including the privatised sectors and firms. These investments may not add to the productive potential of the country, but do bring in money and, most far-reachingly, change the ownership and control structure of the economy.

There is no mechanism that would compensate for the lost growth and its socio-economic consequences. The 1997-98 crisis, for instance, meant by year 2000 a short-term loss of some 10-20% of GDP for Thailand, Indonesia, Korea and Malaysia (assuming that the growth of 1996-97 would have continued otherwise). The long-term cumulative loss is bigger. The Asian crisis was deeper and more severe than financial crises usually. Figure 4 summarises the estimations of the IMF on the cost of almost 200 crises in lost output relative to trend. The total cumulative loss for a combined banking and currency crisis has been, on average, 14.4%, for the countries concerned. It has been estimated, however, that the Asian crisis and its global repercussions cut *global* output by USD 2 trillion in 1998-2000.⁶⁶ This is perhaps 6% of the global GDP; by far, the worst crisis thus far.

It has also been estimated that the Asian crisis made 10 million people officially unemployed. Many others became either underemployed or lost their jobs without leaving a mark in the official statistics (in addition to ubiquitous attempts to colour statistics, immigrant workers, many of them illegal, fall into this category). Moreover, some 50 million people in Asia alone fell under the poverty line; emergence of malnutrition and hunger has been reported. In Russia, *most* people's salaries are now below the absolute minimum cost of living, after the 40-50% drop in real incomes due to the crisis; that is, tens of millions Russians suffer acutely from the collapse of the economy, which has been reinforced by the financial crisis. Many more people in Asia, Russia and Brazil are facing the long-term effects of declining public health care, education, pensions and social benefits.⁶⁷ The striking fact is that, given the current global financial system and the

principles of governing it, those who suffer the most have typically had the least to do with producing the crisis.

Figure 4: Cumulative loss of output due to crises



Source: IMF 1998b, 79.

Not everybody in the global political economy suffered, however. The few speculators that played smart may have benefited from the fluctuations. Most of the Western financial actors involved in the Asian markets were eventually bailed out by the governments of the crisis-ridden countries, with funds borrowed from the IMF, other multilateral organisations, and Western and Japanese governments (i.e. from the taxpayers of the OECD countries, but to be paid back by the crisis-ridden countries, which will ultimately bear

the costs).⁶⁸ Despite some losses due to exposure to the Russian market, the fluctuations of, and flights from, the “emerging markets” also induced forex trading. This kept many Western banks busy and their profits high. The remark in Annual Report 1998 of HSBC (a major UK bank – the second largest in the world – which made USD one billion from forex dealing in

1998) is typical:

*Dealing profits increased in 1998 as the Asian currency turmoil continued through the first half of 1998 and wide margins and high volumes in customer driven business continued to underpin foreign exchange revenues.*⁶⁹

Half of the major banks’ profits are made in forex markets. The Asian crisis also had positive effects on some countries. Demand for the safe, less risky, “high quality” assets increased. This helped Wall Street to boom during the crisis. The moments of uncertainty about the possibility of contagion to New York were precariously managed and quickly buried in the unconsciousness. The US economy in particular succeeded in benefiting from two consequences of the crisis: increase in the demand of the US assets and the cheapening of South East Asian imports.⁷⁰

Conclusion

It is common sensical to distinguish between the “real” economy of production and exchange of goods and services, and the “paper” economy of financial markets. The intuition is clear – and critical. Although there is a need for a system generating savings and allocating credits, the secondary financial markets do not necessarily produce wealth anymore than a *casino* does, particularly if speculation prevails over enterprise. The problem with this distinction is that it seems to deny the reality of financial markets occupied with both speculation and hedging. The social relations of the system of globalising financial markets are causally powerful: they empower actors positioned in these structures with transformative capacity. The collective outcomes of their interdependent actions may be typically unintended, yet no less causally efficacious. To the contrary, they have far-reaching causal consequences. The global financial markets are real.

In this chapter, I have argued that since the collapse of the Bretton Woods systems here appears to have been a jump to a new level of volatility. Statistics do not appear to show any radical changes in volatility or fluctuations since the mid-1980s. However, these statistics hide two important factors. The exponential growth of the global forex markets indicates *the growing power* of these markets to shake and undermine any given currency or asset. Moreover, there have been four tendencies and *processes intervening* in the functioning of global financial markets. Firstly, there has been a greater frequency of crisis interventions by G-5 and G-7 monetary authorities and an attempt to increase forex reserves on a par with the rapid growth of forex markets. Secondly, regional monetary integration in Europe in particular had reduced the intra-OECD fluctuations. Decisions to peg currencies to the dominant ones – also by re-inventing the colonial practice of currency boards – has had a similar, albeit more fragile, effect. Thirdly, according to the dominant neo-liberal discourse, the homogenisation of economic policies should have had a stabilising effect as well, although in reality this is doubtful. And finally, there has been a resort to re-regulation, both in some of the crisis-ridden countries and globally.

The bulk of this chapter was dedicated to building a model about the characteristic functioning of the financial markets. The point of departure is that financial agency is inter- and system-dependent; and that financial decisions must be explained in terms of sensitive trust or confidence on developments and reflexive strategic considerations. The model is also based on the notion of radical uncertainty due to the openness and unpredictability of the future. The emergent game is based on story-telling about strategic moves and market developments. It is also typically highly reflective about the anticipations of the moves of the others. And it tends to be self-referential, in a sense of being at least partially detached from assessing the prospective long-term yields of assets conceived as forces of production. In many respects, it is like Keynes's famous beauty contest.

Financial actors and their powers are based on a complicated process of multiplication of loans, assets and transactions. The systemic explanation shows how the *financial multiplication* process, which tends to grow with rather vague and ambiguous connections to the material world of economic developments, is itself a crucial cause of financial instability. The financial multiplication process, however, also explains the growth of the transformative capabilities of financial actors, and thereby also the growing power of financial markets. From the dependency of actors on this process,

it also follows that sudden turns, reversals and fluctuations in the multiplication process may thus be *existential* for a large number of actors. Hence the occasional bursts of rational panics, with far-reaching socio-economic consequences for millions of people.

Endnotes

¹ For thousands of years, foreign exchange has sometimes been a way to evade regulations against bearing of interest, “usury”. Well before paper was even known to Europeans, paper money and many monetary phenomena were innovated in China. The late-medieval origin of modern European banknotes was in international trade and the need to control the risks of long distance travelling. At that time the value of money – coins or authorised paper receipts for coins – was based on the intrinsic value of the metals. The subsequent developments of monetary institutions and expansion of capitalism were concomitant. For instance, in the development of banking and notes, foreign exchange has played an important role. In that sense, foreign exchange markets have existed for a long time.

² Methodologically, this chapter is based on critical scientific realism. See e.g. Bhaskar 1989; Collier 1994; and Lawson 1997. For a scientific realist criticism of the positivism and instrumentalism of Milton Friedman and his case for floating exchange rates, see Appendix 1.

³ Edey and Hviding 1995, 18.

⁴ Estimation HP, on the basis of the OECD 1995 data, in *ibid.*

⁵ OECD 1988 *Economic Outlook* data, as presented by Harvey 1990, 144.

⁶ These figures combine Felix’s, 1995, 15, calculations with the most recent BIS 1998 Survey statistics, in BIS 1999a, Tables A-3, and B-2, B-3, B-8.

⁷ BIS 1999a, 7.

⁸ With a constant 3% output growth, the world GDP will be about \$40000 billion in 2010.

⁹ For definitions and assessments of the importance of different instruments, see Chapter IV

¹⁰ BIS *op.cit.* 1999a, 16-25, particularly Tables C1-C4.

¹¹ Felix 1995, 16; BIS 1999b, Table VI.4, 118.

¹² BIS 1999b, Table VI.5, 118.

¹³ Arestis & Sawyer 1997, 762.

¹⁴ See Bhaskar 1994, 67-72.

¹⁵ Felix *ibid.*, 18.

¹⁶ Valdez 1997, 50, 170.

¹⁷ Felix, *op.cit.*, 16. The export figure for 1998 is estimated on the basis of World Bank 1997, Table 11 and Table 15, 234 and 243 respectively, that is by assuming a constant 6.8% annual growth of exports. The rate of growth of the world economy as a whole has remained at the level of 2-2.5% in the 1990’s, which is not much more than that of the population growth.

¹⁸ IMF 1998a, Box 1.

¹⁹ See Commission 1970, 8-9. For a discussion, see Minkkinen & Patomäki 1997a, 24-29.

²⁰ For a concise summary of the ERM, see Bainbridge & Teasdale 1997, 232-234.

²¹ See the Chapters in Minkkinen & Patomäki 1997b, and in particular the concluding Chapter by Patomäki, "Dialectics of the Multi-faced EMU".

²² In 1997, when under speculative attacks, both Indonesia and Thailand had to give up this anchoring of their currencies with the US dollar. However, in the course of the crisis Malaysia actually pegged its currency, the ringgit, against the US dollar.

²³ See for instance Gill 1994.

²⁴ IMF 1998a, Box 2.

²⁵ Economic liberalism can be – and often has been – applied in authoritarian political contexts. About the "neoconstitutional" attempt to lock-in neoliberal economic policies by means of international treaties and multilateral arrangements, see Gill 1995.

²⁶ More technically: there is a minimum non-remunerated reserve requirement of 20 percent on credits, foreign currency deposits and investments with maturities of less than one year; this deposit in the central bank must be held there at least for a year.

²⁷ See Singh 1999(a), 154-155.

²⁸ Quoted in Chee Yoke Heong (1998): "Malaysia: Mahathir Counts on Asia Amid Capital Controls", *IPS*, 18 December 1998.

²⁹ For details of the Malaysian capital controls, see "Fact File", *BT (Business Times Singapore) Online*, 30 August 1999.

³⁰ See Eddie Toh (1999): "The Jury is Still Out on the Malaysian Experiment", *BT (Business Times Singapore) Online*, 30 August 1999.

³¹ Polanyi 1957, 38, 57. See also the critique of liberalist and Marxist economics for "putting the economic laws under the authority of Nature" on pp.124-129.

³² These are summarised in IMF 1998a, Box 2.

³³ The common features of all these crises is spelled out in UNCTAD 1998, vii.

³⁴ Giddens 1990, 28, connects the *trust* required by a monetary system based on complex time-space distanciation with the trust reproduced in abstract expert systems. Whether this trust is well-founded can only be tested by making experiments and by a critical public discussion. Within the financial markets, this testing and discussion is a hectic, on-going, real time, around-the-clock process. However, once the conclusion has been reached that a value of X is not trustworthy, there is no way back – without either a collapse or an external intervention.

³⁵ The neo-classical axioms were also applied to the Asian crisis. The 'blame the victim' interpretation was first articulated by Michel Camdessus, the Managing Director of the IMF; Alan Greenspan, Chairman of the US Federal Reserve; Larry Summers, the US Treasury Under Secretary; and various influential investors and economists involved in the 'Washington consensus'. Soon it became the basis of the Western response to the crisis. See Singh 1999b, 9, 18-20.

³⁶ In the context of the Asian crisis in particular, the systemic interpretation has gained more ground. Many Asian political leaders, most notably Mohamed bin Mahathir, the Prime Minister of Malaysia, blamed the activities of foreign speculators and the structure of international financial system. *Ibid.*, 19. Also some of the well-known investors, including George Soros, and economists involved earlier in championing neoliberal models, such as Jeffrey Sachs, began to support the view that the global financial system itself is unstable and prone to crises developments. In addition, a number of Keynesian economists and many

leftist intellectual and movements adopted this view. The story is told, with references, in Patomäki 1999, 17-31.

³⁷ Krugman 1999, xii-xiii.

³⁸ Watson 1998, 2, claims that “overall systemic debt burdens within the western economy are no lower today than they were in the Keynesian era of budget-deficitting. The only significant difference is that debt-financed growth within the western economy has become increasingly privatised.” In fact, however, it seems that the overall debt ratio to GDP has constantly risen. Although in Europe the Maastricht Treaty has stabilised the public debt ratio, the US state has taken more debt in the 1990s, and in particular the debt ratio of both financial firms and households has risen sharply. For the US figures, see Henwood 1997, 59-60. Even in consultation with the Bank of Finland, I have not been able to acquire systematic European figures; the Finnish ones are rather peculiar. In Finland, in the 1980s, there occurred a rapid process of private indebtedness, due to the liberalisation of the financial markets; after the major financial crisis in the early 1990s, this debt was in effect transformed into public debt. With the return of exceptionally high growth in the late 1990s, Finland has been rapidly paying off the debt (in line with its traditional, protestant “no-indebtedness” policy of public finance).

³⁹ See Grahl 1991.

⁴⁰ About offshore activities, see Chapter 3.

⁴¹ BIS 1996, 15.

⁴² For the exact figures, see BIS 1999a, 16-27.

⁴³ Veseth 1998, 71; Chavagneux 1999.

⁴⁴ Singh, *op.cit.*, 27.

⁴⁵ Henwood *op.cit.*, 41.

⁴⁶ BIS *op.cit.* 1999a, 25.

⁴⁷ To think otherwise would imply a commitment to the *fallacy of composition*; what is possible for one actor, is not always possible for many or all of them simultaneously.

⁴⁸ Unfortunately, there have been only few studies of this kind. Doug Henwood’s, *op.cit.*, *Wall Street* is perhaps the best account, although it only focuses on the stock and bond markets in the US. Leyshon & Thrift 1997 take a few preliminary steps towards this direction as well, but eventually they shy away from doing any proper empirical research; see particularly Chapter 9. There is plenty of material for this kind of scrutiny in the almost 200-pages long chronology of the Asian crisis 1997-1998, collected by Professor Roubini, based on information from several news sources (Reuters, Wall Street Journal, New York Times, CNNfn, Financial Times, Bloomberg, etc.) and available online at <http://www.stern.nyu.edu/~nroubini/asia/AsiaChronology1.html>.

⁴⁹ Before the Asian crisis, not only did the IMF and the rating agencies generally praising the performance of the second generation NICs; but the few signs of weaknesses that were reported by the BIS in particular, were simply not read by the market participants. Singh *op.cit.*, 25.

⁵⁰ By creating certain kinds of expectations, they tend to have disciplinary effects on states. See above the section of ‘homogenising economic policies’.

⁵¹ Keynes *op.cit.*, 162-163.

⁵² Speculation proper or derivative markets would not exist without radical uncertainty; there must be an abundance of contradictory assessments of future developments for these kinds of markets to exist in the first place. Cf. Tobin 1978, 157-158.

⁵³ Despite my original intentions, in this book there is no space to discuss this argument further. Suffice it to say that the Prisoner’s Dilemma is a game-theoretical model in which individual utility maximisation appears to be self-defeating, or at least contradictory to some kind of social or collective rationality. In the technical terminology of the game theory, one says that in the Prisoner’s Dilemma game the outcome of the

individually rational choices is Pareto inferior (or is not Pareto optimal), that is, there is an outcome in which both (or all) players simultaneously could do better (for moving towards a Pareto optimal state, it would be enough for there to be one player who could do better while all others would do as well). In financial markets, under the conditions of radical uncertainty and fear of unexpected losses, every single actor may suddenly face a prisoner's dilemma (PD) kind of a situation: for everybody, it is rational to take their money away from X, but thereby the value of X collapses, and everybody is much worse off than they would have been had they kept their money in X. One crucial difference to the real world story is of course the fact that usually the players in the PD-game of the world financial markets are bailed-out, while it is the outsiders who bear the main burden of the consequences of these losses. This would seem to aggravate the problem to a great extent, since, counting on a bail-out, the collectively disastrous outcome may still be individually bearable. Another problem is more methodological, and works the opposite direction: despite the standard account that there are dominant strategies (= "do not cooperate" or "defect") for rational players, the actors can and do co-operate and organise *collective action*, particularly if they are made to communicate in a sustained manner, and if there is a leader or a vision capable of showing the direction. For instance, in the 1907 Crash in New York, Pierpont Morgan launched a series of rescues and eventually invited the leaders of the financial community in his library; "he locked the doors and pocketed the key". By early morning, Morgan had made the others to sign a collective rescue package deal, with substantial commitments from each trust. (Plender 2000, 30) This episode has been repeated a number of times in the 20th century, for instance in the contexts of the British banking crisis of the 1970s and the LTCM debacle of the late 1990s.

⁵⁴ Giddens 1991, 136.

⁵⁵ Cf. Minsky 1982, 90-116.

⁵⁶ Krugman 1998. But for a crucial qualification in the global political economy context, see note [68].

⁵⁷ See Bustelo 1998.

⁵⁸ See the discussions in Bello 1999; and Krugman op.cit 1999, 83-101

⁵⁹ Chakravarthi Raghavan, "BIS banks kept shovelling funds to Asia, despite warnings", *Third World Economics* No. 177, 16-31 January 1998.

⁶⁰ Krugman 1979; and for a survey of related models, Agenor, Bhandari, and Flood 1992.

⁶¹ Obstfeld 1996; and for a survey of related models, Eichengreen, Rose and Wyplosz 1996.

⁶² See Krugman 1998 and 1999; Bustelo 1998.

⁶³ See Patomäki 1991, 223, 239.

⁶⁴ Weiss 1998, x-xv, and Weiss 1999, argues that the second-generation NICs that were involved in the financial crises have in fact been characterised by a weaker transformative capacity of the state than in Japan and Taiwan and that, in some cases, the weakening of state capacities was deliberately manufactured by the main actors of the Washington consensus earlier in the 1990's. Had they had (or kept or developed) more state capacity in crucial areas, they should have been able to avoid the financial crises.

⁶⁵ Krugman op.cit. 1999, ; and more technically, Hirst & Thompson 1999, 161-162, who also say that because of the differences in institutional arrangements, the response that might have been adequate for Anglo-American type of economies, was actually causing the severity of the crisis in the Asian context.

⁶⁶ This estimation is from UNDP 1999, 2.

⁶⁷ These figures are based on UNDP, UNESCAP, World Bank, IMF, Asian Development Bank and Russian State Statistics sources, as put together and summarised by Hayward, 2000, mimeo.

⁶⁸ Gowan 1999, 29, claims that the US discovered a way of combining unregulated financial markets with minimal risk to the US banking and finance already in the early 1980s. "Using its control over the IMF/World Bank and largely with the support of its European partners, Washington discovered that when its international financial operators reached the point of insolvency through their international activities, they could be bailed out by the populations of the borrower countries at almost no significant cost to the US economy."

⁶⁹ Many other similar statements from the Annual Reports of different banks, and detailed figures of the profits of British banks, can be found in Hayward, 1999, mimeo. American and British banks alone made nearly USD 10 billion profit from forex trading in 1998.

⁷⁰ These connections have been spelled out, for instance, by Soros 1998c, xii-xiii.