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The Financial Crises in East Asia: The cases of Japan, China, South Korea and Southeast Asia

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I. Japan (Beatriz Pont)

1. Introduction

Japan's recession has become the focus of international worry. Just recently, the Group of Seven (G-7) meeting of finance ministers and central bank governors issued a joint communiqué stating the importance of Japan's economic situation for the world economic stability and requesting Japanese authorities to take prompt action: "Strong sustainable recovery in Japan's economy is of critical importance to Japan, the Asian region and the rest of the world". The extent of the crisis had been underestimated by most international organizations as well as by the Japanese government. Not until recently did the latter change its predictions of growth for the 1998 fiscal year (from April 1 to March 31), which had been previously estimated to be +1.9%. Finally, this October, the Economic Planning Agency revised it to a -1.8%. This decrease is expected to be caused by a fall in domestic demand, with less consumer spending, less housing investments and slower corporate capital spending, and a fall in exports of goods and services. The International Monetary Fund (IMF) also predicted zero growth for 1998 in its spring report and has revised its prediction to -2.5% in October. The OECD estimated in its December 1997 report a growth of +1.7% for 1998 and also has had to change its prediction to a 2-points decline in growth, which should result in -0.3% in 1998. It must be noted, however, that both IMF and OECD estimates expect the Japanese economy to recover in 1999, under the assumption that the Japanese government will take the measures suggested by these organizations. The situation has been calling for action from the Japanese authorities in order to restore confidence in the economy and stimulate internal demand, which would have positive effects on investment, stock values and an extremely weak financial system. The new government, in collaboration with the opposition, has finally taken light of the urgency of the situation and has passed a bill which might push the Japanese economy on the right track: a bank recapitalization bill has been approved by the parliament and banks are getting ready. The bill includes a recapitalization program funded with 25 trillion yen, together with government assistance for failing banks by putting them under state control. The plan is expected to replenish the depleted capital bases of Japan's banks, prevent bank failures and restore banks' ability to lend funds to corporate borrowers and in such a way to start stimulating the ailing economy and to contribute to raise asset and share prices.

2. The current situation

Many factors have contributed to the economy's stagnation: the Asian crisis, a weak recovering economy, a non-competitive financial system loaded with unwritten debt together with other structural problems and wrong fiscal policy measures, such as a 2% rise in consumption taxes in April 1997. From the beginning of 1997, the Japanese economy has experienced a severe downturn. In only one year (fiscal year from April 1 1997 through March 31 1998), its GDP has decreased by 1.8%, the largest drop ever in Japan in only one year. Industrial production has slowed by 9.2% from last year, and with it private investment in capital and real estate. Exports have also diminished. And most importantly, private demand has fallen as a result of the negative tide and of the loss of confidence in the economy. The unemployment rate has grown by more than 25% in one year to 4.2%, also at its highest in the post-war era. The Japanese stock market, the Nikkei, also reflects the situation: in less than one year, the Nikkei has plummeted almost 25% from 16,000 points to less that 13,000. A large number of the Japanese leading companies expect losses due to devaluation of stockholdings. The yen has also followed a similar course. If the exchange rate surged from 80 yen to the dollar in 1995, it depreciated to almost 145 yen per dollar in June 1998 and required interventions that had only temporary effects (graph 3). A joint effort by the Bank of Japan and American authorities was undertaken to sustain it and prevent a worsening of the exchange rate and the trade problems it might have caused. Recently, however, the yen seems to have recovered, with 111 yen to the dollar in mid-October. The banking system is going through its own crisis, with the closing of several big banks (Hokkaido Takushoku in 1997 and Yamaichi Securities in 1998) and more which might have to do so in the near future to restore growth and clean up a banking system full of bad loans, which are said to amount to almost 15% of GDP.

All together, this situation has resulted in a severe loss of confidence in the economy. Although interest rates are down to 0.25%, the Japanese are not borrowing and worst of all, they are not spending, with an important decline in retail sales. The political authorities are responding slowly, causing even more concern in the international arena and contributing to a further loss of confidence in the system.

3. Analysis of the main causes

It has not been one single factor which has caused the recession. Instead, many factors have come into play since the beginning of the decade to hamper the recovery of the economy. On one hand, we can acknowledge the effects of the emerging Asian markets' crisis, and the downturn it has caused on the Japanese economy. On the other hand, however, internal factors have been extremely relevant: a deflationary situation set off by the burst of the bubble economy, with a substantial fall in land and stock prices; burdening structural problems; and finally wrong economic policy measures taken in the last few years.

3.1. The East Asian crisis and its effects on Japan

Since Japan is one of their main trading partners, the effects of the crisis in Southeast Asia and South Korea have clearly affected the Japanese economy. In 1996 more than 40% of Japanese exports were directed to Asian countries (see chart 1). The crisis has reduced demand for such exports and although Japan has tried to replace those exports with others to the European Union and the United States, taking advantage of the devaluation of the yen, this change in export markets has not been able to fully replace lost Asian markets. Estimates by the *Economist Intelligence Unit* expect a 4.7% decline in Japanese exports in 1998. Manufacturing companies are producing less and reducing investment on construction and equipment to adjust to the downturn on external (as well as internal) demand for goods. At the same time, the financial crisis in East Asia has contributed to the worsening of the financial sector problems in Japan, because these countries were holding an important part of Japanese debt. Banks had to reduce their risks and cut losses by refusing to rollover existing loans or extend new ones. This has contributed to a vicious spiral of illiquidity, leading to insolvency and worsening of net asset positions of the Japanese creditors, which in turn has exacerbated the domestic and regional credit crunches and the financial crisis, as banks try to enhance their balance sheet situation.

Another factor contributing to the economic decline has been the value of the exchange rate of goods produced in the Asian countries affected by the crisis, which, due to severe currency devaluation, has made such products more competitive than their Japanese counterparts. This is especially true for Korean products, since Korea's export structure resembles that of Japan. This has produced a downturn in Japanese exports towards markets outside Asia. So although a weaker yen should have contributed to an increase in exports, the fall of other Asian currencies has offset such event.

Concurrrently, not only has the East Asian crisis affected the Japanese economy, but it has also had the reverse effect, contributing to hamper economic recovery in the rest of the Asian region, which in the long term is also contributing to a continuation of the crisis. It has done so in the following ways, according to Rajan (1998):

1. By offsetting the possible effects of the depreciation of the Korean won and the Taiwanese dollar.
1. By reducing the attractiveness of assets in East Asia, and diminishing the incentive for Japan to invest in the region.
2. Through a psychological effect, which has contributed to thinking that a depreciation of the Chinese *renminbi* would be necessary, and for the Hong Kong dollar to loose its peg. Further competitive devaluations might have to be set into place.
3. And finally, a weaker yen and less domestic demand does not contribute to the export of these countries products to Japan, but the opposite, since a lower value of the yen makes Japanese goods more competitive and hampers exports from these countries which need such markets in order to come out of the crisis.

So the Asian financial crisis has had considerable short term negative effects on Japan, which has in turn contributed to a deepening of the crisis, or at least to a longer time to recover for the rest of the Asian markets, producing a vicious circle. No demand for East Asian products in Japan, no East Asian growth, and no demand for Japanese services and products in East Asian markets. Actually, estimates by the OECD predict that the Asian crisis will provoke a decline in Japanese real GNP of 1.3% in 1998 and 0.7% in 1999, with a reduction in the Japanese current account balance of US$ 12 billion dollars in 1998.

The effects of the crisis in the OECD region, and especially in Japan, have to do with a reduction in demand by the countries in crisis and the rest of the region, which will slowdown growth of export markets. Japan has been the OECD country most affected by the crisis. We have already seen a reduction of exports by 1.5% on the first half of 1998, although it is also true that the lower yen has also contributed to a 33% growth on Japan's trade surplus, as imports have been affected by slow demand in Japan.

3.2. Domestic circumstances

However, the Asian crisis has not been the sole responsible for Japan's downturn. There are other factors which can be included in the recession equation. The collapse of the bubble economy in the beginning of the 1990s has not had allies to stir it back to economic growth, with a banking system ridden with debt, macroeconomic policies which have produced fiscal deficits and public debt, and a population worried with the growth of its elderly in the near future.

3.2.1. The end of the bubble economy

During the latter part of the 1980s, asset prices in Japan, as in most advanced economies, increased enormously. According to the IMF, the combination of financial liberalization together with inadequate prudential regulations contributed to this rise. A changing international economic environment, and growing deregularization and financial liberalization, led large enterprises to search for capital in international and securities markets and diminished their dependence on Japanese banking institutions. To search for profits, banks had to change their lending portfolio. The result was that they had to cater to smaller firms, with more difficulties in accessing such markets, and to the real estate sector. In such a way property prices increased, which in turn boosted the collateral value of small and medium size enterprises.

The increase in asset values also contributed to an expansion of domestic demand. Private consumption grew, since the ratio of net worth to disposable income of households sector grew from 5.5 in 1985 to 8.5 in 1989. At the same time, since companies had more income, investment grew considerably, with an average growth in private fixed investment of 10% in the same period. The results were that stock prices and land prices were oscillating in highly speculative levels.

Towards the end of the 1980s and beginning of the 1990s, the market collapsed, and with it the value of property and asset prices. This has been termed the end of the "speculative bubble economy", and it left a bad loan problem that the banking system has carried throughout the nineties. According to the IMF, the decline in the growth of the private capital stock accounts for almost half of the slowdown in the trend growth of output in Japan in the 1990s.

From then on, GDP growth was slow until 1995 (graph 1), seeming as if it would not recuperate to the growth levels its had experienced throughout the 1980s. In 1995 and 1996 the tide changed, with an increase in GDP of 1.4% and 3.5%. These growth rates, however, have fallen in 1997 and 1998, demonstrating that the recuperation was temporary, and that it may have been due to reasons such as heavy government spending and loose monetary policy.

3.2.2. The banking system

The Japanese banking non-performing loan problems have been considered by many as the root of the Japanese financial crisis. However, there are other specific characteristics which, together with the non-performing loan problem, explain the critical situation it is presently undergoing.

The industrial structure of the economy is composed of large enterprise groupings, otherwise called *keiretsu*, that account for 5% of the labor force, 16% of total sales and profits, and about a quarter of the outstanding shares of the firms listed in the Tokyo and Osaka stock exchange (1989). Their functioning is laid out in such a way that banks constitute the core of the *keiretsu*, with a group of firms in many economic spheres which are bound together through a high degree of share interlocking. Japanese banks are allowed to own equity in other corporations, and they act as an important link in the interlocking structure of these enterprise groups. The result is that banks as well as companies hold a large number of assets and stocks on other companies. Within this structure, the strength and loyalties among firms in a group is often measured by the ratio of shares owned by another group firms to total share issues and by the ratio of loans received from banks and insurance companies within the group to the total shares received. The average interlocking shares for the big six enterprise groups (Mitsui, Mitsubishi, Sumitomo, Fuyo, Sanwa and Ikkan) has been between 12% and 28% while the average intragroup loans ran between 11% and 25%.

In such a way, not only do *keiretsu* have strong participation in the Japanese economy, but the banks which comprise them have strong links throughout the economy, which includes lending to larger firms, accounting for more than 30% of the assets of the banks and the arrangement of preferential loans towards the enterprises that comprise a group. So companies that comprise a *keiretsu* are not constrained by cash flow positions (because of help from the group's main bank), and their performance may be monitored by the bank. Banks may tolerate low earnings and poor dividends in the short run if they are due to costs associated with long-term projects. *Keiretsu* financial institutions granted loans, with preferential rates, to companies of the group, and they also lent with overvalued asset prices as collateral. With the collapse of the bubble economy, the fall of asset and stock prices had important effects on banks holdings, to be added to the bad debt problem. At the same time, as stated earlier, during the bubble economy, due to deregularization and liberalization, banks started lending to small and medium size enterprises, which also were severely affected by the collapse of the bubble economy, having negative effects on loans. Another important aspect of the banking problem has also added to the situation. The Japanese loan policy did not meet international accountability criteria and hence did not allow knowledge of the true dimension of the loan problem. Their accounting system did not comply with the Bank of International Settlements standards of capital adequacy until March 1998 and they were opaque. It has therefore been extremely difficult to estimate the value of non-performing loans that are held by banks at present, although different estimates suggest that they are worth between 70 and 80 trillion yen, or 14% of its GDP. All these problems have contributed to erode bank's core capital, and therefore, bank lending has contracted and many banks have had to close or have been on the verge of doing it. Currently, to stimulate the economy, and in light of the low interest rates prevalent in the Japanese economy, it would seem that companies would recur to credit to stimulate production and consumption. However, contracted lending from banks has forced large companies to turn to capital markets causing bond issues to rise to record levels. Medium and small firms do not have access to such capital which is provoking strong divergences between large and small companies. Although financial conditions seem to be easing for larger companies, smaller ones are the ones who are experiencing the burden of decrease in credit concessions.

International organizations (IMF, OECD) as well as individual countries are urging Japan to solve their banking crisis as one of the main measures to help Japan reestablish its confidence and pull out of its demand slump. It seems that some political will has finally come into place. In October, a bill to recapitalize the banking system, replenish the depleted capital bases of Japanese banks, prevent bank failures and restore the ability to lend funds to corporate borrowers with 43 trillion yen towards bank recapitalization has been passed by the Diet (25 trillion for capital injections, 18 trillion for temporarily nationalizing failed banks) (Kyodo News, October 16th). However, we still need to see whether unhealthy situations are allowed to be sustained to stave off unemployment and the social and political unrest it might cause.

3.2.3. Macroeconomic policy

Macroeconomic policy has played an important role in the whole process. Throughout the post-bubble economy period, fiscal and monetary policy were applied to sustain economic growth, and as the IMF stated, were it not for these macroeconomic policy responses, the Japanese economy would surely have suffered a deep and prolonged recession in the first half of this decade. However, policy was also partly responsible for a downturn in the economy.

Fiscal policy

In terms of fiscal policy, from 1992 through 1998 six different economic stimulus packages have been adopted, most of them composed of public investment, land purchases and increased lending, while some also included tax reductions. Although there is no doubt that they have had positive effects in promoting economic growth after the burst of the bubble economy, some analysts state that part of the problem of the Japanese economy has been the "stop-and-go" character of fiscal policy followed throughout the 1990s.

A fiscal surplus of 3% of the GDP in 1991 changed to become a deficit of nearly 3.5% of the GDP by 1996, due in part to the increase in public spending in the different economic stimulus plans.

It is difficult to understand the way public spending is related to GNP growth in Japan, since there is one important funding mechanism, the Fiscal Investment and Loans Program (FILP), which is not included in the general budget and acts as a capital budget of the national government. It draws on funds from postal savings and makes loans to special accounts and government agencies. The special accounts are set up for different reasons, including construction, specific revenues such as social security accounts, etc., and their size can amount to three times more than the general accounts. The FILP also burdens government debt and calls for long term fiscal health readjustment.

Anyway, increased public spending in 1994 and 1995 appeared to render consolidated growth rates. However, after a year of what seemed steady growth in 1996 and in order to control the government deficit and try to decrease the burden on the state of increased retirements, the government passed a set of strict fiscal policy measures. Within one year, social security contributions were raised (October 1996), a temporary income tax cut of 0.25% was withdrawn (January 1997) and a 2% point increase in the consumption tax rate worth 0.75% of GDP was introduced (April 1997). It all amounted to a reduction of fiscal spending of 3% of the GDP. From this point onwards, most economic variables plummeted, as we have stated at the beginning of this section. Almost all analysts agree that these measures were excessive and that they provoked a decline in confidence that has not permitted the economy to recover yet. Posen (1998) states that it is the result of a badly managed business cycle and not a structural decline in the Japanese economy. He also considers that the Japanese have overstated the amount of fiscal stimulus which was actually passed, and although it is claimed that a total of 65 to 75 trillion yen was spent from 1992 through 1997, only about 23 trillion were actually spent and the rest was taken out in the way of tax rises and spending cuts throughout the same years.

The IMF considers that the large scale tightening was too ambitious for the time being, since only about a year of economic recovery had taken place, and there did not seem to be enough reason to take such radical or urgent measures all within one year, which could have been taken over a longer time span. However, this analysis can be done in hindsight, with the knowledge of all the variables and the understanding of the Asian crisis effects on the economy. At the time, the government probably considered the tightening measures as the most appropriate towards a long term recuperation of the economy and healthy fiscal budgets. Recent measures have taken the opposite direction, with the view that it is necessary to expand fiscal spending to achieve growth in consumption and to stimulate demand. This is indeed needed, together with a permanent reduction of personal taxes, although only temporary reductions have been announced.

Monetary policy

Ever since the collapse of the bubble economy starting in mid 1991 interest rates have been pushed down and currently stand at 0.25%. This low official discount rate has been used to maintain a low value of the yen and to stimulate, through investment, growth the economy.

However, the effects that such low interest rates might have had were staved off by a deflationary movement, making real interest rate falls less pronounced than nominal interest rates. At the same time, to counter this lowering of interest rates, the exchange value of the yen underwent upsurges against the dollar, and tight monetary policy was followed by the Bank of Japan. So even if after 1992 the Bank of Japan lowered interest rates, inflation dropped faster than interest rates until 1995, so Japanese real interest rates were rising. The deflationary momentum was exacerbated by the sharp appreciation of the yen that resulted from Japan's rising real interest rates and by the spreading insolvency of Japan's financial sector.

According to Makin (1998), another problem arose from the failure to recognize how deflation would operate on Japan's savers and investors and thereby on Japan's external accounts. As deflationary momentum in Japan accelerated, investment spending dried up rapidly, while high returns on financial assets, including cash deposits, increased Japanese savings. As Japan's net demand for foreign investment dried up, Japan's net sales of goods to the rest of the world increased as the slowdown in Japan caused imports to collapse more rapidly than exports. However, the Asian crisis resulted in a fall of demand for Japanese exports, provoking also severe restraints in companies and in the economy.

The current situation has evolved into one of a liquidity trap. This is a situation in which interest rates are so low and deflationary expectations remain, so that neither public consumption nor savings in the financial system are stimulated with the public holding cash until better opportunities with lower prices appear. With interests rates already at 0.25% in Japan, it is difficult to reduce them further in order to stimulate the economy. What is left to do, according to most specialists, is to affect short term future expectations of inflation, which are provoking the current atony in investment and consumption.

Although inflationary policy might have an important socio-economic impact, with the inefficiency of fiscal policies and the need to restrain public spending, and to stimulate demand, it has been suggested that one of the solutions, although not the only one, would be to pursue a monetary policy that would create inflationary expectations, maybe through announcements by the Bank of Japan of its intention to target a certain inflation rate in the future. So although it seems that monetary policy does not hold any more solutions to the crisis, because of already almost zero interest rates, some authors (Krugman (1998), Makin (1998) and Rajan (1998), among others), have suggested the possibility of creating inflation expectations through monetary policy.

The IMF, however, doubts whether such long run policy would affect peoples´ behavior today and whether it would be even more negative on consumers confidence in the economy. Instead, the IMF calls for a solution of the banking system as a means to stimulate confidence in the economy.

4. Solutions and outlook

As we have seen, there are many issues involved in the recovery of the Japanese economy. Because there have been several variables involved in the economic downturn, it will also take different policies to pull the economy back on the right track. The recent approval of a banking recapitalization bill demonstrates the recognition of Japanese authorities of the necessity to take faster solutions than their political system is accustomed to. It has also made the Japanese government aware of the international recognition of the Japanese crisis and the effects it will have in the global economy.

The need to restore confidence in the economy is one of the main objectives of the revitalization of the economy. This can be attained through a series of measures which will be repeated here but are not new, since almost all authors and international organizations have called for the same type of measures. One of the necessary steps is to apply a strong fiscal stimulus. Permanent personal and corporate tax cuts would contribute to stimulate growth of the economy. To this effect, the Prime Minister already announced corporate and personal tax reductions for 1999, although it was not clear whether the reduction would be temporary or permanent. Another important measures is the use of monetary policy. As we have seen, although interest rates are already almost at their lowest level, it might be possible to stimulate demand creating inflationary expectations. The Bank of Japan could target a low but sufficient inflationary level so as to accomplish that the Japanese spend more instead of saving, a result of their expectations of future lower prices.

The financial sector restructuring, which includes the clean up of bad loans and a restructuring of the banking sector (with the implication that some might not be viable and might have to undergo closing or merging), will bring back credit to companies and would recover their role as lenders. Recent measures passed are on the right track, and the markets response have been extremely positive in the short run. At the same time, the *big bang* financial deregulation is also under way, and it can also contribute to a more efficient and competitive banking system on the long run.

So recovery requires that the financial sector problems are targeted, together with structural reforms that would add some flexibility to the economy, and demand stimulating measures, such as permanent fiscal readjustments of companies and personal income taxes that will stimulate aggregate demand.

The Japanese economy has indeed all the instruments needed for a medium pace recovery. It has demonstrated throughout the post-war era that it is a country capable of recuperating and of accomplishing economic growth. If the necessary political consensus is set into motion, there is no doubt that Japan can pull itself out of this crisis, having learned an important lesson on the increased interdependence of the economies and the severe impact a country can have on other economies.

Chart 1: Japanese Trade with Asian Countries
1996 (% of total trade)

Trade	Crisis countries(1)	China	Other Asian emerging countries (2)	Total Asia
Exports	19.6	5.3	17.5	42.4
Imports	16.5	11.6	7.1	35.2

(1) Korea, Indonesia, Malaysia, Philippines, and Thailand (2) Hong Kong, China, Singapore, and Taiwan
Source: OECD, *World Economic Outlook*, n. 63, June 1998.

Chart 2: Summary of Economic Stimulus Packages
1992-1998 (in trillions of yen and % of GDP)

Date	1992	1993 (04)	1993 (09)	1994	1995	1998
Tax reductions	--	0.2	--	5.9	--	4.6
(% of GDP)	--	--	--	1.2	--	0.8
Public investment	6.2	7.6	2.0	4.5	6.3	7.7
(% of GDP)	1.3	1.6	0.4	0.9	1.3	1.5
Land purchases	1.6	1.2	0.3	2.0	3.2	1.6
(% of GDP)	0.5	0.3	0.1	0.4	0.7	0.3
Increased lending	2.9	4.2	3.9	2.7	3.1	2.0
(% of GDP)	0.7	0.9	0.8	0.6	0.6	0.4
Other	--	--	--	0.2	2.6	0.8
(% of GDP)	--	--	--	--	0.5	0.2
Total	10.7	13.2	6.2	15.3	14.2	16.7
(% of GDP)	2.3	2.8	1.3	3.2	3.0	3.3

Source: IMF, *World Economic Outlook*, October 1998.

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II. China (LIU Lan)

1. Reasons why the *renminbi* (RMB) has held during the Asian turmoils

Despite what many investors and economists had anticipated, the Chinese currency, the RMB, still holds its official exchange rate against the dollar, now that one year has already passed since the beginning of the Asian crises. In order to support monetary stability in the region, the Chinese leaders have held their ground from the beginning of the crises in keeping the exchange rate unaltered between RMB and the dollar, since they are aware that a devaluation would spread a new wave of concern in Asian financial markets, especially in Hong Kong, and that it would hinder even more the economic recovery of the more affected East Asian countries.

Why has RMB not been devalued, in spite of the fact that nearly all the currencies in the region have done so?

Firstly, the exchange rate between the Chinese currency and other currencies is not dependent on the ups and downs of the financial market, but on the Chinese Government's decisions. Besides, there is a strict control on capital movements, since free exchange is not allowed through capital account, but only through current account; therefore foreign investors have found it very hard to speculate with the Chinese currency, thus preventing an attack against it from the start.

Secondly, unlike Thailand, Malaisia and Indonesia, China has both a current account and a capital account surplus. Foreign trade has been favourable to China for many years now, not to mention the fact that it is the second country in the world in terms of inward foreign direct investment. For instance, until 1997 China has been the recipient of more than US$ 220 billion in accumulated foreign investment.

Thirdly, although China is the third most indebted developing country in the world, with a foreign debt of over US$ 130 billion, only 14% of it is a short-term debt and the debt service ratio does not even reach 8% (Table 1). In addition, China has US$ 140 billion in foreign currency reserves, and if we added to them all the funds from companies and individuals, the amount would total around 220 billion, which seems quite enough to face foreign payments.

Table 1. Foreign Debt of China in 1997
(US$ billion and percentages)

Foreign Debt	Increase from Last Year	Long-Term Debt	Short-Term Debt	Debt Service Ratio	Foreign Debt Ratio
130.96 bn	12.6%	86.15%	13.85%	7.3%	63.2%

Shishi ziliao shouci, No. 3, 1998, pp. 30-31.

On the one hand, China has not depreciated its currency because it did not have the urgent need of doing it, since it had enough foreign currency to pay for the interets of its foreign debt and for the imports of foreign goods. On the other hand, a stable Chinese currency can contribute to the exchange rate stability of the currencies of the countries in crisis and, as a result, it can enhance the prestige of China in the international arena. But in case of not undergoing a devaluation, what negative effects could it have for China and how much longer will RMB be able to maintain its present situation?

2. Trade and investment

The devaluation of China's neighbouring countries' currencies might harm, in the medium and long term, Chinese exp orts as well as foreign investments in China. This is so not only because the countries in the region are China's most important trade partners, but also because they are its main investors. Chinese foriegn trade is for the most part directed to the Asian markets, where it does more than half its businesses (Chart 1). For example, Japan, ASEAN and Korea imported in 1997 some US$ 53 billion products from China, a figure which represents a third of the total exports of the country (Ma, 1998). The current crisis in these countries, especially in Korea and in ASEAN, will cause the fall of their purchases abroad.

Besides, China signs around $10 billion annually with foreign firms to offer labour services and to carry out constructions outside Chinese territory. Owing to the crisis, countries like South Korea and ASEAN, which represent 65% of all contracts of this kind signed by China, have had to cancel some contracts (Ma, 1998: 187).

The devaluation of Asian currencies will increase the level of their competitiveness respective to China in the international market, above all the ASEAN countries, which make some products very similar to those made by China, such as shoes, toys, apparel, etc.. In 1997 textile products and toys alone represented more than a third of Chinese exports.

But perhaps it is in the reduction of investments where the Chinese economy can be most damaged by the Asian crisis. For example, from January to September 1997 South Korea, Japan, Hong Kong, ASEAN and Taiwan invested in all US$ 24.5 billion in China, that is, 77.67% of foreign investments. Lack of cash and the debts incurred by many companies of the countries in crisis will prevent them from spreading their businesses beyond their frontiers.

3. Growth and demand

The Chinese Ninth Five-Year Plan (1996-2000) has established the goal of quadrupling the GDP per capita by the year 2000, but in order to achieve it an annual econmic growth of at least 8% is necessary. To reach an 8% growth and keep it at that level it is essential to have the demand that stimulates economic activity. However, China does not wish to depreciate its currency, and given the fact that the devaluation of the Asian currencies puts a lot of pressure on Chinese exports, for China the best way out of this problem is fostering its domestic demand, so that through it economic growth can be pushed further. While most Eastern Asian countries are too dependent on the foreign market, China's domestic market can create the needed demand. The question is how to manage to revive demand, because during the last months stocks of many products have remained unsold, mainly industrial materials. In addition, although consumer product sales are still increasing, nevertheless they are doing so at a slower pace: for instance, their growth in 1996 was 12.5%, 10.2% in 1997 and 7% for the first seven months of 1998.

China has always had a demand problem; in fact, it has been one of the reasons lying behind its high inflation level for many years. Nowadays, however, this tendency has been turned upside down and the problem is just the opposite: namely, the supply is bigger than the demand. The silver lining of this cloud is that in this way the inflation level can be kept low. For instance, the inflation rate (CPI) was 8.3% in 1996, in 1997 it went down to 2.8% and in the first seven months of this year it has gone even further down to 0.4% from last year's level. Thus, this weakening of the demand affects negatively the industrial output, in fact, from January to July this year it has fallen to 7.8%, nearly four points lower than last year. To save this obstacle, the Chinese Government has decided to improve consumption, thus creating new "hot consumption points" like house or car acquisition. In this respect, one of the new steps that are going to be taken consists of eliminating the free distribution of houses among the urban population from October this year on; therefore, from now on all housing will be sold at market prices. But this policy has two drawbacks: one of them is the high prices of houses and the other is a bad post-sale service. The latter is a very important problem in China that affects many families who find no one to take charge of reparations once they have bought a dwelling; besides, individuals who look after houses charge exorbitant prices. At present, some 70 million square metres of newly built houses cannot find a buyer. Two more difficulties complete the picture: on the one hand, some houses are not sold; on the other, the Chinese population has a high savings rate that reached RMB 4.628 billion in 1997, that is, 62% of GDP. Taking it all into due consideration, the obvious conclusion is that this path should be cleared in order to take advantage of the huge possibilities it offers.

Another means of fostering domestic demand is to expand public investment. In fact, the Chinese Government foresees a 10% increase in fixed assets investments this year, which will go to road construction, railways, environmental protection, and so on. This policy may have a double beneficial effect, like reducing unemployment pressure and creating new work opportunities, especially among those peasants looking for jobs in the towns. In addition, it might stimulate related industries, such as construction material industries, etc. But for these projects to be able to carry through, Government's income must be increased, the circulating money must be watched for and inflationary levels have to be controlled for inflation not to go up again.

4. Exports and devaluation

Some authors regard the 1994 RMB devaluation of nearly 50% as one of the reasons that triggered the depreciation of Asian currencies. At that time, the Chinese Government had decided to integrate the two existing prices, the official price and the black market price, to form one; as a consequence, Chinese exports grew more than 30% that same year (Chart 2). Thus, the RMB devaluation greatly favoured Chinese exports, though it is not clear at all whether this action caused a fall in ASEAN's exports. Exchange rate played a key role in Chinese exports, as shown by Chart 2, where it can be seen that the highest peak of exports coincided with the 1994 RMB devaluation. That year exports reached US $121 billion and they were even bigger than the total exports of the Sixth Five-Year Plan (1980-85).

Despite the Chinese Government's persistence on not devaluing its currency, the Asian crisis is severely affecting the Chinese economy. Compared with the 1997 figures, for the first seven months of this year exports and industrial production have only grown 6.9% and 7.8% respectively (their growth rates in 1997 were 20.9% and 10.8%). These results are not too brilliant for the Chinese economy, for it must be remembered that one fourth of its industrial growth in 1997 arose from the increase of exports.

But the Asian crisis has affected China in a smaller degree than it was thought at the beginning. This is so for several reasons: *In the first place*, more than 40% of Chinese imports and exports nowadays are realized by companies with foreign capital. *In the second place*, more than 85% of Chinese exports consist of manufactured products, a third of which are machinery and electronic equipment that ASEAN countries do not make. *In the third place*, more than half Chinese imports and exports are of the processing- and assembly-type that need materials imported from abroad. Under these circumstances the exchange rate factor is not so crucial for these companies as the labour cost and tax factors. In order to diminish the effects of the crisis China is looking for markets outside Asia; for instance, from January to July this year exports to USA, the EU, Russia and Latin America grew 18.2%, 25.6%, 39.2% and 30.1% respectively from 1997.

5. Lessons and outlook

The Chinese leaders have had to learn a few lessons from the Asian crisis. As a result of the newly acquired experience they have taken some steps, like strengthening the reform of the financial system and altering the policy on big companies. The reform of state-owned companies had already been decided in the Ninth Five-Year Plan; with a few exceptions most of them were to be transferred into private hands. Before the beginning of the Korean crisis the Chinese Government planned to copy the model of "chaebols" and transplant it to China; following such a pattern, big companies would be encouraged to absorb smaller companies. But the crisis in Korea has stopped all these arrangements so, from now on, other ways will have to be thought up. Banks also continue to be reformed in order to make them function as commercial banks and not as banks wholly dependent on the government. Also, the financial system is being rearranged, hence all those firms which will not follow the rules are being closed, especially the investment companies that speculate with their capital in the stock market. As a consequence of all that has happened in the rest of Asia, the government have decided to postpone the complete convertibility of RMB by the moment, a move that places this currency outside the reach of international speculators.

Exports, consumption and investments are the three fundamental factors that make up economic growth. Consumption is being negatively affected due to the income fall among the population, to the loss of posts by state workers and lack of security among the urban inhabitants as to housing, education, public health and social security. Export growth has fallen but the government does not want to depreciate RMB. Thus, the only way out seems to be the encouragement of public investment. But this solution cannot be seen as the ideal remedy that will solve everything and, besides, there is a dangerous side to it, e.g., inflation. On the other hand state-owned industries are being reformed and, following a Chinese Government's estimate, RMB 1 billion will be necessary to carry it out. China has promised not to depreciate its currency in the short run, simply because it does not have the need to. But things might take a turn for the worse in the medium and long run: in this case, if the Chinese economy cannot attain a sufficient growth and the current crisis continues in East Asia RMB will no doubt be devalued.

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3. South Korea (Francisco García-Blanch)

1. Introduction

The Republic of Korea has achieved an extraordinary level of economic growth and wellbeing over the last thirty years. This accomplishment has certainly set a benchmark for development models and many scholars have devoted their research to the study and analysis of Korea's astounding economic performance. Likewise, international development institutions such as the World Bank praised Korea as a successful and exemplary student. It may seem difficult to remember it now but not long ago countries in Latin America and Asia were told to look at Koreans and try to imitate their successful economic model (see table 1). Korea was even rewarded for its extraordinary economic effort and growth with a seat in the selective Organization for Economic Cooperation and Development (OECD) in December 1996. The economy was impeccable except for a couple of "minor" concerns like a pending financial reform, an increasing wage/productivity ratio and a low export growth.

One month after joining the OECD, Hanbo Steel, a leading industrial conglomerate or *chaebol*, went bankrupt. Even before Korea could celebrate its first year as an OECD member, the International Monetary Fund (IMF) had to provide a US$ 57 billion's bailout to avoid the total collapse of the Korean economy. This paper is an attempt to explain why Korea's economy has passed from a model of virtue to the utmost archetype of crony capitalism and bad macroeconomic management. The discussion starts with a short review of the Korean economy in the 1990s and continues with a chronology of the major events that have shaped the crisis in Korea. The argument proceeds with an analysis of the major causes of the financial and currency crises in Korea and explores the possible effects of externalities in domestic events. The final piece of the discussion deals with current Korean economic policies and its implications.

2. The Korean economy before the crisis: The buoyant Korean economy of the 1990s

Triumphalism is the word that best describes the way most Asians perceived the substantial achievements of their economies in the 1990s. Not long before the trigger of the Asian crisis, some economists in Hong Kong crowed over the fact that Asian economies were attaining levels of productivity that surpassed those of the US. In the West, some economists contributed to this idea while others seriously questioned the fundamentals of the Asian economies. Krugman pointed out that the Asian economic miracle was mainly due to an intensive use of inputs, that is, to a high growth rate of capital and labor inputs. This stand clearly implied that very little total factor productivity (TFP) growth had occurred in Asia and that the high rates of growth in the Asian economies were unsustainable in the long run because capital and labor could not be pumped into the economy for a long time at the same rates. In fact, the crisis in Korea has had a lot to do with decreasing labor productivity, bad investments and capital shortage as we will see later in the paper.

Despite Krugman's criticism, most economists still praised until 1997 the incredible rates of growth achieved by Korea (see table 1) and admired the surging level of economic well-being of its citizens. In fact, the Korean economy grew at an average rate of 7.1% between 1992 and 1996 while the GDP per capita surpassed US$ 10,000 at the end of that period. Employment remained low under 3% and so was inflation (stable under 5% for the three years preceding the crisis). Meanwhile, domestic workers were enjoying ever fattening payrolls. An economic slowdown did take place in 1992, when GDP growth rate fell to nearly 5%, although this lasted only for about a year. Some Korean economists pointed out that this slowdown could evolve into a recession but the truth is that, by 1994, the economy was growing at 8.5% again and the future was dazzling. A good set of books and scientific articles during these years dealt with the economic perspectives of the Korean economy for the 21st century and publishers used these catchy headings to increase their sales revenues. Other top-notch and fancy publishers preferred the word globalization to describe the economic stage of Korea during those years, clearly alluding *chaebol*'s success stories in foreign markets.

In fact, the foreign sector was doing quite well. During the early 1990s, Korean companies expanded their operations abroad and some industrial conglomerates managed to become true multinational corporations. Korean direct investment was soaring in China, Southeast Asia, Eastern and Western Europe, the US and even in Latin America. Due to domestic and regional factors, the export sector was not as strong as in the old times. Increasing competition from neighboring countries, decreasing competitiveness of Korean products, lower world prices for goods such as automobiles, computer ships, ships and garments, and a recession in Japan and in Europe, among other factors, contributed to a decrease export growth in the nineties.

In summary, the Korean economy was doing relatively well, although it is very important to note the exc essive amount of optimism among economists and policy makers in Korea and abroad. Moreover, this general optimism proved to be quite counterproductive because it ignored that some of the fundamentals of the Korean economy were indeed not so healthy as it seemed. The upcoming presidential elections and the electoral messages and political arguments employed certainly contributed to foster the idea of economic soundness among the Korean people. This overly optimistic perspective certainly delayed the necessary reforms that could have helped to avoid the collapse of the Korean economy in the fourth quarter of 1997.

3. An abridged chronology of the Korean crisis

3.1. From prosperity to agony: the corporate crisis

As we pointed out in the previous part, not many really suspected the upcoming gloomy future of the Korean economy. Korea's membership in the OECD was an unmistakable indication of the developed countries' confidence in this East Asian nation. However, the initial symptoms of fragility shyly appeared while Korea was still negotiating its accession to the OECD. The current account deficit broadened from 2% of GDP in 1995 to 5% in 1996, while the growth rate of exports went down from 31% to 15%. Foreign debt went up from US$ 78 billion in 1995 to US$ 100 billion in 1996. Moreover, although Korea's GDP growth rate recorded 5.9% for the first half of

1997, command GNP stalled at 0.9%, the lowest rate since the second oil shock. This figure indicated a tremendous deterioration of the terms of trade for the Asian country, mainly due to the fall in world prices of Korea's main export products.

The first evident sign of change in the Korean economy was undoubtedly Hanbo Steel's bankruptcy under US$ 6 billion in debts. Hanbo, the 14th largest *chaebol* in terms of assets, closed down in January 1997. For the first time in recent Korean economic history, the government had decided to suspend economic assistance to a big business group and allow market mechanisms to function. In March, Sammi Steel, another Korean conglomerate, defaulted inducing fears of a imminent corporate debt crisis. While Japanese officials hinted a raise in interest rates that would intensify financial turmoil in Southeast Asia, Korean conglomerates continued to default. After Sammi came two major affiliates of the Jinro group, the major *soju* producer in Korea. The Dainong retail chain and the Ssangyong business group followed through.

In the meantime, the situation in Southeast Asia worsened by leaps and bounds. In July the 2nd, the Thai baht depreciated and Thailand abandoned the peg system. A couple of weeks later, Malaysia's ringgit melted down and Thailand recurred to the IMF.

In Korea, the situation was not much better although the corporate bankruptcies had not yet unleashed a major turmoil. Then, one of the nation's largest *chaebol* and a world-known automaker, Kia, suffered a credit crunch and had to ask for emergency loans. The situation started to seem irreversible but the worst was still to come. Kia's crash had a profound impact of the Korean economy and in September, the government initiated a move to embark on measures to stabilize the banking sector. Unlike corporate failures, Korean authorities were concerned with the fact that bankruptcies of banks could generate far more adverse effects throughout the economy. Logically, Korean banks played a crucial role in the credit expansion of domestic companies and became highly leveraged in doing so. Unfortunately, in spite of the tardy government efforts to save the economy, the situation was already quite unstoppable by then.

The Philippines, Indonesia, Taiwan, and Singapore suffered a currency devaluation in the subsequent months and IMF financial aid packages were granted to Thailand and Indonesia. Moreover, the IMF had confidence in a turnaround of the economic situation in Asia after the US$ 23 billion deal to Indonesia on October 31st. However, November would prove to be a fatal month for the Korean economy. The stock market had dropped 50% from its mid-1997 high and the Korean won started free falling. Market prices fell sharply as foreign investors pulled out, fearing South Korea faced an economic crisis on the scale of Southeast Asia's. In turn, these uncertainties about South Korea put even more pressure on Southeast Asia, creating a spiral of competitive devaluations that lead to the final collapse of the won on November 19th and subsequent days. The Korean government had decided on November 18th to suspend efforts to defend its currency. As a result, the won lost 75% of its value in dollar terms as compared with the mid-1997 high. At that time, foreign-owned short-term debt amounted to nearly US$ 77 billion and it was unclear whether there were foreign reserves left to pay it back. This dramatic situation led Korean authorities to call for a rescue package to international agencies.

3.2. The IMF intervention and the currency and financial crisis

On December the 3rd, the IMF approved the largest financial relief package ever given to a single country: US$ 57 billion. This agreement urged Korea to follow certain macroeconomic policies, but the IMF also pressured to pass through other measures. In short, the agreement included a tightening of the monetary policy to keep inflation at or under 5%, a revised act to allow for central bank independence, a compromise for a flexible exchange rate policy, a tight fiscal policy in line with the monetary policy, a restructuring of the financial sector focusing on consolidate supervision of banks and conglomerates, trade liberalization, capital account liberalization, several measures involving corporate governance and corporate structure, a reform of the labor market, and a more transparent economic and financial information system. This agreement was widely criticized by many economists including Milton Friedman and others. However, the IMF policy towards Korea did not vary significantly, although several reviews of the agreement did take place in January, February, May, and July, as the situation deteriorated. Most economists would agree that some of the reforms called for by the IMF were positive to a certain extent and would have helped to reshape the Korean economy in a different economic climate. Nonetheless and considering the dramatic situation of the Korean economy, many economists pointed out too that IMF requirements were draconian and should have been gradually implemented over a longer time span.

Moreover, the high interest rates and tight monetary control certainly contributed to deteriorate the situation of many businesses. The banking sector was also caught between the devil and the deep blue sea as banks had to meet the requirements established by the Bank of International Settlements by lowering bad loans. As a result, banks were forced to call back loans from businesses that could not return them, creating a spiral.

In spite of the large sum granted by the IMF and the economic and political commitments of the Korean government, the intervention happened to bring some transparency to the obscure functioning of the Korean economy. Nevertheless, international rating agencies decided to downgrade Korea's bonds to junk status when it became evident that Korean reserves were insufficient to cover the debt coming due at the year end. Meanwhile, net foreign lending decreased from US$ 100 billion to US$ –20 billion in less than two months. Money was flocking out of the country and Korea's financial situation was worsening very fast despite the huge bailout conferred by the IMF. By the end of January, the government reached an agreement with international commercial lenders on a US$ 60 billion rollover.

The obscure and poorly regulated financial system in Korea could not perform well in this new environment: high interest rates, increasing bad loans, a gloomy economic outlook, and a government that could not back the banks' decisions blindly anymore. On January 30th, ten merchant banks closed down. Seven more would follow in the following months as the economy entered a state of chaos.

4. Background and causes of the financial and currency crisis in Korea

Although it is still unclear what are the main causes of the Korean crisis, there are to date two basic sorts of arguments. Radelet and Sachs tie the crisis in Korea and, to a larger extent, in other parts of Asia to the financial panic while Corsetti *et al* argue that the crisis can be attributed to external or regional pressures and to internal or domestic factors. A mixture of both would probably help to explain in further detail the causes of the crisis. However, further research should be undertaken before a specific weight could be assigned to each argument.

4.1. A worsening situation at home

The fundamentals of the Korean economy remained fairly solid until 1996 (see table 1 in the statistical appendix). During this year, macroeconomic indicators worsened to the point that some people hinted the possibility of an economic crisis. In 1997, the crisis was already installed in the Korean economy. The efforts to seize the crisis were unclear and the government was too wary to present a coherent plan to restructure the economy. The proximity of the elections was clearly counterproductive, as the government did not dare to take immediate action to tackle the problem. A worsening economic situation, a weak government and the uncertainty brought in by the upcoming elections, proved to be a dreadful mix. Some authors suggest through a set of empirical data that crisis tend to occur in emerging countries when output growth is low, growth of domestic credit is high and the level of foreign interest rates is high. Clearly, this is not exactly the case of Korea either. Other studies also point out that crashes tend to occur when the inflow of direct investment dries up, when reserves are low, and when the exchange rate shows overvaluation.

4.2. Externalities: how much did they matter?

A paper by Eichengreen, Rose & Wyplosz focuses on the chances of contagious currency crisis in a set of industrialized countries. The authors argue that contagion is more likely to occur in countries that are linked by trade rather than in countries that have similar macroeconomic characteristics. In fact, Korea was not so closely linked by trade to Southeast Asian countries. Moreover, the US and Japan are the main trading partners of Korea. Nonetheless, there are two key issues that should be pointed out. Korean direct investment in Southeast Asia grew fast in the years preceding the currency crash and the devaluation of Southeast Asian currencies clearly damaged Korea's competitive position in the international marketplace. Table 2 shows the expansion of the current account deficit in Korea and the foreign reserves versus short term debt and import ratios. Not only the turmoil in Southeast Asian countries had a negative effect on Korea. The recession in Japan and the depreciation of the yen were also important factors that had a direct impact on the Korean economy. The slowdown of the Japanese economy started in 1990. As the won was relatively pegged to the dollar, an ever declining yen/dollar exchange rate meant an appreciation of the Korean currency against the Japanese one. Since Korea and Japan compete in many sectors, this process led to a deterioration of Korea's terms of trade.

4.3. Currency crisis in Korea

The current account deficit grew intensively since 1995 at 4.9% while the Korean won depreciated against the dollar by 8.6% in 1996 and 5.8% in the first quarter of 1997. Nonetheless, some economists have pointed out that the main causes of the currency crisis in Korea were the relatively overvalued won and the growing current account deficit. Others stress that the current account deficit was not large enough to provoke a crisis of such magnitude. Park and Rhee argue that currency deficits in Korea in 1996 and 1997 were temporary and cyclical. The deficit was mainly due to a fall in the international prices of Korea's main exports and to the fact that policy makers regarded investment-led deficits positively. They go on stating that current account deficits were not as large in Korea as in other countries such as Thailand or Mexico and therefore it is not plausible to blame the deficit as the main cause of the currency crisis. Table 3 shows the variations in the exchange rate, as well as in other indicators. It is somehow shocking that while the exchange rate fell from 965 won/dollar in the end of October to 1,965 won/dollar in Christmas eve, the stock index KOSPI only fell from 470 to 366. It seems as if the stock market was already very conscious of the seriousness of the Korea's economic woes.

5. Possible explanations to the crisis

No single explanation exists for a very complex event like the Korean crisis. This section will several plausible explanations, focusing mainly on the weaknesses of the Korean development model, the persisting institutional deficiencies, the *ex-ante* policy mistakes and the *ex-post* responses to the crisis.

The vulnerabilities induced in Korea's export oriented development strategy had a clear impact on the crisis. For instance, the worldwide decline in the world demand of Korea's most popular exports led to a mild recession during the first part of 1997. Another example of strategy induced vulnerability is the mismanagement of the allocation of bank credit. As a way to promote exports, the Korean government kept close control on available credit, set interest rate ceilings, and distributed credit disregarding economic efficiency. Due to this government policy, debt-equity ratios rose and the financial structure of corporations became unsound. As financial costs of corporations became larger, solvency begun to depend heavily on fast growth and increasing revenues. Yet, because there was an tacit government commitment to kept on backing and bailing out banks, financial institutions kept on taking higher and higher risks.

Some authors have stressed the institutional deficiencies of the Korean financial system. In fact, the system was in the borderline between that of a developed and that of a developing country. While Korea slowly liberalized its financial system, the government forgot to regulate it properly and to bring information and transparency into the domestic market. Meanwhile, Korea's open markets started to operate in the global financial system without revealing all pertaining information. It is interesting to point out that Taiwan and China did not suffer a financial crisis in the magnitude of Korea's. As opposed to Korea, China kept a tight control on the financial system while showing little signs of transparency. On the other side, Taiwan had already liberalized its financial system and establish an adequate flow of information for investors.

From a macroeconomic policy standpoint, the Korean government was perhaps too keen on maintaining an overvalued currency. It is not very justifiable to sustain an over-inflated won against the yen for a long period of time and it is even less justifiable to spend 20 billion dollars to defend it. Moreover, the high real interest rate policy maintained by the government induced domestic firms to borrow abroad, increasing demand for foreign exchange, and to recur very little to the stock market. Other policy mistake was to decontrol real wage growth. During the last few years, the government supported wage growth for purely political reasons and disregarded the economic aftermath of this decision.

Adelman and Nak suggest that perhaps the worst policy mistake was the drive towards premature liberalization of capital markets. As it was President Kim Young Sam desire to join OECD during his term in office, the government rushed to open up its markets to fulfill OECD admission requirements. The domestic market was not ready nor regulated enough to open up and, eventually, this led to a crash. It is interesting to recall that the Mexican crisis occurred only six months after Mexico joined the OECD. Once the Asian regional crisis begun, the government was not in a position to respond to the crisis. Just a few months away from the elections, Kim Young Sam's team was centered on short term political considerations. Moreover, corruption practices regarding credit lines to bailout troubled *chaebols*, specially in the Hanbo steel case, put banks in a precarious situation. Still, government led rescue plans did not help to solve the corporate crisis and the situation of the banks grew worse and worse. Later attempts to control the situation came in too late and were regarded as tardy and unrealistic. The government was not successful in maintaining the international credibility of Korea.

6. Policy implications and economic perspectives in Korea

6.1. The effects of the IMF rescue package

Transparency was the first change brought in Korea by the IMF rescue plan. When global markets found out about the real level of foreign reserves, the won/dollar exchange rate fell sharply. The IMF designed a policy for Korea primarily based on stringent macroeconomic policies that aimed at restoring stability and confidence in the country. Money-market rates jumped from 12% prior to the crisis to 27% by the end of 1997. These measures intended to contain the fast outflow of capital and stabilize the exchange rate. At the same time, money supply growth (M3) should slow down from 16% in 1997 to 13% in 1998. Meanwhile, imports should help to raise foreign reserves to US$ 40 billion.

Another cornerstone of the IMF plan dealt with fiscal restraint. Before the crisis, Korea was one of the three OECD members running a national budget surplus. In principle, the government was in a good position to expand their fiscal policy in order to stimulate demand and investment. Despite this budget surplus, the IMF decided to apply its standard recipe to Korea instead: keep public spending on a leash. The IMF initially demanded a balanced budget for 1998, although the worsening situation induced the government to allow for a deficit equivalent to 1.75% of GDP. Soon it would become clear that the budget could not even remain at that level.

The request for structural reforms is probably the most interesting and respectable part of the IMF agreement. The two goals pursued were to expose the Korean economy more fully to world competition and to introduce more effective governance structures in the financial and corporate sectors. It seems quite reasonable to argue that the Korean economy could not follow a path towards globalization while maintaining such an archaic structure. For example, the domestic car market in Korea was the paradigm of protectionism: while Korea exported 850,000 cars per year in 1996, it only imported 10,000. Highly indebted companies were to prepare restructuring plans to get their finances into shape while the banking sector was also compelled to enforce several measures imposed by the IMF the Bank of International Settlements (BIS). At the same time, the government begun a program to make the labor market more flexible. In order to understand the implications of the IMF policy, it is useful to adopt an critical view and observe the results that the agreed measures had on the Korean economy. While the theoretical framework for the IMF macro-policies may sound very reasonable, the truth is that raising interest rates provoked a new wave of bankruptcies of heavily indebted companies. Moreover, higher interest rates increased sharply the level of bad loans and induced the crash of several banks in Korea. In summary, the aftermath of some IMF measures has been catastrophic. However, as no "control unit" exists, it is impossible to know what would have happened otherwise.

Nonetheless, IMF officials have fiercely defended their stand and argued that raising interest rates was unavoidable in order to restore macro-stability. M. Camdessus pointed out that the key lesson of the "tequila crisis" in 1994-95 in Latin America was that interest rates should stay high temporarily to rebuild investors' confidence, even if this measure worsened the situation for banks and corporations. Furthermore, Camdessus argued that IMF programs in Asia and more specifically in Korea, aimed at massive restructuring of financial and corporate sectors. Macroeconomic stabilization plans were only accompanying measures to make the restructuring more viable.

6.2. Structural adjustments and key reforms

Historically, the Korean people has been used to much suffering: fifty years of Japanese control, a civil war that split the country into two irreconcilable political and economic regimes, an exhausting post-war characterized by a tremendous poverty, and a harsh economic adjustment to quinquennial plans for more than three decades. This background is, in principle, an advantage to overcome the current economic problems. Koreans certainly have a strong national consciousness and a set of self-learned crisis management skills. For these reasons, the necessary restructuring programs should be implemented smoothly, even if labor unrest hinders the reform process from time to time. The corporate restructuring mainly focuses on large conglomerates, on small and medium sized companies and on state run enterprises. The corporate restructuring process will benefit transparency by forcing companies to present consolidated balance sheets. Moreover, some subsidiaries will be required to close down while the mother companies will have to improve their capital structure and eliminate cross-debt guarantees. Other measures aiming to improve corporate governance include the amendment of the Commerce Law to simplify procedures, the promotion of organizational flexibility, and the smooth exit of non-operative companies. Financial restructuring refers to banks, insurance companies, securities institutions, investment & trust institutions, and leasing institutions. The reforms of the financial sector are primarily directed towards banks. One of the main objectives for the government is to either merge or close down banks that do not meet the capital adequacy ratio. The Financial Supervisory Commission will inspect reforms and will provide guidance throughout the process.

7. Conclusions

The Korean financial and currency crisis has set an impressive precedent on how global financial and currency markets behave in specific circumstances. The events in Korea have made clear that capital liberalization should be consistent with exchange and interest rate policies. Global markets do not forgive mistakes and do not hesitate to wreck one of the largest economies in the world if the government does not succeed in the planning and implementation of an appropriate policy mix. If we assume that the crisis is the result of pure financial panic, it is certainly hard to define mid- or long-term economic policies that may avoid it. Some authors suggest that restrictions on short term capital flows could help to avoid the negative effects of highly volatile markets on economic structures similar to that of Korea. However, if we consider that the Korean crisis is a matter of deeply rooted economic problems, policy advice should be certainly given much more weight. This view is perhaps more consistent with the policies required under the IMF bailout agreement. Yet, as the IMF insisted on closely chaperoning the Korean economy to its recovery, the set of solutions including high interest rates and monetary control policy mix led the country to a total debacle. In summary, the financial and currency crises has surely tarnished Korea's reputation as the paradigm of economic development. It is still unclear what were the real causes of the crisis and if an appropriate policy mix could have contributed to palliate it significantly. It is true that the passive attitude maintained by the Korean government did not help, but neither did the draconian measures imposed by the IMF. The Korean crisis will remain as a woeful event that will undoubtedly provide invaluable lessons to economists and policy makers and that should help to predict and prevent similar crises in the future.

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Statistical Appendix

Table 1. Republic of Korea: Macroeconomic Indicators.

	80-85	**86-91**	**1992**	**1993**	**1994**	**1995**	**1996**
Real GDP growth	6.3	9.9	5.1	5.8	8.6	8.9	7.1
CPI Inflation	10.9	6.1	6.3	4.8	6.2	4.5	4.9
Corporate bond yield	19.0	15.1	16.2	12.6	12.9	13.8	11.9
M2 growth rate	20.6	18.8	18.4	18.6	15.6	15.5	16.2
Fiscal balance/GDP	-2.5	-0.2	-0.7	0.3	0.5	0.4	0.3
Current account/GDP	-3.8	3.0	-1.5	0.1	-1.2	-2.0	-4.9
Foreign reserves (US$b)	7.1	12.2	17.1	20.3	25.7	32.7	33.2

Source: Bank of Korea, Ministry of Finance and Economy

Table 2. Main patterns of the currency crisis in Korea

	80-84	**85-89**	**90-94**	**95.12**	**96.6**	**96.12**	**97.3**	**97.6**	**97.9**	**97.12**
Foreign Reserves/ Short-term Debt (%)	63.5	104.2	93.2	72.2	-	54.7	47.9	54.8	46.4	39.8
Foreign Reserves/ Imports (Times)	3.3	2.9	2.6	2.9	3.2	2.7	2.3	2.7	2.4	1.6
External Debt/GNP	48.8	30.2	13.7	17.3	-	21.8	23.0	-	24.9	25.1
Current Account/GNP	-4.6	4.2	-1.3	-2.0	-2.8	-4.9	-5.6	-5.3	-4.1	-1.3
Current Account Plus FDI/GNP	-	-4.6	4.4	-1.5	-2.4	-3.3	-5.3	-5.9	-5.6	-4.4

Source: Bank of Korea, Monthly Statistics, various issues.

Table 3. Evolution of relevant indicators

		KDB spread (bp)	Spot Rate (won/USD)	Forward Rate (won/USD)	Corporate Bond Yield (%)	KOSPI
1996	9/27	59	825	834	12.4	793
	12/27	56	843	860	12.7	651
1997	1/31	57	861	885	12.0	685
	2/28	63	863	881	12.4	676
	3/31	72	897	912	12.5	677
	4/30	85	892	902	12.5	703
	5/30	85	891	899	11.8	746
	6/30	85	888	896	11.7	745
	7/31	90	892	909	11.9	726
	8/29	120	900	940	12.1	704
	9/30	119	914	948	12.6	647
	10/31	269	965	1,082	12.6	470
	11/28	277	1,112	1,233	15.6	411
	12/23	693	1,965	1,830	31.0	366
1998	1/30	357	1,689	1,585	18.5	558
	2/27	335	1,633	-	20.5	548

Notes: (1) KDB spread: the yield difference between the KDB global bonds due 2006 and the U.S. treasury securities with comparable maturity. (2) Forward rate: three-month NDF forward exchange rate of the Korean won per U.S. dollar. (3) Corporate bond yield: the yield of three-year corporate bonds in Korean domestic market. (4) KOSPI: Stock Price Index

Source: Park, Daekeun and Changyong Rhee (1998), *op. cit*.

Table 4. Financial Conditions of Top 30 Korean Chaebol at the end of 1996
(in hundred million won and %).

Chaebol	Total Assets	Debt	Sales	Net Profit	Debt/Equity Ratio
Samsung	508.6	370.4	601.1	1.8	268.2
Hyundai	531.8	433.2	680.1	1.8	439.1
Daewoo	342.1	263.8	382.5	3.6	337.3
LG	370.7	287.7	466.7	3.6	346.5
Hanjin	139.0	117.9	87.0	-1.9	556.9
Kia	141.6	118.9	121.0	-1.3	523.6
Ssangyong	158.1	127.0	194.5	-1.0	409.0
Sunkyong	227.3	180.4	266.1	2.9	385.0
Hanhwa	109.7	97.2	96.9	-1.8	778.2
Daelim	57.9	45.9	48.3	0.1	380.1
Kumho	74.0	61.2	44.4	-0.2	477.9
Doosan	64.0	55.9	40.5	-1.1	692.3
Halla	66.3	63.2	52.9	0.2	2067.6
Sammi	25.2	25.9	14.9	-2.5	3245.0
Hyosung	41.2	32.5	54.8	0.4	373.2
Hanil	26.3	22.3	13.0	-1.2	563.2
Donga Construc.	62.9	49.1	38.9	0.4	355.0
Kohap	36.5	31.2	25.2	0.3	589.5
Jinro	39.4	39.0	14.8	-1.6	8598.7
Dongguk Jaekank	37.0	25.4	30.7	0.9	210.4
Lotte	77.5	51.0	71.9	0.5	191.2
Kolon	38.0	28.9	41.3	0.2	316.5
Haitai	34.0	29.5	27.2	0.4	658.3
Sinho Jaeji	21.3	17.7	12.2	-0.1	489.5
Anam Industrial	26.4	21.8	19.8	0.1	478.1
Dongguk Muyok	16.2	13.6	10.7	-0.2	587.9
New Core	28.0	25.9	18.3	0.2	1224.0
Bongil	20.3	18.3	8.7	-0.9	920.5
Hansol	47.9	37.1	25.5	-0.1	343.2
Hansin Kongyong	13.3	11.5	10.6	0.0	648.8

Source: Chosun Ilbo, November 29, 1997.

Table 5. Profitability of Korean Chaebols. ROIC in 1992-1996.

Chaebol	1992-96	1996
Hanbo	3.0%	1.7%
Sammi	2.9%	3.2%
Jinro	2.7%	1.9%
Kia	18.9%	8.7%
Dainong	6.8%	5.5%

Source: LG Economic Research Institute

Table 6. Foreign Liabilities and Assets (toward BIS Reporting Banks) (US$ billion)

Korea	**1993**	**1994**	**1995**	**1996**	**1997**	**1997-Q1**	**1997-Q2**	**1997-Q4**
Foreign Liabilities	45.22	60.97	83.26	109.15	103.78	113.42	118.25	104.71
Foreign Assets	15.20	20.54	25.10	29.07	41.28	33.04	35.87	41.79
Net Liabilities	30.02	40.43	58.16	80.08	62.50	80.39	82.38	62.92
Foreign Liabilities (non-banks)	10.59	13.49	17.91	24.07	25.18	25.98	26.53	25.40
Foreign Assets (non-banks)	1.45	2.29	3.58	3.47	2.24	3.42	3.06	2.28
Net Liabilities	9.14	11.20	14.33	20.61	22.94	22.57	23.46	23.13
Foreign Liabilities (banks)	34.63	47.49	65.35	85.08	78.60	87.44	91.72	79.31
Foreign Assets (banks)	13.75	18.25	21.52	25.61	39.04	29.62	32.80	39.52
Net Liabilities	20.88	29.24	43.83	59.47	39.56	57.82	58.92	39.79

Source: Bank of International Settlements (BIS), International Banking and Financial Market Developments.

IV. SOUTHEAST ASIA (Clara García and Iliana Olivié)

1. Introduction

In July 1997 the economic problems that Thailand had been suffering since 1995 evolved into a financial crisis that rapidly spread to other countries of the area. The crisis affected the four countries we study (Thailand, Indonesia, Malaysia and The Philippines) before reaching South Korea (Korea hereafter) and even some industrial economies. It is too early to know if the Asian financial crises will eventually lead to a radical change in the international environment of trade and financial flows. But it is possible to anticipate that several developed and underdeveloped countries have already been affected, even outside Asia. Moreover, the Asian financial crisis has created a controversy on the risks associated with free international capital flows.

Besides the four countries mentioned above, we should point to other countries affected by the Souteast Asian turmoil. For instance, the economic crisis that Japan bore since the beginning of the 1990s became more acute as a consequence of the Southeast Asian financial crisis. Meanwhile, China is maintaining the value of its currency despite the devaluation of neighbouring currencies, but some experts think that China will end up devaluing the yuan. There are also affected countries outside Asia. The cases of Brazil and Russia (that asked for IMF help in July 1998) stand out. Finally, the crisis has reached the stock markets of industrial countries. Wall Street collapsed in October 1997 as a consequence of the crisis, and even today stock markets around the world have not yet stabilised. In this paper we try to understand the origins and initial development of the crisis in the four countries selected. In section 2 we show a brief chronology of the evolution of the crisis. In section 3 we analyse the economic features of these countries with the aim of depicting the economic context in which the crisis occurred. In section 4 we describe some interpretations of the Asian crisis in order to contribute to understand the mechanisms of development of the crisis.

2. Evolution of the crisis

Thailand had already suffered speculative attacks before 1997. But until those of May 14th and 15th 1997 the pressure on its currency and its stock exchange market was bearable. After those attacks, on July 2nd the government let the currency float, so the baht's value plummeted. The following victims of the crisis were The Philippines and Malaysia which, as Thailand had done before, tried unsuccessfully to maintain the value of their currencies. Then the crisis reached Indonesia and Singapore.

In September it seemed that markets were stabilising. But since October, investors distrust also affected Northeast Asia. The devaluation of Singapore's currency was a problem for Taiwan, which announced a possible devaluation of the New Taiwan Dollar (NT$). In October 20th the NT$ had already lost 5% of its value. Therefore the pressure on Hong Kong and Korea increased. Since this moment the crisis crossed the Asian borders and on October 27th, Wall Street collapsed.

2.1. Thailand

It could be said that the Thai crisis began well before the speculative attacks against the baht. In 1996 this country was already showing a high financial vulnerability, which is more carefully studied in section 3.3. It is sufficient to mention that Thailand had US$ 24 billion in short term investments that could abandon the country anytime. The attack against the baht was the first sign of alarm. Moreover, the government reacted in such a way that investors felt even more likely to take their money out of the country. Firstly, the Thai government fought to maintain the peg to the dollar until July 1997. At that time a big share of the reserves had already been spent (at the beginning of 1997 the Thai central bank had US$ 39 billion in reserves, and by the end of June this figure had fallen to only US$ 2 billion). Secondly, capital controls were introduced in order to prohibit the concession of baht-denominated commercial credits. Moreover, on May 23rd, Finance One, one of the biggest financial firms of the country, collapsed. Finally, on July 2nd, the Thai government had to give in to market pressures, and it widened the baht's fluctuation band. That same day the value of the currency slumped. On August 5th, the government announced an austerity and rationalisation plan for the financial sector. But even this measure was unable to stop the baht devaluation and the fall of the stock market index.

On August 20th, Thailand signed its first program with the IMF. Despite the strong measures that this program imposed, investors' trust was not restored. The stock market index and the currency's value continued to decrease. As the first program was ineffective, on November 25th Thailand signed a second program with the IMF. Once again, neither the currency nor the stock market index stabilised. It was necessary to wait for the government to guarantee the obligations of the Thai commercial banks for the exchange rate and stock market to recover (on January 21st).

2.2. The Philippines

In 1997 The Philippines were suffering the same kind of financial vulnerability as Thailand. In this case the facts that provoked the attacks against the currency and the stock market were the following. On the one hand, the real sector was beginning to send out bad signals, as for example the rumours about the insolvency of the company Megaworld at the beginning of 1997. On the other hand, the Thai crisis made the investors compare the countries of this area with Thailand, and thus reconsidered their investments in The Philippines. When the speculative attack occurred, the fall of the stock market was dramatic, and the inflows of foreign capital to Philippino banks decreased 97% between the last quarter of 1996 and the first quarter of 1997. Then the central bank of The Philippines intervened, selling dollars for pesos with the aim of supporting the value of the currency. Moreover, the interest rates were increased from 15% to 30% with the same goal. But these efforts proved useless, and finally, on July 11th, the government decided to let the peso float in a wider band.

On July 21st, the IMF renewed its program for The Philippines, increasing the funds provided. As in Thailand, the markets' reaction was not positive, so it wasn't possible to stop either the peso devaluation or the fall of the stock market index. In the following months the peso kept losing value, due in part to the bad news coming from Korea and Japan. At the beginning of January the peso registered historic minima.

2.3. Malaysia

Since the mid-1990s Malaysia had featured increasingly fragile financial and real sectors. The concerns of the Malaysian government pushed the central bank to impose, in March 1997, ceilings to the credits given for investments in real estate and equities. The stock market reacted negatively, falling 6.6% in just one week. As most of the investors were foreigners, capital quickly began to leave the country. Another factor that provoked instability in the Malaysian markets was the pronouncement of Prime Minister Mahathir, blaming the foreign investors for the problems in Southeast Asia.

Thus, on July 8th, Malaysia had to intervene in the financial markets in order to defend its currency. The evolution of the ringgit and the stock market was as unfavourable as in other countries of the area. On December 5th, the government announced a drastic change in its economic policy. An 18% reduction in public expenditure was approved. Also, several infrastructure projects were suspended and banking credit was restricted. The stock market reacted positively growing 11%. Nevertheless, in March 1998, rumours about possible failures of banking companies reactivated the instability of the Malaysian financial market.

2.4. Indonesia

One special feature of the Indonesian crisis is that its currency was attacked later than other currencies of the area. The reason is that at the beginning of the crisis the government reacted just like the foreign investors expected it to do. On July 11th, when the pressure on the rupiah became stronger, it widened the fluctuation band to 12%, which generated confidence among investors. But still the attacks against the currency kept coming, so the government had to intervene, spending a big share of the country reserves in order to keep the rupiah within the new fluctuation band. Finally, on August 14th, the government let the currency float. That same day, the exchange rate of the rupiah reached the maximum of 2,755 rupiahs per dollar.

During the following weeks, although the value of the rupiah and the stock market index continued to fall, the situation wasn't as critical as in the other countries of the area. Nevertheless the government applied for IMF aid. On October 31st 1997, Indonesia signed its first program with the Fund. The markets reacted positively but not dramatically. In December, the situation worsened, when rumours about the bad health of President Suharto spread. On December 5th he cancelled a trip abroad, and on the 8th he began a ten day rest. The political uncertainty arisen from the eventual need of looking for a successor to Suharto, who had been ruling the country for more than 30 years, had negative effects on the financial markets. The currency fell to 4,020 rupiahs per dollar, and the central bank intervention stabilised it at 3,965 rupiahs per dollar (Roubini, 1998). On January 6th, the government announced a 32% expansion of the public expenditure in nominal terms (in rupiahs) for the following fiscal year. The US Federal Reserve and the IMF disapproved of this expansion, which provoked the collapse of the financial markets. But the point is that in real terms there was no expansion but a reduction of the public expenditure. A few weeks later, the IMF approved a budget that included a 46% increase in public expenditure in nominal terms. On January 15th, Indonesia signed the second agreement with the IMF. On this occasion, as in other countries before, the markets reacted negatively.

It was not until January 27th that the markets stabilised. The government announced the restructuring of the banking sector (managed by an institution created with that aim: the Bank Restructuring Agency). Moreover, it announced a short term debt rollover and a government guarantee for the commercial banks' obligations. Consequently the markets began to recover. The exchange rate decreased during the first half of the year, though with some oscillations. The facts that temporarily interrupted this trend were the tensions between Suharto and the IMF relating to the schedule of disbursements of funds in March, and the social and political uncertainties during the second fortnight of May.

3. Economic features before the crisis

In this section our aim is to disentangle the economic framework in which the crisis took place. With this purpose, we will describe the main economic features of the four Southeast Asian countries before the crisis. By means of studying such features, it will be easier to assess the sustainability of the growth achieved in previous years and to understand the interpretations of the crisis analysed in the next section.

3.1. The 1980s and Japanese foreign direct investment

Before studying the deficiencies that made these countries vulnerable, we should briefly revise the main features of their growth. Firstly, we must indicate that these countries began their rapid economic growth in the mid 1980s. These economies were highly indebted to foreign countries and the prices of their main export products (e.g. rubber and tin) were growing slower than the prices of their imports. Besides, these countries were applying structural adjustment programs. Thailand, Indonesia and The Philippines had signed agreements with the IMF, and Malaysia had its own adjustment program. These programs were meant to open these economies, liberalising financial and commercial flows. However, the liberalisation of financial movements was more pronounced than trade liberalisation, market deregulation and privatisation.

In such context, a crucial factor contributed to the growth in the 1980s and also allowed to impose some limits to the adjustments proposed by the IMF. This factor was the massive inflow of Japanese foreign direct investment (FDI). Between 1985 and 1990, it reached $15 billion. In Thailand, for example, Japanese investment in 1987 exceeded the investment accumulated in the 20 previous years (Bello, 1997). Furthermore, the Japanese investment favoured FDI inflows from other countries like Taiwan, Korea and Hong Kong.

This FDI reception was in part the result of the 1985 Plaza Agreement between Japan and the USA, according to which Japan let the yen appreciate. Consequently, Japan lost competitiveness and had to reallocate the most labour-intensive phases of its production to neighbouring countries (with the exception of The Philippines, which were going through a period of political instability after the Marcos era).

The growth rates recorded by these countries during that period were surprisingly high (almost an average of 6.5% in Thailand, Malaysia and Indonesia between 1983 and 1989). This record indicates that the FDI inflows were productive for these economies. It was not only due to the big amount of capital received, but also because this capital was moving towards production processes which were increasingly capital intensive. As a result, it favoured structural change, the generation of a middle class, and an increase in competitiveness. But there was a counterpart: the situation generated a high dependency upon the Japanese conglomerates and their technology. When, in the 1990s, the growth of Japanese FDI inflows began to slow down, the governments had to look for new sources of capital, in order to maintain high growth rates.

3.2. The 1990s and new financial inflows

Though the pace of growth of Japanese FDI decreased, the total amount of foreign capital inflows continued to increase. The share of debt (mostly short term debt) and portfolio investments in those new funds was growing faster than the share of FDI. In Thailand net capital inflows reached 10% of GDP in the first half of the 1990s, and they amounted to 13.4% in 1995. In Malaysia, they reached 9% of GDP in 1990-1995, and more than 15% in 1992 and 1993 (one special feature of Malaysia is that a large part of this inflow was still FDI). In Indonesia, the share of capital received as a percentage of GDP was notoriously lower: 4.2% between 1989 and 1995 (IMF, 1997).

We have already mentioned that there were several reasons for these countries to receive large amounts of foreign capital. Firstly, some special characteristics in the international financial markets favoured investment in emerging markets. Secondly, some features of the Asian economies provoked the inflow of a big share of those capitals from industrial countries.

With regards to the characteristics of the international markets, at the beginning of the 1990s interest rates in the USA and Japan were relatively low, thus favouring the outflow of capital from these countries in search of better rates in other markets. The Southeast Asian countries offered high interest rates with the aim of attracting foreign capital. As a consequence, they received a big share of capital looking for higher profitability. The globalisation process in the financial markets, as well as new investment products, facilitated capital movement towards emerging markets.

As to the internal features of South East Asia, one factor that attracted foreign capital was the high growth rates recorded in those countries, which also displayed low levels of inflation, low public deficits and high savings and investment rates. All these factors seemed to guarantee exchange rate stability.

Moreover, the governments accomplished a triple strategy in order to attract foreign capital, consisting of high interest rates, liberalisation of financial markets, and the use of a peg exchange rate of their currencies to the dollar. We have already mentioned that high domestic interest rates attracted foreign capital due to the relatively low rates in industrial countries. The downside of maintaining high interest rates was that they lessened the financing capacity of the domestic industry, and within it the one of the export industry. Regarding financial liberalisation, some barriers to capital movements were removed. This process was supported by the IMF and Western governments, banks and firms. For example, authorities allowed foreign investors to participate in the stock market and in national banking operations. They also reduced the control on foreign debt of national companies and abandoned the coordination between credit and investment. Further on, we will study how this liberalisation process, without being accompanied by an improvement in banking supervision, provoked more fragility and vulnerability in the financial system. Likewise, it may be argued that the control measures and the government coordination of credit and investment were basic pieces of the prevailing economic system. This is to say, without government coordination it is more probable that credits obtained by domestic companies tend to finance less productive activities. It also becomes more difficult for the economic authorities to carry out a national development strategy through credit controls (Wade and Veneroso, 1998a and b).

The third way of attracting capital consisted in maintaining their currencies pegged to the dollar, so that foreign investment would not suffer the possibility of a devaluation. Like high interest rates and financial liberalisation, the peg to the dollar had its pitfalls. The currencies of these countries appreciated 26.5% between 1990 and 1996. The baht appreciated 20%, the rupiah 20% and the ringgit 22%. The most extreme case is that of The Philippines, whose currency appreciated 44% in the same period. The reasons for the appreciation were the massive inflow of foreign capital or the inflation differentials with regard to their commercial partners. But the appreciation of the currencies became more and more pronounced when the yen was devalued from the beginning of 1995. The yen exchange rate to the US dollar went up from 85 yen per dollar in June 1995 to 127 yen per dollar in April 1997. The consequence for the Southeast Asian countries was a loss of competitiveness in markets such as Japan and Europe. So maybe the peg should have been established with a more equilibrated basket of currencies so as the dollar would not have carried so much weight. Anyway, if the peg remained a problem for these economies (because of the appreciation and because of the efforts to maintain the exchange rate) we should not blame those governments exclusively. The money managers were pressing the authorities on behalf of the peg so as to reduce the risk of their investments.

Besides these three strategies mentioned above, governments encouraged foreign investment through other measures. For instance, in Thailand they created the Bangkok International Banking Facility (BIBF), which had a special fiscal treatment because it was exclusively dedicated to lend and borrow in foreign currency. In The Philippines, while the banks were forced to create a 13% reserve for deposits denominated in pesos, they did not need to create reserves for deposits denominated in foreign currency.

3.3. Vulnerability of the financial system

We have analysed the internal and external factors explaining the inflow of foreign funds. We should now study what kind of funds those countries received in order to understand the vulnerability of the financial system. The new funds were mainly loans, except in Indonesia, where the inflow of foreign loans (in percent of GDP) decreased between 1985 and 1996. In Thailand, the most extreme case, foreign loans amounted to 7.1% of GDP in 1990-1995, while portfolio investment reached 1.5% and FDI also 1.5%. The Philippines displayed similar figures but in Malaysia FDI was 6.9% of GDP, which is much higher than the share of loans received (3.8%). It is significant that loans to the public sector in each of these countries represented less than 0.5% of GDP, except in The Philippines, where this percentage was 1.1% (table 1).

As the banks were the main borrowers (except in Indonesia), the external debt of the banking system grew notoriously. In The Philippines it grew from 8.8% of GDP in 1995 to 21% in mid 1997. In Thailand, since the creation of the BIBF, the external debt of financial institutions and banks went up to 28% of GDP in 1995. Indonesia is, logically, where this share was the lowest, reaching only 5.6% of GDP in 1996 (Radelet and Sachs, 1998a). Regarding the origin of the new funds, these were mainly from the USA, although most debts were owed to Japanese banks (table 2).

Short term loans (with a maturity of one year or less), as a proportion to the total debt, were quite high. From 1995 to mid 1997, short term debt amounted to almost 61.7% of the total debt (table 3). As a comparison, Mexico had 45% of short term debt at the end of 1995. The country with the lowest short term debt share was Malaysia, the highest being Thailand (only slightly lower than Korea).

Due to the reception of foreign funds, and to the fact that most borrowers were domestic banks, internal credit expanded. Domestic financial sector claims over the domestic private sector jumped from 67.7% of GDP in Thailand and 77% of GDP in Malaysia in 1991 to 101.9% of GDP in Thailand and 93.4% of GDP in Malaysia in 1996 (IMF, 1997). In the Philippines the internal credit was considerably lower (48.4% of GDP in 1996), but its annual growth reached 22.4% between 1993 and 1996. Only in Indonesia growth of internal credit was relatively low (from 50.3% of GDP in 1991 to 55.4% of GDP in 1996), owing to the fact that the private companies borrowed directly from abroad, thus domestic banks did not act as intermediaries, unlike in the other Southeast Asian countries.

We should now try to understand why the reception of loans and the expansion of internal credit contributed to market instability. Firstly, the liberalisation of the financial system and the expansion of new banking services were not supported by the necessary regulation and supervision. Furthermore, before liberalisation, the financial system was used to a government which coordinated the activities of the banking system according to the needs of the industry. Some examples of the deficiencies of these financial systems after liberalisation were that credit classification was too lax, or that there was not enough transparency in credit operations, or that bankruptcy legislation was inadequate. Despite the subsequent risks that could be found in an open and slightly regulated financial system, we should not blame these countries' governments because it is difficult to regulate a financial system at the pace that foreign capitals were arriving to the region: "institutional change generally cannot keep pace with the high levels of international capital flows" (Radelet and Sachs, 1998a, p.10).

Some authors (Krugman, 1998a; Corsetti *et al.*, 1998) state that another element that contributed to the fragility of the financial sector was that the credit was given according to the existing links between banks, politicians and industry, instead of to expected profitability. Besides, they argue that domestic banks felt protected from losses because their obligations were implicitly guaranteed by the governments. This provoked, on the one hand, the over-indebtedness of banks, and on the other, that banks did not have to worry about the destination of their credits.

The lack of supervision, combined with the institutional guarantees, allowed two facts that weakened these financial systems. Firstly, banks were indebted in foreign currency (mainly in US dollars) while they were lending in domestic currency. This implies that if the domestic currency devaluates (if the peg is abandoned), it is more difficult for the banks to service their debt in appreciated dollars, and even more because they continue to recover their loans in domestic currency. Secondly, banks were indebted in short term liabilities while they were lending on a long term basis. This increases the probability of a financial panic, given the risk of iliquidity in this kind of operation. In fact, a good indicator of the vulnerability of the financial system is the ratio of short term debt to reserves (Radelet and Sachs, 1998b). If this ratio is high, the withdrawal of funds caused by financial panic becomes more probable.

Another problem is that the credits given to the private sector were financing unproductive projects. There is no consensus about this fact. Some authors magnify the over-investment in non-productive activities (Krugman 1998a), whilst others state that only a modestly increasing share of the credit was invested in such activities, while most of it was still invested in productive projects (Radelet and Sachs, 1998b). Anyway, it seems that there were many speculative acquisitions in real estate and equities. For example, in 1996 loans and advances to financial and real estate sectors amounted to 21.5% of total loans in Thailand and to 39.2% in Malaysia (Radelet and Sachs, 1998b). There was also over-investment in public infrastructure projects which proved too ambitious. The negative effects of these new investments are evident in several indicators. First of all, the investment efficiency, measured by the ICOR (investment as percentage of GDP divided by the annual growth rate, table 4) decreased. Second, there was a high rate of bad loans before the crisis (over 15% in Thailand, Indonesia, Malaysia and Korea, according to Corsetti *et al*., 1998), particularly among those given to the real estate sector (around 50% of unpaid loans at the beginning of 1997). Finally, the prices of the real estate sector and the stock exchange market tended to grow.

3.4. Loss of external competitiveness

There was another feature of Thailand, Indonesia, Malaysia and The Philippines that contributed to their financial vulnerability: These countries had increasing current deficits and their export growth rates had been falling since the mid 1990s. Thailand displayed the highest current deficit in the first half of the decade, but Malaysia suffered the biggest decline (from a surplus of 2.4% of GDP in 1985-1989 to a deficit of 5.6% of GDP in 1990-1995). The opposite case is Indonesia, whose deficit did not grow at all since the previous decade (remaining at a level of 2.5% of GDP). Curiously, Indonesia has been one of the most seriously affected countries after the crisis erupted. The growth rate of exports decreased steeply in almost every country in 1995-1996 (table 5). Thailand experienced the worst decline (its export growth was 25.1% in 1995 and -1.3% in 1996). The less dramatic cases were Indonesia and The Philippines: in 1996 their exports grew even more than in 1994 and 1993 respectively.

There are several factors that might explain the increase in the current account deficit and the decrease in the growth rate of exports. Firstly, the US dollar's appreciation respective to the yen implied, because of the peg, the appreciation of these countries' currencies in terms of yen. Another reason could have been the increased international competitiveness of China. Its manufacturing exports grew 46% per year from 1989 to 1994 in nominal terms (Chelem database, CEPII), and it became the 11th biggest world export powerhouse. Also Mexican competition may have lessened Southeast Asian competitiveness. Mexico devalued the peso in 1994, and its exports increased from US$ 52 billion in 1993 to US$ 96 billion in 1996.

It is possible that the third reason might be the saturation of the world market of products in which these countries were specialised (automotive industry, semiconductors, petrochemicals...). World prices of manufacturing exports taken as a whole fell around 2% in 1996. Semiconductors were specially affected, and their price fell 80% in 1996. Malaysia and Korea suffered this fall more than others. That is why the unit value of their exports slumped, even more than their volume. Finally, the deceleration of Japanese growth in the 1990s also contributed to the decrease of the demand for products coming from these countries.

Deficits were not alarming until quite late, because, before the crisis erupted, it seemed that it was not so dangerous to have a current account deficit if foreign capital was being used in investment instead of in consumption, and if borrowers were private agents instead of governments. But when the crisis broke out, current deficits contributed to the outflow of foreign funds, because it corroborated the lenders' perception that these economies did not have enough funds to service their debt.

4. Interpretations of the crisis

We have described the economic framework of the Southeast Asian countries affected by the crisis, but we have not explained why a financial crisis did happen. It is possible to find different interpretations of what caused the crisis. We will study two of them (the "fundamentals and moral hazard" hypothesis and the "financial panic" hypothesis). Obviously there are more types of financial crises. For example we will not analyse the macroeconomic policy-induced crisis (or *canonical* model following Krugman, 1979). This type of crisis happens when the central bank excessively expands the domestic credit in order to finance a budget deficit or to assist a weak banking system. Such macroeconomic management is incompatible with the maintenance of a fixed exchange rate, and when the amount of foreign exchange reserves falls to a critical level a speculative attack occurs. But we will not study this model because it can't explain the Southeast Asian crisis, as the countries we deal with had a small budget deficit and they did not issue money to finance it. Neither will we study the "second generation models". There are many variants of these models, but all of them accept the possibility of self-fulfilling crises: "second generation models emphasise the reinforcing effects of the actions of economic agents in determining the movements from one equilibrium position to another" (Esquivel and Larraín, 1998, p. 4). Some second generation models consider that even countries with "good" fundamentals can suffer one of these self-fulfilling crises. But others consider that a crisis won't happen without a bad position of the fundamentals.

4.1. Fundamentals and moral hazard

There is a frequent interpretation of the crisis that explains it according to structural problems and among them the "moral hazard" issue. This explanation argues that in the Southeast Asian economies there were several domestic fundamentals that provoked the crisis, and that such "bad" fundamentals (described in section 3) were the consequence of mistakes in economic policy-making. The principal mistake was the pursuance of a high growth rate through a fixed nominal peg, the favouring of investment in non-profitable projects, and the institutional guarantees for domestic borrowers. According to Corsetti *et al*. (1998, p.10) "in the 1990s, such policies produced exchange rate misalignment, an investment boom in wrong sectors, an asset price bubble, and current account deficits".

This interpretation emphasises the role that public guaranties played in the birth of the crisis, through the so called moral hazard. According to this approach the loans borrowed by domestic banks from abroad are supported by public guaranties. The bank whose obligations are guaranteed "likes investments that could yield high returns if (it) gets lucky, even if there is also a strong possibility of heavy losses" (Krugman, 1998a, p. 4). That is, foreign capital is deviated towards less efficient and riskier projects than the projects a non-guarantied intermediary would invest in. In Southeast Asia these risky projects consisted mainly in investing heavily in real estate and equities. On the other hand, moral hazard leads to over-investment. When granting a loan, guarantied intermediaries do not consider the expected profitability of the project but the highest profitability possible for such project (the so called "pangloss value"), so for these intermediaries there are more profitable projects to invest in. That is why investors that receive loans from guarantied intermediaries will be willing to pay more than others for certain assets, thus pushing up the price of those assets, generating a speculative bubble.

This process ends when the government eliminates the institutional guaranties in view of the losses born by the intermediaries. That is, there is a moment when banks are unable to make their investments profitable because they were too risky. Therefore, the borrowers can not service their debt and institutional guaranties must come into play. When the cost of supporting the obligations of the banking system is too high, governments remove their guaranties. Then, banks have to reduce their investment so that the prices of real estate and equities fall, causing higher losses in the banking system. Thus the crisis starts: withdrawal of funds, attacks on domestic currency... In short, the financial crisis, following this interpretation, would be the result of over-investment in scarcely profitable sectors favoured by public guaranties. When the low profitability of these projects becomes evident, the authorities take the guaranties away, the bubble bursts and the crisis erupts.

4.2. Financial panic

This interpretation of the crisis considers that the "bad" fundamentals, on which the previous interpretation is supported, didn't cause the crisis. Investors don't remove their capital because the countries have solvency problems, but because they have liquidity problems. "A panic is an adverse equilibrium outcome in which short term creditors suddenly withdraw their loans from a solvent borrower" (Radelet and Sachs, 1998a, p. 3). This situation may occur under three circumstances: When short term debt exceeds short term assets; when there is no lender that can individually lend enough money for the borrowers to service their short term debt; and when there is no lender of last resort. Under all these conditions, crisis begins when the financial market is unable or does not want to give more credit to certain borrowers (in this case, the Southeast Asian countries). Each individual lender stops renewing its credit when he considers that the other lenders are not going to renew theirs. The reason for the individual lender to remove its credit is that the borrowers are perceived to be unable to finance their investments with just one more credit, meaning they won't be able to achieve enough money to pay the debt. And logically, there is no individual lender who wants to be the one who gives that one more credit, because the borrowers will not return it. When all this happens, each individual lender, apart from not giving more credit, wants to be the first one to get his money back before the borrower runs out of funds, which accelerates the withdrawal of credit. A consequence of this withdrawal of foreign credit is the contraction of internal credit, which implies the bankruptcy or the fall in the value not only of inefficient firms, but also of profitable and efficient ones that can not find financing sources anymore.

There are more explanations about how financial panic works. One of them may be that information in financial markets is uneven. If an investor takes his credit away because the information he has access to is not positive, it could be that a second investor imitates the first one's decision although he has good news, because he knows that he is missing the information the other one has. After these two, there may be a third investor, that also has positive information about the markets, but that also withdraws his credit because he supposes that the information the other two had was negative, and so on (Krugman, 1998b, p.7). Radelet and Sachs (1998a and b) consider that financial panic is the better explanation for Southeast Asian countries. On the one hand, the fundamentals were not as unfavourable as to impede the service of the debt (that is to say that these countries were solvent), and it was possible to adjust the exchange rate in the mid 1990s without a financial collapse. On the other hand, these countries complied with the three conditions described above. Short term debt was higher than short term assets (in all these countries the ratio of short term debt to reserves in foreign currency exceeded one); there was no individual investor who could lend that amount of short term debt; and there was no lender of last resort. These authors study which variables entail a higher financial vulnerability (Radelet and Sachs, 1998b, p.25), and they conclude that the most significant variable is precisely the ratio of short term debt as a proportion to reserves, this is to say, the economy's liquidity, but not its solvency. "The defining element of such crisis has been the vulnerability to panic, as measured by high levels of short term debt to reserves" (Radelet and Sachs, 1998b, p.27). We have studied how Southeast Asian countries were vulnerable to financial panic because of their liquidity problems. But what caused the withdrawal of funds? According to these same authors, it may be that in Thailand the failure of important financial companies (e.g. Finance One) and political uncertainties provoked the panic. In Malaysia, contagion played a crucial role. In The Philippines and Indonesia political uncertainties and contagion also stand out.

Other authors (Wade and Veneroso) agree with Radelet and Sachs in that the crisis was a problem of illiquidity more than of insolvency. Moreover, they agree with them in the reason why creditors withdrew their capital: An individual investor reacts according to how he thinks other lenders are going to react. They also think that the financial market overreacted so that the grab race of funds led even solvent companies to bankruptcy. All these facts indicate that Wade and Veneroso accept the financial panic explanation for the outbreak of the South East Asian crisis. But there is one important difference between one approach and the other: Wade and Veneroso emphasise the role of financial deregulation as a cause of the crisis "It (the crisis) happened partly because of excessive financial *deregulation*, including, above all, allowing banks and firms to borrow abroad without any government control or coordination" (Wade and Veneroso, 1998b, p.1-2). That is, Wade and Veneroso consider the existence of structural problems among the causes of the crisis. The inclusion of structural problems in their proposal could bring them near to the fundamentals hypothesis. But there is also an important difference. Corsetti *et al*. criticise the lack of institutional supervision over the Asian financial sector after liberalisation. They plead for a Western type of control over a non-indebted banking system and they criticise the so called "crony capitalism". Instead, Wade and Veneroso defend the control system functioning before liberalisation, which did not necessarily implicate corruption and favouritism but also "the financial rationale for cooperative, long term, reciprocal relations between firms, banks and governments in a system which intermediates high savings into high corporate debt/equity ratios" (Wade and Veneroso, 1998b, p.3).

5. Conclusions

The four countries studied show many common characteristics, though there are some important differences that we should not forget. For example, Malaysia stands out due to the high share of FDI received, Indonesia for the better fundamentals it had before the crisis, or The Philippines for the slower pace of its growth. But in summary, all these countries have suffered a financial crisis because the variables in which their growth was supported became unsustainable in a context of a rapid liberalisation process. The financial crisis has revealed that there were domestic and external problems that drove them (necessarily or not, depending on the interpretation preferred) into a financial crisis. The internal facts have been mainly the lack of supervision of the newly open financial sector and the decreasing links between the banking system, the entrepreneurial sector and the government, all of which led to high vulnerability of the financial systems of these countries. The external facts were, for instance, the evolution of demand for their exports or the US dollar's appreciation respective to the yen. But most important was the so called globalisation process that is taking place in the financial market and that allowed the massive inflow (and then outflow) of foreign capital. We will not discuss how to avoid these kind of internal and external difficulties. But we can indicate that, regarding the domestic problems of these countries, it is important to study carefully the internal features of these economies so as to identify their particularities and to recommend specific policies for their specific problems. And regarding the external facts, globalisation implies such a speed in capital movements that it makes very difficult for those countries to achieve growth and stability without a well regulated financial system. A possible solution could be the creation of an international institution able to control the capital flows, or the permission given to governments to impose some limits to capital inflows. Regarding the interpretations of the crisis (studied in section 4) we consider that it is possible to combine some elements of both. This is to say, they are not totally incompatible. The "financial panic" hypothesis states that structural deficiencies existed and that the crisis was supported on them, but that they didn't cause the crisis. Moreover, it states that the problem of these economies was not of solvency, but of liquidity. On the other hand, the "fundamentals" hypothesis considers that structural problems led to the crisis and that these countries had solvency problems caused by the bad quality of their investments. Therefore, it could be that a difference between both approaches is that the "financial panic" hypothesis takes into account short term variables (impossibility of paying the short term debt), while the "fundamentals" hypothesis takes into account long term variables (insolvency caused by the bad quality of investments in the long run). In this way, both interpretations could be accepted at the same time in the sense that it is possible for a country to have structural problems that ultimately provoke solvency problems, but that already in the short term provoke liquidity problems which cause the financial panic.

Table 1. Balance of payments (as % of GDP)

	Indonesia		**Malaysia**		**Philippines**		**Thailand**	
	85-89	90-95	85-89	90-95	85-89	90-95	85-89	90-95
Current Account	-2.5	-2.5	2.4	-5.6	-0.5	-3.3	-2	-6.8
Balance of Trade	5.9	4.5	13.7	3.2	-2.9	-8.7	-2.2	-4.7
Exports	21.9	24.2	56.1	73.2	17.1	17.4	22.9	29.6
Imports	-15.9	-19.7	-42.5	-70	-20	-26.1	-25.1	-34.3
Capital and Financial Account	3.5	4.1	0.5	9.6	1.4	5.5	4.2	10.2
Direct Investment (net)	0.5	1.2	2.4	6.9	1	1.1	1.1	1.5
Portfolio Investment (net)	0	0.9	1	-1	0.2	0.3	1.2	1.5
Equity Securities	0	0.5	0	0	0	0	0.8	0.7
Debt Securities	0	0.4	1	-1	0.2	0.3	0.4	0.9
Other Investment (net)	3	2	-2.8	3.8	0.2	4	2	7.1
Monetary Authorities	0	0	0	0	-0.6	0	0	0
General Government	2.6	0.5	-1.7	-0.3	2.3	1.1	0.2	-0.4
Banks	0	0.4	-1	1.8	-0.2	1.4	0.2	3.5
Other Sectors	0.4	1.2	0	2.4	-1.2	1.6	1.5	4
Financing	-0.1	-1.1	-2.9	-5	-1.8	-1.8	-3	-3.6
Reserve Assets	-0.2	-1	-2.7	-5	-1	-1.7	-2.7	-3.5

Source: Radelet and Sachs

Table 2. International claims held by foreign banks, distribution by country of origin (US$ billion)

	Total	Japan	USA	Germany	All Others
A. End 1995					
Indonesia	44.5	21	2.8	3.9	16.8
Malaysia	16.8	7.3	1.5	2.2	5.8
Philippines	8.3	1	2.9	0.7	3.7
Thailand	62.8	36.9	4.1	5	16.8
Sub-Total	132.4	66.2	10.4	11.8	84.2
Total, all reporting countries		429.3	132.6	264	
B. End 1996					
Indonesia	55.5	22	5.3	5.5	22.7
Malaysia	22.2	8.2	2.3	3.9	7.8
Philippines	13.3	1.6	3.9	1.8	6
Thailand	70.2	37.5	5	6.9	20.8
Sub-Total	161.2	69.3	16.5	18.1	57.3
Total, all reporting countries		389.4	165.7	292.3	
C. Mid 1997					
Indonesia	58.7	23.2	4.6	5.6	25.3
Malaysia	28.8	10.5	2.4	5.7	10.2
Philippines	14.1	2.1	2.8	2	7.2
Thailand	69.4	37.7	4	7.6	20.1
Sub-Total	170.3	73.4	13.8	20.9	62.8
Total, all reporting countries		404.4	166.3	301.2	

Source: Bank for International Settlements

Table 3. International claims held by foreign banks, distribution by maturity and sector (US$ billion)

		Obligations by Sector							
	Total	Banks	Public Sector	Non-bank	/Private	Short Term		Reserves	Short Term Reserves
A. End 1995									
Indonesia	44.5	8.9	6.7	28.8	27.6		14.7	1.9	
Malaysia	16.8	4.4	2.1	10.1	7.9		23.9	0.3	
Philippines	8.3	2.2	2.7	3.4	4.1		7.8	0.5	
Thailand	62.8	25.8	2.3	34.7	43.6		37	1.2	
Total	132.4	41.3	13.8	77	83.2				
B. End 1996									
Indonesia	55.5	11.7	6.9	36.8	34.2		19.3	1.8	
Malaysia	22.2	6.5	2	13.7	11.2		27.1	0.4	
Philippines	13.3	5.2	2.7	5.3	7.7		11.7	0.7	
Thailand	70.2	25.9	2.3	41.9	45.7		38.7	1.2	
Total	161.2	49.3	13.9	97.7	98.8				
C. Mid 1997									
Indonesia	58.7	12.4	6.5	39.7	34.7		20.3	1.7	
Malaysia	28.8	10.5	1.9	16.5	16.3		26.6	0.6	
Philippines	14.1	5.5	1.9	6.8	8.3		9.8	0.8	
Thailand	69.4	26.1	2	41.3	45.6		31.4	1.5	
Total	171	54.5	11.6	104.3	104.9				
Mexico									
End 1994	64.6	16.7	24.9	22.8	33.2		6.4	5.2	
End 1995	57.3	11.5	23.5	22.3	26		17.1	1.5	

Source: Bank for International Settlements

Table 4. Incremental Capital-Output Ratios

	1987-1989	1990-1992	1993-1995
Indonesia	4	3.9	4.4
Malaysia	3.6	4.4	5
Philippines	3.3	22.8	6
Thailand	2.9	4.6	5.2

Source: World Bank

Table 5. Changes in Exports and Imports

	Exports Value		Growth	Exports Volume	Growth	Change in Unit Value
	1995	1996	1995	1996	1995	1996
China	22.9	1.6	15.3	8.3	6.6	-6.2
India	22.7	7.4	22.4	16.9	0.2	-8.1
Hong Kong	14.8	4	1.9	-8.6	12.6	13.8
Korea	30.3	3.7	24	19.1	5	-12.9
Singapore	22.1	5.7	15.7	6.3	5.6	-0.6
Indonesia	13.4	9.7	10.3	4.8	2.8	4.7
Malaysia	26	5.8	15.6	13.6	9	-6.9
Philippines	31.6	16.7	17	18.8	12.4	-1.8
Thailand	25.1	-1.3	14.2	-0.7	9.5	-0.6
Argentina	33.9	13.6	17.8	3.2	13.7	10
Mexico	40.3	22.6	24.5	14.7	12.7	6.9
Poland	34.3	6.8	30.8	6.9	2.7	-0.1

	Imports Value		Growth	Imports Volume	Growth	Change in Unit Value
	1995	1996	1995	1996	1995	1996
China	11.6	7.6	15.1	16.4	-3	-7.5
India	28.6	8.3	23.6	18.9	4	-8.9
Hong Kong	19.2	3	13.6	4	4.9	-1
Korea	32	11.3	21.2	11.9	8.9	-0.6
Singapore	21.3	5.5	13	6.4	7.3	-0.9
Indonesia	27	5.7	17.4	10.7	8.2	-4.6
Malaysia	30.5	0.9	23.4	17.7	5.8	-14.3
Philippines	25.7	20.4	14.6	24.2	9.7	-3
Thailand	30	3.8	15.9	-3.6	12.1	7.7
Argentina	-6.5	18.1	-17.5	25.2	13.3	-5.7
Mexico	-23.1	30.4	-14.9	20.8	-9.6	8
Poland	35.9	27.8	24.5	28.9	9.1	-0.8

Sources: IFS, BIS

Table 6. Crisis Indicators

	Current Account (% of GDP) 1996	Real Exchange Rate (1990=100) 1996	Financial Institutions Claims on Private Sector (% of GDP) 1996	Short Term Debt / Reserves June 1994	June 1997
Indonesia	-3.5	80	55.4	1.7	1.7
Malaysia	-5.3	78	144.6	0.3	0.6
Philippines	-4.3	56	48.4	0.4	0.8
Thailand	-8	80	141.9	1	1.5
Taiwan	4.4		165	0.2	0.2
Mexico	-0.6	95	21.6	1.7	1.2
Venezuela	13.1		9.6	0.8	0.3
Argentina	-1.4	44	18.4	1.3	1.2

Sources: Bank for International Settlements, IMF, Radelet and Sachs

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