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Learning from the global economic crisis

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The world needs an international monetary system that promotes global price stability, facilitates world economic growth, and ensures global financial stability. Global crises provide rare opportunities in reforming the international monetary system. The ability to provide adequate liquidity, timely and adequate adjustment of imbalances, and reduced risk has proven to be elusive under the current system centered on the US dollar.The stability of the global economic system, in effect, hinges on the United States being the deficit country of last resort.There is a need for fundamental reforms in the current dollar-centric system. This paper presents proposals for reformation of the international monetary system.

JEL classification: F36, F42
Keywords: international monetary system, global crises, reform of international monetary system

1. Introduction

By almost all accounts this is the worst financial crisis since the Great Depression. As of February 2009, the United Kingdom, Japan, and the United States had suffered absolute declines of -0.50 percent, -11 percent, and -1.5 percent, respectively, in their gross domestic product. And China's rapid growth rate decelerated to 6.5 percent from a high of 11 percent

[1] The author would like to thank the panel reactors and the audience during the Ayala Fund Lecture on April 15, 2009.

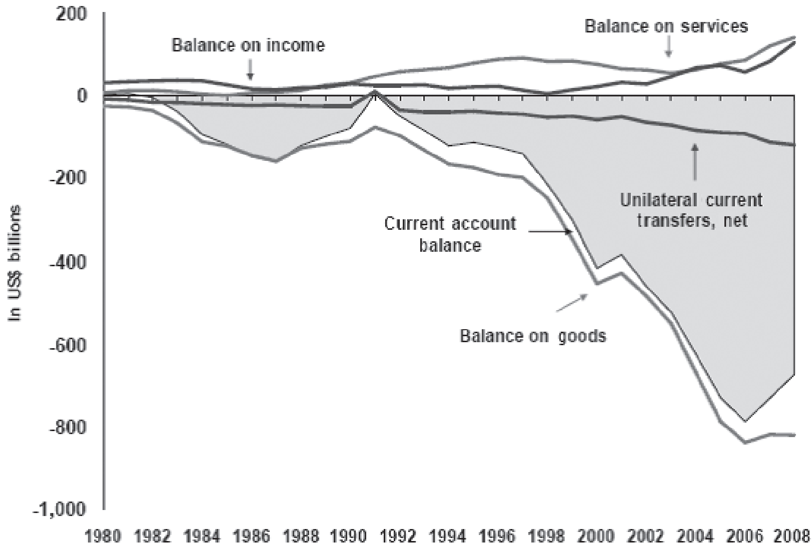
at one time. Other countries have suffered similar if not worse fortunes. There are indications that things will get worse before they get better. For a crisis of such depth, length, and breadth we may have to go back to the 1930s to look for close parallels.

2. How it started

How did it all start? Armed with almost perfect hindsight we attempt to understand the origins of the crisis, fully aware that very few people, including most of us in my profession, foresaw the consequences of the developments we described at the time these were happening. However, if we examine the causes, we may understand the steps to be taken to get out of it. Further, we may also learn how to avoid the major aspects of the crisis in the future. Perhaps, there will be another crisis as deep as this one, but at least not from the same causes. Better still, of course, if we learn how to avoid it altogether.

2.1. Roots of the crisis: overconsumption in developed countries

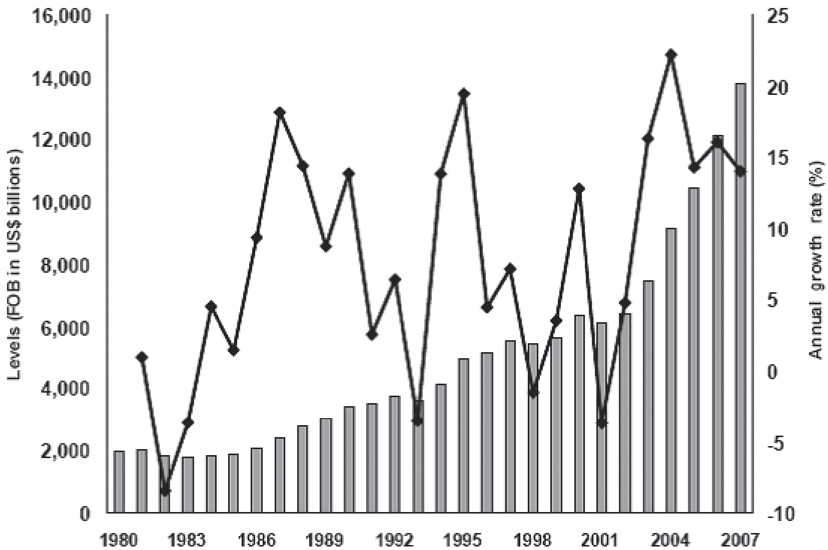
The roots run deeper than may seem apparent at first. One of the sources may have been the overconsumption of developed economies, especially the United States, confronted with the cost competitiveness of newly emerging economies like China and India. This combination of mature economies and efficient production by new producers became apparent about a quarter of a century ago. As a result there was tremendous growth in trade volumes in the last two decades or so of the 20th century. It was a product of the increasing integration of global product markets. As emerging economies took advantage of the opening of world markets, their low-cost production (based on low wages and other cost advantages) confronted mature economies, with their inflexible production structures, giving these older economies access to cheaper goods. As the flow of goods from these newly industrializing economies accelerated, it caused a continuing flow of funds from countries suffering balance-of-trade deficits to those with surpluses.



Source: US Federal Reserve Board (US Fed).

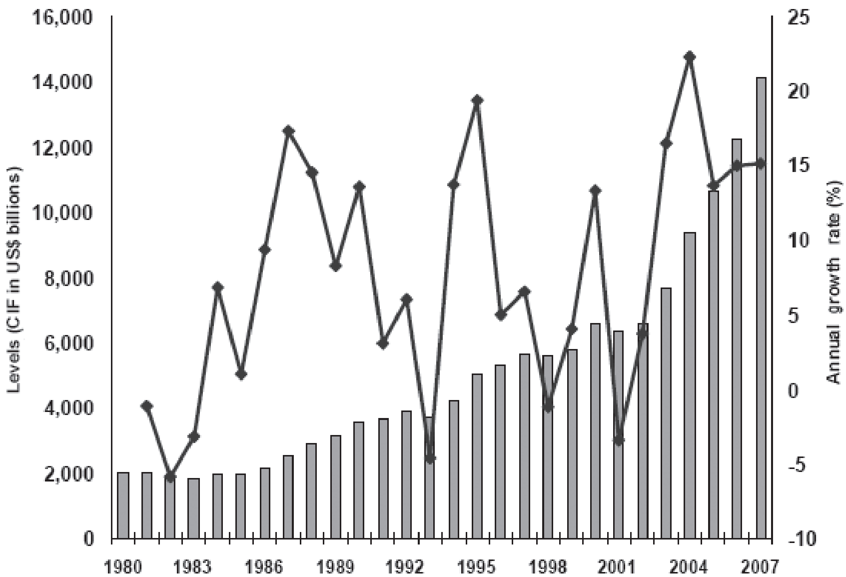
Figure 1. US BOP by components (in US$ billions)

The other major cause of the crisis, rather easy monetary policy, may be described as the other side of the overconsumption coin. However, I discuss overconsumption separately because it implies a structural imbalance that will need to be addressed above and beyond the tightening of monetary policies. It implies, among other things, a radical rearrangement of world trade flows if rapid global growth is to continue in an orderly manner in the future. While we notice a generally one-way flow of goods during the rapid growth of global trade and production of the last 25 years, we will have to see a more multidirectional pattern of trade and a more varied distribution of specialization among producers going forward. Besides, when one examines the timeline of the trade imbalance, the large deficits of key countries persisted even during periods when their monetary policies can be described as less easy—although the two broad threads clearly coincided in the most rapid buildup of the last decade. That is also why I would like to emphasize that this global crisis goes beyond the subprime credit crisis.



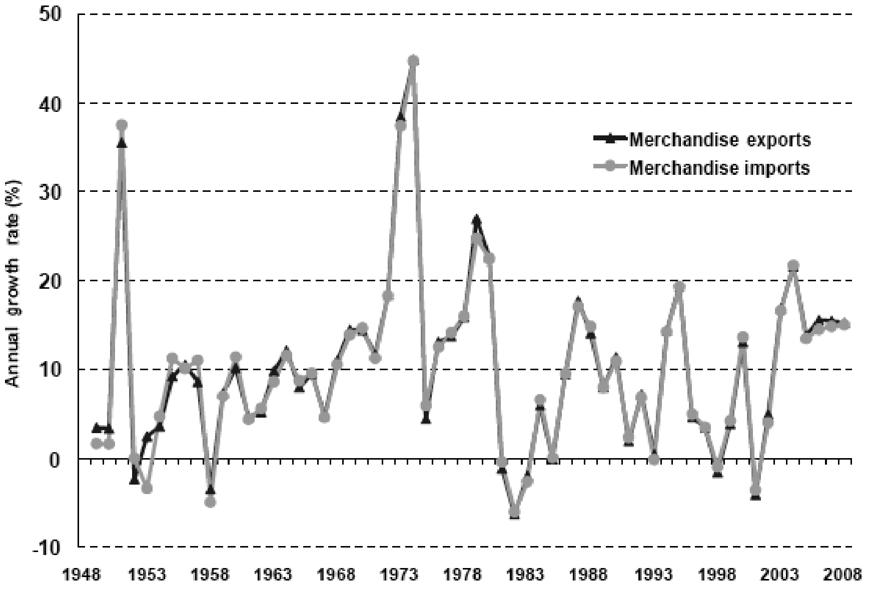
Source: International Monetary Fund (IMF).

Figure 2. World exports value, 1980-2007 (in US$ billions)



Source: IMF.

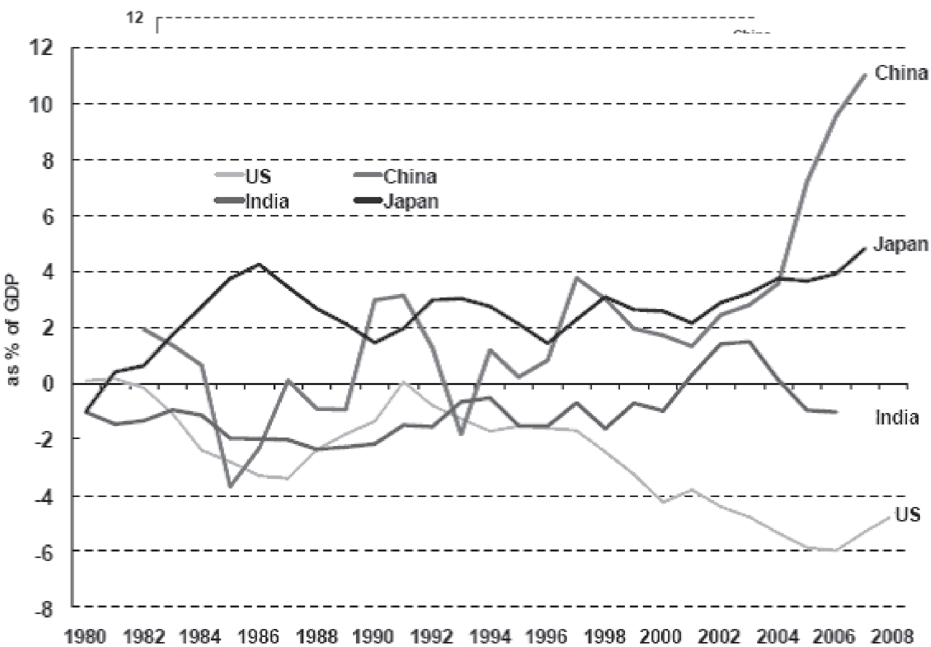
Figure 3. World imports value, 1980-2007 (in US$ billions)



Source: World Trade Organization.

Figure 4. World merchandise trade, 1948-2008

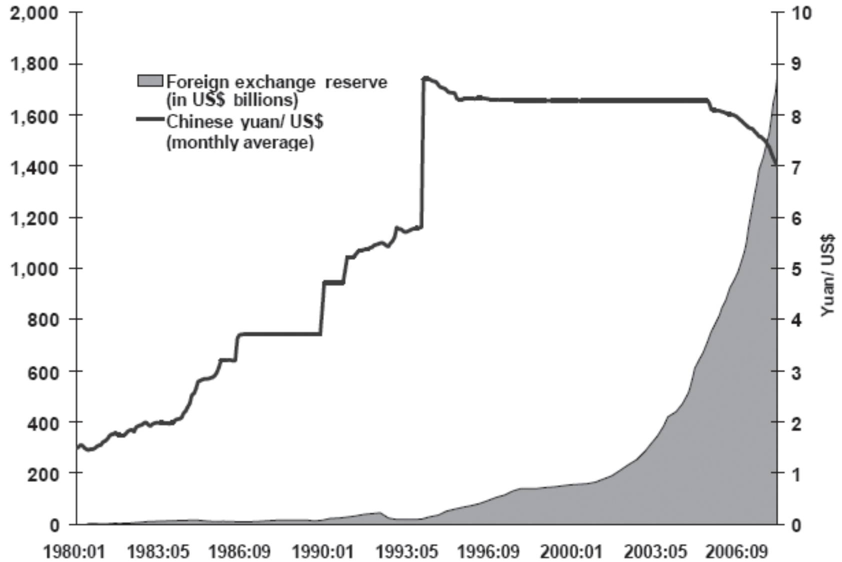
The production and trade imbalance created a recycling problem for the main exporters that could be cured by either a depreciation of the currencies of deficit economies or a remedial capital flow from the surplus countries.To maintain their cost competitiveness,surplus economies chose the latter (i.e., chose to maintain their existing exchange rates), shipping what later accumulated to several trillion dollars of funds to purchase earning assets from deficit countries.While we use China to illustrate how the process took hold,we need to be conscious that this phenomenon came out of a strategy rooted in development lessons of the last half-century and was part of a major push for economic growth by many countries generally described as emerging economies.



Source: IMF.

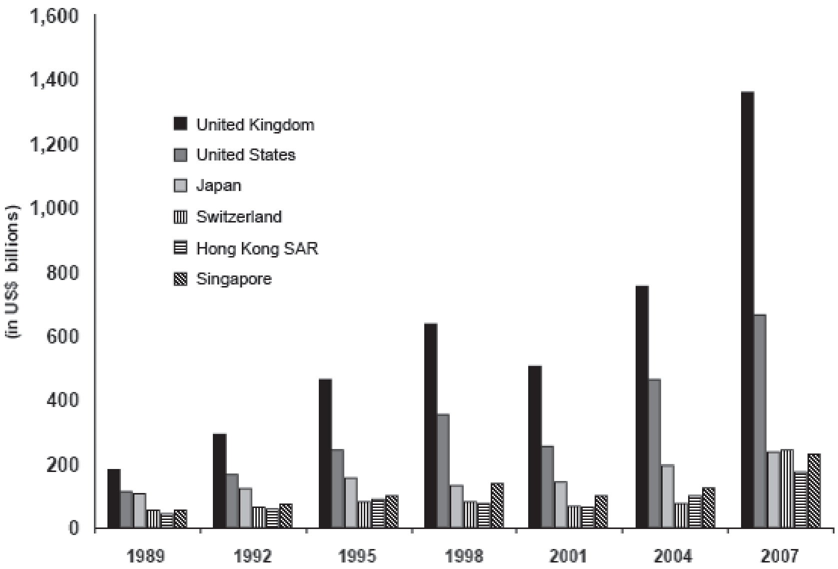
Figure 5. BOP deficit/surplus as % of GDP for selected economies

For the United States, the supplier of the de facto global currency, this was masked by the need to produce a moderate balance-of-payments (BOP) deficit in order to provide the money supply needed by the rapidly expanding volume of world trade. This veil was extended when the collapse of the socialist economies created almost two dozen new capitalist economies with central banks that loaded up in the global currency as foreign exchange reserves to support their entry into the world trading system.



Source: IMF.

Figure 6. China's foreign exchange reserves (in US$ billions) and exchange rate (Chinese yuan/US$)



Source: Bank for International Settlements.

Figure 7. Daily global foreign turnover, by major markets (in US$ billions)

These flows of both cheap goods and funds had two salient results in the recipient countries: the inflow of cheap goods reduced their inflations rates, strengthening their currencies and thereby harming their manufacturing sectors; and the flow of funds inflated asset prices and reduced the return on investments. And in the year 2000, when the dot-com bubble burst, the low-inflation environment allowed the central banks, led by the US Federal Reserve, to combat the incipient recession by continually reducing the interest rates. This further enhanced the budding asset-price bubble and aggravated the already low returns on investments, inciting a frantic search for higher-yielding alternative investments. They found the solution in subprime credits and inflation hedges like minerals and agricultural commodities.

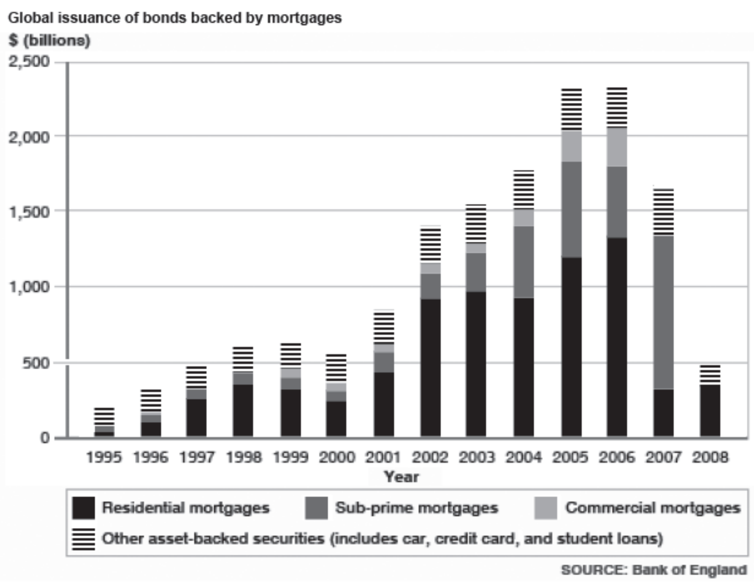
Subprime credits became the centerpiece of a (financial) marketwide effort to stem the decline in investment returns and to extend the reach of the financial markets to the rest of the world. This brought into play a huge reservoir of capital that swirled into a crescendo of financial activity. This was facilitated by financial innovations related to the securitization of subprime mortgage loans into collateralized debt obligations (CDOs) and the "originate and distribute" business model of selling these assets. In the meantime, the United States repealed the insulating restrictions between banking and other financial services like insurance. This increased the size of the financial market and the market players at the same time that it allowed the increased exposure of banks to the volatility of the financial markets.

2.2. Business rationality and market myopia

Where did it all go wrong? How do we prevent its recurrence? These questions go through the minds of the policy makers and the public who have been the main victims of the global financial crisis. Among the main questions asked these days is how regulators could have missed the signals and how they could have allowed the problem to get out of hand. Among the salient features of this crisis is how it started in the financial markets rather than among banks. Thus what froze was "market liquidity" when the rapidly dropping asset prices cause funds to flee financial markets, rather than "funding liquidity" with banks running out of funds as depositors withdraw their funds. Among the main factors identified in the market freeze are new financial structures called structured investment vehicles (SIVs) that made substantial use of innovative financial instruments, including CDOs.

Structured investment vehicles were financial structures set up to exploit the availability of funds provided by the recycling of funds from surplus economies and to avoid the low investment returns (and parallel asset bubbles) in the face of growing liquidity. These were set up to issue short-term instruments and turn around to buy higher-yielding longer-term notes, a practice known as the carry trade. This type of operation carried the inherent danger posed by "a term mismatch" where short-term borrowings finance long-term assets. If short-term rates were to suddenly rise, these activities could result in substantial losses. Further, using short-term fund sources created uncertainty about the stability of the financing used.

The activities of SIVs were facilitated by the increasing availability of securitized subprime credit instruments essentially based on homebuilding loans that were supported by the Federal National Mortgage Association (FNMA, hence Fannie Mae) and the Federal Home Loan Mortgage Corporation (FHLMC, hence Freddie Mac). These asset-based securities became known as collateralized debt obligations. The presence of a vigorous secondary market made possible the tranching of these securities, producing highly rated instruments that allowed the market to attain much higher volumes of financing.



Source: Fitzgerald [2008].

Figure 8. Global issuance of mortgage-backed bonds (in US$ billions)

Unfortunately, the temptation of increasing profits through these instruments was too strong and the market expanded, among others, by resecuritizing these securities up to a few levels. As the original loans were packaged and repackaged into increasing levels of securitization, their underlying credit weakness became submerged and the market forgot how low the basic credit foundation was.

This phenomenon was facilitated by a financial institution meant to strengthen the credit process: credit rating. Credit rating is one of the main pillars of modern financial markets, acting as an instrument for controlling risk. To rein in overly risky behavior by investment managers and credit managers, provide more information for investment and credit decisions, and protect the public, the Securities and Exchange Commission (SEC) requires that public issues of bonds and other credit instruments be rated by accredited credit rating agencies (CRAs). To encourage prudent lending and portfolio decisions, central banks have increasingly implemented the Basel accords that require risk weighting for banks' risk (earning) assets. Under the standardized approach, credit ratings are used to minimize the chances of bank failure due to unexpected losses (i.e., over and above the allowance for bad debt losses) by providing for adequate capital to cover risk-weighted assets.

The SEC requirement ensures that investors unable to afford their own individual credit investigation efforts have enough information to guide their investment and lending decisions. Since the issuance of debt to the general public has tremendously raised the amount at risk, credit rating has become an armor against wholesale losses by investors in the financial markets. The central bank rule is meant to ensure that banks are insulated against failure and, therefore, safe counterparties in the credit business. If individual banks cannot survive loan defaults, then they also create trouble for the next bank in the chain of lenders and that bank to the next bank and so on. This kind of systemic failure is minimized as risk weighting and capital cover allow the banks and other lending entities to successfully absorb unexpected losses at their turn, thereby stopping the contagion chain mentioned above. These examples show the key role of credit rating in modern financial systems.

Still, credit rating (and other risk-mitigating methods) failed to prevent the financial meltdown. In fact, some features of the credit rating system—coupled with other innovations like the securitization of subprime mortgages and deregulation (e.g., repeal of Glass-Steagall) that allowed the fusion of the banking and financial services industries—may have tolerated the underestimation of risk and even amplified the overall danger, individually for lenders and collectively for the market as a whole. The rating process typically involves assessing the issuer of the instrument. In the case of the collateralized debt obligations where debt servicing ultimately rests with the original borrowers (i.e., the mortgagors of the properties) of the underlying contracts, the rating would focus on the issuers of the bonds (perhaps real estate investment trusts or REITs) or the guarantor. By slicing CDOs into varying tranches of seniority, REITs and similar funds are able to issue instruments rated AAA even though based on underlying subprime instruments. When the issuers are highly rated or the issue is guaranteed by highly rated entities (like Lehman Brothers), then the assets are carried at higher value (risk weights are low). Given the high interest rates that subprime credits carried, these instruments were very attractive to investors.

Somehow lost in the shuffle was the fact that the ability of the mortgagors (with low ability to pay) to service the underlying debt was very sensitive to market shifts such as changes in interest rates. When interest rates rose, the original mortgagors started defaulting and even AAA-rated papers were not protected by the tranche feature. Something similar had happened about a decade earlier when a market shift blindsided the Long-Term Capital Management Fund (LTCM).

The credit rating process became an unwitting partner of the magnification of the risk because it lent a (falsely) reassuring tone to the acceptance of what were essentially risky instruments. A frequent rule in guidelines for pension funds, investment, and similar committees include rules that investments "must be AAA-rated" or "must be investment grade," etc. Disciplined boards and committees could rest assured that they had done their fiduciary responsibilities by adhering to the rules of prudent investing. After all, they had followed all the rules of financial prudence. This phenomenon is a variant of the market failure traceable to "moral hazard" similar to the loss of market discipline if deposit insurance (especially if subsidized) is too high. Just because the instruments are credit rated, decision makers become careless in ensuring that default risks are minimized.

While individual responsibility may have been practiced, unknown to most participants in the financial markets, a dangerous mixture of highly combustible risk was building up. Paradoxically, the comfort provided by high credit ratings may have abetted this hazard. Reassured by the use of credit ratings, risk managers, credit committees and similar bodies contentedly allowed their investment managers to continue investing in this type of instruments. Business rationality and market myopia were combining into a highly dangerous recipe for disaster.

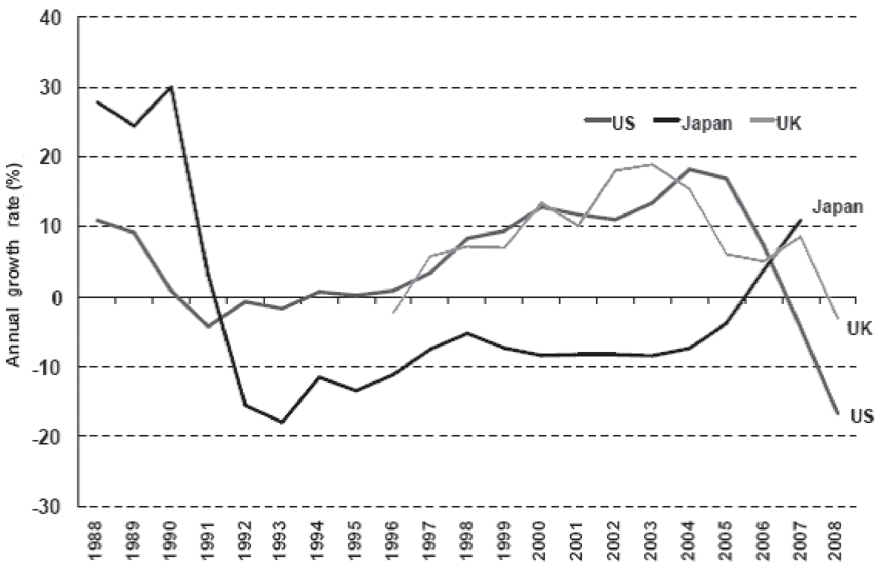
The beginning of the end came when the extraordinary demand for dollars finally came to an end. The large balance-of-payments deficit finally translated into a weakening US dollar. Around this time, increased militancy by the Organization of the Petroleum Exporting Countries (OPEC) also led to rising oil prices and, connected to this, increasing prices of minerals and other commodities. This led to accelerating inflation that induced central banks to raise interest rates. Higher interest rates resulted in rapidly declining asset values, especially the value of houses. Declining house prices exposed the inherent inconsistency in subprime credits—the borrowers could not afford to service their debts especially with higher interest rates—and the defaults started. The resulting decline in asset values led to losses that squeezed the credit markets in a crisis of market liquidity. When the credit markets froze, the absence of operating capital and short-term funds led to higher interest costs and shutdowns in the real economy, leading to losses, layoffs, and the general economic malaise.

3. How the crisis has evolved so far

A few months after large US banks had uncovered their exposures to subprime mortgages and collateralized debt obligations, the important question is: where are we in this downturn? In early 2008, Paul Krugman of Princeton University said in an interview with Yang [2008] that "$1 trillion of losses on mortgage-backed securities [will be] showing up somewhere". (That now looks like a gross underestimate with recent numbers in the 3-4 trillion dollar range.) He also said that the financial impact "looks like a combination of 1990 and 2001, and probably bigger than both combined". He continues that "if the recession started in January 2008, then that would mean that July 2010 is the first month we have anything that feels like a recovery" and he "wouldn't be surprised if it goes longer than that". In mid-2008, Professor Nouriel Roubini of the New York University wrote in his EconoMonitor blog (www.economonitor.com): "The worst is ahead of us rather than behind us in terms of the housing recession and its economic and financial implications." The numbers have since gone in the general direction they had pointed out. The US economy has since declined by 0.9

percent in 2008, the United Kingdom has grown minimally by 1.1 percent, and Japan has contracted by 0.6 percent.

About 20 million people, accounting for about a fourth of US homes, were saddled with paying for more than their houses are worth. In April 2008, the stock of houses was at its 26-year high, while house prices continue to decline. Prices in January 2009 fell at an annual rate of 11.4 percent, the highest in 21 years. With more foreclosures going daily, expectations of declining house prices through the rest of the year fed the pessimism. The US housing sector and its impact on consumer spending weighed heavily on the economy.



Sources: Standard and Poor's Ratings Services (S&P), Japan Real Estate Institute, and UK Land Registry.

Figure 9. Housing price trends for selected countries

Adding to these woes are tighter credit conditions. Lenders undertook a mass freezing of home-equity credit lines. Rising delinquency rates in auto loans and credit card payments heightened continued risk aversion by lenders. The delinquency rate on indirect auto loans—which buyers get from dealers themselves—and credit card delinquencies rose to their highest levels in several decades. Various business and consumer confidence indices kept on declining.

These dire numbers have been repeated in various ways in other developed countries that served as major export markets for the Philippines.

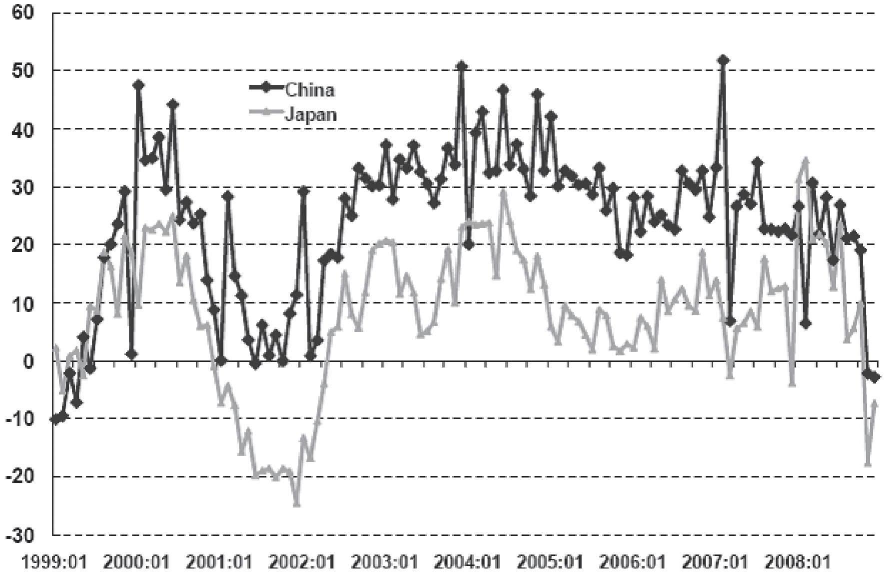
4. How it reached the Philippines and other emerging economies

4.1. Impact on the Philippines

Many people wonder what and how much the impact of the US recession on us has been. Most developing nations rely on America as their largest export market, not only for goods but also for services. US companies have investments and subsidiaries in Asian countries, which provide employment and spur growth in investments. US investors have also included emerging market stocks in their portfolios to diversify; some invest in riskier assets in Asia for higher potential returns. Volumes of domestic assets are held by US investors, and the reverse is also true. These interrelationships make a lot of countries vulnerable to the US economic situation.

A lot of discussion has been on the degree of "decoupling", or whether other economies have reduced their dependence on the US economy to such an extent that the adverse impacts of downturns in the latter are diminished. This concept is not new. When the United States went through a recession in 2001, China's growth only fell by less than a percentage point to grow at 7.3 percent, as strong domestic demand helped cushion the huge decline in exports. In 2007, Asian countries enjoyed healthy growth while the US housing sector slumped and the subprime mortgage crisis exploded. Local currencies strengthened against a weakening US dollar, while stock markets rallied.

There are two views. One says that we are still much affected by the US recession, and developing nations have not decoupled from the United States. As the recent declines in the stock indices of Asian countries show, the subprime mortgage crisis has had spillover effects on markets outside the United States. US investors fled from risky assets to safer ones, and the sell-off led to declines in Asian stock markets. The drastic reductions in exports of export-oriented Asian countries also confirm this. And financial markets all over the world, including Asian institutions that do not have substantial exposures to soured CDOs and mortgage-backed assets, have been strongly affected by movements in developed economies.



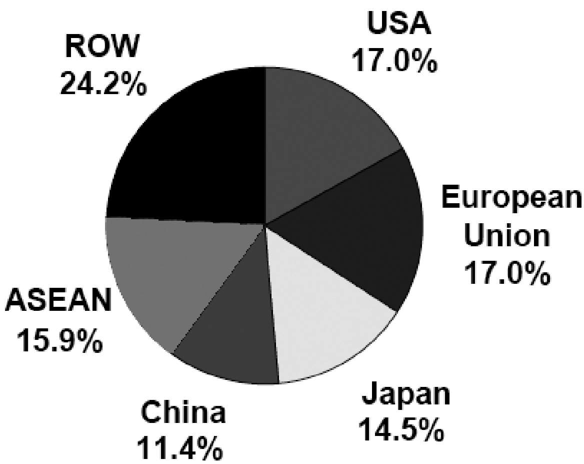
Source: IMF.

Figure 10. Monthly export growth rate for China and Japan, 1999:01–2009:01

The other view says that we are somehow insulated from the impact of the US recession. Some private forecasters share this view. According to some quarters, forecasted growth of emerging markets in Asia, although slower than their previous year's, are more than twice that of developed countries. This conjectured insulation is puzzling in an era of globalization. Economies of developed and developing nations would have more interrelationships with each other. Then again, globalization and decoupling may not be totally opposite each other. The two forces can coexist. In the past, emerging economies were more coupled with developed countries, especially the United States, and less with the rest of the world. Now emerging countries have become more globalized—that is, they have expanded their relationships to other economies, especially with neighboring countries.

This is certainly true of Asia. Globalization has played a hand in allowing economies to decouple from the United States in at least two ways:

First, globalization has resulted in stronger trade relationships among Asian countries. In the Philippines, the current share of exports to the US has declined from 30 percent to less than 20 percent since 2000. Demand from other neighboring countries helped offset the decline in exports resulting from sluggish US consumer demand. Also, China has become a rising force in the region's trading activities. BCA Research reports that emerging markets, as a group, now export more to China than to the United States. At the same time, the internal growth of China is now hoped to minimize its dependence on exports to the United States. This partly explains the expectation of Chinese growth of about 6 percent despite a deep slide in exports.



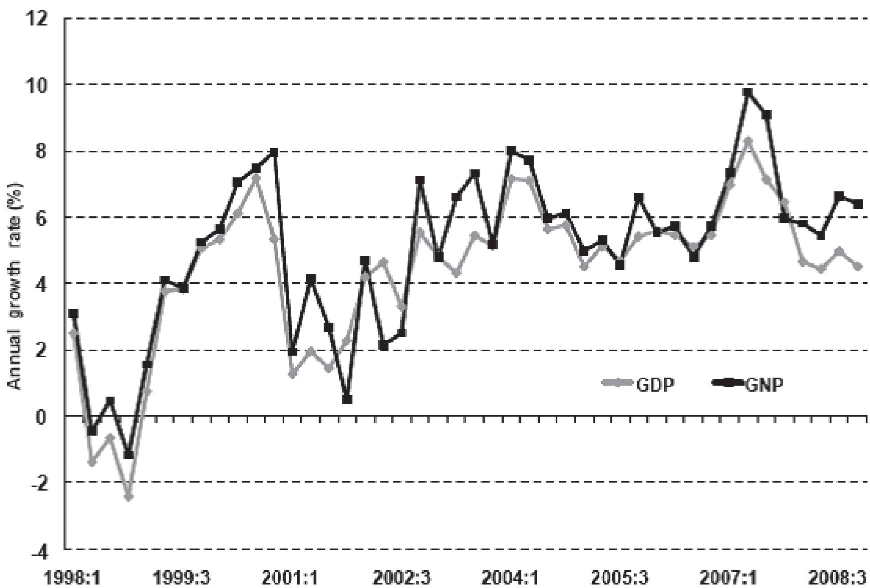
Source: BSP.

Figure 11. Major export partner, 2007

Second, globalization has helped support the growth of the middle class. With the growth of industries, higher production and income generation have led to strong consumer spending. This supports the growth of interregional trade. More important, it also illustrates that growth in Asian countries are slowly becoming internally driven by domestic consumers In turn, increased purchasing power helps spur investments and capital growth, as businesses rise to meet domestic demand.

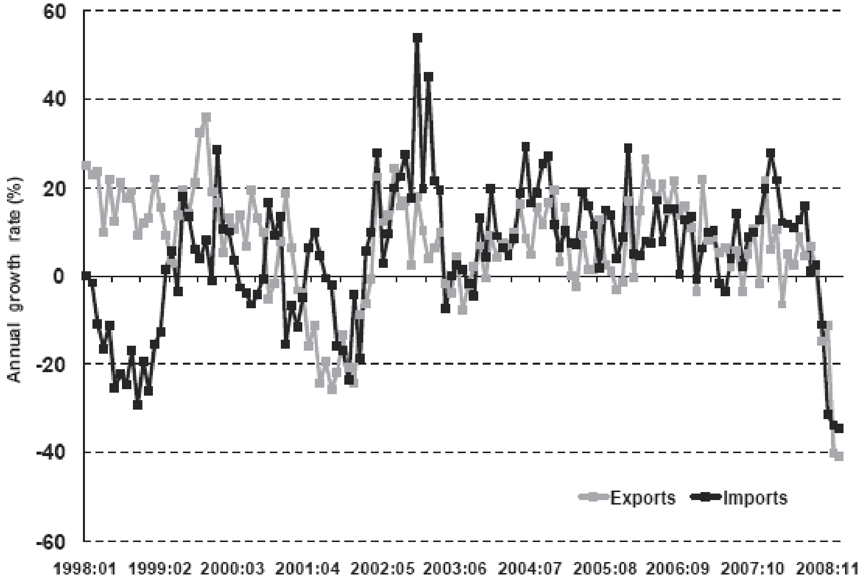
For the Philippines, although the United States remains our biggest trading partner, the decline in our export dependence suggests that we are, to a small extent, decoupled from the United States. The same may be said for other emerging markets. Although we are unable to fully quantify its effects, we can expect it to continue, especially with the growth of large countries such as China and India. The future degree of this decoupling may ultimately determine how we and other emerging markets will respond to future shocks coming from other parts of the world.

The impact on the Philippines has gone through five channels. First, through the impact on confidence and purchasing power because of the asset losses of higher-spending levels of the population, magnified by the losses suffered by banks. Second, through the added losses to the investing public as portfolio investments flowed out leading to lower asset values in the country, and in turn leading to much more difficult mobilization of investment resources in the equity and credit markets. Third, through the difficulty of raising direct investment capital (FDI) in the developed markets (to persist over the next few years). Fourth, through the impact on exports as our overseas markets contract (by October as large as negative 37 percent). Fifth and last, through the feared impact on overseas Filipino worker (OFW) deployment with the resulting adverse effect on the main engine of Philippine economic growth, OFW remittances. This last impact is still developing and will have to be monitored.



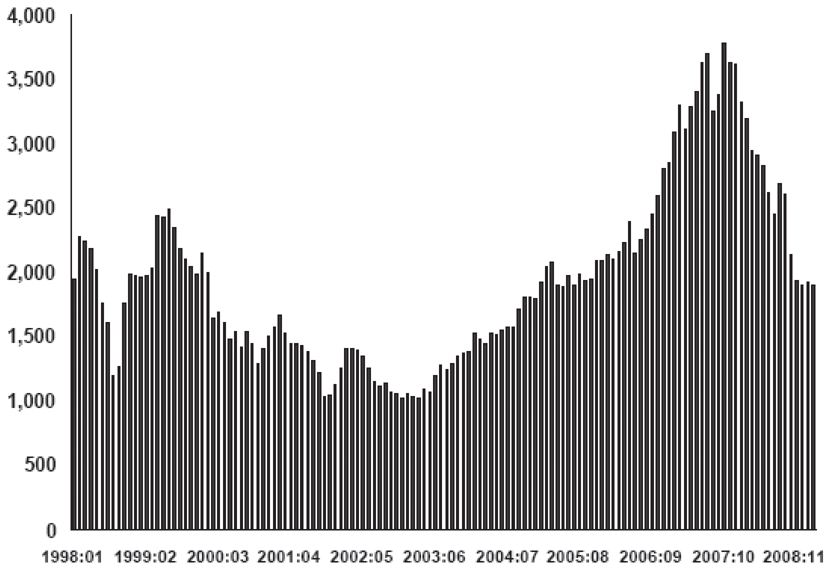
Source: NSCB.

Figure 12. Philippine economic growth, 1998:Q1–2008:Q4



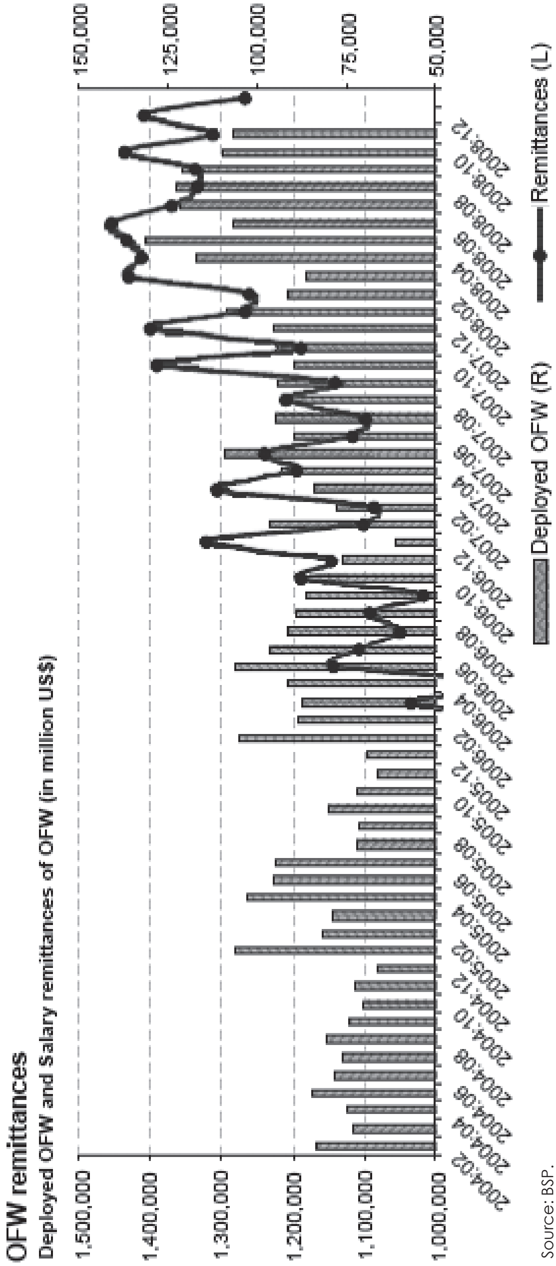
Source: NSCB.

Figure 13. Monthy merchandise trade growth, 1998-2009



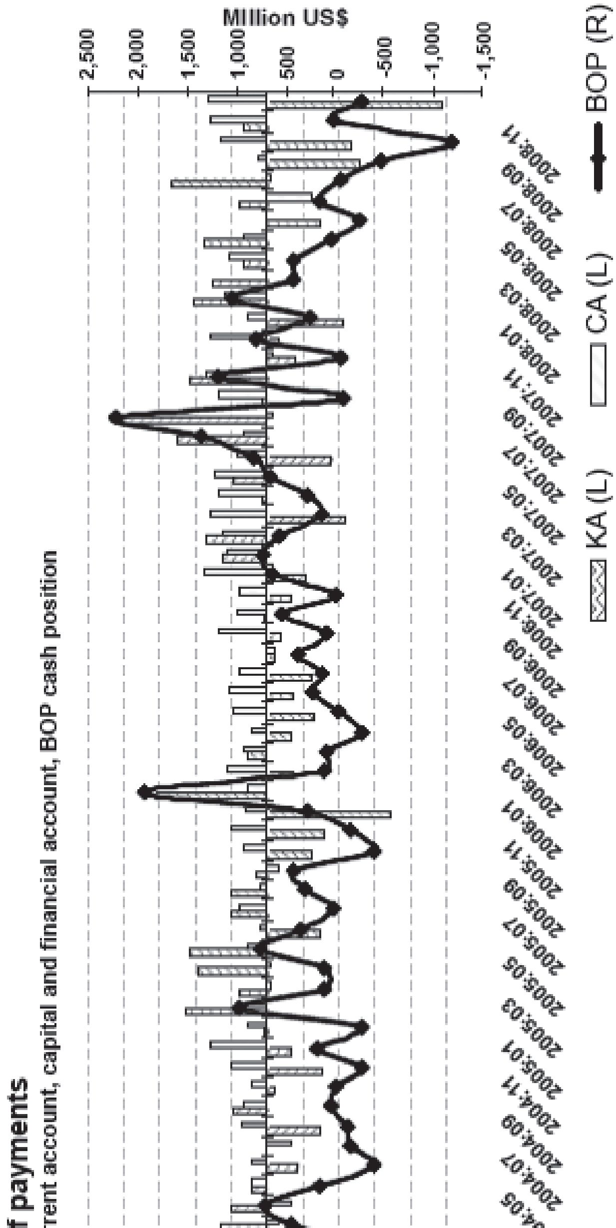
Source: BSP.

Figure 14. Philippine composite index, 1998-2009



Source: BSP.

Figure 15. OFW remittances and deployed OFWs, 2004:01–2008:12



Source: BSP.

Figure 16. Balance of payments, 2004-2008

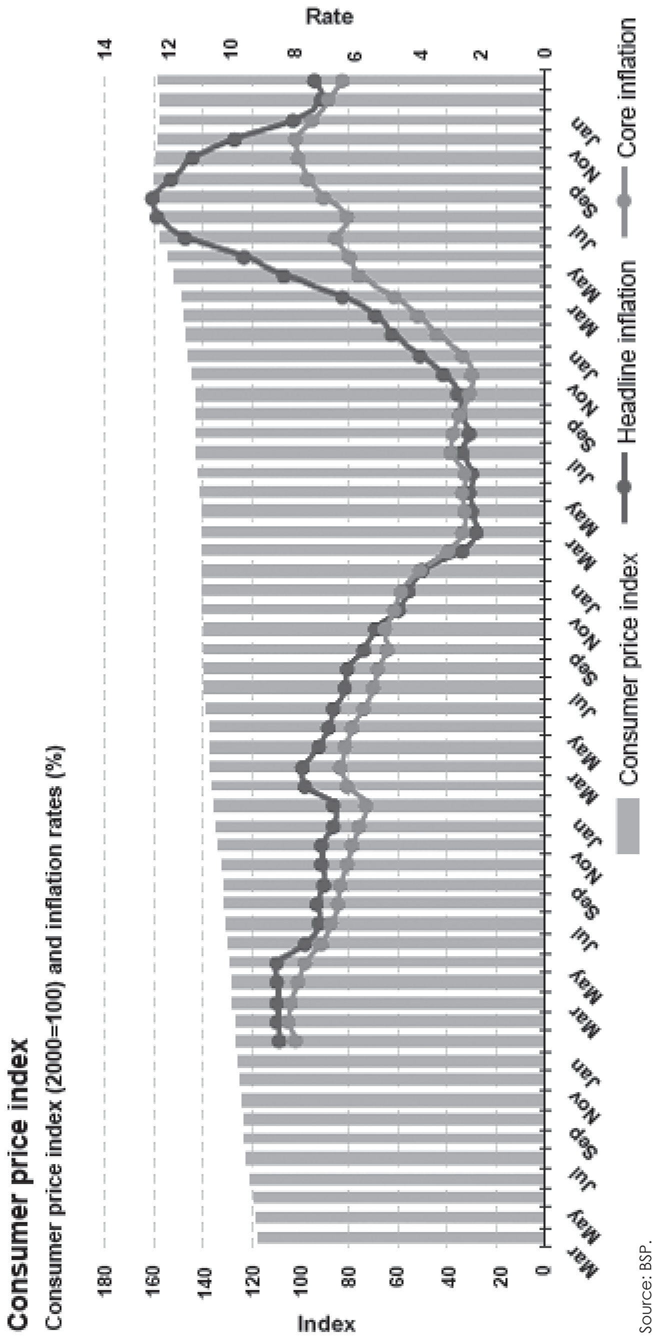
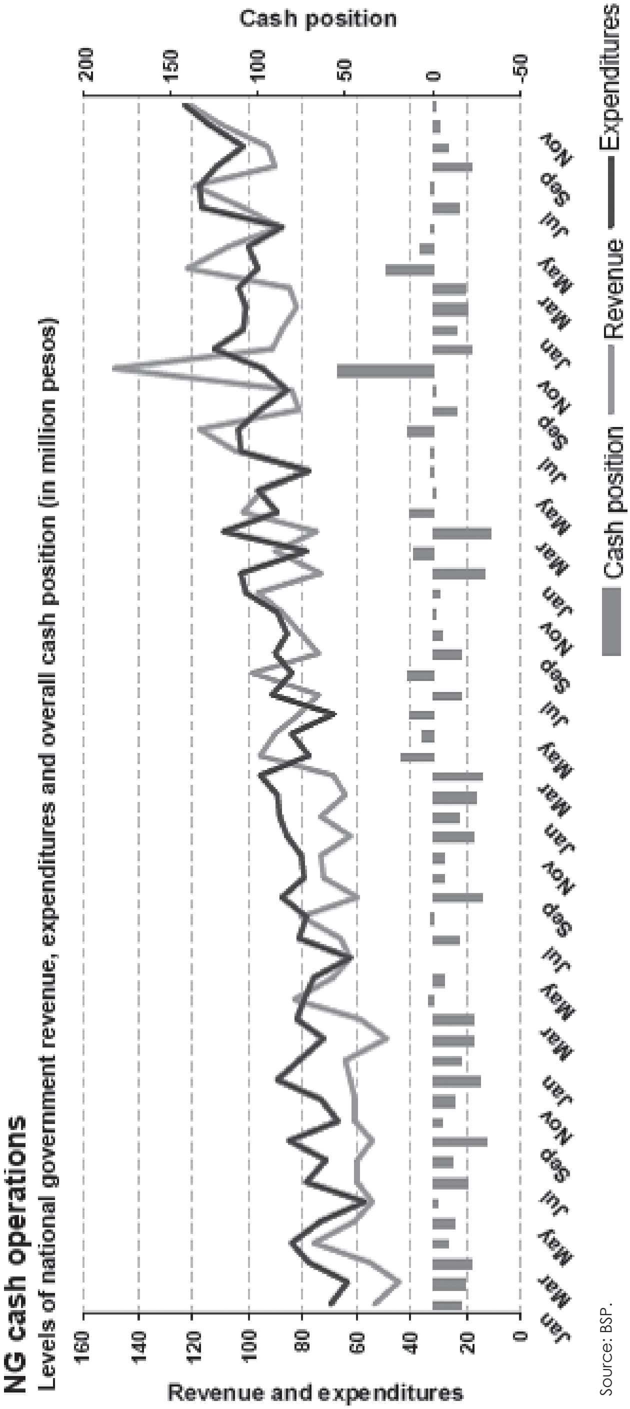


Figure 17. Consumer price index, 2004-2008



Source: BSP.

Figure 18. NG cash operations, 2004-2008

4.2. How long it will take

So where are we in the global recession? Here I use the US financial markets as the entry point of analysis because they serve as main hub of global finance. And I use the stock market as a bellwether, arguing that with the fungibility of funds we would expect a similar level of activity in the other markets. Anecdotal hypotheses among market players indicate that when the market crisis is domestic to the United States, the period from the downward slide in the stock index to the end of the long tail of relative inactivity lasts about eight months. If the crisis is global, the period stretches to 16 months. If one dates the slide from July to September of 2007, this global meltdown may see some return to significant trading activity around this time. Given the depth of this crisis, one may add a few more months to the long tail. In that vein, the recent jumpiness of the New York stock indices probably points toward some revival. It signals a possible stop to the continued slide in stock prices. As prices gyrate, the one-way bet downward is eliminated, and some money can actually be made on correct guesses of prices. Funds may start flowing back into the financial markets and the reawakening of credit can start.

However, the rehabilitation of financial markets will take time. There will be a lag. After a period of financial revival, the real economy can also recover but that will also take time. As these happen, the beneficial effects on emerging markets will then follow. (And a structural adjustment to correct the large balance-of-payments imbalance of developed economies, especially the United States, will mean an additional step before the recovery of our own exports). In sum, while there are hopeful signs, the period of recovery will still take time.

5. How we could get out of the crisis

How will we get out of it? This question has been intensively discussed in several venues around the world, among country leaders and in multilateral meetings. A major issue has been the differing attitudes of policy makers toward the propriety, manner, and size of bailout or stimulus programs.

There seem to be two main positions on the bailout and stimulus programs. One, mainly advocated by the United States, encourages the expansion of government expenditures in order to shore up aggregate demand, rescue pivotal financial institutions to revitalize credit, and participate in asset markets to hasten the discovery of property valuation and thereby shorten the period of inactivity. The other is wary of these actions. First, some policy makers are concerned that these packages would lead to large budget deficits that would burden present and future generations. Further, there would be attendant side effects such as lowered credit ratings and higher interest costs as leverage rations rise above some threshold levels. The second worry is the moral hazard that the stimulus programs and rescue packages may introduce into the behavior of major private players. Key corporations and institutions, having experienced being saved by governments at this time, may come to expect that they would be too important to fail under other circumstances. As a result, they would become less careful in their activities and less vigilant in their dealings with others. This resulting lax behavior may actually increase the chances that crises like the present one will happen in the future.

There could be two reasons for this difference in attitude between the United States and some of its group partners. One is practical and the other is ideological. The first reason is that their positions may not be symmetric. Most of the international assets that reside in various countries and being traded across borders are denominated in US dollars. As leverage ratios deteriorate, lowered confidence may amplify risks associated with operating and owning assets in specific countries, concerns that occupy foreign policy makers. The United States is largely exempted from the uncertainty coming from currency mismatches (which happens when the cash receipts and disbursements are denominated in different currencies) because most of these cross-border assets and liabilities are denominated in dollars. Having one less risk to worry about—currency risk—may allow the United States more flexibility than otherwise. Besides, as the supplier of the de facto global currency, it in a way owns the money printing press and this allows it much more leeway in expanding the money supply. Thus, there is a fundamental difference in situation between the United States and other countries.

The other difference could be ideological in the sense that the two concerns mentioned above and other reasons are inherently ingrained in the psyche of some people, leaving them with a basic distrust of government initiative as a matter of balance in policy making. For some people, it would be best if markets were free to choose winners and losers and free to reward and punish. While others are more preoccupied with the inability of the market to make allowances and control how private actions affect other market players, some are more worried about using policies to mitigate these side effects. In fact, this attitudinal difference may explain a large part of the difference in approach between the Obama and Bush administrations (aside, of course, from the difference in the degree of the crisis during their terms).

5.1. The four-pronged approach

The center of the battle for recovery is the United States. What has emerged is a four-legged approach: bank rescues, purchase of toxic assets to unfreeze credit, increased fiscal expenditure to temporarily replace lost consumer demand due to unemployment and the loss of consumer confidence (the classic Keynesian liquidity trap), and a direct approach to cure consumer insecurity by workouts of the housing mortgages. Only time will tell how long it will take for the recovery to finally take root. But it might be useful to explore the conditions required for this to happen.

The strategy approaches the problem from the two ends of the low-spending freeze. The first looks at the start of the credit-expenditure sequence and breaks into the first two components of the program: (a) purchase of "toxic" assets to revitalize the financial markets by facilitating the price setting ("price-discovery") for rapidly deteriorating asset values and (b) the rescue of key banks and other financial institutions at the core of the financial system. The aim here is to unfreeze credits. Price setting the financial assets halts the continuing slide in market values and deterioration of balance sheets that produces the uncertainty as to whether the counterparties to transactions can ultimately pay for obligations they incur. When asset prices stabilize, then firms can book their losses, restate their capital values, streamline and restructure their liabilities, and base their plans on firm balances sheets that are also more transparent to their creditors, suppliers, and even customers. As a result, credit can restart and loans to both financial and operating firms can be extended in the normal course of business. The economy can then start its path to recovery.

The rescue of banks reinforces this effort by putting a stop to the chain of uncertainties that bedevil a collapsing market. A market freezes because participants cannot be sure if their counterparties can fulfill their obligations. Even if a party looks healthy, it can deteriorate rapidly in the face of defaults by its own debtors and customers. This condition leads to a chain of uncertainties that eventually dries up credit, leading to suspension/delay of operations leading in turn to losses and, eventually, insolvency by firms. A government rescue of key financial institutions keeps the credit flowing by enlarging (even unlimited if the government provides full standby credit or outright ownership) the budget for absorbing by these banks until the economy can grow out of its predicament.

The other end of the recovery program works on the eventual object of credit granting: actual spending by businesses and consumers. The third component involves the actual expenditure by the government in projects that would have otherwise waited for their place in the budget queue during ordinary times. In the face of collapsing demand, producers uncertain about their ability to sell their products stop operations and lay off employees. The resulting losses of their suppliers and the income loss of their ex-employees further reduce aggregate demand that then leads to another round of operational suspensions and employee layoffs, adding another cycle to a vicious spiral downward of economic activity. Government expenditures try to halt this spiral by giving employment to government workers and provide demand for suppliers as it spends on projects, often infrastructure programs. Milton Friedman, probably the best-known modern monetarist, once suggested that a solution to the sagging demand is to drop money from helicopters so that people would get the money and spend it, ending the economic meltdown. Government projects are the frugal and pragmatic man's version of the helicopter money drop. The advantage of the approach is that you can expect some tangible output for the money. You can also be sure that the money will be spent (as against the danger that people who get it from the helicopter drop may just hoard their findings). The disadvantage is that there is an expenditure lag as projects need time for preparation and implementation. One's final take on this could depend on gut feel that may then be attributed to "ideological differences".

The final component also works through increasing aggregate demand. This time, the basis is the belief that private consumption has been severely diminished by asset losses experienced by consumers, the biggest loss being on the house values caused by defaults. To reverse this condition, the government can provide the financing for restructuring and refinancing homeowner loans. This reduces homeowners' fear over their ability to pay and revives consumer spending. The resulting reduction in defaults also helps to lower interest rates on homebuilding loans, further increasing consumer confidence.

6. Lessons learned: some initial issues

6.1. Preamble

As we discuss proposed changes to the existing framework, we must bear in mind an underlying dilemma: the good side of the market is also its dark side. The beneficial effects of the market system come from its system of rewards and penalties. It breeds innovation, product variety, and good quality products at low prices because it promotes those that provide these and downgrades those who fail. This is how the market advances economic growth and material welfare. The market system's success derives from its economical need for information in directing the economy's activities in a decentralized manner that avoids a central planner. Market participants only need to know the prices of outputs and inputs and incentives flow from the profits and losses these firms experience. Market Darwinism then just winnows out those who are found wanting.

The decentralized system is subject to overshooting in a phenomenon that is now known as the business cycle. The easy times of boom periods introduce laxity and excess into firms and it takes the trials of the bust periods to squeeze these weaknesses out. Unfortunately, this painful process is an essential component of the informational and operational efficiency of the market system. This means that to completely avoid the ups and downs of market life would also lose the basic strength of the system. We need to find the (un)happy medium between Schumpeter's "creative destruction" and the externality effects[2] on good companies of deep systemic shocks.

As we seek to prevent these systemic shocks that bring unwanted externalities, key features of the current global crisis are evident. I start here along four initial areas; some have already been under serious discussion. Among these are the global character of the crisis that spread with almost instantaneous contagion, the innovative financial vehicles that enlarged the volumes of business but may have served to split capability and responsibility, financial institutions created as safeguards that may have lulled participants into complacency, and new market areas that may have developed without requisite monitoring and supervision. Finally, for emerging economies like the Philippines, the correction of some global

[2] This is the damage done to otherwise good companies by systemic events such as a credit freeze that leads to insolvencies of good companies just because they cannot obtain working capital at crucial periods.

structural imbalances may have unintended effects. We review these issues, not because we are major players in the international markets but because their resolution will have profound impact on how we do things and may entail major adjustments on our part. Besides, we may need to institute components if not all of these changes inside our own jurisdiction.

6.2. Financial innovation: Credit instruments

Among the proposed culprits in this crisis are the recent financial innovations. Structured credit, including SIVs and CDOs, has come under increased scrutiny. Securitization had proceeded some time before. These new instruments stretched the boundaries even further.

SIVs, incorporated investment funds set up to issue financial instruments to fund special pools of debt obligations like housing mortgages, have been very useful in mobilizing funds that facilitate certain activities like home building. However, they also serve to separate the organizer of the fund (often an investment bank or fund) from the residual obligation of the pool, thus insulating it from heavy losses of the ultimate borrower. This may have introduced adverse moral hazard by divorcing the authority and the final accountability of credit granting. CDOs, while originally just a method of expanding the sources of funding for housing and other activities, through the techniques of subordination ("tranches") and guarantees, became a channel for expanding credit to otherwise low-rated and high-cost borrowers. And additional impetus was given by credit default swaps (CDSs), which provided guarantees for buyers of the CDOs. Cohen and Remolona [2008] point to "third-party repos" where another party—often the clearing bank—that knows both original parties guarantees the transaction and holds the collateral. This further facilitated the transactions.

It would seem that any modification of state-of-the-art supervision and regulation would attempt to address these observations. Among the issues that need to be addressed is the separation of origination and residual accountability that is present in recent financial innovations, the moral hazard aspects these represent, and the safeguard mechanisms and transparency rules needed to address these issues.

6.2.1. Credit rating

One of the frequently asked questions these days is how subprime credits managed to ensnare so many and at such large volumes as to embroil many countries in the crisis. As we previously mentioned, there was a need for such large volumes of financial instruments because of the tremendous recycling problem. We have also described how market myopia flowed out of financial institutions that had been designed to strengthen the process. Chief among these was the credit rating process. One of the questions raised in this crisis has to do with why the credit rating system gave high ratings for mortgage-backed securities, only to be proven wrong (again) when the subprime crisis finally erupted in the United States. Ironically, regulators and investors have asked themselves the same questions after Enron collapsed in 2001. At that time, credit rating agencies also granted high ratings to Enron-issued corporate bonds, only to find itself largely on the defensive and subjected to lawsuits when the company collapsed. Yet, these CRAs would later win over these cases on the grounds that their ratings are no different from an opinion, thus protected by the US Constitution's First Amendment. While the legal reasoning that credit ratings are not an excuse for investors to avoid conducting their own due diligence, the question remains as to what use we can really get from them.

Presently, there is general concern among US and EU regulators that the CRAs' business model breeds its own conflict-of-interest problems, therefore needing changes to the current mold. This occurs because credit ratings are paid for by the bond issuers and not by the investors who ultimately use the ratings. The underlying claim is that CRAs may be tempted to give higher ratings to clients to attract more clients. This is worsened by their advisory arm, which assists bond issuers in packaging and restructuring their financial products in order to achieve a higher rating. This combination could increase the pressure to give rosy ratings. Even a belief that CRAs have a long-term stake in their reputation (and business sustainability) does not fully dispel at the moment.

The CRAs' faulty credit ratings could have resulted from several factors. First, the CRAs' rating process may still be overly geared toward single-firm procedures, neglecting the contagion caused by defaulting debtors of counterparties, and may not fully reflect the impact of marketwide shocks on pools of securities. The former deficiency appears in the stress factor used; the second surfaces in the default probabilities of difference tranches of a pool of securities. Second, CRAs became overly dependent on complex computer models in measuring risk. Aside from its heavy reliance on mathematics, which gives it further credibility, it was widely expected to help solve the shortage of skilled workers in the industry. The huge growth of complex debt products overwhelmed the credit rating industry. The complexity made it increasingly difficult to assess each debt product and the seeming precision-induced laxity. But the demand for their services remained high. Sound risk management practices suffered in order to meet market demand—not to mention credibly evaluating whatever result is generated by their computer models. One of the CRAs, for example, admitted to incorrectly rating US$ 1 billion worth of complex debt securities due to a computer error. Even if this were an isolated case, it is indicative of the pressure under which the CRAs operated.

Current proposals can be divided into two approaches. The first one proposes to remove the important role played by the CRAs as financial gatekeepers of the system. This means the removal of anything CRA-related from the regulatory requirements. At present, corporate charters of fund institutions often require that they park their funds in assets rated safe by these CRAs. The aim is to wean off the fund managers and bankers from using the ratings as a crutch and force them to conduct their own due diligence of any investment decision. Unlike CRAs, fund managers can be held accountable for their investment decisions, whether good or bad to the depositors. This is apart from increasing the transparency of the credit rating methods, addressing the conflict-of-interest issues, and adjusting the rating models and processes to recent financial innovations.

The second approach involves the introduction of government oversight for the industry, effectively introducing a cop guarding their every move. No matter how popular this seems, however, it also raises serious questions since governments are bond issuers themselves.

6.3. Financial architecture, supervision, and regulation

That the international financial architecture has to be revamped has been a popular proposal, even during the Asian financial crisis in 1997-1998. Several proposals were, in fact, put forward at that time such as imposition of very small taxes on cross-border flows ("putting sand on the wheels of global financial flows") and margin requirements for short-term flows, etc. However, the belief in unimpeded flow of funds and the free market as stimuli for economic activity and conveyor of innovation was so strong that the game-changing proposals were largely forgotten as soon as the immediate crisis passed. That the crisis was largely confined to Asia with a bit of contagion for a few Latin American economies also contributed to the issue's lack of urgency. Now that the pain is much more widespread and deeper, these questions will certainly be revisited.

In light of these developments, the repeal of the depression-era Glass-Steagall Act in 1999 has been blamed for enlarging the fire. The change effectively allowed nonbanking institutions to perform banking services. The claim is that it allowed volatility in financial markets to invade the highly leveraged banking industry. It may also have given investment banks free rein in the creation of new financial products with both investors and regulators failing to adapt quickly. While our earlier comments about the benefits of the market and its attendant volatility are relevant here, the issue of what can be done to prevent or minimize excesses still arises. Among the issues that would have to be addressed are the market myopia and overconfidence induced by some institutions like credit rating, cross-border supervision and monitoring as against harmonization and surveillance, and the scope of financial operations across industries.

Since it is almost impossible to rein in the operations of financial institutions within national boundaries, there is general agreement that cross-border monitoring scheme should be agreed upon by major economies. How best to implement this is already an issue in itself. The current standards under the Basel 2 accord may have generated pro-cyclical forces and may actually have worsened the downturn. I tend to agree with Dani Rodrik of Harvard University that a single global super-regulator is not warranted at this point. There is too much variation in the legal and business institutions, the socioeconomic infrastructure, and complementary framework that a one-size-fits-all model would probably be more counterproductive than helpful. What we need are enough transparency, standards (including accounting procedures), as well as dispute and settlement resolution mechanisms to warrant trust and confidence all over. The ability to gauge the risk of instruments across borders will facilitate financial flows, and the transparency and comparability of standards will allow participants to correctly assess the impact of events in other jurisdictions, thus mitigating the panic induced by market uncertainty.

To understand the current turmoil along the lines of regulation vis-à-vis deregulation would be too simplistic and faulty at the least. This becomes more problematic considering that the root of the credit crunch is the housing market, which is characterized by government regulation, coupled with pseudo-government entities—namely, Freddie Mac and Fannie Mae—characterized the industry. The banking industry or, for that matter, the entire financial industry essentially depends on confidence for it to operate effectively. Thus, the bankruptcy of one banking institution also weakens other banks and financial institutions with which it has serious connection. Given the importance of the financial system in the broader economy, the health of the banking system is of critical importance and justifies government intervention if warranted.

A final consideration relates to the possibility of a lender of last resort that would serve to support financial institutions and countries during periods of acute market stress. The argument against having one right now is that it would not have an unlimited supply of funds the way a domestic central bank has (because of the fiat power of the government). However, Mishkin [2006], quoting Stanley Fischer, formerly of the International Monetary Fund (IMF), has said that you don't need unlimited liquidity, only enough liquidity. The current global crisis indicates that "enough" can be quite large indeed.

This question is related to the discussion of a global currency. As we discussed earlier, the taste of policy makers over the prudence and size of stimulus and bailout packages may have flowed out of their varying positions in the world financial order. The United States as the supplier of the de facto global currency enjoys freedom of action than others. This power will reside with the supplier of that currency. If the sometimes-discussed synthetic global currency is based with the IMF, then it would have this power. However, the conditions for setting up such a currency are best discussed in another venue. Suffice it to say that the lender of last resort must have some version of this spending power. And at the moment, the United States seems to be a somewhat imperfect approximation of that.

6.4. Structural imbalance between consumption and saving in developed economies

One of the manifestations for the Philippines of the current global economic crisis is the sudden and drastic drop in exports. As our main export markets—the United States, Europe, and Japan—have tanked, so have their purchases of imported products. Unfortunately, those included the semiconductors, wire harnesses, and other products that we have been selling to the outside world. The impact of the crisis on Philippine exports has been devastating. In October 2008, merchandise exports contracted by 14.8 percent compared to the same month in 2007, in November by 11.4 percent, and in December by a staggering 40.3 percent compared to the same month in 2007. And so, as the crisis winds its long way to recovery, the question of when exports recover and how to bring it about comes up.

As it turns out, what happened to our exports to the developed economies is fundamentally intertwined with the origins of the global crisis. In the last few decades, a growing volume of trade has manifested the increasing specialization and economies of scale and scope of production. These have brought down costs of production as markets expanded beyond the domestic economy and have led to an increasing variety of goods at lower prices. Reflecting this, global finance has also grown tremendously.

This picture is the result of the increasing integration of global markets. Countries gravitate toward those industries where they enjoyed comparative advantage, leaving the rest to others. Once transition costs have been absorbed, countries would have access to good-quality products at lower prices. Unfortunately, the imbalance was confined not only to specific industries (brought about by specialization) but also to the macroeconomy (i.e., a gross imbalance between countries' exports and imports). This increasing macroeconomic imbalance created a recycling problem: how revenues of surplus countries could be returned to the financial markets (and thereby avoid the exchange rate corrections that exporting countries were desperately trying to avoid). The resulting large flow of recycled funds, coupled with lower policy interest rates in developed economies, triggered the asset price bubble that became the incendiary material of the financial crisis.

Now, as the world recovers from the crisis, policy makers need to ponder the future shape of the trading system. A recovery by the developed economies from a deep recession will not be the end of the story. Drastic restructuring is required for them to bring their trade and balance of payments to long-run equilibrium. In the future, the developed markets will have to cut down on their imports, implying that exports to them will not grow fast, if not decline absolutely.

The restructuring by the developed economies has serious implications for the exporting countries. The one-way surge of goods from emerging economies like China and India and other exporting countries to the deficit countries, especially the United States, will have to be moderated. That is the background message behind this global crisis: the long-term fix requires a restructuring that essentially implies that traditional export markets will no longer be able to import at such a volume and growth rate as they have been doing in the last few decades.

For countries like the Philippines (no matter how modest), this means that we will no longer be able to depend on our traditional markets. If we are to reduce our dependence on remittances as an engine of growth, we will have to develop our exports in order to obtain economies of scale and scope. But the future prospects dictate that we look for other markets and other export products. This diversification of our export markets and products requires complementary policies and programs. Externally, we need to look for new geographic markets and check which products marketable abroad we can produce here. An intensive international marketing program needs to be formulated and implemented. From the private sector, this requires marketing programs by the industry associations, trading companies that we somehow have been unable to develop on a large scale, individual businessmen attending trade fairs, and other related activities.

The public sector will need to be very intimately involved. It was very instructive, while I was in government, to witness how other countries used both their political and commercial agencies to advance their export drives. While the commercial attachés were mainly involved, the labor and even political cadre would not miss opportunities to advance their products. This requires a comprehensive and intensive review and revamp of the foreign offices and how they see their job. An integrated concept that puts together security, political, and commercial objectives of the country will need to be articulated. A well-designed and executed program will then have to be carried out immediately. Craft a recovery program now and implement as soon as the indicators say "Go!"

What needs to be noted is that this restructuring of our export markets and products implies industrial internal restructuring. This doesn't have to be forced by the government. The market will indicate the areas where we have an advantage and, we hope, entrepreneurs and other businessmen will take the cue. What will need to be resisted will be the cries for protection just because some firms and areas are losing. Over the long run, these protective mechanisms and subsidies will just be a drain on other sectors and the economy as a whole. Beyond some moderate transition assistance (mainly to ease the movement of resources to other sectors), the government should stand aside and let the market take its course. Attempts to go against the inherent attraction of cheaper and better alternatives will be unsuccessful and just be costly in the end. Closing the borders will not do either. Communication, transportation, and other modern innovations will deny that path.

A way to facilitate the transition and strengthen our products for domestic and export markets is shown by the experience of Japan. A close examination shows that beyond basic infrastructure (the Japanese themselves emphasize education and a very strong bureaucracy) the provision of basic support intended for specific industries actually had broad externalities that benefited all industries. Thus, infrastructure systems—land, air and sea transport, for example—could be used by other industries and the strong export marketing push was eventually of great use to all products that were being exported. We sometimes term this "policy externalities". It also helped that their exchange rate regime was clearly predatory (one of their economic architects of that time wrote that when they were computing what the exchange rate to use in the early '50s, they came up with the rate of ¥220:$1 but they decided to use ¥360:$1 in order to sell more abroad and because it graphically embodied their new flag with the red circle/sun).

In sum, recovering from the crisis also provides an opportunity to leap forward. It just needs marshaling our resources at key points for maximum support to, ultimately, our productive capacity and industrial strength. With broadly supportive and integrated infrastructure system coupled with a strong bureaucracy, good governance, and intense effort we may regain some of the ground we have lost over the years. But we do have to start working it out now.

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