ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

Asia and the Global Crisis

The Industrial Dimension

OECD

Chapter 2

THE ORIGINS OF THE CRISIS

Introduction

There has been extensive debate on whether or not the financial crisis in Asia was inevitable. Some observers, including Radelet and Sachs (1998), have argued that the crisis was largely an artefact of external, global forces which made international financial markets prone to panic. It has also been observed that the first attempts to stem the tide of capital outflows in the Asian countries, including the measures "enforced" by the International Monetary Fund, failed partly because they relied on a dramatic increase in interest rates which strangled domestic demand and worsened the situation for the highly indebted private sector in Asian countries.

While financial factors and processes triggered the crisis, it is clear that a number of underlying structural factors played a role in Indonesia, Korea, Malaysia, the Philippines and Thailand (Furman and Stiglitz, 1999). This chapter addresses the role of factors and policies related to industry. A brief background on structural developments in Korea, Malaysia and Thailand is provided. Differences in developments in Hong Kong, Singapore and Chinese Taipei are noted. The key problem areas are then highlighted. Statistical information relating to the topics addressed in the chapter can be found in Annex 1, Tables 1 to 9.

Country profiles

triggered what was to follow. Investors and bankers became nervous, fuelling a reversal in capital flows in the other countries of the region as well.

On closer examination, however, it becomes apparent that the crisis has been far more than a financial, or even macroeconomic, phenomenon. There is growing recognition that key structural weaknesses in industry had been allowed to develop in a number of Asian economies, and that these weaknesses were the underlying cause of the crisis. It is useful to review some of these developments on a country-by-country basis.

Korea

Korea has the highest level of industrialisation among the crisis-affected Asian economies. The country has experienced several decades of very strong economic development. Its annual industrial growth averaged 10.7% between 1976 and 1986, and 8.3% during the decade ending in 1997. The Korean industrialisation process started with the development of labour-intensive light industry in the 1960s; the country then began to emphasise capital-intensive heavy industry, and achieved significant progress in the metal, machinery and chemical industries from the beginning of the 1970s. In the 1980s, high-technology industries, such as motor vehicles, semiconductors and computer chips, gained momentum. During the first half of the 1990s, the share of high-technology industry in the manufacturing sector grew from 18% to 30% in terms of output and from 14% to 42% in terms of employment (OECK04 Tw t-4((e)11(hic 4((n[etx.nne)1wpetween)2(st3(en)(t)8(hgf)9(r)T* 0.357 2t (OECK04 a

Malaysia

Malaysia's economic performance has been very strong in the last several decades. Real GDP grew at 8.7% a year between 1991 and 1996, inflation averaged around 3.8% over the same period, and unemployment was low, at 2.5% in 1996. Manufacturing accounted for 34% of GDP in 1997, up from 12% in 1970. Malaysia's industrial development has been markedly export-oriented, and the share of manufactured exports in total exports increased from 11% in 1970 to 81% in 1997. Despite this impressive performance, Malaysia is confronted with a number of serious structural weaknesses, which were recognised at the beginning of the 1990s in the Sixth Malaysia Plan (1991-95) (Box 2). The Malaysian economy has in essence been overheating since 1991, generating upward pressure on factor prices, with wage increases exceeding productivity gains. In the absence of efficiency improvements, growth was chiefly achieved through capacity expansion, a situation that could not be

Malaysian labour costs have increased markedly along with the emergence of labour shortages, which have led to substantial imports of labour. Currently, some 1.14 million legal foreign workers constitute 13% of the Malaysian labour force. The future strength of Malaysia's industry will no doubt be strongly influenced by its technological competence, including the supply of human capital. Malaysia has limited educational capacity, however, and many Malaysian students go abroad to pursue their studies. About 38% of students in tertiary education studied abroad in 1988 (Lall, 1998a). At present about 54 000 students are pursuing tertiary-level courses in foreign institutions. The bottleneck facing the Malaysian educational system is the lack of qualified teachers, rather than the lack of financial resources (World Bank, 1998c) – a situation typical of countries having experienced rapid industrialisation in their most recent histories. As Malaysia moves up the ladder of the value-added chain, the capacity and quality of its higher education system becomes increasingly important.

Thailand

Until the onset of the crisis in July 1997, Thailand had experienced decades of impressive economic development. Growth in real per capita income averaged 5% per annum and real GDP grew at about 9% per annum from 1986 onwards, before slowing in 1996. The manufacturing sector, which employs more than 4 million workers, accounts for 29% of GDP and more than 70% of export earnings. Thailand has gradually embarked upon an export-led growth strategy, initially fostering industries that were able to exploit the low labour costs that the country enjoyed in the early stages of its economic development.

Thailand's industrial development benefited from the relocation of labour-intensive industries by multinational firms from high-labour-cost industrialised countries. This provided Thailand not only with the capital and technologies needed for rapid industrialisation, but also with well-developed channels to large foreign markets. In addition, exports benefited from the privileges of the Generalised System of Preferences (GSP) to which Thailand was entitled as a developing country. Under these favourable conditions, export growth of Thai manufactured goods averaged 24.4% per annum between 2vee e3e0.3o fonuk5 Tet(c) The1n(isa)0pecy

High-technology industry has grown rapidly in Thailand during the 1990s. Technology-intensive exports increased on average by 31% per year between 1992 and 1995, accounting for 54% of total manufactured exports in 1996, up from 42% in 1992 (Lall, 1998b). The development of high-technology industry in Thailand was built on foreign capital, foreign technology and foreign product designs; final products, moreover, relied significantly on foreign markets. For example, the electronics sector absorbed nearly 40% of foreign direct investment in manufacturing in Thailand between 1995 and 1997 (UNCTAD, 1998a). On average, imported contents accounted for 80% of the value of high-technology exports.

Other Asian economies

The crisis did not affect all developing Asian countries similarly. Hong Kong, Singapore and Chinese Taipei, for example, have so far escaped with relatively little damage. One of the reasons for this is that they have managed structural change more effectively during the course of rapid industrialisation. The cultural, linguistic and geographic advantages enjoyed by Hong Kong, Singapore and Chinese Taipei are likely to have contributed to their successful industrial restructuring. Nevertheless, their experience in terms of policy provides useful lessons.

First, these economies not only have sound macroeconomic fundamentals, but also a relatively free entrepreneurial climate. Hong Kong is recognised as the freest market economy in the world and it also has a very flexible labour market. Singapore has a relatively transparent regulatory environment run by a stable government. Chinese Taipei, which used to be known for its interventionist industrial policies, has, since 1980, opted to increase the economy's receptiveness to market forces (Schive, 1995). Market mechanisms have thus been given a major role in resource allocation and structural adjustment. There is limited policy-induced resource misallocation. Sound macroeconomic management based on prudent fiscal policy and conservative monetary policy have counter-acted a build-up of industrial over-capacity.

Second, governments and private sectors in these economies have attached great importance to investments in human capital and R&D. This becomes particularly important when an economy

promotion of strategic alliances, upgrading of technologies and labour training. Even more important has been the insurance fund for SME credit, which reportedly has been very successful, with a low rate of loan defaults (Schive, 1995). SMEs are often regarded as having a disadvantage in access to information. However, Chinese Taipei's experience shows that the diffusion of new technology, if it involves no heavy capital investment, and of new products, is particularly rapid in SME-concentrated industries. It is argued that this is because SMEs have an advantage in learning quickly which tends to offset the disadvantage in access to information. However, networking and a critical mass are important conditions for enhancing the learning effect and technology diffusion.

Fourth, massive overseas relocation of labour-intensive production has taken place over the last two decades, as many of Hong Kong's labour-intensive industries moved their plants to Guangdong, in mainland China, which has become their "backyard workshop". On the other hand, Hong Kong continues to act as the "front shop" for these enterprises, linking goods to the international market. It is estimated that Hong Kong manufacturing facilities in China today employ up to 4 million workers, more than the total size of Hong Kong's labour force. Firms from Chinese Taipei carried out similar relocation of labour-intensive production via large investments in mainland China. It is interesting to note that the Chinese Taipei authorities sought to discourage such investments; those that did occur

generation of developing countries, a phenomenon which in Asia became known as the “flying wild geese”. However, just as the success of the Asian countries was interrelated, so was the danger that they would fall together. This risk of collective failure was particularly difficult to predict.

In addition, another important consideration is the fact that the preconditions for continued success in Asia, as elsewhere, have changed gradually but systematically. This factor is related to the growing hold of the so-called “knowledge-based economy”. Those industries whose shares of production, value added and trade are on the increase in the world economy, tend to be relatively intensive in their use of new technology and knowledge. Furthermore, technology and knowledge are becoming increasingly important as production factors across a widening spectrum of industrial activities, including services. In particular, the widespread adoption of information and communication technology offers enormous new opportunities for accessing and using information on a global scale (OECD, 1999b).

As Asia developed, the individual countries cherished increasing ambitions to compete in more and more technologically advanced industries, where value added was higher and higher wages could be offered to workers. However, some of the conditions and policies which had succeeded in the past became increasingly burdensome and/or redundant. Some of the main problem areas are considered below (see also Box 3 and Table 3).

Targeting

First, a number of Asian economies adopted ambitious development programmes targeting investment in heavy and high-tech industries (Table 2). Compared to other developing countries, which had promoted industrial development by substituting for imports, it is true that the Asian countries did encourage industrial output that could be competitive on world markets. Nevertheless, market forces were put to the side.

Table 2. Industrialisation plans in selected Asian countries

Corporate governance

Corporate governance refers to the framework of rules and regulations that shape the extent to which shareholders and other stakeholders can exercise oversight and control over a company. The conditions for corporate governance in the Asian countries have played an important role over the years, shaping success as well as failure. The dominant model in the region is based on close relationships between corporations, banks and governments, leading to a strong commitment by multiple stakeholders to the survival and growth of companies. Accounting tends to be highly non-transparent, however, and the rights of minority shareholders are weak. This situation was further aggravated by the barriers to mergers and acquisitions, both legal and due to business practices and the nature of stakeholder involvement in Asia. Before the crisis took hold in 1997, there were, in fact, relatively few mergers and acquisitions in the region.

Insufficient oversight by banks and regulatory authorities, and the lack of transparency and accountability to shareholders, gave corporations an inordinate amount of discretion in their business decisions, and they were often backed by political support. As a result, a good number of ill-advised investments worked their way into companies' portfolios. These bad investments have intensified the restructuring that will be required, as there is little hope that such dubious projects can, or should, be made viable. The commitment made by the crisis economies to liberalising trade and investment will, in fact, put further pressure on companies to jettison weak investments.

SMEs

The focus and favouritism towards targeted industries in the crisis economies came at the expense of small and medium-sized enterprises, which generally received relatively little policy attention. Critical linkages between larger firms and SMEs failed to develop, leading to an increased reliance on imported inputs and technology, limi7.001 Tc1(rgl/)8(ted 041 TDtowargt)7(i)-4(ve)11(ca)7(ogy6ac7(t)73( )11(b1

capacities, labour shortages and rising wages, the Asian crisis economies appear to have misjudged the comparative advantages within their reach. As a consequence, they probably lost their edge in production based on low labour costs prematurely.

Box 3. Industry-related factors in the Asian crisis economies

- Over-capacity created by over-investment in certain sectors.
- Insufficient diversity of industrial structure, including excessive reliance of some industries on export markets.
- High reliance of certain export industries on imports of inputs and machinery.
- Overemphasis on large enterprises to the detriment of small firms.
- Lack of linkages between export-oriented industries and other sectors.
- Lack of industrial linkages between high-technology and supporting sectors.
- Outdated technologies and machinery in many domestic industries.
- Shortages of skills and of technological and managerial competencies.
- Weak transparency and deficiencies in corporate governance structures.

Table 3. Summary of major structural weaknesses

	Over-capacity[1]	Insufficient technological capability[2]	Unfavourable conditions for SMEs
China	++++	++	+
Hong Kong	-	++	No
Indonesia	+++	+++	++
Korea	++++	+	++++
Malaysia	++++	++++	+++
Philippines	+++	+++	++
Singapore	+	+	++
Chinese Taipei	-	+	No
Thailand	+++	++++	+++

Note: Crosses indicate the degree to which each element is problematic, from relatively low (+) to relatively high (++++). "-" indicates unknown, and "No" indicates no problem.

1. The degree of over-capacity varies markedly across sectors. It provides a rough estimate of the seriousness of the problem in those sectors which are most affected within each economy.

2. This element assesses the degree of technological capability, relative to the stage of each country's development (*i.e.*

Conclusions

The industry-related factors which contributed to the crisis in the Asian countries are summarised in Box 3. Their impact can be summed up as three major structural weaknesses: over-capacity; insufficient technological capability; and an unfavourable environment for small and medium-sized enterprises. Table 3 provides an estimation of the extent to which these impacts were present in a number of the economies in the region, including those most affected by the crisis.

This situation led to a dichotomous structure; large industries co-exist with small firms which are labour-intensive and sometimes low-technology, and there are insufficient linkages between the two. The build-up of excess capacity was facilitated by lack of transparency in domestic financial markets