THE CRISIS IN FOUR *NOTES*

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Abstract

The current crisis is one of the most profound in living memory, yet it can be explained by four simple factors.

This is a paper about the current crisis, but also previous and future ones. All crises present recurrent features: fundamental economic disequilibria, bad policy decisions, lack of controls, and also bad luck. At the same time, the severity of the crisis depends on how events interact and the momentum they generate. As critical and intense as it is, the current crisis can be explained by the interplay of four basic factors:

- *We live in a global, complex and overly integrated world. In such a world there can be no full decoupling;*
- *Macroeconomic distortions are global in scale. They can be sustained for far longer periods, but eventually get corrected in painful ways;*
- *Prevention of distortions is hampered by a lack of global institutions and policies; coordination can be achieved only after crises wreak havoc;*
- *In an integrated world, human beings tend to behave similarly, irrespective of their cultural and religious belief; bubbles are global.*

Keywords: Financial Crisis, Global Imbalances, Market Regulation; Credit Ratings; Financial Innovation.

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***1. In a global, complex world there can be no full decoupling*.**

In the early nineties the world entered a phase of rapid globalizations. This process has kept its momentum despite some bumps in the road, such as the emerging markets crisis of the turn of the century. Globalization was driven by some fundamental factors: the end of the Cold War divide; the emergence of new global powerhouses; the increasing belief in the virtues of the private sector and the functioning of the market economy.

The globalization trend started with the growth of East Asian emerging countries in the eighties (*"The East Asian Miracle"*, according to a well known World Bank report), driven by export-led country strategies and impacting on the rest of the world through what the World Bank defined as the *"Reverse Linkages"* in world trade.

Trade is good; it's akin to innovation. By specializing in producing goods where they have greatest advantages, countries become more productive, grow faster and their people become richer. Over the past decades trade has been growing faster than an already rapidly growing global GDP. Countries have been increasingly trading in components, exploiting specialization at a micro-level rather than in final goods (the traditional "comparative advantages"). The greatest spur to global trade has come from outsourcing the production of parts and components to countries with low labour costs.

Off-shoring to emerging markets has contributed to faster economic convergence. New production models have become overly complex. In the more innovative models, vertical integration of production takes place in different regions, pointing at the importance of functions such as logistics (see charts in Box 1), strategy and firm communication, required to keep the production process in place efficiently. Emerging markets are both a source of cheap production inputs and a large destination market. As a result, world production is increasingly based on off-shoring tasks[2] (see charts in Box 2), to enhance competitiveness. Goods can be manufactured in sequence, with the production of different components taking place in various countries. The emerging markets' role in the manufacturing process of advanced economies is ever more strategic. International trade has therefore gradually transformed into an "integrative"[3] trade scheme.

Delocalization of productive assets has occurred through a large wave of Foreign Direct Investments (FDIs). FDIs have played a major role in moving production to large emerging markets, to capture lower production costs or enter growing consumers' markets. In the nineties, multinationals started to look for a "new middle class" in countries in an economic "take off" phase, to replace the saturated markets in developed countries. The search for growth focussed on the BRIC group of countries: Brazil, Russia and India, China[4].

The explosion of the supply chain was underpinned by the developments in ITC and the growth of the logistic and shipping industry. "Just-in-time" delivery and production models, developed in prior decades, became the norm and changed the way businesses were run. In the late nineties, economists predicated the "end of the cycle" thanks to the effects of lean manufacturing on the reduction of inventories, whose excess in the past had been the key cause of cyclical overproduction. The burst of the ITC bubble and the ensuing brief recession at the turn of the century showed that the economic cycle was still alive and well, just working differently. However it did not have a lasting impact on this business model. The September 11 terrorist

[2] See two articles from the Economist on this issue: *The Great Unbundling* (January 18th 2007) and *On The Hiking Trail* (August 31st 2006). See also Grossman and Rossi-Hansberg (2006), Baldwin (2006), Blinder (2006), and IMF (2007).
[3] See EDC (2004).
[4] As defined in O'Neill (2001). See also, for more recent work on this, Wilson and Purushotaman (2003); O'Neill et alii (2005) and - a collection of the Goldman Sachs BRICs analyses – in Goldman Sachs (2007).

attacks and the outbreak of SARS both proved that the "just-in-time economy" could be threatened and that global trade was exposed to global risks more than ever. Yet the world seemingly turned a blind eye to this inherent vulnerability.

While enjoying broader support, the consensus on the benefits of global trade has never been unanimous. The nineties saw the birth of the so-called "civil society" groups, a broad array of NGOs, in industrialized countries as well as in emerging countries, ranging from labour unions to local communities. Their main concern was the very functioning of the global economy; they seemed to win the day when, at the turn of the century, an economic and financial crisis hit emerging markets. Some even spoke about the "end of globalization". As hard as that crisis impacted upon many emerging countries and the poorest segments of their populations, its effects were quickly absorbed and growth resumed.

When the new crisis hit in 2007, emerging markets appeared so strong to be immune. In the view of many, the world had decoupled; emerging markets after the previous "globalization crisis" had become much stronger and their virtues seemed impeccable, so much so that, it was thought, they could withstand a financial crisis born and bred in the Anglo-Saxon western world. The new crisis was seen as a crisis of the industrialized world, their banks and the failure of their systems of governance. As a result, one school of thought claimed that the world was finally decoupling. However, it was the other school, those who were sceptical and claimed that "if the US gets a cold, the rest of the world gets pneumonia" who were to be proven right (see charts in Box 3).

In reality, in an integrated global world there is no room for full decoupling. Trade is not the only factor at work when it comes to world integration. Labour has become a global factor too, and remittances are now an important source of foreign exchange and income for many developing countries. New technologies, furthermore, allow the sourcing of many services (from medical screenings to call centres to security services) outside national borders.

In the last ten-fifteen years the financial sector has profoundly changed. Financial institutions were originally conceived as intermediaries that help savings and investments meet. Many (if not most) financial transactions today are de-correlated from actual economic transactions; thanks to advances in financial theory, risk-management tools (options and swaps) have become common; financial engineering eventually moved into more and more speculative territory. The concept of speculation does not need to have negative connotations; it simply implies taking a view on the movement of a market. However, when speculative trades become very large (as in the case of CDS – see Fig. A1 - when their value is many times the value of the original asset) they tend to become independent from the performance of the underlying asset. The market movements that they induce may have large impacts on the overall financial sector and the real economy, and well beyond the ability of monetary authorities to manage them. The ratio of financial transactions to economic transactions has increased exponentially, and the use of high leverage has created enormous risks.

The financial flows in the nineties were largely the results of the high current account gap of the USA, a situation that runs contrary to common wisdom: richer countries should be financing the needs of poorer ones and the return to capital should be higher where capital is scarcer, i.e. in less developed countries. Over the past decade, emerging markets have been enjoying large current account surpluses on account of two self-reinforcing factors. One endogenous: better economic policies, very attentive to maintaining strong economic fundamentals; the other exogenous, the growing commodity prices. The last decade saw a dramatic change for the better in the terms of trade of emerging markets, after a long decline which had justified a historical "terms of trade pessimism". This trend affected not only energy commodities, but minerals and even food crops, to a point where the rise in primary goods became a preoccupation for many of the least developed countries unable to economically meet their supply needs.

The perception of future scarcity led to a "scramble for commodities" (and for Africa), which can be considered as another dimension of recent globalization. At the height of the boom, the greatest preoccupation was the availability of key natural resources; emerging markets were prepared to invest much of their financial surplus in procuring strategic imported inputs. The Chinese foray in Africa epitomizes the new scramble for Africa. It is also a source of concern within the international community because of the lack of transparency in the financial flows, lack of standards of underlying projects (e.g. environmental or social), and so on. At the same time, the amount of funds available without strings attached (i.e. no "policy conditionality") makes the Chinese funding extremely appealing. Other oil producing countries used their foreign exchange windfall to invest in agricultural land in African countries, to secure the supply of commodities for future consumption.

At the same time, some resource-rich emerging countries became increasingly reluctant to share the windfall gains from high prices with foreign investors. In particular, countries such as Russia and Venezuela became very aggressive in renegotiating the terms of concluded deals with foreign counterparts, in what amounted to a "resource (re)nationalization" effort, through outright expropriation or forced renegotiations of contracts. Political risk events that had been out of the picture for a while resurfaced dramatically.

In the new global world trade and capital flows are multi-directional: north-north; south-south and even south-north. Multinationals of emerging markets have started to invest in mature economies in sectors as broad-ranging as logistics, automotive, steel. Sovereigns themselves invested massively in the assets of industrialized nations, both State (treasuries) and private (stocks). This trend raised a whole set of political preoccupations, ranging from the sustainability of these flows, key in funding public deficits (i.e. the US deficit), to the risk of foreign States being shareholders of strategic companies. The vehicles used for such inroads by foreign States were the "Sovereign Wealth Funds" (see Table A1): the new form of recycling the windfall from favourable terms of trade.

In the new global world, complexity is important. Complexity in trading is exemplified by growing outsourcing networks and the sophistication of "future" transactions (remember Enron?). In the financial industry complexity has been driven by advances in finance theory (options and derivatives), statistical and mathematical models, increasingly powerful computer systems. This new capacity is underpinned by global distribution networks able to sell products all over the world. Needless to say, at the basis of those products are overly complex legal documents. Innovation has changed risk profiles, allowing the allocation of risks in a more efficient way: the mantra of the last decade was to segregate and allocate the risks to those best suited to manage them ("originate and distribute"). This, in the view of many, was sufficient to turn low-rated assets into investment grade securities. The trick was the pooling, diversifying and tranching of assets as well as their re-branding in a way palatable to investors (e.g. "sub-prime").

This intricate web of transmission channels works as an accelerator of economic trends. After the housing bubble in the USA exploded, related toxic assets were found in the balance sheets of players around the world; funding mismatches, encouraged by the access to multiple sources of funding (e.g. foreign currency borrowing) affected financial intermediaries and industrial corporates worldwide; complex derivatives sold as hedges (i.e. against the oil price increase) or simply as directional trades created a whole set of new issues, including the emergence of the "counterparty risk". Investors move in herds: when markets go south everybody sells assets (at loss or at a gain) to limit exposure. If everybody sells everything at the same time, the price of all assets falls and feeds back into the negative cycle.

The link between finance and real economy is fast: it goes from “bubble-creation” to “credit crunch”. If a large country enters into recession, the countries that export to it feel the pain as well. The second group will be affected through raising unemployment and domestic demand decline. The overall cycle swings further into negative territory. The collapse in trade and GDP experienced in the last quarter of 2008 has taken everybody by surprise and its magnitude has been so devastating to be compared to the Great Depression of the thirties (see charts in Box 3). This has resulted in a wave of trade-restrictive measures imposed by some countries and as a consequence, in the re-emergence of “new protectionism” risk.

***2. In a global world, distortions are global*.**

How to spot a distortion when everything seems to be working just fine? A long period of rapid growth, low inflation, low interest rates and macroeconomic stability breads complacency and increased willingness to take risks (see Fig. A2). Smart people can always find a rational explanation for irrational situations. The global economy grew faster than ever over the past two decades and optimism abounded. Bubble mentality took hold (see charts in Box 5), a situation seen before (see Fig. A3): in the eighties, where countries were not supposed to fail and yet we had the Latin American crisis; in the nineties, where the economic cycle was dead and yet we hade the *dot.com* collapse; in the new century, where banks could minimize risks through their diversification and greater allocation and yet we had the quasi-implosion of the banking industry.

Common wisdom explained both large current account deficits (financial market depth) and large current surpluses (sound economic policies). The global current account was a positive-sum-game: emerging markets surplus (especially China's) financed industrialized market deficit (especially USA's); see charts in Boxes 6 and 7)[5]. Emerging countries were running conservative economic policies and the US had the strength to sustain large imbalances ("consumer of last resort"), all to the benefit of the global economy that was growing faster than ever. The fact that emerging markets investments in industrialized markets assets were generating negative returns seemed a cost to pay to stay out of trouble. The yield on Treasury was unappealing, as interest rates were at their historical lows, and the currency of investment (the US dollar) depreciation could wipe out even that little margin. Yet much of foreign reserves by surplus countries continued to be denominated in US

[5] For comprehensive reference on the issue of global imbalances see the contributions in the volume 28 of the Journal of Policy Modelling (2006). For a review of the whole volume see Padoan (2007).

dollars. Poor country farmers were subsidizing rich country real estate buyers and economics provided a rational explanation for that.

There was risk in emerging markets virtues and even more risk in industrialized countries profligacy. Somebody had to consume the excess savings in the world; this implied large current account deficit by the “ultimate US consumer”, the hero of the great growth spurt in the new century. Many observers anticipated a major adjustment in the value of the US dollar, a collapse that would have caused a major structural adjustment in the US economy. As it turned out, the adjustment has indeed occurred and has included the collapse of the global financial system and of global demand. Finance-based economies like the US and UK have been hit first; their domestic demand has collapsed following the credit crunch and the ensuing panic among investors and consumers. In anticipation of a slowdown in consumer spending, investment in inventories has been dramatically reduced all over the world. As a result, export powerhouses such as Germany, Japan and Korea have seen their export markets - key source of growth - disappear. Domestic demand was not able to make up for this loss. Past virtues turned into negatives.

Global distortions had their origins in economic policies and strategies. In the US, economic policy was run under the belief that asset bubbles could not be managed, let alone burst. Bubbles had to run their course and deflate by their own. Accommodating monetary policies would offset the impact on the real economy after the fact. This was the experience with the internet bubble and it seemed to work: interest rates were driven down low or even negative, giving financial speculation more room to grow. Monetary policies were instrumental in inflating the asset bubble. This fact was overlooked as the main gauge of inflation, consumer price indices were not rising as fast due to the so called “*Wal-mart effect*”: the possibility to keep low the price of many basic goods thanks to cheaper sourcing from emerging countries and especially China[6]. As inflation affected assets other than consumer goods, it was thought to be more benign and at the same time more difficult to tackle. In a world of low interest rates, long-lived assets tend to go up in price; they are valued upon returns accruing over many years, at a very low discount rate. In other words assets were increasing in value overtime.

Too much money was chasing too few good investment opportunities and new asset classes were created, including in the "sub-prime" category. New assets needed a good rating to reduce the need for investors to provide evermore dwindling amounts of economic capital; capital had to be "optimized" in order to produce as high a rate of return for shareholders as possible and high bonuses for managers. Finance theory, complex product structuring, portfolio diversification, sophisticated risk management techniques were used to produce miracles, transforming highly risky assets in high-rated securities. New vehicles were created to spin off risks from the balance sheet of the banks even though they remained largely exposed to the newly created vehicles (so called SIVs or Conduits) through their exposure as lenders or simply by reputational risks. The past decade saw stellar levels of return-on-equity; fast-increasing stock values (and share of global value added) of financial companies; geometrical pay rises for managers.

And what about lending terms? The preoccupation in the financial sector tends to be about "predatory lending", i.e. issuing loans at high rates to people who cannot reasonably be expected to pay them back. In the recent past the problem was the opposite: lenders of all sorts were lending too much money without seeking enough interest to compensate for the risks they took, or providing covenant-light loans, where the only event causing a default would be a missed payment, sometimes after having deferred payments for a while. In other words, inadequate loan covenants made it impossible to default quickly. The reasons for undercharging for risk were

[6] There are several books and articles on the so-called *Wal-Mart Effect*; among them see Fishman (2006).

many: the pressure to lend the ample liquidity available; the misunderstanding of real underlying risks; the lack of transparency of the structured products to the point that today not even those who sold them can properly assess them. Securitization or more broadly structured finance can be useful tools; re-securitization of already secured assets in a CDO can be a bad idea. Funding a pool of long-term, illiquid assets with very short funding in the so called asset-backed commercial paper market can be disastrous. The growth of this business was occurring in the face of ever more lax credit standards, increasing distance between the underwriter and those who shouldered the risk, complicated legal structures. In the making, this process increased the number of home-owners in the US, a remarkable social achievement for any government to show. However, this process lacked fundamentals and as the housing bubble burst, the houses were vacated and the indicators suddenly worsened.

On the other side of the world, emerging countries sobered by the crisis of the turn of the century had no intention of repeating the same policy mistakes, and started running large and sustained current account surpluses. The competitive exchange rate generated large foreign reserves, the majority held in US dollars. Growth had to rely on foreign demand, as domestic expenditure, both public and private was kept in check.

When distortions are global, nobody is in charge of their monitoring or management. Everybody familiar with global institutions such as the World Bank and the IMF is aware of the "*great country complex*". IFIs have rarely been effective in leveraging their policy prescription on large emerging countries, because of limited negotiating power. The leverage is a function of the resources that can be offered; when a country has access to financial markets it has no incentive to borrow with conditionality from IFIs; quite the opposite, accepting "conditional" lending may weaken the political strength of the government in place. At the same time, staff of international institutions have a vested interest to continue to lend to large countries, as from it depend the revenues and the mission of their organization. They are often prepared to compromise on the adjustment policy agenda in order to move the loans forward. The result is that IFIs have little leverage in preventing bad policies by large countries; their leverage of course increases when countries are on the brink of a crisis. This has been for long the "*political economy of adjustment lending*". Furthermore, when the IMF enters into a negotiation with a country, the markets will see this as a sign of higher risk and move against the country with the consequence of jeopardizing the outcome of the IMF intervention. On the other hand, if the IMF delays its negotiation with the country (for a new facility or the disbursement of an existing one), the market still interprets this as a negative sign and moves openly against it. To avoid this catch-22 situation, the IMF is introducing new facilities with "no strings attached" or for "good performing countries" to provide a financial cushion when thing are still manageable and avoid playing with market sentiments[7]. If this is the situation, it should be no surprise that IFIs power to sanction the poor economic policies of industrialized countries (even small ones) is tantamount to nil. Even less is the IFIs power to address global imbalances that rest on the responsibilities of numerous countries. The conclusion that in a global world there is no global economic governance, seems a plausible one.

[7] e.g. the *Flexible Credit Lines* for Colombia, Mexico and Poland. For the updated list of all IMF lending arrangements click this link.

3. State and market: the role of the regulator

The past twenty years have seen a growing faith in market forces and private players. The historical evidence provided by the collapse of centrally planned USSR and invasive governments in many emerging markets (and some industrialized ones) was so overwhelming that the pendulum swing towards market economies was long overdue[8]. Market economies, however imperfect, function far better than State-controlled ones; market failures, however gigantic like the current one, are still modest compared to the potential failures of governments. Furthermore, even this crisis must be put into context and it must be recognized that it comes after one of the longest periods of world growth in history, with great advances in the living standards of millions of people in emerging countries.

Strong (and global) markets must go hand in hand with strong (preferably small but effective) governments. In the last decade the pendulum has swung too much. As markets proved so formidable in enhancing productivity, accelerating growth, creating jobs, their functioning had to be totally unbounded to maximise their potential. The less controls and rules applied the better; private players should be the regulators of themselves. This attitude violated the basic principle of the functioning of a modern economy: the system of checks and balances between the market, driven by the relentless search for profit, and the State, that should prevent and compensate market failures and pursue social goals.

This lack of regulation is most evident, but not limited to, the financial industry. Large scandals occurred in the early decade of 2000 in the industrial corporate sector: from Enron, to WorldCom, to Parmalat. Madoff started to conceal his state of affairs in the early nineties. What happened in the banking and financial industry was systemic and it was global. It had to do with a lack of proper supervision in the

[8] See Shleifer (2005) on the effects of the transition after communism on Russia.

commercial banking; inadequate control by institutions in other segments (the so-called shadow banking industry); the mismatch between the borders of the States and the activities of financial institutions; unethical behaviour.

Central Banks failed to appreciate the dimension of market failures: moral hazard; "too big to fail" syndrome; asymmetric information. In the past decade banks were allowed to run their business on very small capital, inadequate compared to the amount of risks in their portfolio. This played in the interest of shareholders and managers: high leverage generates very high returns when everything goes well. The assets in banks' balance sheets were deemed to be of the highest quality; other risks were moved out of the balance sheet into dedicated vehicles. In this process regulators failed to appreciate the dimension of the potential market failures facing the financial industry: the asymmetric information implied in securities and assets, originated by third parties, that buyers and holders could not understand (only to discover later on that neither issuers did); the "too big too fail" problem of the large Money Centres and financial institutions, whose web of transactions was so knotted that the fall of one would tear down many other players; the moral hazard inherent in the State guarantee on deposits, that allowed banks to continue to fund themselves at low rates even when their balance sheets deteriorated. This system of incentives, together with the belief that by acting in their own interest banks were acting in the interest of everybody, led to totally irrational behaviour. The system of controls, fragmented in many different jurisdictions, divided among different institutions, failed to spot the emerging market failures.

The growing complexity of the market was matched by increasingly complex regulations (Basel I and II; Solvency I and II) but the premises on which they where based were weak. Let us take for example the concept of *Value-at-Risk* and the associated concept of tail risk. Statistically the events that should happen every hundred years are occurring with much higher frequencies; they are not so "tail" after all. Or let us look at the concept of mark-to-market: to what extent does the market reflect the real value of a security? Before the crisis, prices were ridiculously low; after the crisis they are outrageously high. What is the right price?

Many players bluntly failed under the circumstances, foremost among these were the rating agencies. The agencies operate in a context of enormous conflict of interest (being paid by the subjects they rate) and tend to be pro-cyclical in their decisions (this has proved an historical constant)[9]. In the recent past, they entered into the business of rating very complex structured financial products and in the process faced new challenges that they probably were unable to fully appreciate. Their ratings at times provided misleading information to the market, both in terms of what a rating really means and the risks it measures. They failed to recognize how a small error in their statistical models could generate huge losses.

Let us look at the meaning of a rating. S&P's long-term data show that the 10-year default rate on an A-rated municipal bond is 1%; on a corporate bond it is 1.8%; on a CDO it is 2.7% (see Fig. A4). In other words, an AA+ - rated CDO has the same probability of default of an A-rated municipal bond. Furthermore, when municipal bonds default, the expected recovery rate is 90% compared to 50% on corporate and CDOs. At the same time, some agencies claim that: "no matter what types of instruments the ratings apply to, no matter where the issuer resides, and no matter what the currency or market in which the security is issued, Moody's ratings are intended to have same relative meanings in terms of expected credit loss". When the Agencies were put under criticism for failing to anticipate the deterioration of the rated securities, they claimed that their rating measured credit risk and not market risk, a fine distinction for those who had invested into them. Had it been a consumer product, the label would have warned about this.

[9] On the contribution of credit ratings to the current crisis and proposals to regulate their agencies, see Sy (2009). On the effect of these agencies on "herd behaviour", see Ferri and Morone (2008).

4. Micro-motives and human behaviour.

Capitalism is driven by "animal spirits", in turn driven by greed and the search for profit. That's why capitalism needs to be kept on check. In certain times the search for profit becomes an obsession of the masses: when a lot of people get richer, everybody wants a piece of the cake and the concept of rationality changes[10]. When boom cycles are very long, it is impossible for investors to bet successfully against the trend. This is the time when markets are inefficient and private investors cannot easily make money against them. In this situation, what is irrational for the market is rational for firms or individuals: as the Chairman of Citibank said to explain his firm's strategy, "…as long as the music is playing, you've got to get up and dance…"[11]. Anticipating bubbles too early means giving up to a lot of profits; even in today's US real estate market, many homes are worth much more than at the time of purchase, despite a dramatic decline in their price in the last year or so. But being overexposed, for example through high leverage, when the bubble bursts, is disastrous.

One of the concepts that better highlight how the financial sector has lost touch with reality is "*Alpha*", i.e. the ability of the asset manager to create excess returns on his portfolio. Alpha can be produced by special abilities (*à la* Warren Buffet); by activism (venture capitalism, in example); by financial entrepreneurship or engineering (creating diversification or scarcity); or simply through liquidity provision (having the liquidity to hold on the asset until the arbitrage closes). Alpha is a very scarce resource; if markets were perfectly functioning Alpha would disappear. The first three sources of Alpha are hard to generate, as they depend on the investment manager possessing unique abilities; the last one, though, can be termed the poor manager's source of Alpha and can be achieved more simply by raising a lot

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[10] See Akerlof and Shiller (2009).
[11] Financial Times, *Citigroup Chief Stays Bullish on Buy-Outs*, July 9th.

of funds[12]. The temptation is to hide risks, by passing off returns generated by taking "Beta" risk as Alpha, thus hiding the extent of Beta risk.

At the same time, innovation and its benefits often get overestimated. Risk-management made great strides in the past decades thanks to technological progress and advance in scientific knowledge, including in the field of finance. However, this success made everybody overconfident on sophisticated risk management programs (often of a "black box" type). This mental and technological structure was essentially built on a wrong premise: i.e. measuring volatility on a recent past. What was looked at was the volatility (uncertainty) along a certain path, not the volatility of the path itself. The possibility that the path would shift down was seen as a "tail event" with very low occurrence probability. This in turn neglected the not too distant history of frequent bumps in the road experienced over the last two decades. The bankers had limited or no understanding of the way risks would unfold. There are times when people are too trusty. Capitalism will produce what they want, but also what they do not want. And it will do it profitably. Capitalism produced an on set of oil-snake products: from the "Alpha" concept, to 99.9% *VaR*, to sub-prime assets to "originate-and-distribute" models.

Of course all this had one sole goal: create money. For the shareholder, for the investors, for the management. As always, a bubble is King Midas territory. The feature that best captures this is the compensation structure in the financial sector, with mechanisms that move up very strongly with good performance (apparent "Alpha"?) and fall, albeit more mildly, with poor performance. True performance can only be estimated over a long period, far exceeding the horizon set by the average manager's incentives; managers will take these risks if they can.

[12] See Rajan (2007).

The financial industry performance has been a key factor explaining much of the growth over the past decades. It is now clear that much of that was overemphasized. The current crisis has almost entirely written off the investment banking industry; it has wiped out large amounts of capital in other commercial banks and insurers; it has brought havoc to many financial businesses, from securitization to commercial paper. The financial sector is now playing a negative role in explaining productivity[13] and growth. What do we make of the "animal spirits" that drive this process of creation and destruction?

In capitalist countries there does not seem to be a wide understanding of either its advantages or its hazards. Capitalism is not the "free market" or the *laissez-faire* system of zero-government. It functions less well without state protection for investors, lenders and companies against monopoly, deception and fraud.

In the end, what is progress? What lifestyle should be pursued? These questions are becoming crucial in the current situation which has seen some of the paradigms of economics and finance crumble: the theory of "efficient markets" can hardly be taken for granted; the "principal agent theory", according to which agents will perform best under high-powered financial incentives to align their interests to those of their principals, has also crumbled under the excess of performance-related pays; the philosophy of "continuous change", promoted by self-interested consulting companies, which disregard the fundamental human need for stability, has proved limited.

If all this is no longer viable, what should human beings strive for? What about happiness? The concept discussed in Richard Layard's recent books[14] is that of (re)

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[13] On the contribution to aggregate productivity from the financial sector see an article, posted on his blog, by Paul Krugman, *Reconsidering a Miracle*, April 16th 2009.

[14] See Layard (2005, 2006). See also Stiglitz, Sen and Fitoussi (2009) on proposals for new statistical tools to evaluate a country's wealth and well-being. The proposals made, which are included in a long report, are summed up in twelve

focusing on the quality of human relationship, at home, at work, in the community of less rivalry and more common purpose. To recreate the trust among people that has progressively diminished over time and do something about the fall in trustworthy behaviour so clear in the banking sector.

recommendations and three key messages based on concepts such as “Quality of Life” and “Public Services” among the others.

5. Conclusion. As history teaches us there will always be crises

Not many forms of economic system are possible, and all of them revolve around the respective roles of the State and the market; if we prefer, of the private and public sector. What a crisis does, is to change their respective roles.

In the collapse of the USRR, the big winner was the private sector. The demise of the Union gave way to the biggest transfer of wealth since the collapse of the Roman Empire. Whether the huge privatization wave was managed in the most effective way remains to be seen; it certainly decreed the end of the dominance of the "bureaucratic spirits" in a large part of the world.

The collapse of Lehman Brothers and other banks marks the end of one of the fastest periods of growth for market economies and private activities; the sudden break in the unfettered role of "animal spirits" in the global economy. This collapse has caused the greatest transfer of private debt on the shoulders of the State the likes of which has not been seen for a very long time.

It is when everybody is bullish that contrarian views on the magical role of market forces are needed; and it is when, like in this phase, markets are under attack that they need to be defended, even by forcing on them the much needed reforms.

And it is exactly at this time that the role of the State must be checked. Its interventions must be targeted, timely and temporary. They must also do no harm by altering the level playing field; they must avoid destroying public resources; they must preserve the integrity of the public agents involved.

The main culprit of this crisis is the financial sector; the stage is the global economy; the scene is a very complex world where distortions can be sustained over long periods of time and become explosive.

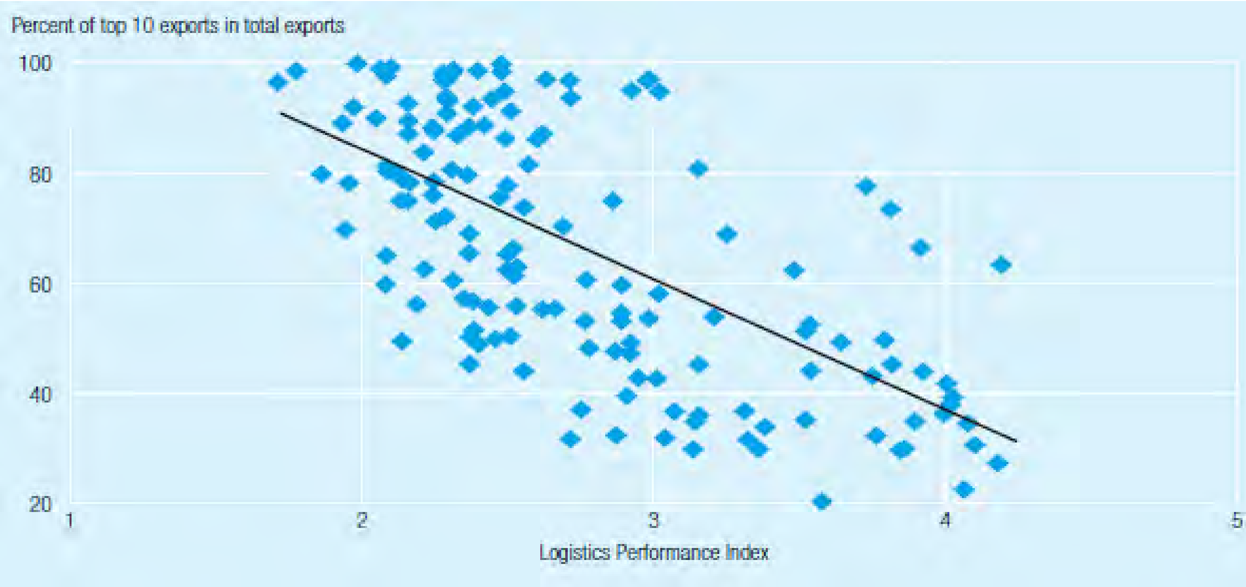
States are unprepared to tackle the crisis in this new setting where actions need to go across the borders, where coordination is paramount, and where the resources involved are massive. In this scenario global governance is inadequate, new players and new roles are being sought out.

However great the challenge, the biggest contribution the we can make individually is to think independently, to avoid the bandwagon. “Unified Thinking”, whether as a result of centrally-planned messages or market-driven bubbles, is always destined to fail.

The only sure tool against future crises is our ability to be critical and challenge the conventional wisdom.

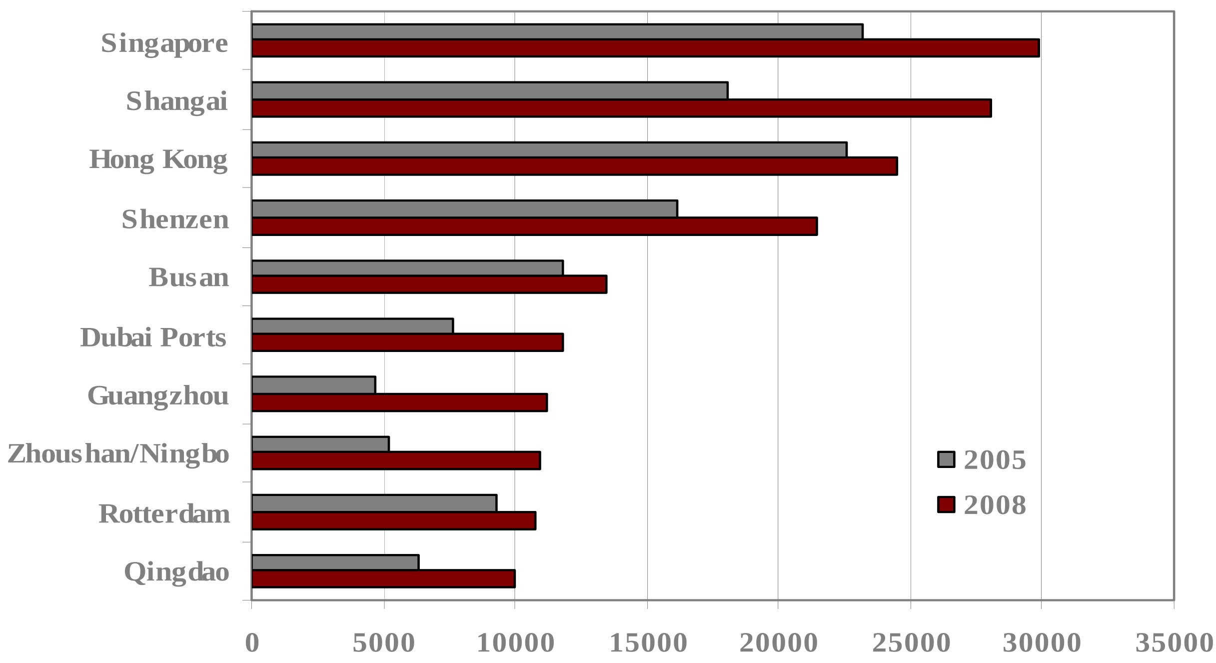
Chart box 1: Logistics – where the business goes

The better the logistics performance, the more diversified trade



Source: IBRD/World Bank.

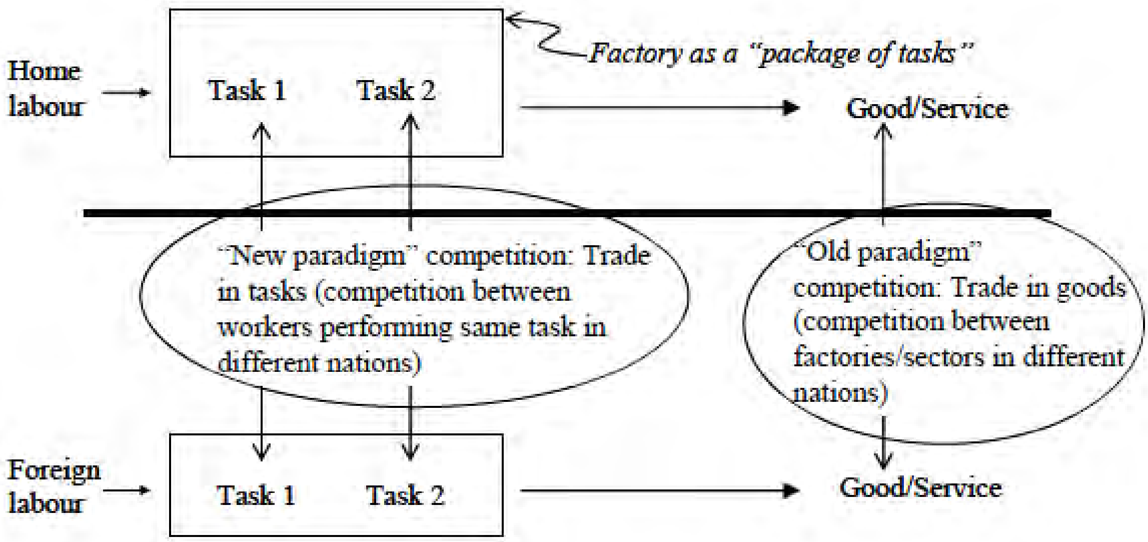
The increasing importance of shipping*



*Top 10 World container ports (number x 1000 twenty feet equivalent units)
Source: Port of Rotterdam Authority.

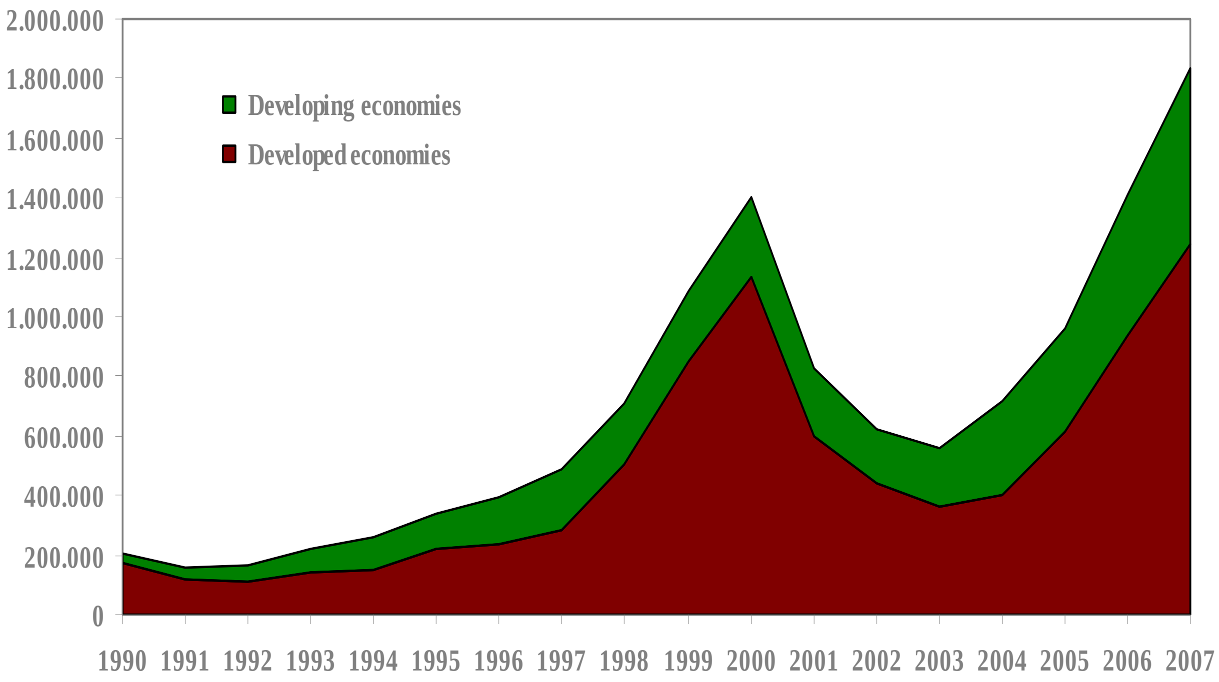
Chart box 2: New production/comparative advantages

From the first to the second unbundling



Source: Baldwin (2006).

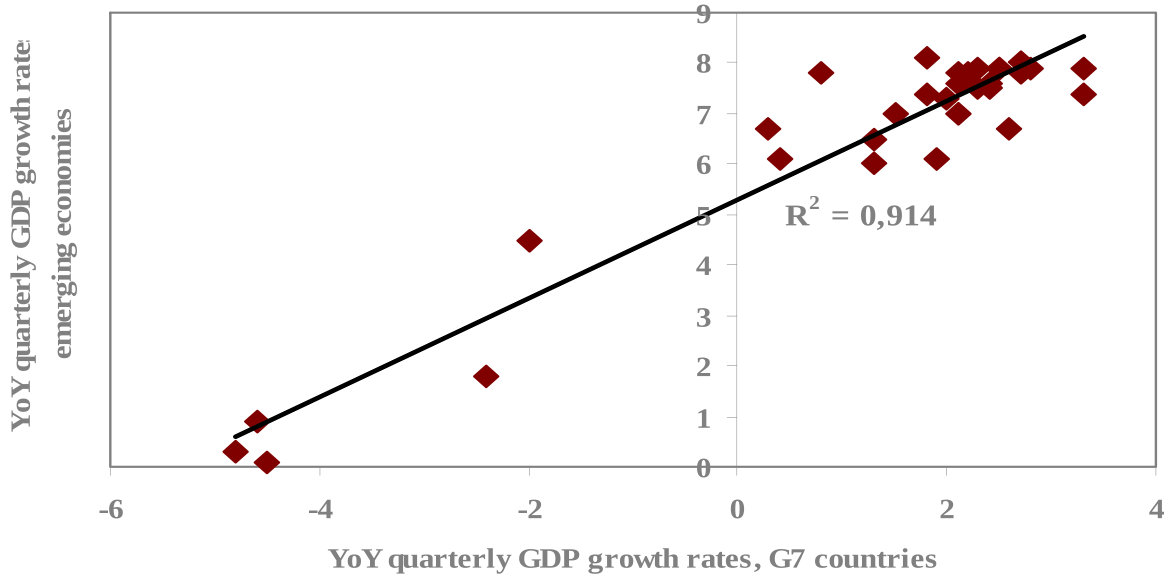
Global FDI inflows: developed vs developing economies (*million USD*)



Source: SACE calculations on Unctad data.

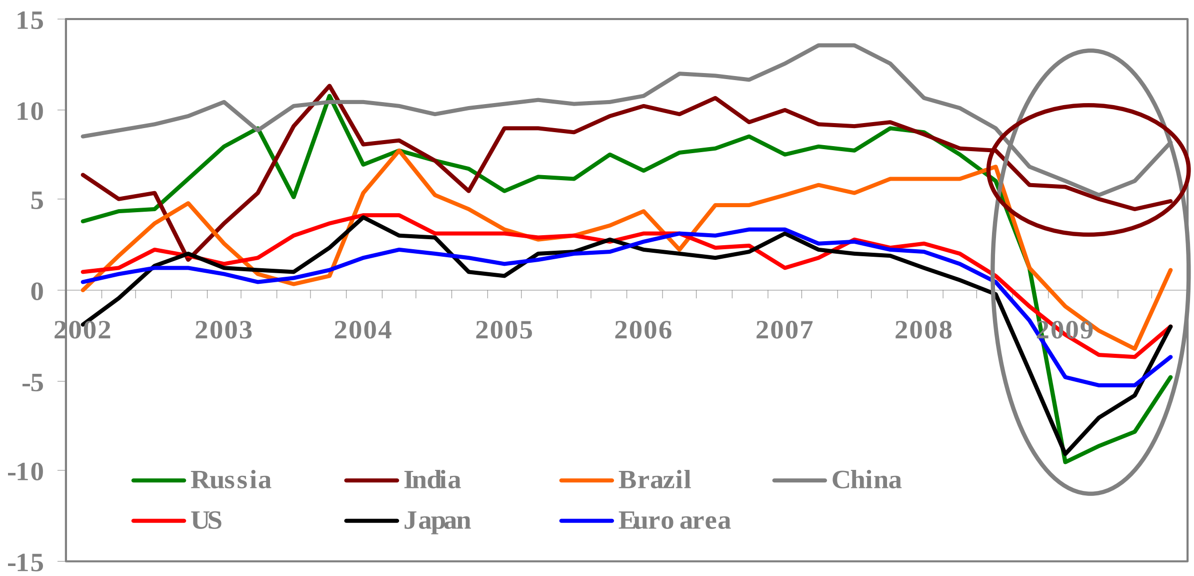
Chart box 3: Decoupling or not decoupling? Hard or soft?

Decoupling vs recoupling 1 (*2002-2009*)



Source: SACE calculations on Oxford Economics data and estimates.

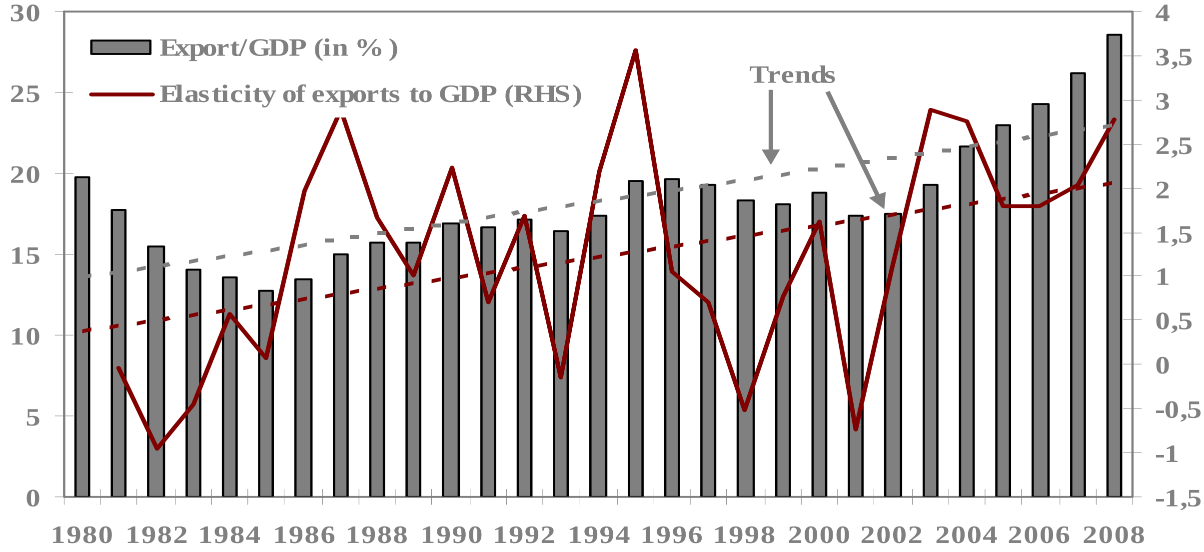
Decoupling vs recoupling 2 (*YoY quarterly growth rates*)



Source: SACE calculations on Oxford Economics data and estimates.

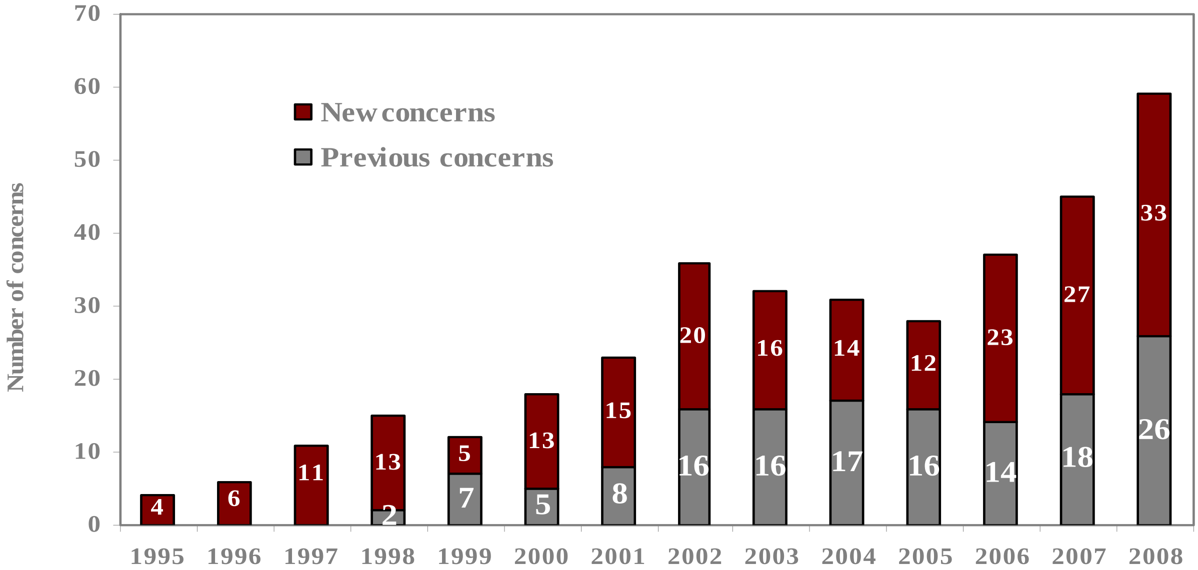
Chart box 4: When growth falls, trade collapses and protectionism rises

Both the intensity and the elasticity of world trade to GDP have increased



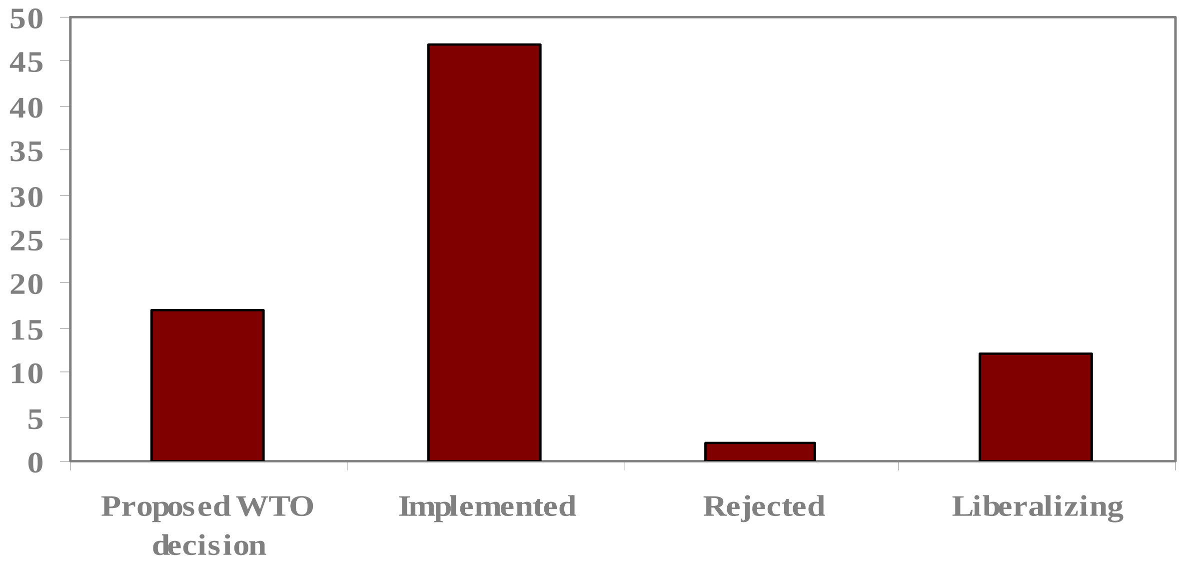
Source: SACE calculations on IMF data.

Specific trade concerns raised in the WTO Technical Barriers to Trade Committee



Source: WTO.

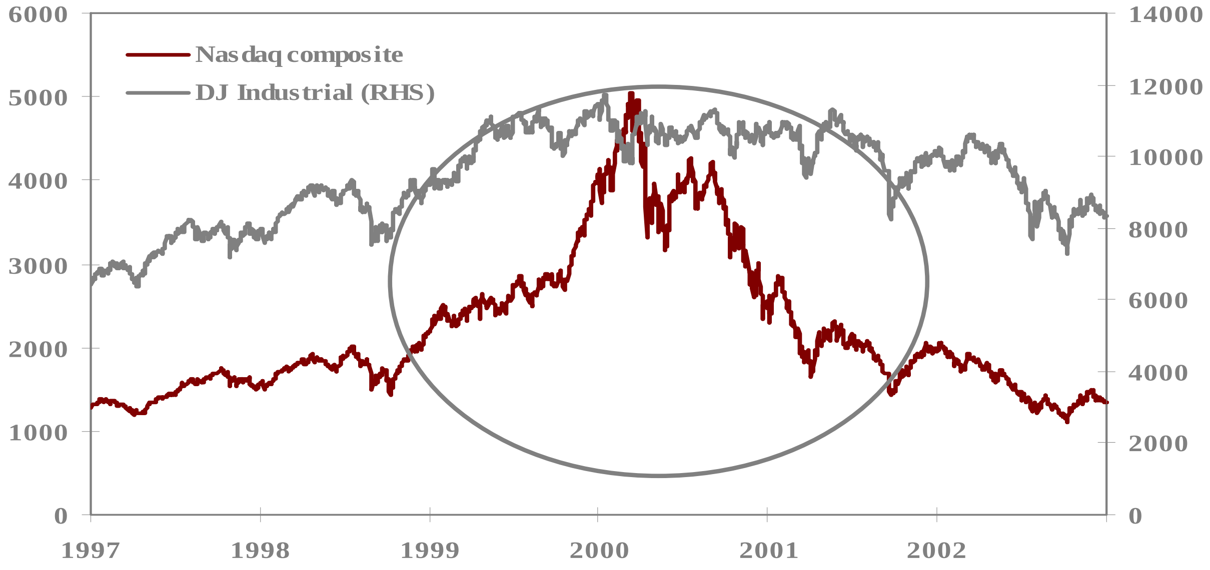
Trade measures, October 2008-February 2009 (*number of measures**)**



Excludes anti-dumping cases
Source: World Bank.

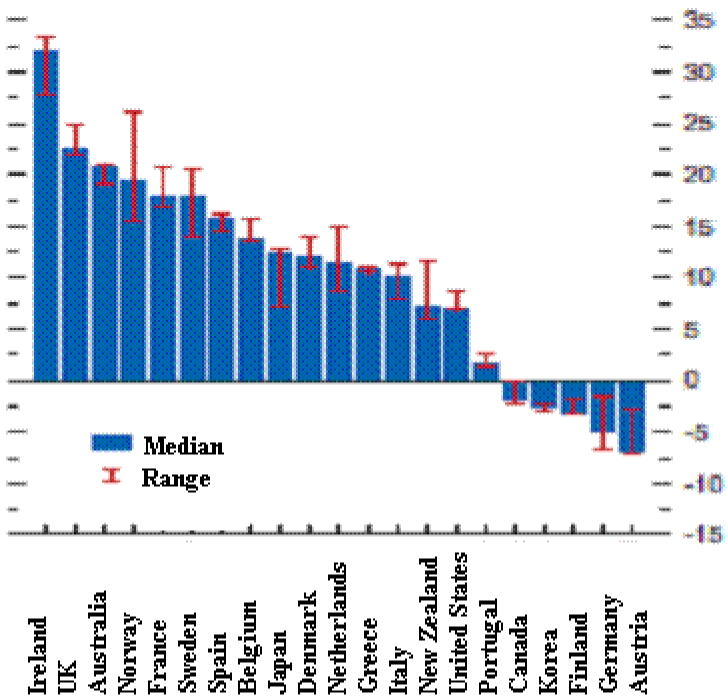
Box 5: Bubbles and bubbles

"Bubble mentality" 1: the high-tech bubble



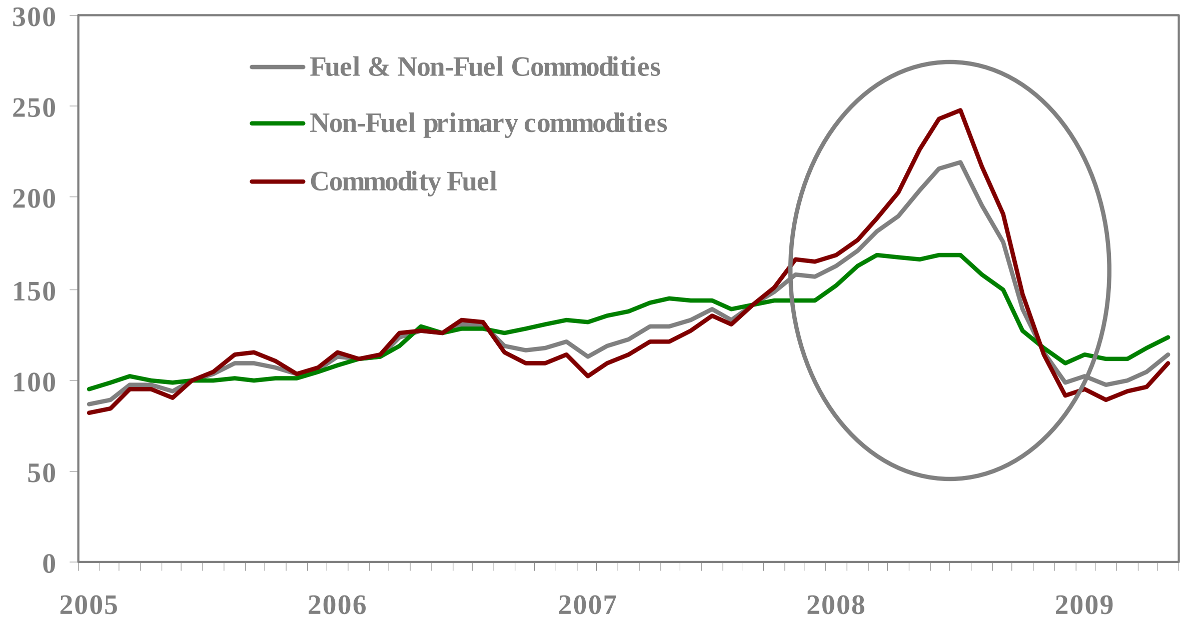
Source: Bloomberg.

"Bubble mentality" 2: the real estate bubble – House price gaps (*in %*)*



* It can be interpreted as a measure of overvaluation and used to define countries which are more likely to experience a correction in house prices.
Source: IMF, WEO, October 2008.

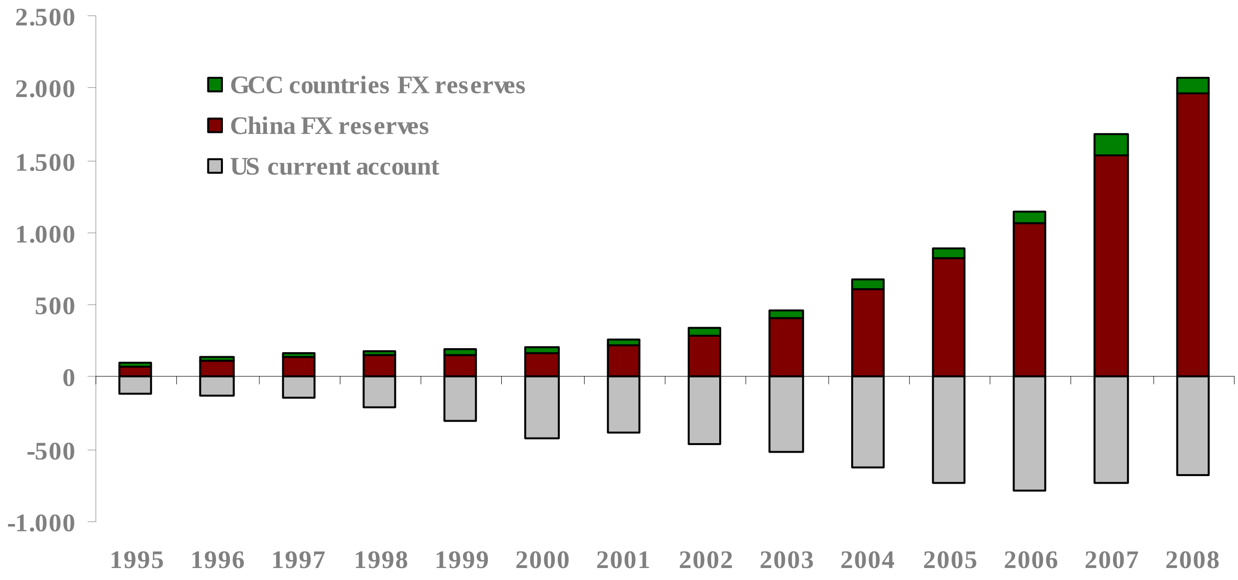
“Bubble mentality” 3: a commodity bubble?



Source: IMF.

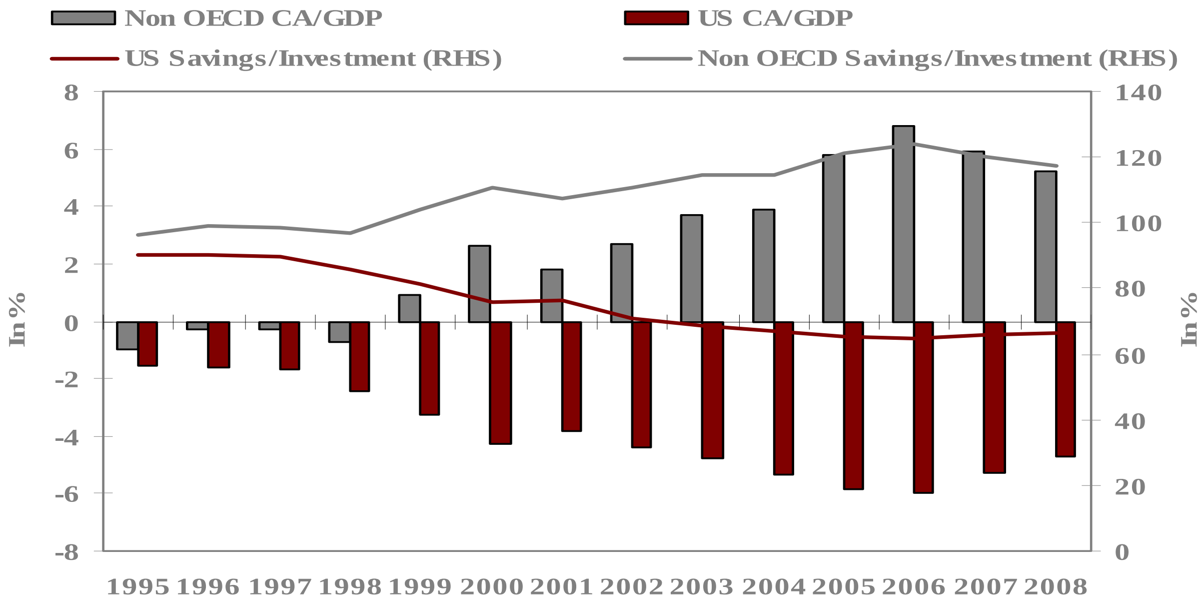
Chart box 6: When the Chinese farmer finances the American homeowner

Global imbalances 1 *(bln USD)*



Source: SACE calculations on Bureau van Djik (EIU) data

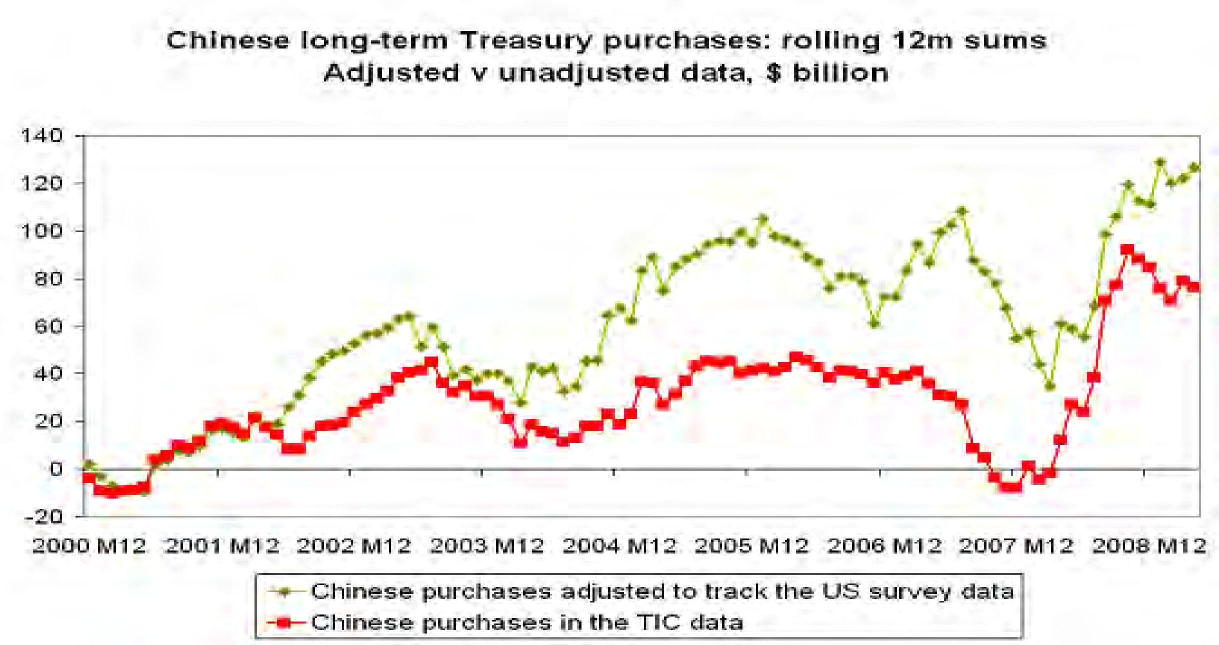
Global imbalances 2



Source: SACE calculations on Bureau van Djik (EIU) data

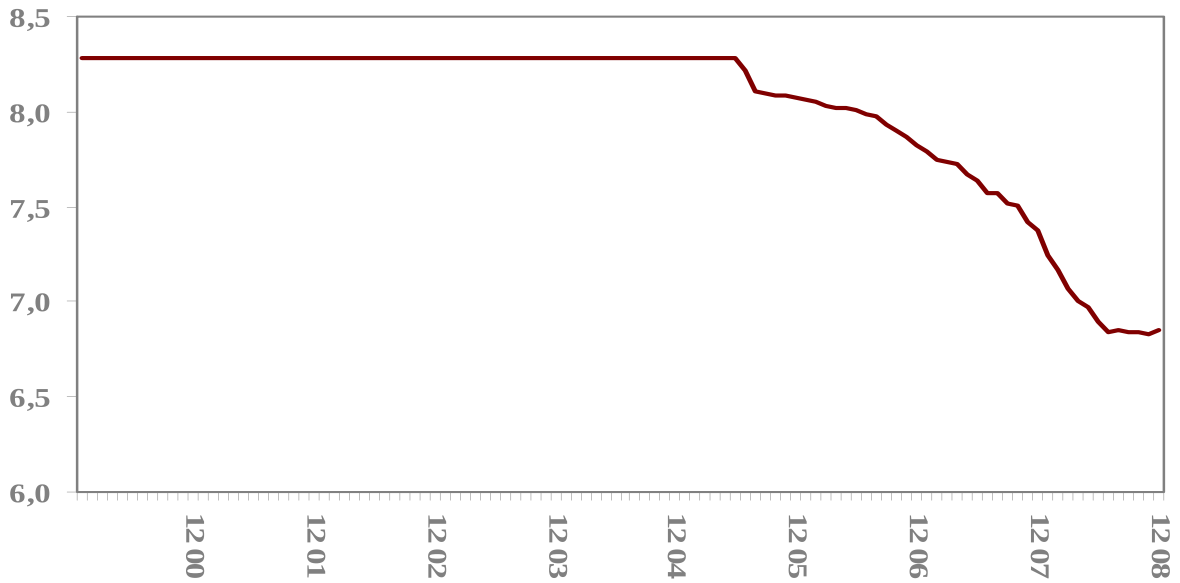
Box 7:Where would you put your savings if you had any?

Chinese purchases of US government bonds



* Adjusted data includes the revisions from the surveys of US foreign portfolio investment.
Source: RGE Monitor.

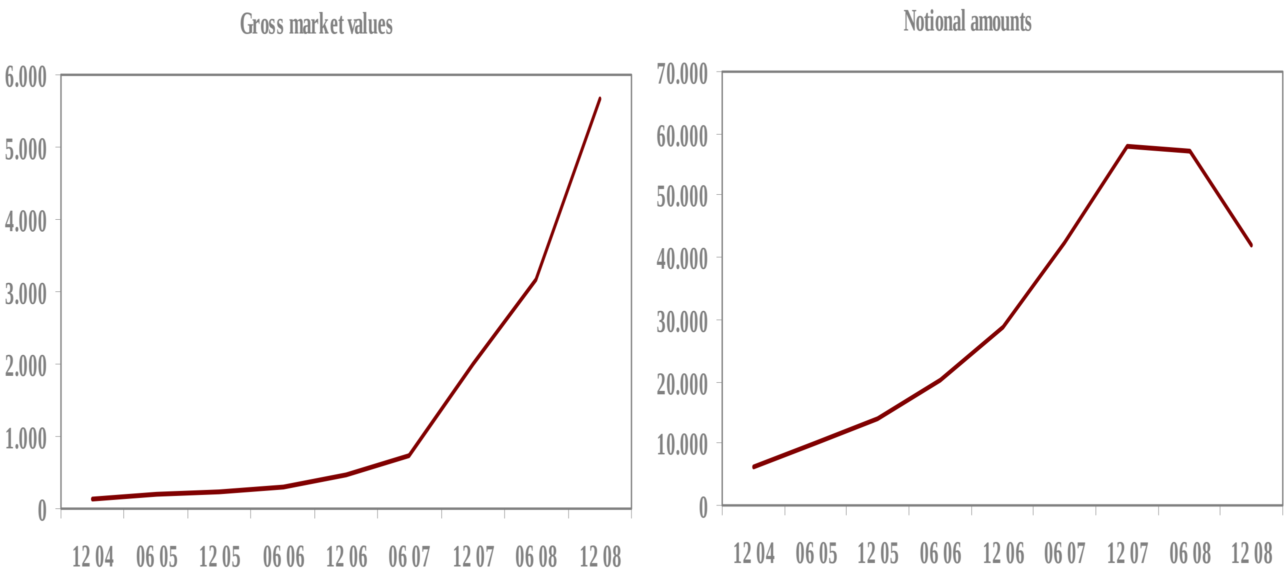
Yuan vs USD: appreciation risks?



Source: SACE calculations on UIC data.

Chart appendix

Fig. A1 Amounts outstanding of over-the-counter CDS (*billion USD*)



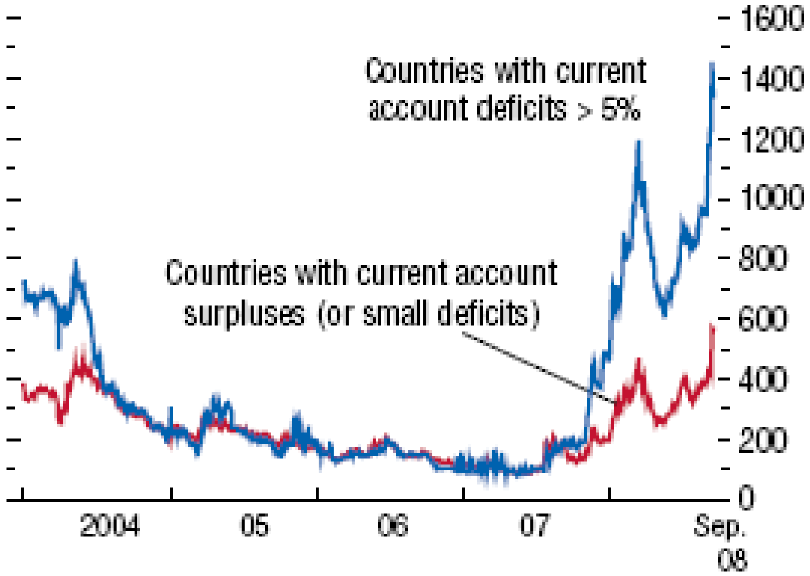
Source: BIS.

Table A1 Top 20 largest Sovereign Wealth Funds by assets under management

Country	Fund Name	Assets value (*bln USD*)	Inception	Origin
UAE - Abu Dhabi	Abu Dhabi Investment Authority	627	1976	Oil
Saudi Arabia	SAMA Foreign Holdings	431	n/a	Oil
China	SAFE Investment Company	347		Non-Commodity
Norway	Government Pension Fund – Global	326	1990	Oil
Singapore	Corporation	248	1981	Non-Commodity
Russia	National Welfare Fund	220	2008	Oil
Kuwait	Kuwait Investment Authority	203	1953	Oil
China - Hong Kong	Hong Kong Monetary Authority	193	1998	Non-Commodity
China	China Investment Corporation	190	2007	Non-Commodity
Singapore	Temasek Holdings	85	1974	Non-Commodity
China	National Social Security Fund	82	2000	Non-commodity
UAE - Dubai	Investment Corporation of Dubai	82	2006	Oil
Libya	Libyan Investment Authority	65	2006	Oil
Qatar	Qatar Investment Authority	62	2003	Oil
Algeria	Revenue Regulation Fund	47	2000	Oil
Australia	Australian Future Fund	42	2004	Non-Commodity
Kazakhstan	Kazakhstan National Fund	38	2000	Oil
Brunei	Brunei Investment Agency	30	1983	Oil
France	Strategic Investment Fund	28	2008	Non-Commodity
South Korea	Korea Investment Corporation	27	2005	Non-Commodity

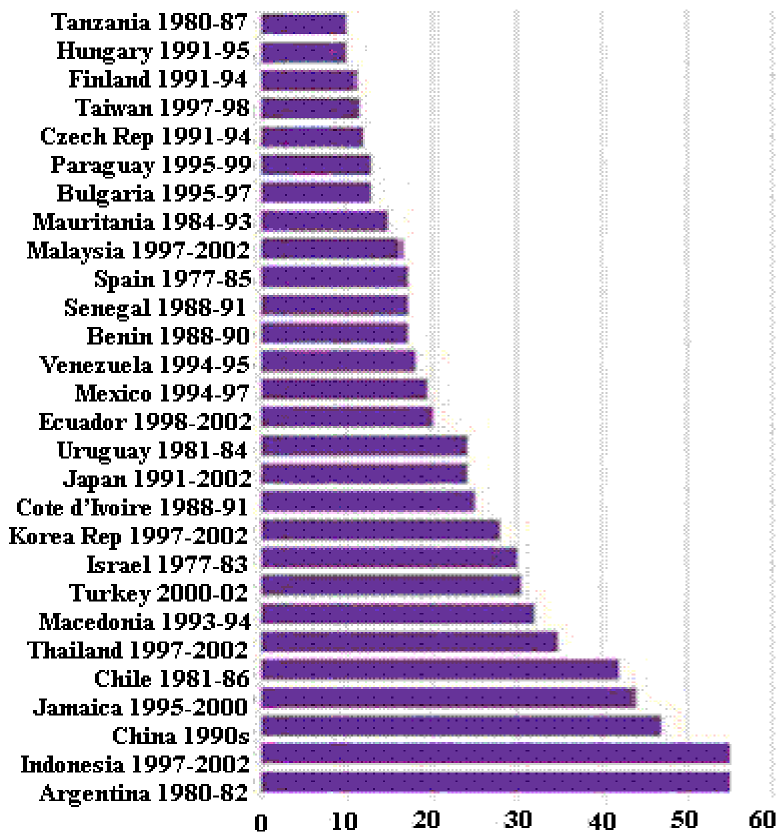
Source: Sovereign Wealth Fund Institute.

Fig. A2 (The miss) pricing of risks according to fundamentals (*bps*)



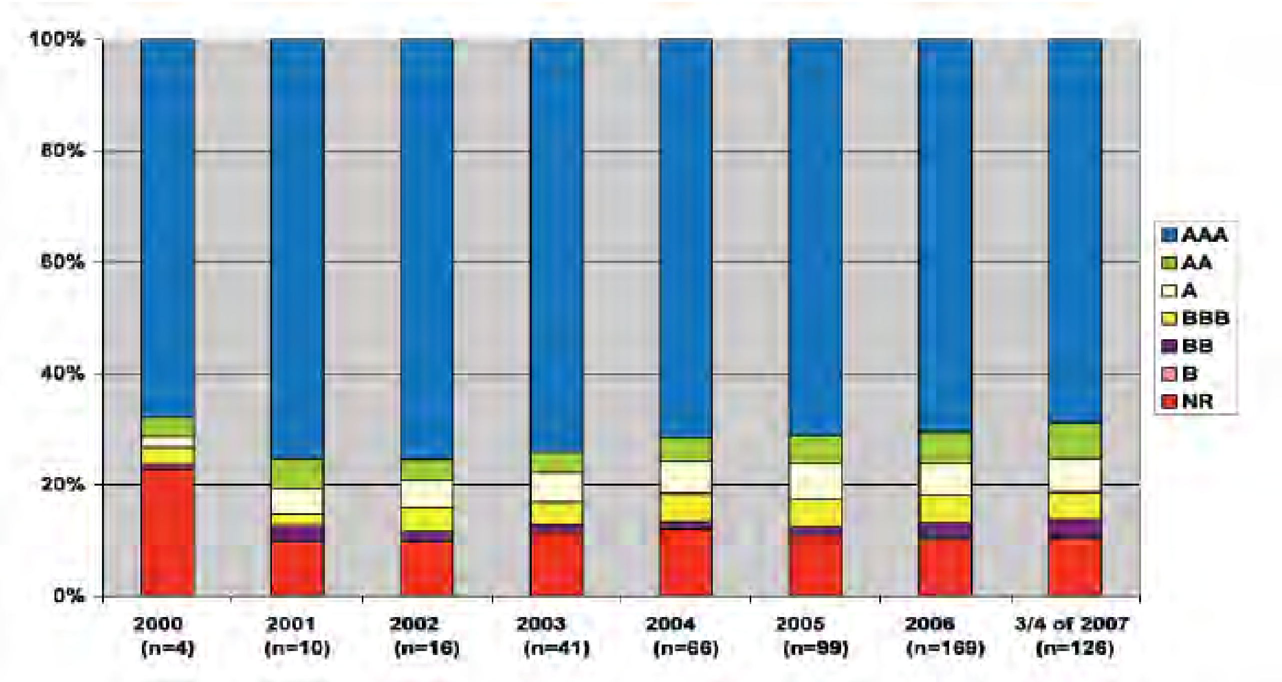
Source: IMF.

Table A3 Systemic financial crisis can have high costs (*costs in % of GDP*)



Source: Caprio and Klingebiel (2003).

Fig. A4 CDO ratings distribution (*Par value of issuance by rating*)



Source: Benmelech and Dlugosz (2008).

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