วารสาร
เศรษฐศาสตร์
ธรรมศาสตร์

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วารสารเศรษฐศาสตร์ธรรมศาสตร์

เจ้าของ คณะเศรษฐศาสตร์ มหาวิทยาลัยธรรมศาสตร์

กำหนดการวางตลาด มีนาคม มิถุนายน กันยายน และธันวาคม

การส่งบทความ ดูระเบียบฯ ปกหลังด้านใน

อัตราค่าสมัครสมาชิกวารสารเศรษฐศาสตร์ธรรมศาสตร์

ก. **ภายในประเทศ**

บุคคลทั่วไป	ปีละ 400 บาท
ราคาขายปลีก	ฉบับละ 100 บาท

ข. **ต่างประเทศ**

จุดปลายทาง	อัตราค่าสมาชิก	
	ทางเรือ	ทางเมล์อากาศ
อเมริกา	700	900
ยุโรป	700	800
ออสเตรเลีย	700	800
ญี่ปุ่น	700	700
อาเซียน	700	700

(ใบสมัครสมาชิกวารสารและรายละเอียดการชำระค่าสมาชิกอยู่ท้ายเล่ม)

แห่งเดียวในประเทศไทย

หลักสูตรนานาชาติ ครบวงจร
ปริญญาตรี - โท - เอก

ที่คณะเศรษฐศาสตร์ มหาวิทยาลัยธรรมศาสตร์

สอนโดยอาจารย์ผู้เชี่ยวชาญทั้งชาวไทย
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วารสารเศรษฐศาสตร์ธรรมศาสตร์มีนโยบายที่จะเผยแพร่ผลงานทางวิชาการในสาขาวิชาเศรษฐศาสตร์ โดยไม่คำนึงถึงความแตกต่างทางด้านปรัชญาพื้นฐาน ระเบียบวิธีการศึกษา และอุดมการณ์ทางการเมือง

วารสาร

เศรษฐศาสตร์ ธรรมศาสตร์

ปีที่ 17 ฉบับที่ 1 **มีนาคม 2542**

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Trade Policy and Economic Growth*

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บทคัดย่อ

นโยบายการค้าและการเติบโตทางเศรษฐกิจ

โดย วิลเลียม แมคเคลียรี

บทความนี้ศึกษาผลของนโยบายการค้าที่มีต่อการพัฒนาเศรษฐกิจและพยายามมองภาพในระยะยาว โดยการมองย้อนกลับไปยังประสบการณ์ในช่วง 4 ทศวรรษที่ผ่านมา และมองเลยหลังจากวิกฤตการณ์ทางเศรษฐกิจในเอเชียที่เกิดขึ้นในปัจจุบัน บทความนี้ศึกษาประสบการณ์จากประเทศกำลังพัฒนา โดยเฉพาะอย่างยิ่งประเทศเอเชียตะวันออก และตั้งคำถามว่าตัวแปรด้านนโยบายเศรษฐกิจและลักษณะโครงสร้างบางประการสามารถอธิบายได้เพียงไรว่า ทำไมบางประเทศจึงพัฒนาได้ดีกว่าประเทศอื่น ๆ บทความนี้ได้แบ่งออกเป็น 4 ส่วน ส่วนแรกกล่าวถึงการพัฒนาของประเทศกำลังพัฒนาในช่วง ค.ศ.1965-1997 และชี้ให้เห็นว่ามีประเทศกำลังพัฒนาเพียงส่วนน้อย (ซึ่งส่วนใหญ่เป็นประเทศในเอเชียตะวันออก) ที่ได้เติบโตอย่างรวดเร็วมากและสามารถไล่ตามประเทศอุตสาหกรรมได้ทัน ขณะที่ประเทศด้อยพัฒนาส่วนใหญ่เติบโตช้า และส่วนมากกำลังถดถอย ส่วนที่สองกล่าวถึงที่มาของ Washington Consensus ซึ่งเป็นแนวคิดที่ว่ากลยุทธการพัฒนาที่จะประสบความสำเร็จได้ต้องใช้นโยบายเปิดเสรีการค้า พึ่งพากลไกตลาดให้มากขึ้น และลดการแทรกแซงจากภาครัฐ ซึ่งกลยุทธ์เหล่านี้เป็นบทเรียนที่ได้จากความล้มเหลวของนโยบายทดแทนการนำเข้าที่ใช้ใน 2-3 ทศวรรษหลังจากสงครามโลกครั้งที่สอง และความสำเร็จของนโยบายการพัฒนาแบบ outward-looking ในประเทศเอเชียตะวันออก การศึกษาในส่วนนี้ได้เสนอผลการศึกษาจากแบบจำลองที่ใช้ปัจจัยด้านโครงสร้าง ตัวแปร

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* An earlier version of this paper was presented as " Three Globalization Issues : An Overview Paper" at the Faculty of Economics, Thammasat University's Fiftieth Anniversary International Conference on the Challenges of Globalization at the Royal Orchid Sheraton Hotel in Bangkok on October 21-22, 1999.

ด้านประชากร และตัวแปรด้านนโยบายบางตัว มาอธิบายความแตกต่างของการพัฒนาของภูมิภาคที่กำลังพัฒนาต่าง ๆ ในส่วนที่สาม เสนอแนวคิดว่า แม้นโยบายการค้าเป็นสิ่งสำคัญ แต่นโยบายอื่น ๆ ก็มีความสำคัญไม่แพ้กัน ในส่วนสุดท้าย เป็นบทสรุปและข้อเสนอแนะ

Abstract

This paper concentrates on the trade policy aspects of economic development and tries to take a long-term view looking back at the experience of the past four decades and forward beyond the impacts of the current Asian economic crisis. It looks at the experience of the developing countries - and particularly the East Asian economies - and asks to what extent various structural characteristics and economic policies, especially trade policies, explain why some countries have done so much better than others. The paper is organized in four sections. The first section reviews the performance of developing countries 1965-1997 and points out that only a handful of developing countries -the bulk of them in East Asia - have been growing very rapidly and catching up with the industrialized countries. The overwhelming majority of less developed countries have been growing more slowly and a large number even declining. The second section discusses the origins of the so-called "Washington Consensus", the idea that successful development strategies require open trade policies, increased reliance on market forces and minimal reliance on interventions on the part of the government. It finds these origins in the supposed poor performance of import substitution policies followed in the first 2-3 decades after World War II and in the successful performance of the outward-looking East Asian economies. Section two also presents the results of a model which uses structural factors, demographic variables and and some policy variables to explain the differing performance of the various developing regions. The third section argues that, while admittedly trade policies are important, other policies have also played a critical role, that East Asian economies are less open than is commonly realized and that governments have and will likely continue to play a critical role in making liberalizations successful. The final section sums up and provides conclusions.

1. Introduction

It is now almost universally recognized that we are living in an increasingly globalized world economy, certainly more so than 3-4 decades ago and perhaps even more so than only just a decade ago. Trade forms a much larger share of world product than before. Goods and services, real and financial capital, labor, technology and ideas all flow across national borders more readily and in greater quantities than before. To the economies of East and Southeast Asia, globalization appears to have brought clear benefits in terms of faster economic growth, rising shares of international capital, access to new technology and sources of productivity growth, and increasing per capita incomes which have helped to raise large numbers of people out of poverty. Globalization, however, has an apparent downside by exposing countries to the possibility of large outflows of capital where government macroeconomic and financial policies appear to be out of line or where questionable investment strategies are being followed; by increasing pressures for more dynamic human resource development strategies and for improved social safety nets; and by putting urban and rural environmental resources under growing strains. In addition, the growing closeness and competition between economies is bringing more intense pressures for greater harmonization not only in trade policies but also in environmental and labor standards.

This paper concentrates on the trade policy aspects of economic development and tries to take a long-term view looking back at the experience of the past four decades and forward beyond the impacts of the current Asian economic crisis. It looks at the experience of the developing countries – and particularly the East Asian economies – and asks to what extent various structural characteristics and economic policies, especially trade policies, explain why some countries have done so much better than others. The paper is organized in four sections. The next section reviews the performance of developing countries 1965-1997 and points out that only a handful of developing countries –the bulk of them in East Asia – have been growing very rapidly and catching up with the industrialized countries. The overwhelming majority of less developed countries have been growing more slowly and

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2. The Economic Performance of Developing Countries

Start with the question "how well have the less developed countries been doing in general and relative to the industrialized countries over the past several decades?" I am quite aware that the answer could be quite complex – involving not just income growth but social indicators and other aspects of well-being such as freedom, the environment , poverty and income distribution – but lets keep it relatively simple by just looking at the growth of GNP per capita in the developing countries themselves and relative to the richer countries. An examination of Table 1, which covers the period 1965-1997, leads to four broad conclusions. First, income per capita in the Low- and Middle- Income countries has been growing at 1.9 percent p.a. which is slower than the 2.3 percent p.a. recorded in the High Income countries.[1] On average the less developed countries are falling behind. Second,

[1] Countries are classified by income classes according to World Bank guidelines. For example, in 1997, Low -Income countries were classified as those with a per capita income below $785; Middle-Income between $789 to $9,655 and High-Income above $9,656. Middle-Income countries are split into Lower- and Upper at $3,125.

growth rates in less developed countries are very unevenly spread. If you take countries grouped by regions only East Asia, with a per capita growth rate of 5.4 percent p.a. , is converging with the High-Income countries.[2] In the remaining regions, South Asia is just barely keeping pace. Growth in Latin America is substantially lower while the Middle East/North Africa and Sub-Saharan Africa registered either no growth or a slight decline over a thirty year period. Third, if you examine the performance of individual countries to see which are doing better than the industrialized countries, a remarkable number of them are in East Asia, forming what the World Bank refers to as the "High Performing Asian Economies" and what we will refer to as the "East Asian 7" – the four NICs - Hong Kong, South Korea, Singapore and Taiwan - and the three "cubs"- Malaysia, Indonesia and Thailand. Together with China, they form 8 out of the just 17 developing countries in the world that are growing faster than the rich countries. Of the 88 developing countries whose data form the basis of Table 1, we have the 17 just mentioned, 42 which registered positive growth but at a rate lower than 2.3 percent p.a. and 29 where per capita income actually declined (most of which are in Sub-Saharan Africa). Fourth, the result of this rather dismal performance can be put rather starkly. Per capita incomes in rich countries are now on average 25 times those in the developing countries, up from roughly 16 times in 1968. Per capita income in the richest country in 1995 - Switzerland - is 508 times that of the poorest country - Mozambique. Still another way to look at it is to say that in 1995 the 16 percent of the world's population that lives in the industrialized countries have 81 percent of the world's income. The 84 percent that live in the developing countries lives on the remaining 19 percent.

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[2] Regional groupings are those used by the World Bank. Asia is split into two regions, East Asia beginning at Thailand and comprising all countries to the east, including the Philippines and Indonesia and the Pacific Islands. South Asia is the Indian Sub-continent plus Sri Lanka.

Table 1 Growth in GNP per Capita 1965-1997

(percent per year)

Regions	
East Asia	5.4
South Asia	2.3
Latin America	1.3
Middle East/N. Africa	0.1
Sub-Saharan Africa	-0.2
Classified by Income	
Low Income	1.4
Middle Income	2.2
Lower Middle	3.0
Upper Middle	1.5
Low and Middle Income Countries	1.9
High Income	2.3
East Asia	**5.4**
China	6.8
Hong Kong	5.7
Indonesia	4.8
Korea	6.7
Malaysia	4.1
Philippines	0.9
Singapore	6.3
Thailand	5.1
South Asia	**2.3**
Bangladesh	1.4
India	2.3
Pakistan	2.7
Sri Lanka	3.0
Latin America	**1.3**
Argentina	0.3
Brazil	2.3
Chile	1.7
Colombia	2.1
Mexico	1.5
Trinidad /Tobago	2.6
Venezuela	-0.9

(continued)

	Percent (per year)
Middle East/N. Africa	**0.1**
Egypt	3.4
Iran	-1.4
Jordan	-0.4
Morocco	2.0
Oman	5.1
Syria	2.1
Tunisia	2.7
Sub-Saharan Africa	**-0.2**
Botswana	7.7
Cameroon	1.4
Cote d'Ivoire	-0.9
Ghana	-0.9
Kenya	1.3
Lesotho	3.2
Malawi	0.5
Mauritius	3.8
Nigeria	0.0
Rwanda	0.1
Senegal	-0.5
Sierra Leone	-1.4
Swaziland	1.8
Zambia	-2.0

For those of you who are familiar with the flaws in converting incomes in national currencies to US$ using nominal exchange rates, Table 2 shows the per capita incomes for a number of countries converted to US$ using 1995 Purchasing Power Parity and their per capita incomes relative those in the USA in both 1987 and 1995, unfortunately a relatively short time period.[3] What Table 2 shows is that incomes are very low relative to the USA -

[3] At the PPP rate, one dollar has the same purchasing power over that nation's domestic GNP that the U.S. dollar has over US GNP.

although less so than when nominal exchange rates are used for the conversion - and that only in a few cases are incomes growing relative to those in the USA. Those countries that are converging are the usual ones from East Asia, some in South Asia, only one in Latin America (Chile), and three in Africa (Botswana, Lesotho, and Mauritius).

The above record raises some serious social and ethical issues in addition to the economic ones. It also raises some disturbing questions about the role of war in accounting for different performances between countries - that is, about two-thirds of the 30-40 poorest ations in the world are either at war or have recently emerged from a civil or external war. However, I want to brush all these fascinating questions aside and concentrate oneconomic explanations. To what extent can the differential economic performance that we see be explained by the differences in economic policies that these countries followed, perhaps augmented by some structural and demographic characteristics? That is, to what extent do trade policies, macroeconomic policies, human resource investment programs plus some other country characteristics explain why growth rates differ between countries?

Let me state at the outset, I have a confession to make: while I feel that trade policy has an important role to play in economic development, I am not a big fan of free trade as an objective of economic policy. Free trade ought to be a means to an end, pursued only so long as it contributes to general economic and social well-being . In fact, my views on free trade are somewhat similar to my views on wanting to get into heaven when I die: however desirable achieving free trade and arriving in heaven both may seem, one ought not to be in a hurry to get to either place. If I may carry my analogy a bit further, just as it is desirable to prepare for one's entry to heaven by taking care of one's finances, making sure the family is taken care of and perhaps doing a good deed or two, there are accompanying actions which will make the approach to free trade smoother and more likely to be successful - e.g. appropriate macroeconomic policies, the development of human resources and the creation of social safety nets.

Table 2 Purchasing Power Parity Estimates of GNP per capita

(in current international dollars; relation to US)

	Current $	US =100	
	1995	1987	1995
East Asia			
Indonesia	3,800	9.8	14.1
Philippines	2,850	10.3	10.6
Thailand	7,540	16.2	28.0
Malaysia	9,020	22.9	33.4
Korea	11,450	27.3	42.4
Hong Kong	22,950	70.7	85.1
Singapore	22,770	56.1	84.4
South Asia			
Bangladesh	1,380	4.8	5.1
India	1,400	4.4	5.2
Pakistan	2,230	8.4	8.3
Sri Lanka	3,250	10.6	12.1
Latin America			
Bolivia	2,540	9.1	9.4
Trinidad Tobago	3,770	38.1	31.9
Colombia	6,130	20.7	22.7
Venezuela	7,900	33.0	29.3
Mexico	6,400	27.8	23.7
Brazil	5,400	24.2	20.0
Chile	9,520	24.6	35.2
Argentina	8,310	31.6	30.8
Sub-Saharan Africa			
Tanzania	640	2.6	2.4
Rwanda	540	3.8	2.0
Sierra Leone	580	3.2	2.2
Uganda	1,470	4.7	5.5
Nigeria	1,220	4.4	4.5
Kenya	1,380	5.7	5.1
Ghana	1,990	7.4	7.4
Zambia	930	4.2	3.5
Senegal	1,780	7.3	6.6
Congo	2,050	11.5	7.6
Cote d'Ivoire	1,580	8.2	5.9
Lesotho	1,780	6.1	6.6
Botswana	5,580	15.3	20.7
Mauritius	13,210	39.0	49.0
United States	**26,980**	**100.0**	**100.0**

Source : World Bank, ***World Development Report 1997***, Table1.

3. Origins of the Export-Oriented Approach to Development

The prevailing orthodoxy of today amongst most development institutions and development economists is that "outward oriented" or "export oriented" strategies of development are more successful. That is, these strategies have led to more rapid growth, greater employment generation, and hence to a more equitable and poverty reducing pattern of growth. At the risk of some simplification, the main elements of an outward looking strategy may be summarized as follows:

- conservative monetary and fiscal policies
- increased reliance on market signals and removal of price distortions, especially lowering protection which discourages exports
- greater commitment to increasing exports, especially non-traditional manufactures
- encouragement of private investment, especially foreign direct investment
- privatization of most public enterprises, and
- what has been called a "minimalist role" for governments

This constellation of policies has been called the "Washington Consensus", being identified mainly with the World Bank, IMF, and the State Department/USAID, but also with some other aid donors and a fairly large number of development economists. One finds these views in the World Bank's annual World Development Reports of the late 1980s and 1990s and most prominently in its ***East Asian Economic Miracle*** (1993).[4] Broadly speaking, the outward looking approach finds its origins in two experiences: (a) growing disillusion with the inward looking, import substitution strategies which had prevailed during the first two to three decades following World War II; and (b) the seeming success of a number of more export oriented countries, most notably but not exclusively centered in seven East Asian economies.

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[4] See World Bank (1991), for example, and World Bank (1993).

3.1 Disillusionment with Import Substitution

Immediately following World War II, there was considerable skepticism about markets and considerable faith in governments to play a leading role in the economy. The Great Depression had eroded faith in market capitalism and many expected a return to a depressed world economy. Declining terms of trade for primary goods, skepticism about whether farmers responded to price incentives and protectionist policies in the industrialized countries against agricultural imports meant that agriculture was an unlikely source of economic growth. On the other hand, governments had successfully fought World War II, implemented the Marshall Plan which led to the recovery of Europe, and, following the teachings of Keynesian economics, were to be responsible for assuring that the world's capital and human resources were fully employed. Moreover Soviet planning was leading to what appeared to be spectacular growth results. The key to economic growth was thought to lie in capital formation (as in the well known Harrod-Domar model, for example) and this is where import substitution entered into the development strategy. Since most developing countries had small or non-existent capital goods industries and it was recognized that in most cases it would be very inefficient to develop one, capital goods would need to be imported. This, combined with poor prospects for primary goods exports, would likely lead to chronic balance of payments problems. To counter these pressures as well as to provide a ready market for industrial output, a combination of high tariffs, tight import restrictions and other licensing arrangements would limit consumer goods imports while keeping capital goods relatively cheap. In this way, less developed countries would industrialize, drawing resources out of a relatively backward, low productivity agriculture into a more modern high productivity and urban industrial sector.

The development experience of the three decades following World War II revealed a number of successes - spurts of rapid economic growth, considerable improvements in social indicators such as schooling, longevity and infant mortality, and the creation of much basic infrastructure. However - and we will return to this theme of interpreting performance later in the paper - the overall assessment was one of disappointment with performance of

a number of countries, most particularly in Latin America and Sub-Saharan Africa. During the 1970s , a number of large studies of the trade and economic policies of developing countries - conducted by eminent economists such as Balassa; Little, Scitovsky and Scott; Bhagwati; and Krueger - found evidence of severe distortions across a range of developing economies.[5] At the risk of painting somewhat too stark a picture, the main elements of the problem can be outlined as follows. The heavy tariff/quantitative restrictions(QRs) protection given to industry (coupled with strong tendencies toward exchange rate overvaluation) under an import substitution strategy introduced distortions into the economy that were biased against exports and against agriculture. Seemingly contradictarily, import substitution strategies turned out to be quite import intensive: the protection given to consumer goods production created very strong incentives for the import of intermediate and capital goods. This coupled with poor export performance led to periodic balance of payments crises. The resulting growth process led to a very slow growth in the demand for labor which, combined with poor agricultural growth, made the reduction of poverty rates very slow and uncertain. In addition, import substitution strategies seemed to be leading to significant underutilization of capital, creating the paradox of excess capital in economies that were supposedly short of capital. Subsidies for capital formation, uncertainty about future government trade and foreign exchange policies, shortages of complementary inputs and, at times misdirected, foreign aided projects were creating tendencies toward excess investment.

And lastly there was a growing skepticism about the ability of governments to play a leading role in the development process. This was the product of a number of different observations: that the governments of many countries simply lacked the capacity to implement complex development programs and policy regimes; the growing recognition of the failure of planning in the Eastern bloc; and growing knowledge of what was called "rent

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[5] See Little, Scitovsky and Scott (1970); Balassa (1971); Bhagwati (1978) and Krueger (1978). For useful surveys of the findings of those studies see Edwards (1993) and Bruton (1998).

seeking" behavior. The latter was the recognition that -- with heavy government involvement in setting tariffs, licenses for imports and investments, setting product prices and in letting contracts for public projects -- large sums of money were to be made from access to and influence over government officials. Instead of the government playing the role of correcting market failures as in the classic public finance text cases of public goods and externalities, governments were themselves thought to be responsible for introducing large distortions and inefficiencies into developing economies.

The lessons outlined above were combined with two further lessons – that contrary to received wisdom farmers were very price responsive and that countries that put more emphasis on manufactured exports were seemingly more successful. Part of the rationale for heavy government interference in the economy had been the fear that markets did not work very well – that small farmers, most particularly in Africa but also elsewhere, and small businesses were simply not that price responsive; culture and inertia got in the way. However, the experience of five decades of development is rather overwhelming that in Africa and elsewhere farmers and small businesses respond very well to incentives. In fact, the experience of "import substitution" itself is an example of how price responsive business entities respond; the system of cascading tariffs (and other import restrictions) and overvalued exchange rates results in growth that is intensive in imported intermediate and capital goods, discourages agriculture growth and is a disincentive to manufactured exports. The implication was drawn that an alternative set of incentives -- known as "getting prices right" -- would lead to more rapid and better balanced economic growth.

The second lesson was that the decades of the 1950s to the 1980s were thought to have demonstrated the success of countries that put greater emphasis on developing manufactured exports. Such exports were thought to confer a lot of advantages favorable to growth by;

- allowing greater specialization along the lines of comparative advantage than was possible under import substitution (less need for protection and the possibility for exploiting economies of scale would assure this)

- encouraging greater technological progress through stiffer competition in foreign markets as well new techniques embodied in partnerships with foreign firms and in increased access to imported inputs
- providing the foreign exchange to purchase imported intermediate and capital goods inputs(in contrast to import substitution strategies which led to frequent foreign exchange shortages) ; and
- creating more labor intensive growth, hence employment generation.

3.2 The Experience of the East Asian Economies

The strongest and most complete statement of the "Washington Consensus" is to be found in the World Bank's ***East Asian Miracle: Economic Growth and Public Policy***.[6] While that work covers a vast panorama of public policy from trade to financial policy to civil service reform, its most important findings from our point of view may be outlined as follows. First was macroeconomic stability. The East Asian economies kept inflation at very low levels through conservative monetary and fiscal policies. This in turn allowed them to maintain relatively stable and competitive real exchange rates which in turn provided a more attractive environment for exports and for foreign investment. The second area in which the East Asian economies stand out is in savings and investment. Whereas the investment and savings rates of the East Asian economies were little different than those of other developing economies at about 20-25 percent of GNP during the 1960s and early 1970s, by the 1980s these rates had reached 30-35 percent of GNP at least half again as high as rates in South Asia, Latin America and Sub-Saharan Africa.[7] Third was the early and strong support for manufactured exports. While all the East Asian economies - except Hong Kong and Singapore - followed import substitution strategies at the beginning , all

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[6] World Bank (1993). The East Asian countries that the World Bank is focusing are is what we have above called the "East Asian 7".

[7] See World Bank (1991), p.184 for a comparative table.

switched to more outward looking strategies with better incentives for exports, which allowed the acquisition of improved technologies and greater productivity growth.

Fourth, the World Bank recognized that the East Asian economies - despite their many common features - represented quite different development experiences. Broadly speaking there were three groups. Hong Kong and Singapore were recognized to be special cases - small, urban, very open economies that depended heavily on trade and commerce for economic growth. Both had a large skilled manpower base and a very competent civil service and both depended very heavily on free trade and on foreign direct investment. Singapore, however, had a more activist government with more public enterprises and more involvement in the promotion of particular industries and technologies. The next grouping was South Korea and Taiwan both of which began as relatively small economies with relatively few natural resources but with successful agricultures built upon land reform, the introduction of new technologies and not letting the terms of trade for farmers deteriorate. Both began development in the 1950s with a phase of import substitution behind protection levels that were quite high even when compared with other import substituting countries. Both countries switched course in the mid 1960s toward greater export orientation supported by very aggressive government policies that involved subsidies, preferred access to foreign exchange and special lines of credit. In addition foreign direct investment was discouraged, more emphasis was placed on acquiring foreign technology through licensing arrangements, and foreign capital flows were controlled. What was thought to be unique about the South Korean and Taiwanese experiences was that despite quite interventionist policies, both governments were quite "hard headed" : incentives were not very distorting and when they did not result in competitive industries that could export the incentives were withdrawn.

The last group was the three "tiger cubs" -- Thailand, Malaysia and Indonesia - which were larger economies, richer in natural resources and poorer in skilled manpower than South Korea and Taiwan. All three depended on a successful agricultural expansion to absorb labor and provide a market for growing industrial production. All three were more

protectionist than the Four Tigers and went through a more prolonged period of import substitution. But they gradually liberalized and established mechanisms by which manufactured exports could escape the penalties of industrial protection - usually by assuring exporters access to imported inputs at world prices. All three were very receptive to foreign direct investment, most particularly Malaysia.

Fifth, agriculture was more central to the development strategy of the East Asian economies (except of course Hong Kong and Singapore) than it has been for most developing countries. As stated in the ***East Asian Miracle*** (p.352): "Wide adoption of the Green Revolution technology, high investment in rural infrastructure, and limited direct and indirect taxation of agriculture meant that rural incomes and productivity rose more rapidly than in other regions". Growth rates for agriculture in the East Asian countries 1965-1989 far exceeded those of other developing regions averaging 3.7 percent p.a. as against 2.8 percent in South Asia, 2.6 percent in Latin America and 1.9 percent in Sub-Saharan Africa.

The ***East Asian Miracle*** (p.352) goes on to say that "As in other economies, agriculture sectors in the [High Performing Asian Economies] were a source of capital and labor for the manufacturing sector. But in East Asia these resources were generally pulled into the manufacturing by rising wages and returns, rather than squeezed out of agriculture by high taxes and stagnant or declining relative incomes. As a result urban-rural income differentials were smaller in the [High Performing Asian Economies] than in most other developing economies". Successful agricultural policies, together with substantial investments in human resources, made a substantial contribution to the sharp reductions on poverty rates experienced in all these economies.

Sixth, the government in the East Asian economies played a varied role but in all countries was important in providing the institutional and financial superstructure needed to support growth and in providing essential economic and social infrastructure, especially the development of human resources. The accumulation of human capital was critical to the principle of "shared growth" which characterized these economies. In sum, the ***East Asian Miracle*** leads to what the World Bank calls a "market friendly" approach to development . It

is not laissez faire in that it recognizes a role for government not only in providing essential public services but also in other cases where social returns exceed private returns as where there are economies of scale or spillovers from R&D expenditures for example. However as a general rule interventionist policies are to be avoided as markets are thought to work quite well. This and other points raised above are a source of continuing debate between the World Bank and its critics and we will return to take them up again later in the paper.

3.3 Evidence of the Effects of Openness on Growth

The World Bank's evidence for the superior performance of open economies is often quite anecdotal and descriptive, consisting of grouping countries by one or more characteristics and then showing that the performance of more outward looking countries appears to be better - faster growth, more rapid total factor productivity expansion, and the like. At other times the World Bank (1991, p.100) has backed this up with partial regressions between indicators of openness (e.g. average tariffs, average extent of deviations of domestic from foreign prices, size of black market premium for foreign exchange) and some growth indicator. These results usually show a positive correlation between openness and growth but with substantial deviations around the regression line. In its ***1991 World Development Report*** (p.99), the World Bank explains these deviations by saying that "this is because, openness is only one factor which explains productivity growth; this Report also establishes the importance of establishing macroeconomic stability, providing social services, and fostering a productive climate for enterprises". What this means is that more complete models where a number of variables are used to explain growth or productivity growth would likely produce more satisfying results.

Sachs and others (1997) have produced a model which satisfies these requirements. Their model accounts for differences in country growth rates by four sets of variables: (1) initial conditions: relatively low initial incomes and relatively skilled workers; (2) geographical and structural characteristics; (3) policy variables concerning openness and macroeconomic policy; and (4) a set of demographic variables. The model belongs to a

family of models characterized by "conditional convergence". Countries with relatively low levels of income relative to their long run steady state levels will tend to grow faster than countries closer to their steady state levels because they have greater gaps in physical and human capital and greater gaps in technology which give them more opportunities for "catching up". In the model countries are not converging to the same level of income as this would imply that poor countries always grow faster than rich countries and this, as we have seen, is clearly not the case. Rather each country is converging to its own steady state level which depends on its economic policies and its own structural characteristics. That is, after controlling for policies and structure, poor countries do tend to grow faster than the rich -- this is what is known as "conditional convergence".

Sachs and others measure values of 12 variables in the four groups mentioned above for a set of 78 countries during the period 1965-90. A subset of 50 countries out of the 78 are grouped into five country groupings - Four Tigers, Southeast Asia, South Asia, Latin American and Sub-Saharan Africa. The scores for the five groupings on the 12 variables are shown in Table 3. For initial conditions Sachs and others use 1965 income per capita . Because 1965 incomes were quite low the East Asian economies had considerable potential for catching up but this is even more the case for South Asian and Sub-Saharan African countries. They also have a human capital variable - average years of secondary schooling in 1965 - as an initial indicator of the potential for making productive use of the resource base. On this basis, the "Four Tigers" are clearly superior, with the other four regions trailing badly, especially Sub-Saharan Africa.

For structural variables they use four separate measures: (a) dependence on natural resources; (b) landlocked or not; (c) ratio of coastline to total land area; and (d) location in the tropics. While there are exceptions, countries are thought to be burdened by natural resources, here proxied by the share of primary product exports in total GDP. Look at such African countries as Nigeria, Zaire and Zambia or the slow development of the middle eastern oil producers; but, on the other hand, look at the US, Botswana or Malaysia. The reasons for the burden are not clear but are thought to lie in such factors as "Dutch disease"

Table 3 Summary of Key Variables by Region (Unweighted averages)

	All Countries (N=78)	Four Tigers (N=4)	South Asia (N=4)	Southeast Asia (N=4)	Sub-Saharan Africa (N=17)	Latin America (N=21)
Growth rate of per capita GDP (1965-90, %) [a]	1.9	6.7	1.7	3.8	0.6	0.8
Initial Conditions						
Real GDP per capita in 1965 (1985 prices, '000) [a]	3,163	2,010	996	1,161	826	2,611
Average Years of Secondary Schooling in 1965	0.8	1.5	0.5	0.5	0.2	0.6
Resources and Geography						
Natural Resource Intensity (primary exports/GDP, 1971)	0.11	0.01	0.05	0.17	0.16	0.16
Tropics	0.53	0.63	0.40	1.0	0.91	0.79
Landlocked	0.17	0.0	0.0	0.0	0.47	0.10
Coastline distance/land area	0.29	2.83	0.07	0.43	0.02	0.17
Policy and Choice Variables						
Openness (0 to1; 1 = most open) [b]	0.43	0.97	0.06	0.73	0.0	0.17
Government Savings Rate (% of GDP)	1.6	5.6	1.0	3.5	3.0	1.2
Quality of Institutions (1 to 10; 10 = best) [c]	5.99	7.79	4.23	4.95	4.72	4.37
Demography						
Life Expectancy in 1965 (years)	57	63	49	52	41	56
Growth of Working Age Population (Annual avg., 1965-90, %)	2.23	2.68	2.51	2.90	2.85	2.60
Growth of Total population (annual avg., 1965-90, %)	1.96	1.68	2.26	2.35	2.92	2.20

Notes : [a] GDP gfowth rates and levels are on a purchasing power parity basis, and are taken from the Penn World Tables version 5.6.

[b] The openness index is the share of years between 1965-90 that a country is considered to be open to world markets. To be considered open in any year, average tariffs must be lower than 40 percent; quotas and licensing must cover less than 40 percent of total imports; the black market premium must be less than 20 percent; and export taxes must be moderate.

[c] The institutional quality index was created by Knack and Keefer (1995), and is the average of five indicators of quality in (i) government bureaucracy, (ii) corruption, (iii) rule of law, (iv) expropriation risk, and (v) repudiation of contracts by government.

Source : Sachs, Radelet, and Lee, ***Economic Growth in Asia*** (1997).

stemming from an overvalued exchange rate; poor linkages between the resource sector and investment opportunities in the rest of the economy; and high profits from resources leading to rent-seeking and corruption. All of these problems could be overcome by good policies (e.g. as in Botswana) but apparently in many cases they are not. Landlocked countries are clearly at a disadvantage as high shipping costs lower the value of their exports while raising the costs of their imports. A high proportion of coastline gives a greater share of the population better access to the sea. East Asia's Four Tigers have by far the best "access ratio" of any countries and the Southeast Asian countries come in second still far ahead of the other regions. The last structural variable is location in the tropics which is thought to be disadvantageous to development because of the presence of infectious diseases, the effects of climate and weather on labor productivity, and the harmful effects of heavy rainfall on soil quality. Location in the tropics put a heavy burden on the Four Tigers and the Southeast Asian economies, except perhaps for Hong Kong and Singapore where manufacturing and trade were larger shares in the economy from an early stage.

Policy variables for Sachs and others are represented by (a) openness to international trade; (b) fiscal policy; and (c) the quality of government. Greater openness is thought to bring benefits through larger markets and economies of scale, increased competition, improved access to technologies, and improved management. "Openness" is measured by average tariffs, the proportion of imports covered by quotas and licenses, average export taxes, and the size of the black market premium on foreign exchange markets. Countries are classified as "open" if they meet certain minimum requirements on all four measures and"closed" if they miss out on one or more of the variables. An index is created for each country is constructed according to the proportion of years 1965-90 they were "open" or "closed". Government savings, the fiscal policy variable, were seen as contributing to growth either directly by providing finance for investment or indirectly as an

indicator of prudent macro policies - e.g. lower inflation, lower pressures toward exchange rate appreciation, lower risks of instability. Government savings at 5.6 percent of GDP in the Four Tigers were by far the highest of any region with the three Southeast Asian next at 3.5 percent. Among the rest only Sub-Saharan Africa came close at 3 percent. The last policy variable is the perceived quality of public institutions by business surveys as measured in the quality of the bureaucracy, extent of corruption, the efficacy of the judicial system, the danger of expropriation risk and the risks of contract repudiation. Again the Four Tigers score by far the highest and, no doubt much to everyone's surprise these days, both Thailand and Malaysia score relatively well compared to other regions.

Lastly Sachs and others add demographic variables. For a given population growth rate, a faster growth in working age population means raises the relative size of the labor force and lowers the dependency ratio. On both counts it would be favorable to growth. Again the Four Tigers have the greatest differential between the two growth rates, with the "cubs" coming in second. The final variable is life expectancy at birth meant to proxy for the health, hence productivity, of the workforce. Again the East Asian economies are dominant in the usual order.

In sum, the Four Tigers have the most favorable scores on all but two of the twelve variables: initial real income and location in the tropics. On quality of human resources, demographic characteristics, access to the sea, and lack of dependence their scores were very favorable for economic growth. Their dominance was even greater on the three policy variables where they achieved the best scores. The Four Southeast Asian countries did not in general have such favorable scores: while low initial income and access to the sea would dispose them toward faster growth, on natural resource dependency, quality of human resources, they were not notably different than the other regions. Where the Southeast Asian countries did sharply differentiate themselves from the others was in having the second highest scores on all three policy variables. Sachs and others fit regressions on the 12 variables for the 78 countries for the period and then these regressions are used to provide growth estimates for each country which in turn are used to generate explanations

of why the growth rates between areas differs. Table 4 then shows the contributions of the 12 variables to explaining the deviations in growth in the other three regions from that in East/Southeast Asia.

Table 4 Contributions to Growth Differentials Between East/Southeast Asia and Various Regions, 1965-90 (percent, annual average)

	Contribution of each variable to the difference in per capita growth relative to East/Southeast Asia		
	South Asia	**Sub-Saharan Africa**	**Latin America**
Initial Conditions	**0.3**	**0.7**	**-1.2**
Initial GDP per capita	0.5	1.0	-1.2
Schooling	-0.2	-0.4	-0.1
Resources and Geography	**0.2**	**-1.0**	**-0.6**
Natural Resources	0.1	-0.2	-0.2
Landlocked	0.0	-0.3	-0.1
Tropics	0.5	-0.2	-0.0
Coastline/land area	-0.3	-0.3	-0.3
Policy Variables	**-2.1**	**-1.7**	**-1.8**
Government Savings Rate	-0.4	-0.1	-0.3
Openness	-1.2	-1.2	-1.0
Institutions	-0.5	-0.4	-0.5
Demography	**-0.9**	**-1.9**	**-0.5**
Life Expectancy	-0.5	-1.3	0.1
Growth in working age population	-0.3	0.1	-0.2
Growth in total population	-0.2	-0.7	-0.1
Difference in:			
Predicted Growth	-2.5	-3.9	-3.8
Actual Growth	-2.9	-4.0	-3.9

Note : The ten economies in the sample from the East/Southeast Asia region are Hong Kong, PRC, Singapore, Korea, Taipei, China, Thailand, Malaysia, Indonesia, the Philippines, and Papua New Guinea.

Source : Sachs, Radelet, and Lee, ***Economic Growth in Asia*** (1997).

Four main conclusions stand out from this table. First is that the 12 variables a large part of the growth rates in the various regions and hence the differences between them; note that "openness", while very important, is just one amongst 12 variables. Second, the East Asian Miracle was not really a miracle, no fairies, elves or other mystical creatures were involved; rather the growth experience is quite readily explained in terms of a set of variables usually thought of when development economists try to explain why the performance of countries differs. Third, the 12 variables explain a major part of the different growth rates between East Asia/Southeast Asia and the remaining three regions. Countries with relatively higher incomes in 1965 tended to grow more slowly than countries with lower incomes after controlling for policy and structural differences, esp. location in the tropics and abundance of natural resources. And fourth, the policy variables account for a substantial share of the difference in growth rates between countries – in fact over half the difference in growth rates is explained by the three policy variables with the "openness" variable making the largest contribution. Sachs and others (p.14) state that " the East Asian economies were among the most open of all developing economies between 1965 and 1990, a fact which helps to account for their better growth performance."

In concluding, it is worth pointing out that, however helpful one may find the model of Sachs and others in elucidating some of the causes of why developing countries do or do not perform and what accounts for the differences, their "openness variable" is subject to some limitations. Countries are classified as "open" or "closed" on the basis of whether: (a) average tariffs were below or above 40 percent in any year; (b) the proportion of imports subject to licenses or QRs was below or above 40 percent; (c) the black market foreign exchange premium was below 20 percent; and (d) a judgment about whether or not export taxes were moderate. The degree of openness is the proportion of years 1965-90 an individual country satisfies all of those criteria. Quite apart from concerns about whether average measures can adequately capture protection, there is still the problem that level of protection. In addition, there is no mechanism to determine whether a country is becoming more or less protectionist over time other than by the frequency it is satisfying these rather

generous standards. Are average tariff rates falling over time or the proportion of imports covered by QRs? One has the feeling that the answer would probably be "yes" for the East Asian countries but this information does not enter their equations. Hence, one could be forgiven for having doubts about whether openness has been properly measured and hence whether the relationship between openness and growth has been correctly captured.

Other authors have tried using other methods for measuring openness - e.g. the average level of tariffs, ratios of collected tariffs to imports, the percentage of imports subject to licensing restrictions (but not the deviations of domestic from foreign prices caused by restrictions which would be hard to collect on a time series basis); and the black market foreign exchange premium. At least these variables would tell us whether some aspect of protectionism was getting better or worse. The problem with all these variables (quite apart from the use of averages) is that they each measure a particular aspect of distortions but not the totality of effects coming from the use of several instruments (which, after all, is not uncommon) . Sebastian Edwards (1998) feels that this problem may be basically intractable; one will never be able to find the right "openness" index or combination of indexes. Instead it might be better to find out whether relationships between openness and growth are fairly stable quite apart from what index is used. He therefore constructs a simple model which posits that TFP growth is negatively related to GDP (the "catching up hypothesis"), positively related to initial human capital (reflecting the ability to absorb new ideas), and positively related to greater openness. Using a data set for 93 countries for the period 1960-90 and nine alternative openness indicators he finds a positive and statistically significant relationship with total factor productivity growth in an overwhelming number of cases (with the correct and statistically significant signs on the other variables). One might still prefer more followup work on the relation between the degree of protection and growth in individual countries as perhaps yielding a more reliable test than cross-country studies; but until that time at least we have some evidence suggesting a positive relation.

4. Reinterpreting the Evidence on Export Orientation

What we have seen in the previous two sections is that the East Asian experience provides considerable backing for the "Washington Consensus" and its outward-looking, market friendly approach; that a model embodying structural and initial conditions, some demographic and some policy variables can explain a substantial amount of the variation in economic growth between countries and regions; and that good policies -- esp. trade and macroeconomic policies and the quality of government -- can have a considerable impact. What we will do in the four parts of this section is to challenge the "Washington Consensus" position a bit and hopefully make the reader somewhat more skeptical of parts of the argument. First, "openness" can clearly make a contribution to better performance but it is only one among a number of variables and its role may have been somewhat overstated, especially compared with the role of appropriate monetary and fiscal policies. Second, while East Asian economies were more open than those of other regions, they were still subject to considerable tariff and non-tariff barriers (at least until recently) and the role that government played in industrial and trade policy should not be understated.

Third, while there is no doubt scope for improving the efficiency of governments, the governments of the industrialized countries are absolutely and relatively much larger than those of developing countries and have continued to get bigger, so it seems more likely that the governments in developing countries will get larger and not smaller in the future. And lastly, the move to more market determined outcomes and more open economies, while bringing gains, will also inevivatably lead to economic disruption and periodic crises, and its success will depend heavily upon developing mechanisms for determining how the gains and losses are to be shared and for cushioning the impact on adversely affected parties.

4.1 Export Orientation and Growth

It is quite possible to put a somewhat different interpretation on the development experience of the past three decades. Table 5 shows the growth per capita GDP for regions, countries classified by income class and individual countries broken into four sub-periods --

1965-73, 1973-80, 1980-90 and 1990-97. What is striking about this rearrangement of the data is the difference between the pre- and post- 1973 experience. Prior to 1973 all developing countries grew at an average rate of 4.2 percent per capita, with growth rates ranging from highs of 5.2 percent and 4.7 percent in East Asia and Latin America to lower but still quite positive rates of 1.7 and 1.2 percent in Sub-Saharan Africa and South Asia.[8] Following 1973, the performance of developing countries as a group declines never again reaching the previous levels. Note that this is also true for the High- income countries. There is also a growing divergence among regions. Whereas East and South Asia recover very quickly from the setbacks of the 1970s and early 1980s and go to even higher growth rates in the 1980s and 1990s, the other regions record negative per capita growth in the 1980s and only in Latin America are there signs of the beginnings of a recovery in the 1990s.

The above results are, of course, mirrored in the results for individual countries also shown in Table 5. What comes through clearly is that the performance of number of African and Latin American countries during the period up to 1973 is very respectable and in fact quite comparable to that of the East Asian countries. Look at, for example: Argentina, Brazil, Colombia and Mexico in Latin America; at Botswana, Kenya, Lesotho, Mauritius and Sierra Leone in Africa; and at Syria and Tunisia in the Middle East/North Africa. Since most developing countries could be classified as following inward-looking policies during this period it is not evident that import substitution strategies were outright harmful to growth. It is only after 1973 that growth rates fall sharply across a broad sample of countries (reaching negative levels in a large number, principally in Africa).

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[8] Some may feel that the period 1965-1973 is too short to make judgments. Part of the problem is forced on us by our choice of the period 1965-97 which gave us consistent data for a large number of countries. Extending the data back to (say) 1950 or 1960 for the same set of countries was not a readily available option. If we can content ourselves with just using regional average per capita growth, we can show that the period 1950-1970 was, while slower than 1965-73, generally successful across a range of developing countries; the growth rates of income per capita were : East Asia (3.5 percent); South Asia (2.1 percent); Middle East/North Africa (2.0 percent); Latin America (2.3 percent); and Sub-Saharan Africa (1.9 percent). World Bank, ***World Tables 1983***, Table 1.

Thanks to the work of Susan Collins and Barry Bosworth (1996) of the Brookings Institution, we can now see what has been happening to total factor productivity growth across a wide range of individual countries and country groupings for various sub-periods during 1960-1994. Their results are shown in Table 6. Again the results for the early time period stand out. Latin America and the Middle East have relatively higher rates of TFP growth than does East Asia. While Taiwan has the highest TFP growth in East Asia, such countries as Brazil, Bolivia, Ecuador, and Trinidad and Tobago in Latin America; Iran, Israel, Morocco and Tunisia in the Middle East; and Cote d'Ivoire, Kenya and Tanzania in Africa have comparable or higher growth rates. Note also that none of these countries - including Taiwan - is particularly noteworthy for having an outward looking stance at this stage; in fact quite the opposite.

Two other results stand out from Table 6. Again we find the striking result that, following 1973, TFP growth drops to negative rates in Latin America, the Middle East and Africa and that no country from these three regions that performed well relative to Taiwan in the early period is able to keep up its performance. Second is the acceleration in South Asia's TFP growth in the following two periods to levels quite comparable to that of East Asia. This is a very interesting finding since countries such as India, Pakistan and Bangladesh do not usually leap to mind when is thinking of countries with outward looking strategies; all have relatively high rates of protection via tariffs and quantitative restrictions.

Table 5 GNP per Capita Growth Rates

Regions, Country Classes, Countries by Sub-periods 1965-97 [a]

(percent per year)

	1965-73 [b]	1973-80	1980-90 [c]	1990-97 [c]
Regions				
East Asia	5.2	4.7	6.0	7.9
South Asia	1.2	1.9	3.5	3.5
Latin America	4.7	2.3	-0.3	1.9
Sub-Saharan Africa	1.7	0.6	-1.0	-0.8

(continued)

	1965-73 [b]	1973-80	1980-90 [c]	1990-97 [c]
Classified by Income				
Low and Middle Income	4.2	2.5	1.3	1.2
Low Income	2.4	2.1	2.1	1.6
Middle Income	5.2	2.4	1.4	1.3
High Income	3.7	2.3	2.5	1.5
East Asia	**5.2**	**4.7**	**6.0**	**7.9**
China	8.9	n.a.	8.9	10.3
Hong Kong	n.a.	n.a.	5.4	3.8
Indonesia	4.9	9.5	4.3	5.7
Korea	8.1	12.6	8.3	6.1
Malaysia	5.4	6.2	2.6	5.9
Philippines	3.1	1.9	-1.5	0.8
Singapore	n.a.	n.a.	4.8	6.7
Thailand	4.0	2.8	6.1	5.9
South Asia	**1.2**	**1.9**	**3.5**	**3.5**
Bangladesh	-5.6	2.2	2.2	2.6
India	0.0	1.2	3.8	4.0
Pakistan	0.9	2.4	3.7	1.6
Sri Lanka	1.0	3.6	2.6	3.9
Latin America	**4.7**	**2.3**	**-0.3**	**1.9**
Argentina	3.1	0.9	-1.8	4.0
Brazil	9.3	3.5	1.0	1.7
Chile	0.1	-0.6	2.6	6.7
Colombia	5.4	3.0	1.6	2.4
Mexico	4.5	4.2	-1.3	0.2
Venezuela	3.1	1.2	-1.3	-0.2

(continued)

	1965-73 [b]	1973-80	1980-90 [c]	1990-97 [c]
Middle East/N. Africa	-	-	-	-
Egypt	1.8	5.8	3.1	1.7
Jordan	0.0	6.6	-1.7	4.6
Morocco	2.0	10.8	2.2	-0.1
Syria	4.6	10.5	-1.7	3.1
Tunisia	5.6	4.8	1.1	2.1
Sub-Saharan Africa	**1.7**	**0.6**	**-1.0**	**-0.8**
Botswana	11.3	8.5	7.2	1.4
Cameroon	0.0	6.2	0.6	-2.9
Cote d'Ivoire	2.3	1.1	-2.5	-0.2
Ghana	1.8	-1.5	0.0	1.2
Kenya	4.4	0.4	1.0	-1.1
Lesotho	8.8	6.0	2.0	5.4
Malawi	-0.9	-0.9	-0.5	0.6
Mauritius	6.1	3.4	5.2	4.0
Nigeria	11.2	11.2	-1.4	-0.2
Rwanda	1.1	3.8	-0.3	-8.2
Senegal	-1.8	-0.4	0.4	-0.2
Sierra Leone	5.1	0.9	-2.0	-6.7
Swaziland	6.2	-0.7	1.9	-0.7
Zambia	2.7	-9.9	-1.9	-1.9

Notes: [a] Growth rates per capita are for GNP 1965-80 and GDP 1980-1997.

[b] Growth rates for individual countries are for 1968-73.

[c] Calculated by subtracting 1980-97 population growth rates from 1980-90 and 1990-97 GDP growth rates.

Source : World Bank. ***World Table 1989/90***, Table 2; ***World Tables 1995***,Table 2; ***World Development Indicators 1999***, Tables 1.4, 2.1 and 4.1.

Table 6 Total Factor Productivity Growth Rates 1960-1994

(percentage growth)

	1960-1973		1973-1984		1984-1994	
	GDP per Worker	TFP	GDP per Worker	TFP	GDP per Worker	TFP
East Asia	**4.2**	**1.3**	**4.0**	**0.5**	**4.4**	**1.6**
China	2.2	1.4	4.3	2.2	8.0	4.6
Indonesia	2.5	1.1	4.3	0.5	3.7	0.9
Korea	5.6	1.4	5.3	1.1	6.2	2.1
Malaysia	4.0	1.0	3.6	0.4	3.8	1.4
Philippines	2.5	1.7	1.2	-1.3	-0.3	-0.9
Singapore	5.9	0.9	4.3	1.0	6.0	3.1
Thailand	4.8	1.4	3.6	1.1	6.9	3.3
Taiwan	6.8	2.2	4.9	0.9	5.6	2.8
South Asia	**1.8**	**0.1**	**2.5**	**1.2**	**2.7**	**1.5**
Bangladesh	0.0	-0.6	2.5	1.8	1.1	0.7
India	1.8	0.1	2.4	1.0	3.1	1.6
Pakistan	3.9	0.2	2.8	2.0	2.7	1.5
Sri Lanka	2.1	1.0	3.2	0.7	2.7	1.0
Latin America	**3.4**	**1.8**	**0.4**	**-1.1**	**0.1**	**-0.4**
Argentina	2.6	0.2	0.4	-1.0	1.1	1.0
Bolivia	3.5	2.1	-0.6	-1.5	-0.1	0.8
Brazil	4.4	2.9	1.0	-0.8	0.5	-0.2
Chile	1.6	0.7	-0.6	-0.7	4.7	3.7
Colombia	2.9	1.9	1.2	0.0	1.8	1.0
Mexico	3.8	1.6	0.7	-0.8	-1.1	-1.8
Venezuela	1.2	0.9	-3.1	-4.3	-0.9	-0.4
Middle East	**4.7**	**2.3**	**4.0**	**0.5**	**-1.1**	**-1.5**
Egypt	3.0	1.8	6.2	2.3	0.0	-1.5
Iran	6.1	2.4	-2.9	-5.7	-2.2	-2.2
Israel	5.1	3.3	1.2	-0.1	2.7	1.9
Jordan	2.1	-0.9	6.7	2.3	-1.2	-2.9
Morocco	4.7	3.5	1.3	-0.5	0.9	0.3
Tunisia	4.1	2.3	2.2	0.2	0.7	0.1

(continued)

	1960-1973		1973-1984		1984-1994	
	GDP per Worker	TFP	GDP per Worker	TFP	GDP per Worker	TFP
Sub-Saharan Africa	**1.9**	**0.3**	**-0.6**	**-2.0**	**-0.6**	**-0.4**
Cote d'Ivoire	5.9	3.3	0.5	-2.0	-2.4	-1.8
Cameroon	5.9	-0.8	6.7	3.4	-4.5	-5.7
Ghana	0.9	-1.0	-3.2	-3.2	1.8	1.1
Kenya	3.4	3.4	0.4	-0.1	0.1	0.4
Mauritius	1.5	1.5	1.0	0.3	4.0	2.8
Nigeria	1.2	-0.9	-2.3	-4.6	1.3	2.0
Rwanda	-0.2	-0.8	1.7	-0.1	-3.6	-4.3
Senegal	-0.5	-0.6	0.0	-0.2	0.2	-0.2
Sierra Leone	3.4	1.3	0.9	0.2	-0.3	-0.2
Uganda	0.7	-0.3	-2.9	-3.0	1.3	1.1
Tanzania	3.0	2.2	-1.1	-1.7	1.0	0.6
Zambia	1.0	0.2	-2.3	-1.9	-2.5	-1.1

Source : Collins and Bosworth (1996)

In sum the pre- and post-1973 development experiences are substantially different for a wide range of developing countries. The common cause was brought on by two oil shocks (1973 and 1979), a massive recycling of petro dollars at favorable rates of interest by commercial banks to LDCs up to about 1980, followed by tight monetary policies (and rising real rates of interest) and recessions in the industrialized countries and a resulting decline in export volumes and falling commodity prices for the developing countries. The result was - at least the potential for - massive current account deficits and rapid debt buildup by individual developing economies. What differentiated groups of countries was how they responded to the crisis. One possible reaction was for a country to assume that the crisis will be short-lived and borrow its way through until things return to normal. The second way is the classic macroeconomic response to a (potential) large external imbalance:

fiscal and monetary policies accompanied by a shift in demand toward home produced goods through devaluations of the currency. The combination is expected to reduce balance of payments pressure by increasing exports and reducing the demand for imports, although often at the expense of slower or even negative growth for a (hopefully) short period.

While there are significant differences between the East Asian countries, on balance their macroeconomic policies over the past three decades has been quite conservative with smaller budget deficits, lower monetary growth and less resort to external finance than was the case in other regions. The result was lower inflation, greater stability in real exchange rates, and a lesser tendency toward appreciating exchange rates. While the shocks faced by the East Asian economies in the 1970s and 1980s were comparable in size to those found in the other regions, they were more successful in adjusting. A similar story is to be found in South Asia where macro policies have tended to conservatism despite the presence of other large distortions in these economies. While differences in macropolicies and their consequences between countries are difficult to capture simply, some suggestive evidence can be seen in Table 7. What shows up very clearly is the sharp surge in inflation and external indebtedness of developing countries during the 1980s. But the experience is not uniform across regions. East Asia and South Asia were able to actually reduce inflation rates while experiencing relatively modest debt buildups. The other regions experienced large increases in inflation or indebtedness or both (note for example the fivefold increase in the inflation rate in Latin America or the near fourfold increase in the debt/GDP ratio in Africa)

Korea, Thailand, Indonesia, Malaysia and Singapore all undertook fairly major adjustment programs in the early to mid-1980s. Broadly speaking these involved the standard remedies and were introduced rather quickly in Korea and Indonesia and in a more phased manner in Thailand. All involved short-term losses in output but recovery was rapid in all cases. The combination of generally cautious monetary and fiscal policies and prompt responses to imbalances when they arose meant the East Asia avoided the stop-go pattern of crisis and response that characterized many other developing countries which delayed firm and credible policy responses but at the sacrifice of very large dropoffs in long-term

growth rates. Some other countries also did well: the South Asian countries; Botswana, Lesotho and Mauritius; and countries like Egypt, Tunisia and Chile were able to keep inflation moderate and keep debt service under control even while experiencing a buildup of indebtedness. This comparative story and its consequences shows up quite clearly in our comparative macro indicators table and our tables 5 and 6 which show the results on income and TFP growth.

Table 7 Macroeconomic Indicators

(percentage)

	Average Annual Inflation		Debt/GNP Ratios		Debt Service Ratios	
	1965-80	1980-89	1980	1989	1980	1989
Low-and Middle-Income Countries	16.7	53.7	27.6	41.2	21.8	22.4
East Asia	9.3	6.0	16.7	23.7	13.6	15.5
South Asia	8.2	7.9	17.3	29.6	12.1	24.8
Sub-Saharan Africa	11.4	19.0	26.8	96.8	10.9	22.1
Europe, NE, NA	13.1	21.8	35.7	55.5	19.0	24.1
Latin America	31.5	160.7	35.1	45.8	38.5	31.0

Source : World Bank, ***World Development Report 1991***, Tables 1 and 24.

In sum, there are very sharp differences in country performance across a wide range of counties between the pre- and post-1973 periods. Differential responses to the oil shocks and their aftermath account for a very large part of why countries diverged so much. The countries that did well in the ensuing period are those that took measures to correct the imbalances. These by and large were the relatively more open East Asian economies and the other examples cited in the previous paragraph. Therefore it seems likely that differences in growth or TFP performance which are being attributed by the World Bank and others as a product largely of openness, may be more a product of differential macro policies than has been recognized to date.

4.2 Trade and Industrial Policy in East Asia

Interpreting what happened in East Asia and why has generated considerable controversy. Early World Bank interpretations emphasized reducing distortions and setting better incentives as being the key to success - the so-called "market friendly" approach.[9] Critics countered that this really understated the very activist role played by governments in encouraging and even sponsoring certain sectors and even certain firms, most particularly in the cases of Korea and Taiwan. The ***East Asian Miracle*** incorporates the critics' ideas but still comes down very heavily on the side of the market friendly approach, saying essentially that the government intervention did not have a very large impact.

The to-ing and fro-ing between the World Bank and its critics has generated some areas of consensus on what happened in East Asia but there remain some areas where there is no meeting of the minds. The areas where there is substantial agreement are:

- beginning in the mid-1960s for Korea and Taiwan(with the other East Asian countries following later), liberalization of the trade regimes began with lowering of tariffs and reductions in the scope of import restrictions;
- exporters were enabled to obtain imported inputs fairly freely and at prices approximating world prices; duty drawbacks for inputs into exports; bonded warehouses; export processing zones; and subsidized credit all played roles but roles which varied from country to country;
- Stability in real exchange rates was maintained and tendencies toward appreciated or overvalued currencies were avoided; at times in certain countries, exchange rates were undervalued;
- the basis for "export push" was not an incentive system which particularly favored exports, but rather one which removed the bias against exports embodied in previous regimes; that is the incentives for producing exports were

[9] See the World Development Reports of the late 1980s (especially 1987), for example.

not substantially different from the incentives for producing substitutes for imports;

- despite liberalizations, the trade regimes in most East Asian economies were far from open (except, of course, for Hong Kong and Singapore); Table 8, for example, shows that average tariffs and average non-tariff barriers on East Asian manufactured imports at 22 percent and 20 percent respectively in the mid-1980s. While below levels in other regions, such rates -- given deviations in individual rates from the average, rates that increase with stage of processing, and small share of domestic value-added in final output prices -- were still capable of generating high Effective Protection Rates; e.g. EPRs for manufacturing of 68 percent in Indonesia(1987) and 66 percent in Thailand(1985) and a range in Malaysia(1987) going from -26 percent in tobacco to 289 percent for steel. EPRs, of course, could and did vary substantially between sectors. In earlier years both nominal and effective rates had been much higher but, as late as the mid-1980s, East Asian levels of protection were still quite high.

Table 8 Tariffs and Non-tariff Barriers in Developing Countries, 1987

Region	Manufacturing		All Goods	
	Tariffs	NTBs	Tariffs	NTBs
East Asia	22	20	21	22
South Asia	81	47	77	48
Europe/Middle East/North Africa	26	31	24	32
Africa	30	30	33	30
Latin America/Caribbean	34	20	33	21
Average	34	27	32	28

Note : NTB means non-tariff barrier. Data derived from UNCTAD sources for 82 developing countries.

Source: World Bank, ***World Development Report 1991***, p.98.

While there can be variations in thinking about how to assess the above points, where the World Bank and its critics really part company is on assessments of the nature and effects of government interventions in East Asia. The critics argue that the East Asian economies used all the policy tools employed by other developing countries (e.g. tariffs, QRs, industrial licensing, tax incentives, and directed credit) and used them aggressively to encourage particular sectors and particular firms. The World Bank acknowledges that this was in fact so but argues that these countries used the tools pragmatically and flexibly; programs that didn't produce results were discarded. The World Bank emphasizes two points: first that the costs of intervention were never allowed to become excessive and that efforts to "pick winners" were limited to cases with positive returns;. Since distortions in these countries were substantially less than in other developing countries, deviations from comparative advantage were not so great and a criterion of forcing firms to produce exports profitably was probably a pretty good indicator of economic efficiency. In addition, if the additional exports did not appear within a reasonable length of time, government support was withdrawn.

The critics and the World Bank have no trouble agreeing that the governments of Korea and Taiwan were quite "hard headed", capable of ending support when it didn't work out and that this ability was rare in the experience of developing countries. The critics, however, still feel that the World Bank fails to understand that these countries were not just trying to correct distortions to better reflect the lines of comparative advantage but were heavily and substantially involved in trying to direct the course of industrial development, helping industries to take advantage of economies of scale and spillovers that otherwise might have been missed by private firms only concerned with their own profits. The critics feel that the structure of industry in these two countries is different from what it would have been because of government interventions. The World Bank agrees that the two governments were heavily interventionist but feels that this didn't really have a large impact on the outcomes. For this it cites three pieces of evidence; (a) that the structure of industry in Korea and Taiwan was not substantially different from that of other countries at the same

stage of development; (b) that TFP growth in promoted and non-promoted sectors in the two countries were not substantially different; and that (c) Thailand, Malaysia and Indonesia were all able to achieve rapid growth of manufactured output and exports with much less government intervention. To which the critics reply that the World Bank's evidence is simply irrelevant. Comparing Korea and Taiwan's industrial structure with that of other countries (especially since those structures were generated by highly distorted policy environments) or comparing TFP growth in two different sectors doesn't prove anything. The correct counterfactual would have been to compare the experiences in the two countries with what it would have been had there been little or no government intervention. This is, of course, true but since gathering the evidence for the appropriate counterfactuals is difficult or next to impossible, it leaves the two sides both holding their ground unable to produce an argument or the evidence that would resolve the issue.

The last area of contention is about whether the experiences of Korea and Taiwan could be replicated by other countries -- not exactly of course -- but whether other countries are capable of carrying out such an interventionist strategy and, if so, whether it is indeed desirable or necessary for them to do so. The World Bank is very skeptical saying that the prerequisites for success are so stringent that few if any countries could meet them. What are these prerequisites: "First, governments in Northeast Asia developed institutional mechanisms which allowed them to establish clear performance criteria for selective interventions and to monitor performance. Intervention has taken place in an unusually disciplined and performance-based manner..... Second, the costs of interventions, both explicit and implicit, did not become excessive. When fiscal costs threatened the macroeconomic stability of Korea and Malaysia during their heavy and chemical industry drives, governments pulled back. In Japan the Ministry of Finance acted as a check on the Ministry of Trade and Industry to carry out subsidy policies, and in Indonesia and Thailand balanced budget laws and legislative procedures constrained the scope for subsidies. Indeed when selective interventions have threatened macroeconomic stability, [high performing Asian economies] have consistently come down on the side of prudent macroeconomic

management. Price distortions arising from selective interventions were also less extreme than in many developing economies". (World Bank, 1993, pp.6-7).

Most critics would accept that the very activist, selective policies such as those followed in Korea and Taiwan are fraught with dangers and the very instruments they used have led to problems in many other countries - e.g. continued reliance on protection and support, lack of competitiveness and unsustainable pressures on the government's budget for subsidies, tax relief, and credit at below market interest rates. They would also agree that it is quite difficult to set up and administer performance tests whereby positive outcomes are expected from firms/industries receiving government favors. Where the critics part company from the World Bank -- quite rightly in my view - is on its insistence that few, if any, developing countries could successfully implement such policies (as well as its contention that, in any event, such interventions are not needed since the market will take care of everything). To argue as the Bank does is to assume that government's are incapable of learning by doing and setting up institutions that maintain a cooperative but somewhat arms length relationship with business. Admittedly avoiding "capture" and "rent seeking" behavior is never going to be easy but the attempts by some governments around the globe to bring budget deficits under better control, to streamline government activities and to open up economies to more competition would appear to suggest that governments are learning from experience and that, however slow, improvements are possible.

4.3 Role of Government

It is not at all clear what the concept of "minimal government" means; in fact it is quite possible that the whole concept stems from persons trying to interpret what the World Bank (and the IMF) are saying. If it means that there are gains to be had from improving the productivity of government officials, devolving the provision of a number of less essential government services to the private sector, and focusing increased attention on providing better quality public services, it is likely that many people would agree. If it means that many government interventions to sponsor or protect certain industries have

been costly and inefficient in a large number of cases, again you might get substantial agreement although this time more from development economists. But you would get complaints from those who believe there are other models of development and from those who are not so skeptical about the government's ability to carry out "hard headed" interventions. If it means that in this age of growing globalization and openness, governments - in both developed and developing economies - are very circumscribed in what they can do because international investors will punish governments that get too large, this is simply not convincing. Flows of international capital are quite agnostic as to size of government; look at the huge flows to China for example. What international capital flows respond to is mainly persistent internal and external imbalances, indications that growing amounts of investment are not productive, activities which suggest that public protection for international flows is weakening and/or activities which exacerbate the social divisions within society which in turn may lead to increased political and social strife.

The World Bank's ***1997 World Development Report*** on the Role of the State (p.18) -- probably the most "government-friendly" report written by the Bank to date - summarizes its position as follows;

- "Development - economic, social , and sustainable - without an effective state is impossible. It is increasingly recognized that an effective state - not a minimal one - is central to economic and social development, but more as a partner and facilitator than as director. States should seek to complement markets, not replace them.
- A rich body of evidence shows the importance of good economic policies (including the promotion of macroeconomic stability), well developed human capital , and openness to the world economy for broad-based ,sustainable growth and the reduction of poverty. But as our understanding of the ingredients of development improves, a deeper set of questions emerges: why have some societies pursued these actions with greater success than others, and how, precisely did the state contribute to different outcomes?

- The historical record suggests of building on the relative strengths of the market, the state, and civil society to improve the state's effectiveness. This suggests a two-part strategy of matching the role of the state to its capability, and then improving that capability".

It is worth stressing that the World Bank is saying that an "effective" state, not a "minimal" one, is critical to development and that the way to achieve such a state is to concentrate it's activities in areas where government services are urgently needed and then to improve the capacity to improve such services (and, later perhaps, additional services) This "tailoring the suit to fit the cloth" approach to government is likely to produce quite different results in different countries not only because of differences in capacity but also because the role of the state will depend on its history, institutions and culture and increasingly on the outcomes of democratic processes. This is highly unlikely to lead to "one size fits all" or even to small governments. While comparing the size of governments across countries is fraught with difficulties because of different practices about whether local governments, social insurance and extrabudgetary funds are or are not included in the data, Table 9 compares central governments across country classes and time periods for a standard definition.

Table 9 Size of Central Governments : 1960-64 to 1990-94

(percentage of GDP)

	1960-64	1970-74	1980-84	1990-94
OECD Countries	18	25	35	37
All Developing Countries	16	20	28	27
East Asia	15	18	26	26
South Asia	16	15	25	30
Latin America	15	19	26	24
Sub-Saharan Africa	20	20	27	28
Middle East/North Africa	n.a.	33	37	33

Source : World Bank, ***World Development Report 1997***, p.22.

Several points stand out from Table 9. First, after four decades of increasing openness and long bouts of "Thatcherism" in the UK and "Reaganism" in the USA, OECD governments are bigger than ever, approximately having doubled in size as a share of GDP over the period 1960-64 to 1990-94. Second there is no tendency of governments in any class or region to get smaller (relative to GDP). All are much larger now than they were in the 1960s (except for the Middle East/North Africa where they have pretty much maintained their already large share). Third the governments of OECD countries are not only absolutely larger than those of developing countries but are relatively larger as a share of GDP as well; and, if anything, this relative gap seems to be expanding over time. Lastly - and for this it is not possible to compile data - if one were to include local government, social insurance and extrabudgetary funds, the tendencies noted in points 1-3 above would likely be even more pronounced since these activities are bigger in more developed countries and they have been growing more rapidly. Table 10 shows the data on central government total revenues and expenditures for those countries for which data could fairly readily be collected. What comes through from this table is the huge size of central governments in the developed countries compared to those in the less developed countries and the enormous variety in size amongst developed country central governments, with expenditures ranging from 22.9 percent of GDP and 27.1 percent in the USA and Switzerland at the low end to 53.4 percent and 50.8 percent of GDP in Belgium and the Netherlands at the high end in 1995. In East Asia, central government expenditures - except in Malaysia - absorb less than 20 percent of GDP. With exceptions (see Botswana and Brazil, for example), the governments in most developing countries appear small in comparison with those in wealthier countries.

What conclusion is one to draw from this mass of information? It seems likely that even if governments were to follow the World Bank's prescriptions and cut their activities to their capabilities and then improve their capabilities, most developing country governments would still end up absorbing a much larger share of GDP in the long run than they do at present. The East Asian countries - and many other developing countries - may be

fortunate in that the worldwide trend to rationalizing governments and making them more effective may mean the that reasonable levels of public services could be achieved with much smaller governments than one finds in (say) many European countries. This means that governments won't need to grow so much but the likelihood remains that, over the medium-term government expenditures will grow faster than GDP. The demand for public services seems likely to grow with rising per capita income; the voters in democracies are likely to insist that this be so; and the absence or low coverage of social insurance in most developing countries will only serve to reinforce these tendencies.

Table 10 Size of Central Government, Selected Countries 1980 and 1995

(percentage of GDP)

	Total Revenue		Total Expenditure	
	1980	1995	1980	1995
Developed Economies				
Australia	24.7	27.5	22.6	29.1
Belgium	52.2	55.1	50.9	53.4
Denmark	48.0	51.9	39.4	43.5
France	48.9	49.6	39.5	46.8
Germany	-	37.3	-	33.9
Italy	36.8	49.6	39.8	49.9
New Zealand	37.7	45.2	38.1	36.2
Norway	48.7	47.0	34.6	39.1
Sweden	40.3	44.0	39.3	45.0
Switzerland	22.1	24.9	20.3	27.1
United Kingdom	40.4	45.3	38.2	44.0
United States	19.4	19.8	22.1	22.9
East Asia				
Indonesia	22.0	22.6	22.1	16.2
Korea	23.3	24.2	17.0	17.8
Malaysia	27.8	27.2	29.1	23.2
Philippines	18.4	20.9	13.4	18.4
Singapore	21.5	21.8	20.1	14.9
Thailand	19.8	19.2[a)]	18.8	16.9[a)]

(continued)

	Total Revenue		Total Expenditure	
	1980	1995	1980	1995
South Asia				
India	13.8	13.7	13.3	16.0
Pakistan	18.8	22.5	17.6	23.2
Latin America				
Argentina	15.6	11.9 [b]	18.2	14.0 [b]
Bolivia	-	18.9	-	24.1
Brazil	22.6	27.0 [b]	20.2	33.8 [b]
Chile	37.0	27.5	28.0	19.5
Colombia	13.0	20.8	14.5	14.4
Mexico	18.7	22.8	16.8	14.3
Venezuela	20.8	18.8	18.9	18.8
Sub-Saharan Africa				
Botswana	25.2	29.8	33.9	38.3
Cameroon	17.9	12.3	15.7	15.5
Ghana	8.3	18.5	10.9	20.6
Kenya	27.6	29.6	25.3	27.4
Mauritius	22.0	23.7	27.3	23.3
Sierra Leone	16.5	16.7	24.6	19.8
Zambia	33.9	20.4	37.0	16.8

Notes : [a] Data from Ministry of Finance, Thailand

[b] Data are for 1996.

Source : World Bank, ***World Development Report 1997***, Table 14.

4.4 Consensus Management

International trade opens up the possibilities for higher incomes and faster growth. It also opens up the possibilities for greater economic instability and periodic crises. The debt crises suffered by Latin American and African governments in the 1980s and into the

1990s, the Mexican crisis of 1994-95, and the Asian crisis that began in 1997 are all testimony to this. Even absent crises, our trade theory teaches us that, though countries gain from trade, not everyone in the country gains from trade. There are gainers and losers in each case and the overall gains to the country only mean that the gainers could compensate the losers and still come out ahead. Domestic consumers are likely to be losers from increased exports because of rising prices; and increased imports may benefit consumers but will damage the producers of competing products. One only has to look at the USA to realize how politically contentious opening up to foreign trade can be. Recall the debate over NAFTA and the Uruguay Round/WTO or think about the fact that after almost a decade of strong economic growth and the lowest unemployment rates in decades, protectionist sentiments are the stronger now than in recent memory. As examples, think of the reaction to the recent demands for quotas on steel imports, or the increased use of anti-dumping measures or recent the reaction to the surge in wool imports from Australia and New Zealand.

The movement to free trade is not going to be easy in the USA or Europe or the developing countries; in fact I really have my doubts about how readily free trade will be achieved in the developed or the developing countries. The countries that handle the opening up most smoothly are likely to be those with stronger mechanisms for achieving consensus about appropriate policies. Countries with sharp social divisions (due to ethnic, religious, regional or social divisions) and/or weak institutions for confronting problems and reaching reasonable accommodations on the sharing of the costs are likely to be those which have the greatest problems in adjusting. Part of the reason that Latin America and Africa had such difficulties in adjusting to the 1980s crisis was the absence of institutions for reaching compromises; the governments in these countries represent a small proportion of the total population. In addition, ethnic divisions in Africa and the width of social divisions in Latin America stemming from very badly distributed income and social splits between European descendants and the indigenous population made agreements on macro and social policies very hard to arrive at.

Given that we are living in an increasingly democratized world, esp. in Asia, an institutional framework which allows greater participation, which allows for political parties and labor unions and which allow groups representing those who usually underrepresented such as farmers, minority groups and the poor appears more likely to be capable of producing a consensus about how to adjust and how the costs are to be shared. The existence of social insurance(unemployment, health, old age)and other social safety net programs -- which played a vital role in making market outcomes more palatable in the USA, Europe and Japan --would no doubt make the adjustment easier. What mix of institutions and what mechanisms for their operation produces the greatest chances of success is something about which little is known and no doubt any formula would vary considerably from country to country. What does seem clear is that not many developing countries have a framework which would offer a high probability of success. Latin America and Africa certainly don't, at least for the vast majority of countries. Asian countries, with some exceptions, seem much better equipped but social insurance and protection are in the early stages of development in most countries. Moreover, Asian democracies are still at an early stage. Given that developing the appropriate framework is likely to take time, a more coordinated approach to opening up seems a surer route to success. Letting trade liberalization run ahead of political developments and the ability to provide assistance to adversely impacted groups will likely run into difficulties.

5. A Summing Up

My overall point is clearly not that openness is unimportant. Quite the contrary, I think that greater openness can make an important contribution to successful development. My worry rather is the rhetoric for export-led strategies and for free trade may be crowding out the recognition that a complex set of trade and non-trade policies is needed for success; to use some American slang, I'm afraid that "the free trade tail may be wagging the development strategy dog." What we have learned in looking at the development record

of the past four decades is that quite a mix of countries have attained modest to outstanding success while most countries have not done well; that a variety of policies explain this record; and that future growth will depend on the coordination of policy improvements along a number of fronts. What follows is an elaboration on these points.

The record on development over the past forty years is by and large disappointing. Most developing countries have grown only slowly, many have even declined. The most successful group of countries were the East Asian economies that we have been stressing which accomplished a per capita expansion of over 5 percent per year 1965-1997. Yet a number of other countries have been able to achieve modest success or better during this period by achieving growth rates in per capita income greater than those in the High-income countries (i.e. 2.3 percent p.a.). Together with China which has grown very rapidly, a good number of these countries are not what one would refer to as outward looking, market friendly economies (take as examples Pakistan, Sri Lanka, Egypt, and Tunisia).

The picture gets still more complicated if the period is split into pre- and post oil crisis intervals. Prior to 1973, Low and Middle Income countries together grew at an average rate of 4.2 percent, a rate they have never again succeeded in attaining (see Table 5). Moreover all regions were doing well on average with Africa averaging 1.7 percent per year and Latin America's average growth rate nearly matching East Asia's (note: this was also an era of great improvements in social indicators such as school enrollments, infant mortality and life expectancy across a range of developing countries). Following 1973, and especially in the 1980s, growth in a large cross-section of countries in Africa, the Middle East/North Africa, and Latin America fell to much lower (and even negative) levels. Failure to adjust to the two oil shocks led to many problems including greater inflation, unsustainable debt buildups, periodic foreign exchange crises and a stop-go pattern of growth from which many developing countries are only now beginning to recover and some have still not yet begun.

While speculations are always problematic, the following one seems reasonable: if there had been no oil crises or if a greater number of developing countries had been able to

make the needed macroeconomic adjustments, it is likely that many more of them would have achieved much higher average growth rates over the past three decades and we would have more variations in successful models than just the "East Asian model". True, no doubt they would have to move toward greater openness just as the East Asians did (especially the very small states in Africa) but "successful countries" would likely have exhibited greater variations in how much and how they opened up, in the mix of private/public enterprise, in the degree of government interventions in the market, and in the size and role of government than the development experience has been able to generate to date.

The overall evidence strongly suggests that greater openness is associated with more rapid growth rates in total output and/or total factor productivity. However, it is also worth stressing that, while the East Asian economies were relatively more open than other economies, their levels of protection were not exactly low. Through much of the 1960s and 1970s and well into the 1980s, the East Asian economies had levels of protection which, though declining and lower than in other regions, were nonetheless substantial. This allowed quite high rates of effective protection for the entire manufacturing sector and for particular industries. The main source of "export push" consisted of reducing or eliminating the bias against exports inherent in this system as much as possible. The elements of such a program were:

- use conservative fiscal/monetary policies to avoid exchange rate real appreciation (perhaps even erring on the side of undervaluing the currency)
- eliminate the bias created by tariffs/QRs by getting exporters access to imported inputs at world prices through duty drawbacks, bonded warehouses, export processing zones and the like
- replace QRs with tariffs and reduce the level of tariff protection over time to more moderate levels

- encourage exporters through performance targets if necessary cross-subsidized through profits from sales in heavily protected domestic markets
- support exporters by other means such as subsidized credit, government services, etc.

Together this is the East Asian model of "export push" although with somewhat more room for interventionist government policies than perhaps the "Washington Consensus" might approve of.

The model by Sachs and others shows us that the "openness variable" is but one important variable amongst a number of others in explaining the differences in growth performance between countries. The evidence we presented suggests strongly that the inability of a large numbers of LDCs - esp. in Africa and Latin America - to adjust to the two oil shocks may be more critical in accounting for the differences in performance between various developing countries than has been previously recognized. The ability to formulate and implement fiscal (and monetary/financial) policies to keep economic imbalances from developing and to adjust to external shocks will be critical in the future to achieving more stable growth. "Minimal government" is not a reasonable or realistic objective; in fact it is not clear what the concept really means. Better government is critical to development - in conducting macroeconomic policy, in providing economic and social infrastructure, in creating social safety nets, and in overseeing the laws and regulations that are critical to the workings of a market economy. Safety nets likely require urgent attention. The Asian Crisis has provided an important reminder that market economies are subject to instability, that there will continue to be business cycles, and that international capital markets are erratic. Safety nets - in the forms of social insurance (unemployment, old age and health) and social protection (for the poor, handicapped, children and the aged) - are not very well developed in Asia and will be critical to making market outcomes more tolerable. Therefore improving government focus on the activities that are really critical to economic and social development is likely to help to improve performance but how this is

accomplished is likely to show substantial variations across countries. Given that East Asian governments - and indeed the governments of most less developed countries -- are much smaller than those of the industrialized countries it is not evident that the outcome of improving the performance of governments will lead to smaller governments.

In sum, the governments of developing countries face a formidable agenda of tasks ranging from improving macroeconomic policymaking (including the management and regulation of financial systems) to providing better and more efficient public services to creating social safety nets to creating a better set of political and social institutions to forge a consensus about appropriate development strategy and an appropriate sharing of benefits and costs. In closing, two points seem worth making:

- just as the USA is different from Germany which is different from Sweden, the mix of programs, policies and institutions that individual countries adopt in order to succeed will show substantial variations between countries. To deny that this will be so is to claim that there is a single model for success, a notion for which there is no evidence, and to also say that the momentum for globalization will override the wishes of individual countries, including those of democratically elected governments, which is a formula that will eventually lead to a backlash against insensitive international forces; and
- the successful opening up of trade will depend on progress on a number of complementary programs and the desire for the ideal of "free trade" should not be allowed to get out too far in front of needed policy improvements in other areas.

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What Caused the Thai Crisis?*

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บทคัดย่อ

อะไรคือสาเหตุของวิกฤติการณ์เศรษฐกิจไทย ?

โดย ปีเตอร์ จี วอร์

เราจำเป็นต้องเข้าใจวิกฤติการณ์เศรษฐกิจที่เกิดขึ้นในประเทศไทยว่าเป็นการล่มสลายของเศรษฐกิจที่เติบโตรวดเร็วเกินไป ทั้งนี้มิได้มีต้นเหตุจากนักเก็งกำไรที่ชั่วร้าย หรือนักการเมืองที่ฉ้อฉล แต่เป็นผลจากความผิดพลาดของการดำเนินนโยบายเศรษฐกิจมหภาคในช่วงเวลาที่เศรษฐกิจเติบโตอย่างรวดเร็ว ดังที่ไม่เคยเป็นมาก่อน ความผิดที่สำคัญคือ การรักษาระดับอัตราแลกเปลี่ยนไว้ให้คงที่ ซึ่งไม่เหมาะสมกับภาวะแวดล้อมที่ได้เปลี่ยนไปแล้ว การเติบโตทางเศรษฐกิจดังกล่าวทำให้เกิดภาพลวงที่ชักนำให้ผู้ตัดสินใจทางธุรกิจยอมรับความเสี่ยงเกินกว่าจะยอมรับได้ในภาวะปกติ

การเติบโตอย่างต่อเนื่องก่อนภาวะวิกฤติ มีสาเหตุมาจากการลงทุนโดยตรงจากต่างชาติ (Direct Investment) และเมื่อการเติบโตดำเนินต่อไป ปริมาณเงินทุนที่ไหลเข้าอย่างมากมายผนวกกับนโยบายอัตราแลกเปลี่ยนคงที่ ทำให้ค่าเงินที่แท้จริงสูงขึ้น (หรือเรียกว่า Dutch Disease) ส่งผลให้ความสามารถในการแข่งขันทางการค้าระหว่างประเทศลดลง ในปี พ.ศ. 2539 ปัจจัยดังกล่าวร่วมกับการเปลี่ยนแปลงของปัจจัยภายนอก ทำให้การส่งออกชะลอตัวอย่างชัดเจน และจุดกระแสความเชื่อว่าค่าเงินบาทจะลดลง

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ในช่วงเวลาก่อนเกิดวิกฤติการณ์ ก็มีแนวโน้มที่จะเกิดความตื่นตระหนกทางการเงิน ได้ทำให้ทุนสำรองระหว่างประเทศของไทยอยู่ในฐานะที่ล่อแหลมมากขึ้น ทั้งนี้เพราะปริมาณทุนต่างชาติที่ไหลเข้ามาในไทยอย่างมากมายสามารถไหลกลับออกไปได้ในระยะเวลาอันสั้น และการที่สัดส่วนปริมาณทุนระยะสั้นเหล่านั้นเมื่อเทียบกับทุนสำรองเพิ่มขึ้นได้ ก็เป็นผลจากการดำเนินการนโยบายเศรษฐกิจมหภาคนั่นเอง

Abstract

Thailand's crisis must be understood as the collapse of a boom. It was not caused by evil speculators or by corrupt politicians but by errors of macroeconomic policy, themselves an outcome of complacency arising from a decade of unprecedented economic growth. Central among these policy mistakes was the insistence on retaining a fixed exchange rate when circumstances no longer suited it. The boom produced a euphoria that also led business decision-makers to take risks they would not ordinarily have accepted.

The prolonged boom which preceded the crisis was fueled by high levels of direct foreign investment. As the boom developed, these high levels of capital inflow, combined with Thailand's fixed exchange rate policy, set in train a 'Dutch disease' real appreciation, undermining the competitiveness of the traded goods sector. In 1996 these forces, combined with changed external conditions, produced a dramatic slowdown in export growth which provoked the expectation of a devaluation.

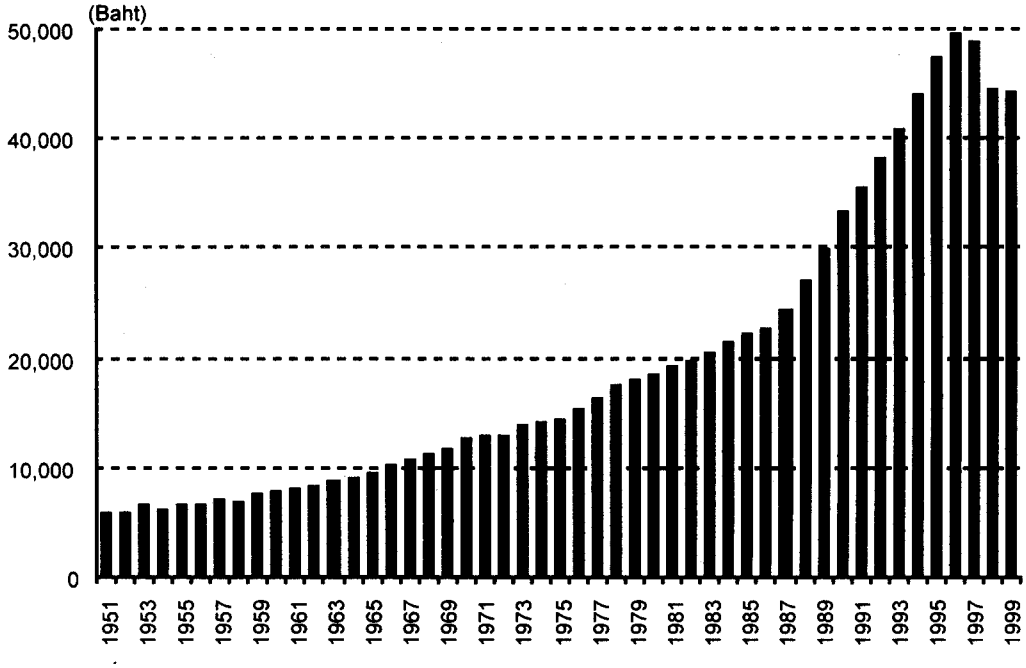
Over the same pre-crisis period, the vulnerability of the country's foreign exchange reserves to a financial panic had increased very substantially. The vulnerability was derived from of a greatly increased stock of volatile capital within Thailand which could be presented for conversion into foreign exchange at short notice; but the growth of this stock of volatile capital relative to reserves was itself the outcome of macroeconomic policies.

I. Introduction

Thailand's crisis was the collapse of a boom. Over the decade ending in 1996 the Thai economy was the fastest growing in the world, with annual growth of real GDP averaging almost 10 per cent. Although growth at these stellar rates was new for Thailand,

sustained economic growth had been the norm throughout the second half of the 20th century. Growth of Thailand's real GDP per head of population was positive in every single year from 1958 to 1996 (Figure 1), a unique achievement among developing countries. By the mid-1990s, Thailand's performance was being described as an example others might emulate and its principal economic institutions, particularly its central bank, the Bank of Thailand, were cited as examples of competent and stable management.

Figure 1 Thailand: Per Capita GDP at constant 1987 prices, 1951 to 1999



Note: Data for 1999 are based on Bank of Thailand projections.

The currency crisis of 1997 changed all that and capital movements played a central role in the process. The principal task of this paper is to describe the manner in which capital movements generated the collapse of the Thai economic boom. The story is not merely about the rapid capital which occurred in *outflows* of late 1996 and early 1997 , placing pressure on the reserves of the Bank of Thailand, inducing a float of the currency and producing the subsequent macroeconomic instability. The more important story is the

manner in which short-term capital *inflows* over the preceding four years of economic boom culminated in these problems. They did this by rendering Thailand *vulnerable* to a currency crisis. The lesson from this experience is certainly not that capital flows are "bad", whether short-term or long-term, but that they need to be managed better.

A secondary task of the paper is to consider the role played by a less well-known feature of the Thai crisis. It was preceded, in the early 1990s, by a relaxation of controls on capital movements into and out of Thailand. How important was the relaxation of these controls in causing the Thai crisis? Would their retention have averted the crisis?

The analytical core of the discussion is the distinction between *vulnerability* to a crisis and the *trigger* which actually provokes it. For now, assume a fixed exchange rate regime. A 'trigger' is a disturbance which increases the perceived likelihood of a devaluation. This trigger may arise from many possible sources, both external and internal, including changes in the external or internal economic environment, political events and natural disasters. 'Vulnerability' is a set of economic conditions under which a small disturbance will induce the expectation of a *large* devaluation. The result is that mobile capital will flee the country to avoid the large capital losses that will accrue to assets demoninated in the devalued currency, or whose value would be reduced by policy responses to capital flight. For a crisis to occur there must be *both* a state of vulnerability and a trigger.[1] As Dornbusch (1997) puts it, vulnerability does not mean that things *will* go wrong; it means that 'if they go wrong, then suddenly a lot goes wrong.'

The empirical core of the analysis is a review of the long term factors that made Thailand vulnerable to a financial crisis and the role played by international capital mobility in that process. The newly emerging literature on macroeconomic vulnerability has

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[1] The analogy with a tightrope walker may be helpful. Any number of disturbances (triggers) could cause the walker to lose balance. But there will be no disaster if the tightrope is close to the ground, or if there is a safety net. Only when the tightrope is high and there is insufficient protection (a state of vulnerability) will a trigger lead to catastrophe.

stressed three predisposing conditions for vulnerability to a crisis.[2] These are: inadequacy of international reserves; substantial real appreciation, in excess of the 'natural' rate of real appreciation; and high levels of bank exposure. If these conditions exist, then a relatively small trigger could cause a major crisis because it could lead market participants to make a large upwards revision to their perceived probability of a devaluation.

By 1995, Thailand was already highly vulnerable to a financial crisis according to each of these three indicators. This discussion is contained in Section II. Section III identifies the short-term trigger – a slowdown of export growth in 1996 - which led to the expectation of a devaluation and which in turn produced the crisis. Section IV describes the crisis itself finally, in Section V we turn to the issue of capital controls. The policy relevance of the discussion is that the set of disturbances which could potentially serve as 'triggers' is endless and many of them cannot be avoided. What can be avoided is the circumstance under which a small or moderate disturbance - a trigger - will lead to a crisis; that is, *vulnerability* is what must be managed. First, we must understand it.

II. How Capital Inflows Produced Vulnerability

The origins of the Thai crisis of 1997 must be understood in the context of the protracted boom which preceded the crisis. What fueled the growth of 10 per cent per annum which occurred from 1988 to 1996? Growth at this sustained, high rate could not result from an enormous, exogenous increase in productivity. To explain the boom we must examine the growth of the factors of production employed in Thailand.

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[2] See, for example, Sachs, Tornell and Velasco (1996), who produced a similar list of pre-disposing factors for vulnerability to a currency crisis, based on their analysis of the Mexican crash of 1994.

Explaining the Boom

Improvements in the quality of the labour force were not the source of Thailand's boom because the performance of Thailand's educational sector has been among the weakest in East Asia. Secondary school participation rates are low and have not improved greatly in the past two decades (Khoman, 1993). Similarly, since the 1960s the expansion of the cultivated land area was small, so growth of the stock of land was not the source either. The answer must lie with the capital stock. Thailand's capital stock grew dramatically in the years since 1987. Both foreign direct investment and domestic investment grew, but growth of foreign direct investment began first and was proportionately much larger (Warr, 1993).

Studies of total factor productivity growth in Thailand reveal a crucial point. Over the 20 year period ending around 1987, and therefore preceding the boom beginning in 1988, growth was explained reasonably well by growth accounting methods. The unexplained residual, total factor productivity growth, was less that 1 per cent per annum. But over the period of the boom of the late 1980s and the first half of the 1990s, the unexplained residual increased to around 5 per cent (Warr, 1993). Growth of factor supplies, as conventionally measured, did not account for the growth that was occurring.

A clue to the difference between these two periods is provided by the behaviour of incoming foreign direct investment. Beginning in 1987, foreign direct investment increased dramatically. From annual rates of inflow varying between US$ 100 and 400 million over the previous 15 years, the annual rate of inflow rose more than five fold, to over US$ 2 billion per year and remained at roughly these levels over the next 8 years. Rates of domestic saving and investment were also high, but the stock of capital represented by direct foreign investment was increasing much more rapidly that the stock represented by domestic investment.

The way the capital stock is measured in total factor productivity studies involves adding the value of capital from all sources, foreign and domestic. The Thai experience exposes a flaw in that procedure. Suppose foreign capital embodies forms of technological

know-how which domestic capital does not. Then the two forms of capital are imperfect substitutes for one another. According to the author's econometric estimates, using Thai data, the elasticity of substitution between the two is about 0.45, certainly not infinity, as implied by the usual aggregation. This implies that the two forms of capital are strongly complementary - an increase in the stock of foreign capital will *increase* the productivity of domestic capital. Simply adding these two capital stocks is inappropriate because it will miss this effect.

This argument implies that when the foreign component of the total capital stock is increasing rapidly, the productivity of the domestic capital stock will in fact be increasing in a way that the conventional approach to measuring capital stocks does not recognise. Increased foreign investment thus increases the *level* of domestic investment because it raises the productivity of the domestic capital stock. When these two components of the capital stock are separated, the unexplained residual in total factor productivity growth studies, total factor productivity growth, becomes much smaller. The point is that to explain the boom we must take note of the massive inflow of foreign capital and abandon the notion that foreign and domestic capital are perfect substitutes. But this inflow of foreign capital did not merely fuel the boom. Its magnitude and its changing composition, combined with the policy environment of the time, also created the foundations for the collapse of 1997.

Bank of Thailand Response: Sterilisation and Liberalisation

Thailand has a long and proud history of stable monetary policy and low inflation. The Bank of Thailand sees its major role as controlling inflation and for decades it had viewed the maintenance of a fixed exchange rate as central to achievement of that outcome. Prior to 1990, financial capital movements into and out of Thailand had been subject to extensive controls, a policy which had allowed Thailand a significant degree of monetary independence in spite of its fixed exchange rate (Warr and Nidhiprabha, 1996). But these controls were largely dismantled during the early 1990s. In part, it was hoped that Bangkok might replace Hong Kong as a regional financial centre following the

restoration of Chinese sovereignty in Hong Kong in 1997, but the liberalisation of capital controls was also apparently supported by the IMF.[3] Following this liberalisation, both the entry and exit of foreign funds was now very much easier. As foreign investment poured into the booming Thai economy, the Bank of Thailand attempted to sterilise its effects on the domestic money supply. Domestic interest rates were bid up, despite the fixed exchange rate and the increased openness of the capital market, confirming that foreign and domestic assets were imperfect substitutes. The result was an increased level of short-term foreign investment, which entered the country in response to the increased rate of return.

Now suppose an inflow of long-term foreign investment was occurring. If sterilisation was not occurring at all, the nominal prices of traded goods would not be affected, since they are determined (with lags) by international prices and the fixed exchange rate, but non-traded goods nominal prices would be bid up by the increased domestic demand. That is, the capital inflow would produce a real appreciation - an increase in domestic non-traded goods prices relative to domestic traded goods prices - the phenomenon now known as the 'Dutch Disease' (Corden, 1984). The current account deficit would increase, reducing the amount by which foreign exchange reserves would be increased by the initial capital inflow.

The outcome would be much the same if the monetary authorities were *attempting* to sterilise but where the exchange rate was fixed, capital movements were unimpeded, and foreign and domestic assets were perfect substitutes. Any attempt to sterilise by raising domestic interest rates, through sale of bonds, would be defeated because it would produce an inflow of portfolio investment sufficient to drive the domestic interest rate down

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[3] See the IMF reports by Robinson, *et al.* (1991) and Kochhar, *et al.* (1996) for favourable accounts of this policy change. On the other hand, see Warr and Nidhiprabha (1996), p. 204, for a warning of the dangers inherent in this programme of capital market liberalisation in combination with a fixed exchange rate. Warr and Nidhiprabha concluded that if the capital market liberalisation was to be maintained, Thailand would require a more flexible exchange rate system.

to its previous level. Demand would be increased by the monetary consequences of this inflow, producing the real appreciation described above. This is the familiar Mundell-Fleming model.

In the hypothetical case where sterilisation was completely effective, the monetary effects of the capital inflow would be exactly offset by the sale of bonds. Bond prices would be forced down and domestic interest rates would rise relative to international rates. The money supply would not increase and relative domestic prices would not be affected. Reserves would increase by the amount of the capital inflow. This outcome assumes, however, that additional short-term capital inflow is not induced by the rise in domestic interest rates. For this reason, complete sterilisation would be highly improbable in the Thai context of the early 1990s, because by then capital movements had been liberalised significantly. There was very little to prevent capital inflow in response to higher domestic interest rates.

Incomplete sterilisation implies an intermediate outcome. This might be observed if the monetary authorities were attempting to sterilise but where domestic and foreign assets were imperfect substitutes, leading to capital inflows which only partially offset the attempts to sterilise, and/or where some residual controls on capital movements were limiting mobility. We would then expect coexistence of the following phenomena, relative to what would otherwise have occurred:

(i) increased levels of foreign exchange reserves;

(ii) increased current account deficits;

(iii) increased domestic interest rates;

(iv) increased inflows of foreign short-term capital; and

(v) increases in prices of non-tradables relative to tradables - a real appreciation.

This combination is what occurred. Items (i), (ii) and (iii) are obvious from inspection of Thailand's macroeconomic data. We can therefore concentrate on items (iv) and (v).

Adequacy of Reserves

The Bank of Thailand was attempting to maintain a (nearly) fixed exchange rate relative to the US dollar.[4] Were its reserves of foreign exchange adequate for this task? The conventional measure of reserve adequacy, the number of months of imports that reserves could finance, relates a financial stock, international reserves, to a trade flow, the monthly value of imports. Based on this measure, reserve adequacy increased steadily throughout the pre-crisis period from 3 months of imports in 1988 to over 6 months in early 1997. This measure signalled no problem regarding reserve adequacy at the time of the crisis. On the contrary, it suggested a steady improvement in the adequacy of Thailand's reserves as the boom progressed. But this indicator is conceptually of little relevance as an indicator of vulnerability to a financial crisis.

At a time of financial panic it does not matter how many months of imports could be financed from reserves. What matters is whether reserves can withstand a capital outflow. Under a fixed exchange rate regime the relevant magnitudes are: (a) the *stock* of foreign currency available to the central bank to finance transactions which convert domestic currency to foreign currency, namely its international reserves, compared with (b) the *stock* of financial capital which could be presented to the central bank at short notice for such currency conversion. The accumulated stock of foreign-owned, short-term capital is a major component of the latter.

The foreign-owned component of the stock of short-term capital is only one component of the total stock, in that it does not include volatile capital held by domestic residents. However, focusing upon the foreign-owned component is helpful in that it is one of the most volatile components of the total stock of short-term capital. Moreover, focusing upon this component has the advantage that it can be isolated using balance of payments data. Clearly, if vulnerability can be demonstrated by looking at just this component of the

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[4] See Warr and Nidhiprabha (1996), chapter, Ch. 9, for a detailed discussion of exchange rate management over the period ending in 1991, and also Robinson, Byeon and Teja (1991).

stock of short-term capital, looking at a broader measure of short-term capital must necessarily indicate even greater vulnerability.

Figure 2 compares the stock of the Bank of Thailand's reserves, on the one hand, with the estimated cumulative stock of short-term, foreign owned capital, on the other. The latter includes foreign-owned portfolio capital, short-term bank loans and non-resident accounts held in Thai banks. This short-term capital is to be distinguished sharply from long-term, foreign-owned capital, which includes direct foreign investment and long-term loans from abroad. The accumulated stock of long-term capital is also shown in Figure 2. Monthly balance of payments data from the Bank of Thailand on net flows of financial capital are used to construct these stocks. The data are accumulated from January 1980, prior to which flows of foreign-owned capital were very small.

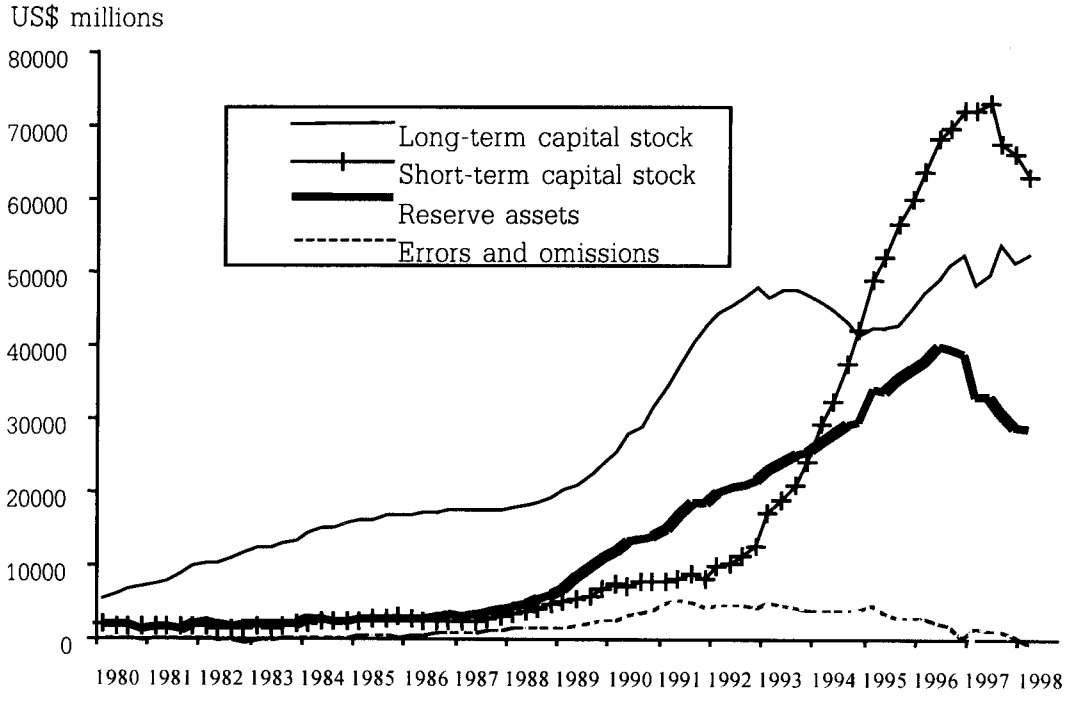
The longer the boom continued, the greater the accumulated stock of mobile funds became, relative to long-term capital and, much more significantly, relative to reserves. Figure 2 reveals a significant increase in vulnerability to a crisis in the years preceding 1997, especially from 1993 onwards. From 1994 onwards, the stock of short-term foreign capital exceeded the value of reserves and the discrepancy between them increased steadily. By early 1997 the stock of short-term, foreign-owned capital exceeded reserves by 80 per cent. Figure 3 shows the composition of this stock of volatile, foreign capital. Both portfolio capital and non-resident accounts increased significantly in the years prior to the crisis, but the most significant component of the increase was in bank loans from abroad.

Clearly, the adequacy of Thailand's reserves had declined dramatically, when these reserves are measured in relation to the stock of volatile funds that could be presented against them in the event of a loss of investor confidence. Moreover, this vulnerability did not develop suddenly, immediately prior to the crisis, but steadily, over a period of several years. That the subsequent outflow of this stock of short-term foreign-owned capital was the cause of the decline in reserves which accompanied the crisis is confirmed by comparing the decline in reserves during 1997 and 1998, shown in Figures 2 and 3, with the decline in the stock of short-term foreign capital during the same period. The flight of

this short-term, foreign-owned capital was clearly the principal source of the loss of reserves.

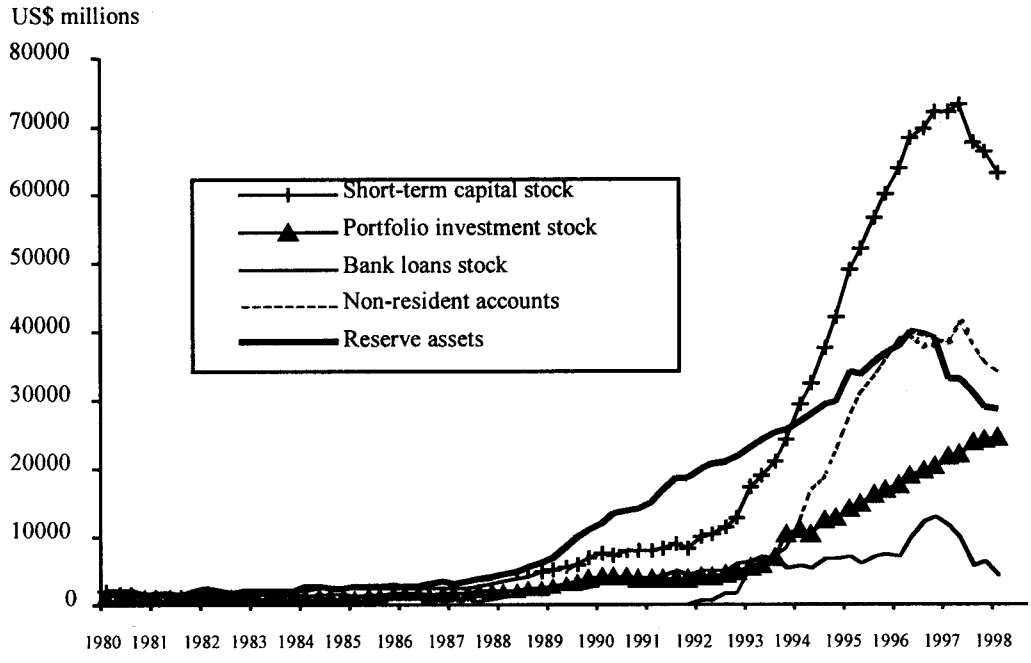
The growth of volatile foreign capital relative to reserves had made Thailand increasingly vulnerable to a speculative attack on its reserves, but few observers, if any, were looking at the appropriate indicators. Prior to the crisis, both the absolute value of reserves and the number of months of imports they could finance had been increasing, but the growth of reserves was far exceeded by the growth of volatile foreign capital, thereby increasing Thailand's vulnerability to a financial crisis.

Figure 2 Thailand: International Reserves and Foreign-owned Capital Stocks



Sources. Author's calculations, using monthly data from Bank of Thailand, Balance of Payments data bank.

Figure 3 Thailand: International Reserves and Short-term Foreign Capital Stocks



Sources. Author's calculations, using monthly data from Bank of Thailand, Balance of Payments data bank.

The Bubble Economy

What caused the massive inflow of volatile foreign capital in the years preceding the crisis? Large returns were being made from investing in Thailand and this situation had been sustained over several years. Euphoria induced by almost a decade of high growth produced over-confidence. In addition, the government was assuring the public that reserves were adequate to maintain the fixed exchange rate and the IMF also seemed satisfied, judging from its public statements. Investing in Thailand seemed both safe and profitable. Not to participate was to miss out.

Through the first half of the 1990s, investment in real estate and commercial office space soared. The rate of inflow was so rapid that the quality of the investment inevitably

declined, much of it proving to be financially non-performing, destroying the companies which had financed it. But why had investors acted so imprudently? Over-confidence was an important part of the story, but the underlying real appreciation was another. The classic bubble economy is one in which real estate prices continue to rise well beyond levels justified by the productivity of the assets, but so long as the prices continue to rise existing investors are rewarded and collateral is created for new loans to finance further investment, and so on - until the inevitable crash.

Unrealistic expectations of continued boom are the underlying fuel for this process. These expectations are generally possible only after several years of sustained boom. The boom therefore generates the mechanism for a crash. This is why economic booms almost never peter out gradually. They collapse. In these respects, Thailand's financial panic was similar to many previous examples around the world, including the Mexican crash of 1994 (Edwards, 1998).

In the Thai case, there were three other, less well understood causes for over-investment, each of which was policy-induced. First, as described above, the Bank of Thailand was attempting to sterilise the monetary consequences of capital inflows, despite its own relaxation of capital controls. By increasing domestic interest rates this encouraged further short-term capital inflows.

Second, beginning in 1993 the Thai government encouraged banks to borrow short-term through its establishment of the Bangkok International Banking Facility (BIBF), again with the apparent approval of the IMF. This development made short-term borrowing from abroad easier and more attractive for domestic banks and from the point of view of the foreign lender, these loans were protected by implicit guarantees from the Bank of Thailand. It can be seen from Figure 3 that the dramatic increase in short term bank loans began at this time. In addition to new short-term loans, significant substitution of short-term loans for longer-term loans also occurred. This is evident from Figure 2. Beginning in 1993, the stock of long-term loans actually declined for around two years while short-term loans accelerated.

Third, the Bank of Thailand also indirectly encouraged short-term borrowing by non-bank financial institutions. For many years prior to the crisis, banking licenses in Thailand had been highly profitable. The issuance of new licenses is tightly controlled by the Bank of Thailand but it had become known that the number of licenses was to be increased significantly. Thai finance companies immediately began competing with one another to be among the lucky recipients. To project themselves as significant players in the domestic financial market, many companies were willing to borrow large sums abroad and lend domestically at low margins, thereby taking risks they would not ordinarily contemplate. With lenders eager to lend vast sums, real estate was a favoured investment because purchase of real estate requires almost no specialist expertise, only the willingness to accept risk.

Real Appreciation

A dramatic real appreciation was occurring throughout the 1990s. This real appreciation is indicated in Figures 4 and 5. Figure 4 shows the behaviour of traded prices, non-traded prices and relative prices over a 30 year period from 1968 to 1998. These data update the series explained in Warr and Nidhiprabha (1996), which used monthly domestic price data for Thailand to obtain an index of traded goods prices (using 33 individual wholesale prices which approximately match the analytical concept of traded goods) relative to non-traded goods (using 42 individual consumer prices which approximately match the analytical concept of non-traded goods).[5] In the earlier study, the data were presented for 20 years from 1968 to 1988. The traded/non-traded goods price ratio (Figure 4c) rose sharply with the international inflation induced by the two OPEC induced oil price shocks of the 1970s, but a steady and rapid decline in the relative price series occurred from 1987 onwards.

Figure 5 focuses on the decade 1988 to 1998. We shall consider first the series labeled 'Relative Price', the same index of the relative prices of traded to non-traded goods

[5] For a full discussion of this index and its composition, see Warr and Nidhiprabha (1996), pp.221-226.

shown above in Figure 4c. Over the preceding two decades the index took values between a maximum of 1.7 and a minimum of 0.68 (indexed to August 1973 = 1). In January 1988 the value of this index was 0.7.

For convenience of comparison with the earlier series, the relative price series shown in Figure 5 is indexed to begin at 0.7 in January 1988 and its composition and construction are identical to the earlier study. Leaving aside short term fluctuations, the index declined steadily from 1990 onwards. By April 1997 its value was 0.38. A very large real appreciation had occurred. The real exchange rate, so measured, had fallen to only 55 per cent of its lowest value over the two decades prior to the boom. Do external exchange rate changes explain this outcome? The question arises because it is now well understood that the depreciation since 1995 of the Japanese yen and other currencies relative to the US dollar meant that any currency pegged to the dollar would suffer a real appreciation. But the answer is no.

It should be noted that the real appreciation within Thailand demonstrated in Figures 4 and 5 was *not* confined to the period since 1995, when the US dollar was appreciating. A large real appreciation within Thailand can also be seen in the first 5 years of the 1990s when the dollar was *depreciating* relative to the yen and other currencies. Most of the real appreciation from 1990 to mid-1997 was already evident by mid 1994, well before the appreciation of the US dollar began. External exchange rate changes were clearly relevant, but they were not the main causal factor.

Figure 4a Thailand: Index of Traded Goods Prices, 1968-1998

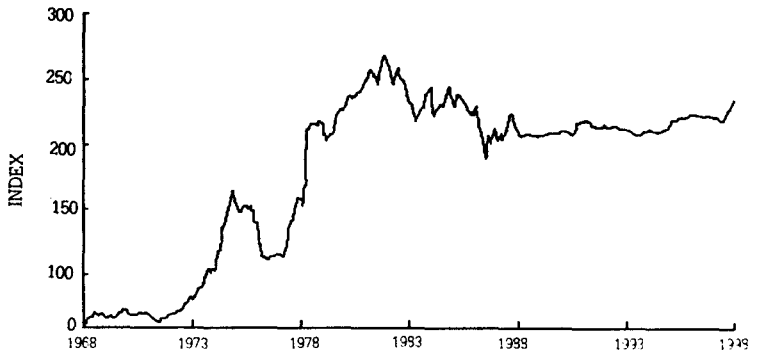


Figure 4b Thailand: Index of Non-traded Goods and Services Prices, 1968-1998

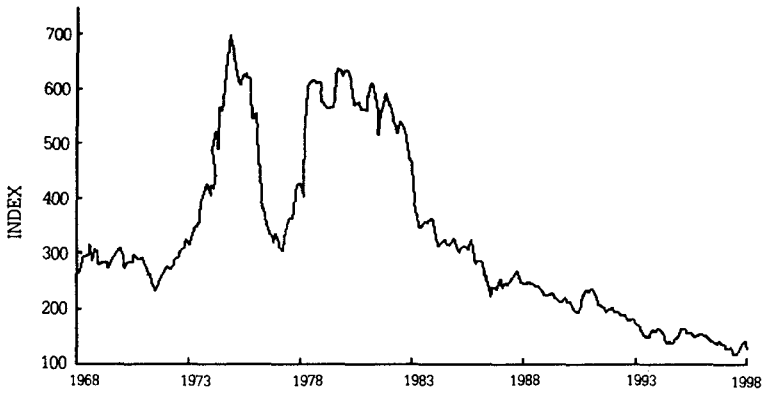
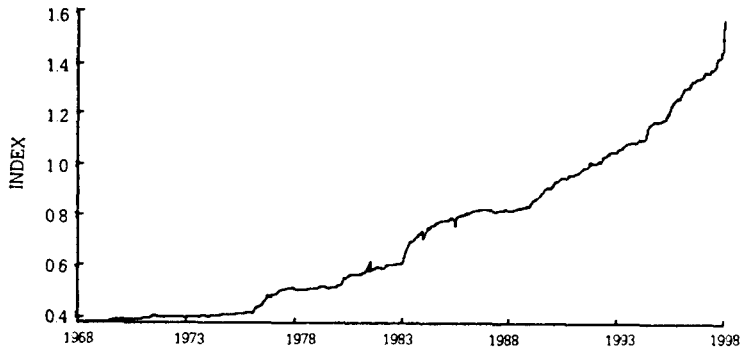
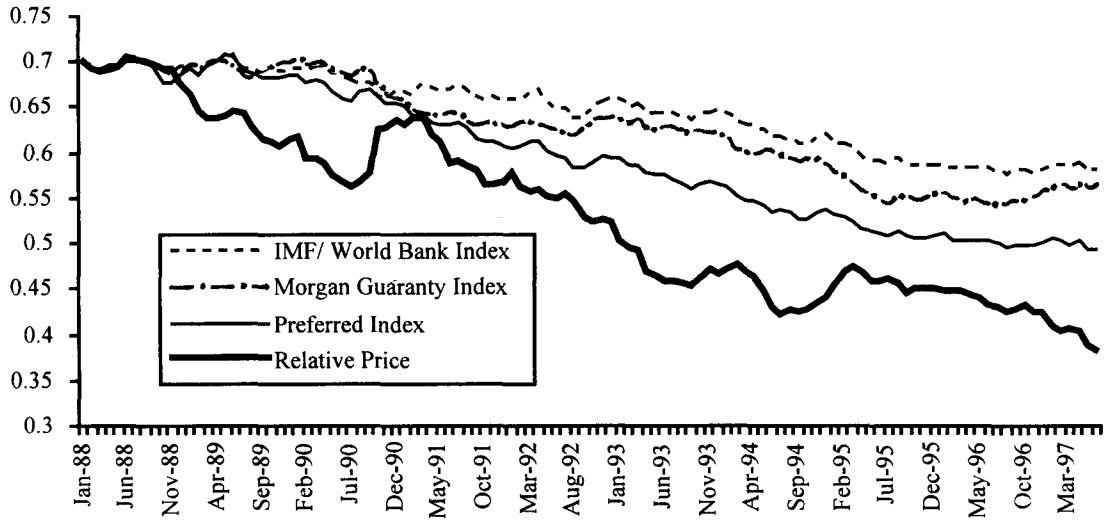


Figure 4c Thailand: Index of Traded / Non-traded Goods Relative Prices, 1968-1998



Source: Author's calculations, using data from Department of Business Economics, Ministry of Commerce, Bangkok.

Figure 5 Thailand: Real Exchange Rates



Sources. Author's calculations, using data from Thai government sources and International Monetary Fund, *International Financial Statistics*, various issues.

The principal source of Thailand's real appreciation resided in forces operating *within* the Thai economy, not external exchange rate adjustments. The principal source was the demand effects of very large foreign capital inflows, only partially sterilised. The effect of the real appreciation was that it undermined the competitiveness of Thailand's traded goods industries, meaning their capacity to attract resources within the domestic economy in competition with non-traded goods sectors.

Figure 5 also shows three other measures of real exchange rates, also commonly called measures of 'competitiveness'. All three are based not on domestic relative prices but on nominal exchange rates adjusted by foreign and domestic price levels. The two most commonly used in the literature are labeled the 'IMF/World Bank Index', the export share weighted sum of trading partner consumer price indices, each multiplied by the bilateral exchange rate, divided by the domestic consumer price index; the 'Morgan-

Guaranty Index', where the two consumer price indices described above are replaced by foreign and domestic wholesale price indices, respectively.

Finally, the series labeled 'Preferred Index' replaces foreign consumer prices in the numerator of the 'IMF/World Bank RER Index' with foreign wholesale prices, but it retains the domestic wholesale price index in the numerator. This index is preferable to either of the other two as a proxy for traded goods prices relative to non-traded goods prices. The reason is that the share of traded goods in wholesale price indices is higher than its share in consumer price indices. Thus the numerator of this index, the export share weighted sum of foreign wholesale price indices, each multiplied by the bilateral exchange rate, may be taken as a (very rough) proxy for domestic traded goods prices and the denominator, the domestic consumer price index, may be taken as a (very rough) index of domestic non-traded goods prices.

For the reasons demonstrated in Warr (1986), all three of these exchange rate based measures, but especially the first two, may be expected to understate the magnitude of a real appreciation, compared with changes in the domestic relative prices of traded goods to non-traded goods.[6] This pattern is exactly borne out by the calculations shown in Figure 5. All four measures shown confirm that a real appreciation did occur but its magnitude is understated in particular by the 'IMF/World Bank' and the 'Morgan-Guaranty' measures.

Bank Exposure

The implication of the above phenomena was a large increase in the exposure of the Thai banking sector to both exchange rate risk and to domestic default. This is indicated in Figure 6. First, the increased level of banks' foreign indebtedness relative to the lending base of the banks increased their exposure to exchange rate risk. Second, the increased level of bank credit to GDP increased their exposure to a domestic contraction.[7]

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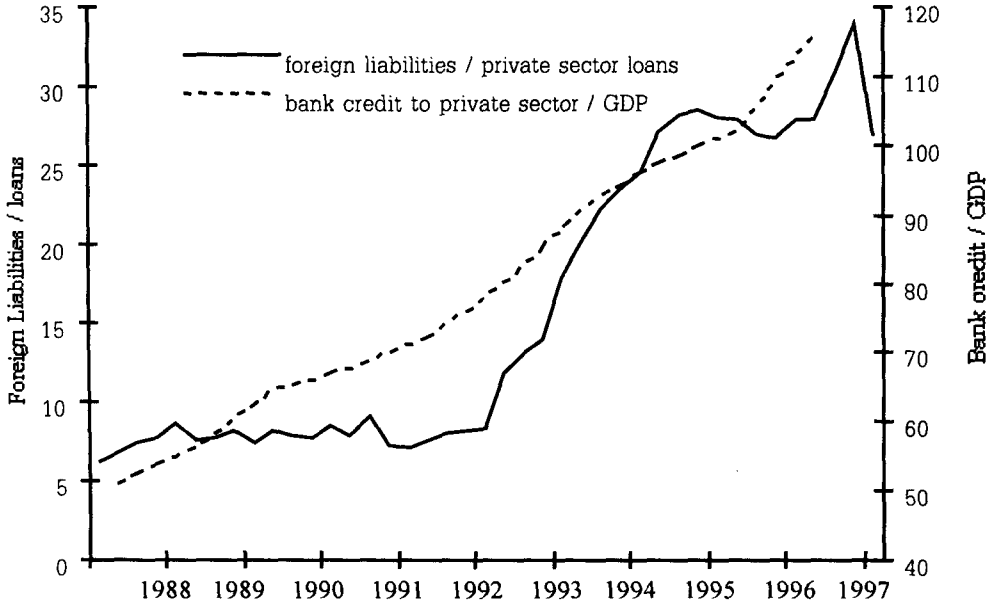
[6] All three also greatly exaggerate the gain in export competitiveness resulting from a depreciation and distort the pattern of its changes over time. See Warr (1986) for a theoretical demonstration of these points.

[7] See Sachs, Tornell and Velasco (1996) for a fuller discussion of these concepts.

Poor supervision of Thai banks has been widely blamed for their difficulties. There seems little doubt that standards of prudential control were indeed lax, a product of the over-confidence on the part of monetary authorities that also characterised the private sector.

Figure 6 Thailand: Bank Exposure



Sources. Author's calculations, using quarterly data from Bank of Thailand and quarterly GDP data from National Economic and Social Development Board, Bangkok.

III. How the 1996 Export Slowdown Produced the Trigger

The underlying causes of the crisis were long-term, as discussed above. The trigger that actually undermined confidence sufficiently to set a speculative attack on the baht in process was the collapse of export growth in 1996. Export growth declined from over 20 per cent per year in previous years, a performance which made the high current account deficits of the time seem (almost) sustainable, to around zero in 1996. This provoked capital outflow and speculation against the baht because it produced the

expectation of a devaluation. Once this expectation developed and portfolio capital headed for the exit, the process was unstoppable. Table 1 shows the levels of exports and their growth rates for the years 1984 to 1996. The slowdown was widespread among Thailand's export destinations but was greatest in exports to Japan, NAFTA and the Chinese economies. By looking at the composition of exports by commodity it can be seen that the slowdown was concentrated in manufactured exports from labour-intensive industries.[8]

The export slowdown of 1996 did not *cause* the crisis; it was merely a trigger. In normal circumstances a temporary slowdown in exports would be met by an increased current account deficit, financed by a combination of reduced reserves and temporary borrowing from abroad. The slowdown coincided with an already high current account deficit, equivalent to around 8 per cent of GDP. Given this, and the high level of vulnerability to a crisis which had developed by 1996, as outlined above, the export slowdown of 1996 affected confidence sufficiently to trigger the expectation of a devaluation and that produced a self-reinforcing capital outflow.

The export slowdown of 1996 has attracted many attempted explanations from observers of the Thai economy. Arranged in what would seem to be increasing order of importance, the causes of the export slowdown included: the political events of the previous two years; monetary policy; Thailand's trade liberalisation; the congestion of industrial infrastructure; falsification of export data to receive value added tax rebates; increasing competition in international markets from China since the latter's devaluation in 1994; a slowdown in demand in importing countries; and effective appreciation of the baht through pegging to the dollar while the latter appreciated relative to the yen from late 1995 through 1997. Each of the above probably played some role in 1996, especially the last, but two other factors appear to have been more important. These were the long term real appreciation within Thailand resulting from the demand effects of foreign capital inflow, discussed above, and a closely related phenomenon, a large increase in real wages.

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[8] The 15 commodities represented in Table 1 comprised between 52 and 54 per cent of total exports in each of the three years shown.

Table 1 Thailand: Major Exports by Commodity, 1994 to 1996

	1994	1995	1996
Total Exports (million baht)	1,137,602	1,406,310	1,401,392
growth rate (%)	20.9	23.6	-0.35
Growth rate by Commodity			
1 Computer and parts	44.9	38.7	31.3
2 Garments	12.4	1.3	-21.9
3 Rubber	43.3	46.5	1.4
4 Integrated circuits	27.5	28.4	3.4
5 Gems & jewellery	8.3	11.5	8.4
6 Rice	18.9	24.1	8.4
7 Sugar	41.2	67.2	11.7
8 Frozen shrimps	29.9	2.3	-17.8
9 Television & parts	26.2	12.7	14.1
10 Shoes & parts	40.5	37.0	-40.9
11 Canned & seafood	24.7	4.1	-0.3
12 Air conditioner & parts	62.1	49.6	33.6
13 Plastic products	-29.1	102.2	51.4
14 Tapioca products	-13.6	-2.8	16.7
15 Textiles	4.5	22.1	-4.4
15 commodities sub-total			
value (million baht)	611,536	765,734	740,683
Growth rate (%)	20.7	25.2	-3.27
share in total exports (%)	53.8	54.4	52.9

Source: Bangkok Post, *Year-end Economic Review*, December 1996.

Data on real wages provide a powerful explanation for Thailand's export slowdown and its concentration in labour intensive industries. Research at the Thailand Development Research Institute has recently produced a reliable series of wage data for Thailand's manufacturing sectors. When these data on average nominal wages in manufacturing are deflated by the consumer price index they indicate that over the 15 years from 1982 to 1996, real wages roughly doubled, but this increase was heavily concentrated in the years since 1990. Over the years 1982 to 1990 the increase was from an index of 100 to 117, an average compound rate of increase of 2 per cent. But over the following six years to 1996 the same real wage index increased to 202, an average annual rate of increase of real wages of 9 per cent.

Both supply and demand side forces played a role in the real wage increases. First, the supply side. During the early stages of Thai economic growth the rising industrial and services sector demand for labour could be satisfied from a very large pool of rural labour with relatively low productivity. The potential supply of unskilled rural labour was so large and so elastic that as workers moved from agriculture to more productive jobs in the manufacturing and services sectors, it was possible for these sectors to expand their levels of employment without significantly bidding up real wages. Thailand at this time was apparently a classic Lewis 'surplus labour' economy. But as this process continued that pool of 'cheap' rural labour was largely used up, so that by the early 1990s labour shortages were becoming evident. Labour supply was no longer as elastic as it had been. Agricultural industries were themselves experiencing serious problems of seasonal labour shortages. Further increases in the demand for labour outside agriculture then led to rising wages.

Changes in the demand for labour also played a role, as a consequence of the real appreciation described above. Non-tradables are on average more labour-intensive in their production than tradables. As non-tradables prices rose, relative to tradables, wages were bid up relative to both tradables and non-tradables prices (the Stolper-Samuelson effect) and wages therefore rose relative to the consumer price index.

With the end of the era of 'cheap labour', the competitiveness of Thailand's labour intensive export industries declined. The importance of this point is confirmed by the fact that the export slowdown shown in Table 1 was concentrated in labour intensive industries such as garments, footwear and textiles.[9] Thailand's export industries are especially vulnerable to increases in real wages for two basic reasons. First, many of Thailand's most successful export industries are highly labour intensive, implying that a given increase in real wages has large effects on their costs. Second, these export industries face highly competitive international markets for their products, where they must act as price-takers. This means that cost increases cannot be passed on in the form of increases in product prices, whereas producers for the domestic market may have greater scope for doing so.

IV. The Crisis and After

Through late 1996 and the first half of 1997 the Bank of Thailand struggled to maintain the stability of the Baht / US dollar exchange rate against speculative attacks. The speculation was fueled by expectations of a devaluation. Despite the insistence of the government and the Bank of Thailand that the exchange rate could be defended, market participants did not believe them. They were right. The level of official foreign exchange reserves declined from US$ 40 billion in January 1997 to well under 30 billion six months later. On July 2, the Bank of Thailand announced a float of the currency. The rate moved immediately from 25 baht per US$ to 30. By January 1998 it was 55, subsequently moderating by February to 45. Late in 1997 IMF assistance was requested, and a stringent package of financial measures was required by the fund.

The crisis had political casualties. In November 1997, a year after it came into government, the administration of Prime Minister Chavalit Yongchaiyudh was forced to surrender office as its coalition of political parties unraveled. It was replaced by a new

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[9] The frozen shrimp industry is a special case, where US import restrictions were important, effectively banning imports of non-farm shrimps from Thailand. These restrictions were lifted in the following year.

coalition government led by Democrat Party leader and former Prime Minister, Chuan Leekpai, who had led the parliamentary opposition to the Chavalit government. The Chavalit government had lost public confidence, appearing unable to cope with the developing crisis.

The change of government gave Thailand a major political advantage in responding to the crisis that some of its neighbours lacked. The new government did not need to defend itself against blame for the crisis itself. Notwithstanding the parliamentary efforts of the new Opposition, now led by General Chavalit, there seemed little political necessity for debate as to whether foreigners, domestic businessmen or the domestic government were ultimately responsible for the nation's problems. Full attention could be given to instituting the reform package which might resolve the emergency.

There was considerable debate as to what the most appropriate reform package should be. The government felt constrained to implement the IMF package and to announce public commitment to it. The package was widely criticised within Thailand, however, and behind the scenes the government was lobbying to have the package modified. The economic crisis produced a contraction of domestic demand which was much larger than expected by most observers, including the IMF. Private consumption and investment spending declined significantly. Inflation remained low, in spite of the mid-year depreciation of the baht.

The IMF program seemed a copy of packages the Fund had previously devised for Latin American countries burdened with external imbalances associated with massive public sector debt, hyperinflation and low rates of private saving. The external imbalance in Thailand, like most of its neighbours, lacked any of these features. Inflation was relatively low, debt was primarily a private sector problem (US$ 72 billion out of US$ 99 billion total external debt) and saving rates remained high. The crisis produced a massive contraction in private spending. The IMF package added a public sector contraction by initially requiring a budget surplus equivalent to 1 per cent of GDP, subsequently relaxed. Moreover, at a time when confidence in the financial sector was essential, the IMF required

that problem institutions be closed. Given the circumstances of the time, this requirement seemed to many observers to be ill-advised.

While the IMF rescue package was handled poorly, this was not the main failure. That occurred *before* the crisis, not after it. The main failure was that the developing crisis had apparently not been foreseen in time and was thus not averted. Some IMF officials have subsequently stated that the Thai government was indeed properly warned during 1996 about the impending danger. If so, the warnings were made only in secret and cannot be verified. They were also inconsistent with published IMF commentary on Thailand during the immediate pre-crisis period, including Kochhar *et al.* (1996) and the Fund's Annual Reports.

The economic boom since the late 1980s had encouraged the Bank of Thailand to remove almost all of its earlier restrictions on movement of financial capital into and out of Thailand. What surprised all observers was the rate at which funds could flow out of the country in response to what seemed small changes in market sentiments, putting irresistible pressure on the Bank of Thailand's foreign exchange reserves. The crucial point was the very large volume of short term capital that had entered Thailand during the boom. To attract this capital Thailand had removed most of the capital controls that had made maintenance of its fixed exchange rate policy consistent with a degree of monetary independence. But the liberalisation meant that speculative attacks on the baht were now much easier than previously. To attract large volumes of financial capital into Thailand it had been necessary to demonstrate not only that entry was open, but that the exit was unobstructed as well. When market expectations moved in favour of a devaluation, the rate of financial outflow was so great that the expected depreciation became inevitable. In January 1998 the influential *Bangkok Post Year-end Economic Review* commented (p.18) that:

> Liberalised capital flows but a fixed exchange rate proved to be the undoing of the Thai economy.

V. Would Capital Controls Have Made a Difference?

Thailand had capital controls in place for several decades until they were largely dismantled from 1990 onwards. The controls were justified by the need to regulate speculative and destabilising capital movements. The paradox is that during most of the period prior to 1990 when the controls were operative large capital movements were not occurring. Large capital inflows did not begin until around 1987. But during this brief period before they were abolished the controls were indeed inhibiting capital movements and this was a major reason for their removal. The controls were dismissed as anachronistic and unnecessary. Moreover, the forthcoming restoration of Chinese authority in Hong Kong led many to believe that if Thailand's capital markets were liberalised, Bangkok could become a major regional financial centre.

Given the current controversy over the efficacy of capital controls, the question arises of whether the dismantling of Thailand's capital controls played a significant role in causing the crisis. We shall first review the capital controls Thailand in fact had in place prior to 1990. Over the two decades ending in 1990, four reasons for lack of capital market openness were important: interest rate ceilings, direct capital controls, controls on the foreign exchange positions of commercial banks, and the withholding tax on foreign borrowing.

(a) Interest rate ceilings

Regulatory ceilings on domestic interest rates - both lending and borrowing rates - prevented the domestic interest rate increases that would otherwise have induced capital inflows when the domestic money supply was contracted. These interest rate ceilings were adjusted only slightly during shocks. Their impact on domestic interest rates seems clear. For example, from 1970 to 1981, commercial banks' deposits rates were equal to the ceiling rates and from 1982 to 1985, the actual time deposit rates of interest paid by commercial banks remained 0.5 per cent below the ceiling.

(b) Direct capital controls

Bank of Thailand permission was required to move capital out of Thailand and this policy was policed vigorously. During periods of monetary expansion this arm of policy enabled the monetary authorities to prevent the outward flow of capital which would otherwise deprive them of the capacity to expand the domestic money supply when desired. All outgoing payments were subject to approval. Until 1990, exporters were required to submit foreign exchange currency to banks within 7 days after receiving payments from abroad.[10]

Until 1990 holdings of foreign exchange deposits by Thai citizens were not permitted. Thais could not purchase foreign currencies for investment overseas and were thus greatly restricted in taking advantage of differentials between domestic and foreign rates of interest. Individuals were not permitted to take out of Thailand domestic currency exceeding 500 baht (equivalent to around US$20) or foreign currency exceeding US$1,000. In 1993 these limits were 50,000 baht (equivalent to around US$2,000) and US$10,000 of foreign currency. The degree of substitution between domestic and foreign assets was far from perfect; similarly, foreign liabilities were imperfect substitutes for loans obtained from domestic banks, since domestic deficit units could not access foreign capital markets. The government also imposed a limit on the volume of foreign debt of public enterprises.

(c) Controls on foreign exchange positions of commercial banks

In addition to the above instruments, the net foreign exchange positions of commercial banks was subject to regulation since 1984. Following the 1984 devaluation, the net future and current position of each commercial bank - whether positive or negative - could not exceed US$5 million in either direction or 20 percent of the net worth of the bank, whichever was smaller. In April 1990, the ceiling on the net position of commercial banks was raised to 25 percent of capital funds.

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[10] Relaxed in 1990 to 15 days, following the acceptance by Thailand of IMF article VIII.

(d) Withholding tax on foreign borrowing

A withholding tax was applied to foreign borrowing at rates which were varied by the Minister of Finance either to encourage or discourage foreign capital inflows. This instrument created a tax wedge between the domestic and foreign costs of capital. The withholding tax rate was usually imposed at 10 percent of the interest payments when the government wanted to reduce the capital inflows. It was exempted whenever the government considered that the domestic money market was too tight. Exemption was sometimes granted for loans with long maturity periods, such as one to three years, to attract long-term capital funds. The withholding tax rate was varied significantly from time to time. The adjustments were directed at influencing capital flows for stabilization purposes.

Did the controls work? Their effectiveness in controlling short term capital may be assessed by the behaviour of Thai interest rates. Over the period from 1970 to around 1990, during periods in which the Bank of Thailand had pre-announced its intention to induce a monetary contraction, Thai interest rates rose and the spread between Thai interest rates and LIBOR interest rates increased. The reverse occurred during periods of monetary relaxation (Warr and Nidhaprabha, 1996). The point is that this occurred in spite of Thailand's fixed exchange rate.[11] If capital mobility was unrestrained, such an outcome would be impossible because short-term capital flows into or out of the country would defeat the efforts of the Bank of Thailand to influence domestic interest rates.

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[11] The exchange rate between the baht (the Thai currency) and the US dollar was held constant at 20 baht/dollar from the early 1950s until two devaluations in the early 1980 (10% in 1981 and 15% in 1984). From then until the float of 2 July 1997, the baht was officially pegged to a "basket" of currencies, but the constancy of the rate at around 25 baht/dollar over this entire period demonstrated that the basket was dominated by the US dollar. Following the float, the baht depreciated to 55 baht/dollar in January 1998, but had stabilised at around 35 by August 1998 and remained at approximately that rate in mid-1999.

The impact was small, however, and short-lived. Regulated bank interest rates were clearly affected by the controls (Figure 7). However, the medium-term elasticity of short-term capital flows with respect to domestic interest was large (Warr and Nidhaprabha, 1996) and although short-run deviations of domestic interest rates from international rates was made possible by the controls, over longer time periods Thai interest rates followed international rates very closely (Figure 8). The evidence suggests that capital controls were effective in slowing down the capital flows that lead to interest rate convergence, but that they did not prevent these flows. Their effect was temporary. Considering the changes to the ease with which funds can now be moved internationally, it would seem likely that if the controls had been retained, or were reintroduced today, they would be even less effective than before in regulating capital flows.

The economic debate on the efficacy of capital controls continues and dogmatic positions on either side of this discussion are surely unwarranted by the limited evidence available. Nevertheless, capital controls would not seem to be the answer to preventing the development of vulnerability. If Thailand's capital controls had been left in place in the early 1990s and not dismantled, as they were, it would seem likely that capital inflows would have been slower, but this alone would not have prevented the development of vulnerability. Still lacking were the properly enforced prudential banking regulations required to prevent over-exposure of domestic banks. This was surely a more important matter than whether capital controls remained in place. Similarly, Thailand would have been better served by the abandonment of the Bank of Thailand's obsession with pegged exchange rates and the attendant danger of exchange rate misalignment. If the exchange rate had been floated, or even devalued significantly, in mid-1996 it would seem likely that the crisis could have been averted.

Figure 7 Thailand and United States: Lending and Deposit Interest Rates, 1970-1990

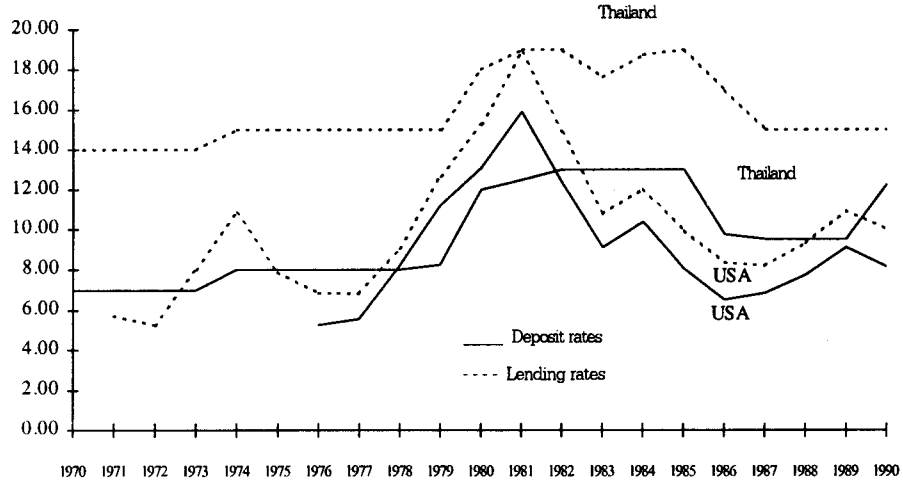
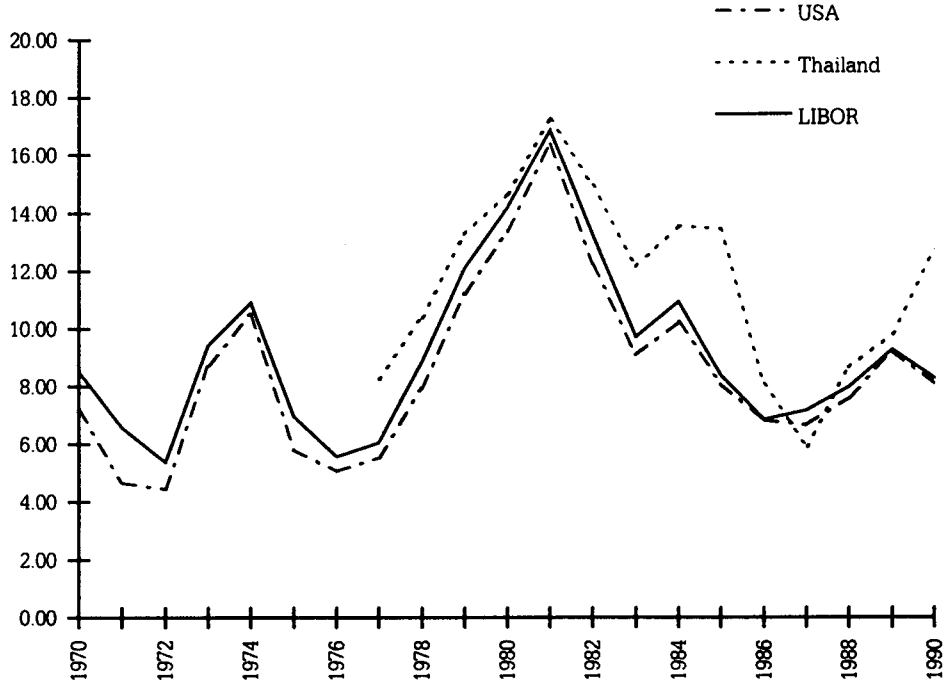


Figure 8 Thailand and International Money Market Interest Rates, 1970-1990



VI. Summary and Conclusions

Thailand's crisis must be understood as the collapse of a boom. It was not caused by evil speculators or by corrupt politicians. It was caused by errors of macroeconomic policy, themselves an outcome of complacency arising from a decade of unprecedented economic growth. Central among these policy mistakes was the insistence on retaining a fixed exchange rate when circumstances no longer suited it. The boom produced a euphoria that also led business decision-makers to take risks they would not ordinarily have accepted.

The prolonged boom which preceded the crisis was fueled by high levels of direct foreign investment. As the boom developed, these high levels of capital inflow, combined with Thailand's fixed exchange rate policy, set in train a 'Dutch disease' real appreciation in which real wages increased unsustainably, undermining the competitiveness of the traded goods sector. In 1996 this produced a dramatic slowdown in export growth which provoked the expectation of a devaluation.

Over the same pre-crisis period, the vulnerability of the country's foreign exchange reserves to a financial panic had increased very substantially. The vulnerability derived from of a greatly increased stock of volatile capital within Thailand which could be presented for conversion into foreign exchange at short notice. The growth of this stock of volatile capital relative to reserves was itself the outcome of macroeconomic policies. First, the attempt to sterilise capital inflows raised domestic interest rates and induced very large inflows of short-term foreign capital. Second, controls on capital movements were largely eliminated in the early 1990s. Third, the Bangkok International Banking Facility, established by the government in 1993, encouraged domestic banks to borrow abroad, short-term. Finally, non-bank financial institutions were encouraged to borrow abroad as well, in the hope of qualifying for highly profitable domestic banking licenses.

Thailand had capital controls in place for several decades until they were largely dismantled from 1990 onwards. The controls were justified by the need to regulate speculative and destabilising capital movements. But during most of the period prior to

1990 when the controls were operative large capital movements were not occurring. Large capital inflows did not begin until around 1987, but during this brief period before they were abolished the controls were indeed inhibiting capital movements and that was a major reason for their removal. If Thailand had retained its capital controls, short-term capital flows would have been slowed. This may have reduced the rate of growth during the period of economic boom, but would also have restrained the development of vulnerability arising from the build-up of stocks of short-term capital. Removal of the capital controls while still retaining a fixed exchange rate was a mistake. Nevertheless, evidence from the period in which these controls were in place suggests that if they had been retained the effect would have been small. Capital controls are not a substitute for effective prudential regulation of the banking sector or for a sensible exchange rate policy.

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Australian Multinational Enterprises in China:

Motivations, Technology Transfer and Operations.

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บทคัดย่อ

บริษัทข้ามชาติจากออสเตรเลียในประเทศจีน : แรงจูงใจ การถ่ายโอนเทคโนโลยีและการดำเนินงาน

โดย อลิซาเบท เมทแลนด์ , สตีเฟน มอร์แกน และสตีเฟน นิโคลัส

บทความนี้ได้วิเคราะห์ถึงแรงจูงใจ การถ่ายโอนเทคโนโลยี และ การดำเนินงานของบริษัทข้ามชาติ (MNE) จากประเทศออสเตรเลียในประเทศจีน โดยใช้กรอบทฤษฎีด้านฐานทรัพยากรของ MNE ซึ่งพัฒนาต่อเนื่องมาจากแนวคิดด้านต้นทุนทางธุรกรรม และ หน่วยปฏิบัติงาน ในการอธิบายถึงสาเหตุของการถ่ายโอนความสามารถเฉพาะด้านเป็นการภายใน แบบจำลองได้ตั้งคำถามเกี่ยวกับการต่อรองก่อนและหลังทำสัญญาในดำเนินงานของบริษัทร่วมทุน และบริษัทเหมารับช่วงต่อ

ข้อมูลที่ใช้มาจากการสำรวจทางไปรษณีย์จากบริษัทในประเทศออสเตรเลียที่ได้ทำสัญญาเป็นระยะยาวในประเทศจีน โดยใช้วิธีทดสอบแบบ Mann-Whitney และ Kruskal ในการวิเคราะห์ข้อมูลทางสถิติ

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นอกจากนี้ได้สำรวจถึงแรงจูงใจในการถ่ายโอนทักษะความชำนาญ การเลือกหุ้นส่วนร่วมทุน และการบริหารงานในบริษัทร่วมทุนและบริษัทในเครือ การวิเคราะห์ถึงการแก้ไขข้อขัดแย้งต่างๆ และการควบคุมดูแลจากบริษัทแม่ รวมถึงการวิเคราะห์สถานะความเสี่ยง บทบาทของทำเลที่ตั้ง และการตรวจสอบผลการปฏิบัติงานของบริษัท

Abstract

This paper analyses the motivations, technology transfer and operations of Australian firms in China. The theoretical framework rests on resource-based theories of the MNE, with the explicit development of a transaction cost and agent-principal framework to explain why firms transfer firm-specific capabilities internally. The model also addresses the question of pre-contractual bargaining and post-contractual operation of JVs and wholly-owned subsidiaries.

The data are drawn from a mail survey of Australian companies engaged in long term contractual arrangements in China. Mann-Whitney and Kruskal-Wallis tests are used to statistically analyse the data.

The paper investigates the motivation for transferring know-how, selecting JV partners, and operating JVs and wholly-owned subsidiaries. Disputes and dispute resolution are analysed for JVs, and the forms of control exercised by Australian parents specified. The assessment of the risk environment, the role of location factors, and the performance of Australian operations are examined.

1. Introduction

In the 1990s the People's Republic of China (PRC) became the second largest destination for foreign direct investment (FDI), after the United States. At year-end 1998, China had received US$265.72 billion in utilised FDI (*China Daily*, 28 February,1999). Australian firms were early entrants to the China market. During the years immediately following China's opening to foreign investment Australia was the fourth largest investor in

China, following Hong Kong, the USA and Japan. From the mid 1980s its position slipped rapidly to rank 15th largest investor in 1998 (*SSB*, 1986, 1998). According to the Australian Department of Foreign Affairs and Trade, Australian firms have established more than 2500 investment projects in China between 1983 and 1996, mainly in manufacturing, resources and infrastructure services, with an estimated value of $4.5 billion by 1996 (Macrae, 1991).[1]

This paper analyses the long-term commitments of Australian companies in China based on a mail survey returned by 171 companies, of which 99 had transferred know-how to China through a non-export arrangement. The first section comprises a brief survey of the literature on China and FDI theory used to design the survey, followed by a description of the characteristics of the Australian parent. The third section examines the motivations for entering China, the process of entering China (staging of entry, negotiating experiences and location), the types of know-how transferred and the contractual form governing that transfer including joint ventures (JVs) and wholly-owned subsidiaries, and lastly the issues of risk perception and performance.

2. Overview of FDI in China

China in late 1978 abandoned economic autarky, adopting an outward-looking strategy which linked FDI to the promotion of export-oriented manufactures. Foreign firms were invited to establish alliances with Chinese firms, transfer technology and know-how, and produce goods for export that would enable China to modernise its economy. Over the past two decades this process of technology transfer and modernisation has enabled China to reintegrate into the world economy.

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[1] Estimates of Australian FDI in the PRC vary widely. Many Australian firms invest in China via subsidiaries in third countries, such as Hong Kong or tax havens, some of which may themselves be joint ventures with firms of other nationality, and appear in Chinese official statistics as originating from the third country rather than Australia. Furthermore, 14 percent of the survey respondents were wholly-owned foreign subsidiaries which ran their China operations via the Australian affiliate.

The 'opening-up' process included five major phases of FDI each corresponding to specific legislative initiatives and institutional shifts, summarised in Table 1. These changes have progressively made the Chinese business environment more amenable to foreign investors (Beamish, 1993). The early years of FDI in China, from 1979 to the mid-1980s, were characterised by high levels of uncertainty for foreign investors and the Chinese officials responsible for implementing the new policy (Mathur and Chen,1987; Grub and Lin,1991; Pearson,1991; De Keijzer, 1992; Jia,1994; Roehrig, 1994). Although China passed the Joint Venture Law in 1979, the enabling provisions were not promulgated until 1983, the rules governing wholly-owned foreign enterprises were not promulgated until 1986, and nine years passed before the Contractual Joint Venture Law was promulgated.

Four main types of FDI were approved during the first phase of liberalisation: equity joint ventures (EJV); cooperative operation enterprises, also known as cooperative (contractual) joint ventures (CJV); wholly-foreign owned enterprises (WFOE); and cooperative (joint) development projects restricted to the resource sector (Mathur and Chen, 1987; Pearson, 1991; Murray, 1994). The EJV is a limited liability company formed between a Chinese firm and one or more foreign firms. The CJV is a non-equity long-term contractual arrangement, resembling a subcontracting rather than a joint venture. No separate legal entity is formed, with each of the CJV parties retaining their autonomy and sharing in the benefits and burdens of the venture according to the specifications of the contract. The WFOE, as established under the 1986 rules, have become the preferred form of entry, and now account for almost as much investment as JVs (Shaw and Meier, 1994; Luo and O'Connor, 1998; SSB, 1998).

Chinese officials during the early phase held a conservative view of technology transfer, believing that joint ventures were necessary to compel foreigners to transfer technology to China and retain control (Pearson, 1991). They also sought to quarantine foreign investment in south China in the special economic zones (SEZs) established in Guangdong (Shenzhen, Zhuhai, and Shantou) and Fujian (Xiamen). Both attitudes were a

reflection of official concerns to preserve self-reliance and national sovereignty, which required state control of FDI (Pearson, 1991; Jia, 1994).

Table 1 - Summary of trends in FDI in China, 1979-1998

Period	Phase shifts in institutional and legal developments	FDI (US$m) during phase[1]
1979-85	First phase: Approval of the Special Economic Zones) in South China, and early FDI legislation such as the JV Law.	4,721
1986-90	Second phase: Revision of original FDI legislation, including more liberal foreign exchange rules, incentives for technology imports, and the rules for wholly-owned subsidiaries.	14,261
1991-93	Third phase: A raft of new or amended legislation presaged the 1990's FDI boom, including the Foreign Enterprise Tax Law, Copyright Law, and Software Protection Regulations.	42,888
1994-97	Fourth phase: The Company Law passed late 1993 takes effect in June 1994, covering all firms whatever their ownership form, and more effort to implement promulgated regulations.	158,271
1998-	Fifth phase: Increased recognition of the private sector, and of the need to further reform of the structure of state firm. Private equity investment funds appear.	45,580

Sources: Mofert (1984-99); Grub and Lin, 1991; Roehrig,1994; Jia, 1994; SSB, 1998; *China Daily*, 23 January , 28 February ,1999; Tretiak and Holzmann, 1993.

1. FDI amount is the cumulative sum of foreign investment used during the years of the particular phase. Excluded are other types of foreign capital, such as loans, leasing, assembly and compensation trade. Sum each of phases for cumulative FDI for 1979 to 1998.

Early in the second phase (1986-90), rapid growth in FDI reflected an increasing level of comfort among Chinese officials, and a more sophisticated targeting of investment. The Joint Venture Encouragement Provisions (also known as the "22 regulations") issued in 1986 loosened state control over foreign-invested enterprises (FIEs), provided additional benefits for technology imports, and liberalised the foreign exchange constraints affecting FIEs. A major initiative of this period was the instruction that open cities should set up economic and technology development zones (ETDZ), and the promulgation of the Law on Wholly-owned Foreign Enterprises (Tretiak and Holzmann, 1993). Four times as many FDI agreements were signed during the three years 1986-88 as the previous six years 1979-85, and cumulative FDI for the period was nearly twice that for the first six years of liberalisation (Mofert, 1984-99).

The third phase (1991-93) was marked by several major regulatory initiatives to bring China more into line with the demands of international business. Included in the reforms were the Equity Joint Venture Amendment Law, the Foreign Enterprise Tax Law, the Copyright Law, the Software Protection Regulations (Jia , 1994). The effect was striking: five times the number of FDI agreements were signed during the three years 1991-93 than had been concluded the previous 12 years. Utilised FDI jumped from US$3.5 billion in 1990 to US$27.5 billion in 1993. In 1992 FDI exceed foreign loans as the major source of external capital for the first time (Mofert, 1984-99).

Through the fourth phase (1994-97) FDI grew strongly, reflecting a foreign perceptions that China had become an easier place in which to do business. The regulatory framework was characterised by greater transparency, while the skill of government agencies in implementing regulations had improved with experience. The major legislative initiative of the period was the July 1994 promulgation of the Companies Law, which sought to unify the regulatory environment for firms, irrespective of ownership. There were also signs of a greater willingness to reform the state-owned enterprise sector through converting them to joint-stock companies as provided for in the 1994 companies law. These developments saw a significant increase in reported share capital issued to foreigners, including private equity fund arrangements.

3. The Theory of International Involvement in China: Choosing Intra-firm Transfer of Resources and the Market Entry Mode

When undertaking foreign investment multinational firms make two simultaneous decisions: the form of international involvement — exporting, intermediate contractual arrangements (such as licensing, franchising and long-term supply contracts); and hierarchy and the location of economic activity. Multinational firms transfer resources (capabilities, assets and products) across national boundaries when spot markets and intermediate contracts (including franchises, licenses and alliances) fail due to high costs of exchange (Buckley and Casson, 1976; Casson, 1979; Rugman, 1982; Hennart, 1982; Caves, 1982; Teece, 1986). Intrafirm transfer is particularly efficient when exchange involves the firm's tangible and intangible assets, including product and process technology, network coordination, work and managerial expertise, advertising, marketing and distribution skills and brand name and parent reputation advantages (Johnson, 1970; Teece, 1980; Hennart, 1982; Caves, 1982).

The cost of transferring resources and inputs is not costless within the firm, although MNEs provide superior mechanisms for managerial control, dispute resolution and goal alignment compared to alternative arrangements, such as markets and intermediate forms (Williamson, 1975; Hennart, 1982). Transaction cost—agency theory takes a comparative institutional perspective, since all contractual forms have costs of writing, bonding, monitoring and enforcing incentive contracts for the exchange of resources. Intrafirm transfers require complex incentive contracts between the parent and its overseas managers and workers and monitoring by sophisticated organisational structures, including internal accounting systems and information reporting devices (Chandler,1962; Williamson, 1975; Carlos and Nicholas, 1993). The analysis of Australian firms in China focuses on the ownership advantages (capabilities) of the Australian firms and the mechanisms for headquarter controlling, monitoring and incentivising operations of their subsidiaries in China.

Transaction cost theory provides only a partial explanation for the choice between markets, intermediate contracts and intrafirm transfer. Production and other real costs also favour hierarchy over licensing. Hierarchy might also be selected because ownership allows better control and coordination of global MNE strategies, (Hill and others, 1990); extends market power (Teece, 1981); appropriates a larger share of investment returns (Anderson and Gatignon, 1986); allows follow-the-leader and oligopolistic exchange-of-threat responses (Ito and Rose, 1995; Graham, 1974, 1978); or reflects the preferences of decision-makers. Using mail surveys, Erramilli and Rao (1993) found that American service firms investing overseas preferred full ownership to other arrangements, a result confirmed by Nicholas and others (1996) for Japanese MNEs investing in Australia. Location factors, discussed below, also impact on the form of overseas involvement. Host governments may exclude certain forms of involvement, including wholly-owned subsidiaries in exempt sectors, such as mining, communications and residential housing.

Once intrafirm transfer is determined, then entry mode choices include full equity control through greenfield investment; full equity control through acquisition/merger; and JVs, either greenfield investment or acquisition. JVs and acquisitions involve the procurement of capabilities and inputs (raw material and component inputs) from outside the firm. Markets for the procurement of capabilities and/or inputs fail, otherwise the two firms would contract through the market or intermediate arrangements. Similarly, JVs and acquisitions require the procurement of necessary resources from outside the firm, otherwise firms make greenfield investments (Hennart, 1988 , 1991; Kogut, 1988).

The nature of the firm's capabilities and inputs determines whether the firm chooses to go it alone (greenfield) or to cooperate through a JV or acquisition. When the ownership advantages are non-separable from the firm, especially when the capabilities are tacit knowledge and embedded know-how, and the firm requires no complementary assets or inputs, then greenfield is the selected mode. Inversely, JVs and acquisitions occur when the investor requires know-how that is bundled in an existing firm or when there are inputs not procurable through intermediate and market contracting. Foreign market know-how

typifies the high costs of contracting in knowledge capabilities, which are subject to moral hazard and adverse selection problems. It is costly to discover parties with market know-how, and to value the know-how appropriately. JVs and acquisition requires the firm to use its incentive structures, monitoring and enforcement regimes to efficiently utilise the know-how embodied in the JV or acquired firm. Not surprisingly, JVs and acquisitions impose high costs related to appropriately valuing the other firm's resources and integrating those resources (including management and workers) into the JV or new acquired firm (Williamson, 1975, 1985; Teece, 1985, 1986; Hennart, 1988, 1991).

JVs have a number of advantages over acquisitions, including being able to terminate more inexpensively, which is an effective enforcement device for non-opportunistic behaviour by JV partners. When complementary assets are hard to disentangle, acquisition involves the purchase of all the acquired firm's assets, even if only subsets of assets are required. JVs allow the partner firm to contribute only those assets required by the MNE (Hennart and Reddy, 1993). JVs also embody an efficient incentive structure for attenuating opportunism. Both parties are rewarded for their resources according to their share of the venture's residual, rather than payment for inputs, reducing opportunistic rent dissipation (Hennart and Reddy, 1993). In the presence of transaction specific assets, both parties have an incentive to continue the JV relationship, when the second-best use for specialised assets is low or scrap value. The internal governance costs of JVs might be lower than those for acquisitions, given the factors outlined in the preceding paragraph.

Non-transaction cost factors also contribute to the choice of mode. For example, acquisition may be a source of market power, governments may require JVs, late entrants may seek speedy entry through acquisition, and economies of scale may make greenfield unprofitable in a small or saturated market. The study analyses the choice of a JV partners and the incentivising, monitoring and controlling of China JV operations by Australian parents.

Simultaneous with the choice of MNE as the form for transferring firm-specific advantages internationally, multinational firms also decide on the location for direct investment in service and production facilities. Foreign direct investment means it is more profitable to combine the firm's ownership advantages with factor inputs in a selected location than with factor inputs in some other location. Locational factors include production costs (wage rates/labour costs; energy costs; input and component availability and price; tax rates), transfer costs (tariffs and non-tariff restrictions; transport costs), financial assistance from central and local governments, market size and growth potential and political stability.

The study focuses on two decisions. First, the motivation to establish hierarchical forms of involvement, especially the choice between JVs and wholly-owned subsidiaries, including the costs of monitoring, controlling and assessing the operations and performance of Chinese subsidiaries by Australian headquarters. Secondly, the location decision is examined, assessing the reasons that Australian firms selected China as an investment destination.

4. The Survey, Data and Sample Characteristics

4.1 The Survey

The data are drawn from a mail survey of Australian companies engaged in long term contractual arrangements in the PRC. The survey questionnaire was designed to test the theory developed in the previous section. As no comprehensive list of Australian companies with offshore activities was publicly available, a mail list was constructed with the cooperation of the Australia China Business Council. The survey was sent to Australian-based CEOs or managers responsible for China operations. The survey was conducted through the Australian Centre for International Business at the University of Melbourne, with endorsement from the National President and Victorian State President of the Australia China Business Council. A reminder letter was posted to all non-responding firms four weeks after the first mail-out, and telephone calls made in week seven. The return rate was

43 percent, or 171 firms from the total sample of 403 firms. Of the 171 companies responding, 99 had transferred know-how to China through a non-export arrangement, which yielded information on 133 intermediate contracts and foreign direct investments by Australian firms.

The parent firms were analysed according to size, industry sector (manufacturing and non-manufacturing) and international experience. Two statistical tests were used to analyse the data, complementing descriptive statistics. A Kruskal-Wallis one-way analysis of variance by ranks was used to determine whether the means from different samples were from the same population (Siegel and Castellan, 1988). Secondly, the Mann-Whitney U-test was employed as a non-parametric version of an independent sample t-test (Bryman and Craner, 1997; Siegel and Castellan, 1988).

4.2 Data and Sample Characteristics

The 99 parent companies which made an equity investment in China were a diverse cross-section of the Australian business community. As shown in Table 2, the sample of firms encompassed very small business entities, employing fewer than 10 workers and annual sales revenue less than AUS$1 million, through to diversified, multinational corporations with workforces in excess of 30,000 employees and annual sales greater than AUS$1 billion.

Table 2 - Parent Size

Employees	**Respondents**		**Annual Sales (million)**	**Respondents**	
<50	25	25.3%	<$5m	18	18.2%
50-999	30	30.3%	$5m-$49m	22	22.2%
1,000-9,999	17	17.2%	$50m-$499m	20	20.2%
>10,000	8	8.1%	>$500m	21	21.2%
Missing observations	19	19.2%	Missing observations	18	18.2%
TOTAL	99	100%		99	100%

The core activities of the parent companies encompassed a wide spectrum of industries, from primary extraction sectors to the provision of financial products and services, as detailed in Table 3. Business service and property firms were significantly smaller in turnover, assets and employees than manufacturing firms, which were significantly smaller than the residual category, which included all other industries in Table 3. JVs were significantly larger in terms of employees than wholly-owned subsidiaries, which were significantly larger than 'other' types of contractual involvement in China. Roughly two-thirds of the companies were majority Australian owned, with wholly Australian owned parent firms representing the largest group (42 percent), far exceeding the nine percent of companies with wholly foreign owned shareholdings.

Table 3 - Main Income Source of Parent[1]

Industry	**Respondents**
Mining[1]	5
Manufacturing[1]	35
- Machinery & equipment[2]	(13)
Utilities[1]	4
Logistics & Distribution[4]	12
Finance & Insurance[1]	4
Property & Business Services[1]	28
- Scientific research[3]	(5)
- Technical services[3]	(7)
- Legal & accounting services[3]	(7)
Other (inc. education, construction)[1]	5
Missing observations	6
Total	99

1 Australian and New Zealand Standard Industrial Classification (ANZSIC) Division Title Subdivision Title (two digit code)

2 ANZSIC (three digit code)

3 ANZSIC Group Title

4 Amalgamation of ANZSIC Divisions D (Electricity, Gas and Water Supply) and J (Communication Services)

Just over half the sample firms were experienced multinational enterprises, as defined by their engagement in more than five investment projects worldwide. This experience was gained in a diversity of economic and cultural settings, including Asia, North America and Europe. About one quarter had five or more investments in China and Asia. Firms with international experience outside the Asian region had a significantly larger number of projects in China than firms with only China or Asian experience.

5. Motivation: Location and Form of Involvement

5.1 Location Decision

The majority of Australian firms invested along the Chinese eastern seaboard, favouring the Beijing-Tianjin, Shanghai-Jiangsu, and Guangdong areas. Only 12 percent of Australian firms reported activity in the central and western Chinese provinces, such as Hubei, Hunan, Sichuan, Gansu, and Xinjiang. This geographical distribution is typical of foreign investors, which have clustered in areas with more highly skilled employees and wealthier consumers.

The size and growth potential of the China market were the major drawcards for Australian firms, which also indicated a long-term commitment to a market presence, as shown in Table 4. All firms, irrespective of multinational experience, industry group and parent size, ranked the first three factors as the most important drawcards in China. Low wage costs and the establishment of an export base were rated only of low-medium importance, although low wage costs were more important to small firms and those with extensive investment in China. While recognising these differences for size and experience, neither wage factors nor an export platform were major factors in the location decision for Australian MNEs.

Table 4 - Location Factors in the Investment Decision

	Mean	Standard Deviation
Strong market growth prospects	4.5	0.94
Establish long term presence	4.3	0.84
Size of market	4.1	0.14
Low wage costs	2.5	0.17
Establish export base	2.5	0.18
Service foreign company in China	2.2	0.17
Service Australian company in China	2.2	0.19
Tax incentives	2.1	0.13
Access raw materials	2.1	0.18
Forestall entry by competitor	1.8	0.30
Source components for Australian operations	1.8	0.15
Bypass government trade barriers	1.7	0.14
Lack of local licensee/franchisee	1.7	0.14
Government financial assistance	1.6	0.12
Follow competitor	1.5	0.11

1. The means are the rankings on a Likert scale from 1 (not important) to 5 (very important).

5.2 Negotiations

Ninety-five percent of the surveyed firms invested in China as part of a long-term business strategy, with more than half the firms engaged in multiple business activities (33 percent operated three or more projects). Entry forms were diverse, although equity-based investments were prominent including WOS (8 percent), JVs (29 percent), representative office or agent (22 percent), management contract (17 percent), export (12 percent) and licences, franchises and build-operate-transfer contracts (12 percent). Between the 1980s and 1990s, Australian firms in China increased their use of wholly owned subsidiaries and JVs, a general trend observed for firms of all nationalities (Shaw and Meier, 1994).

Existing commercial networks were crucial for Australian firms seeking to enter the PRC market. Half the Australian firms learned about their China business opportunity, or were introduced to the China market, through informal but established overseas business links. Nearly a third of the firms discovered commercial opportunities in China through their Australian business networks.

Australian firms achieved relatively rapid entry into China, in contrast with reported American and European experiences. Thirty percent of Australian firms had no or low difficulties communicating and negotiating in China, while 50 percent experienced moderate levels of difficulty. Few firms (20 percent) were subject to high levels of difficulty. Australian firms found the responsiveness of Chinese government agencies slow, fairly difficult, and less open than desired, though not hostile. Three-quarters of Australian firms did not make facilitation payments to secure their contracts. For the remainder, such payments were extended to a variety of government bodies including local authorities (7 percent) and a mix of local - provincial - central (19 percent).

Correspondingly, contract negotiations were fairly quick for most firms, with 50 percent successfully finalising within 12 months and two thirds within 18 months. CEOs were heavily involved in negotiations and more than half the firms included in-house market entry specialists in their negotiating teams. CEOs of large firms made significantly fewer trips (3.7) than the CEOs of medium-small firms (7.8). The average negotiation period for Australian firms' first entry was roughly equivalent to that for the second or third American FDI in China (Yan, 1999). Industry sector was a significant variable: business services and property firms ranked problems of communication, linguistic and cultural differences and negotiations with provincial and local authorities as less difficult than did manufacturing firms. Further, large firms (83 percent) and medium size firms (100 percent) were significantly more likely to write contracts that were binding outside China than were small size firms, which were less likely to seek dispute resolution options.

5.3 Capabilities and Technology Transfer

The theory of international involvement requires the possession of assets, resources and capabilities, which allow the international firm to compete in foreign environments. Australian MNEs in China drew on two distinct sources of capabilities: knowledge of efficiently operating an enterprise and the ability to build a consumer base. Non-process intangible know-how embodied in human capital was the pre-eminent source of Australian firms' competitive advantages. Managerial skill, skilled personnel and process technology, encompassing intangible knowledge of coordinating and controlling product and service delivery represented distinct organisational capabilities for Australian firms in China, as displayed in Figure 1[2]. Complementing this operational expertise, Australian firms drew on strengths in product technology, brandnames and trademarks, and marketing and distribution expertise to define and establish customer loyalty in China. Patents (3.1) and copyrights and design (3.3) were of less strategic importance in the pursuit of market share. All respondents ranked the resources and capabilities in Figure 1 the same, although small and large firms were significantly more likely to transfer marketing and distribution know-how than medium-size enterprises.

The characteristics of the technology transferred to China were consistent with Australian MNEs capabilities. Half the firms transferred core technology to China, but most of the technology was not patented in Australia (33 percent), nor state of the art (39 percent). However, as the theory suggests, large and experienced firms, which entered through wholly-owned subsidiaries, exhibited a greater tendency to transfer state-of-the-art technology than smaller and inexperienced firms who preferred JVs.

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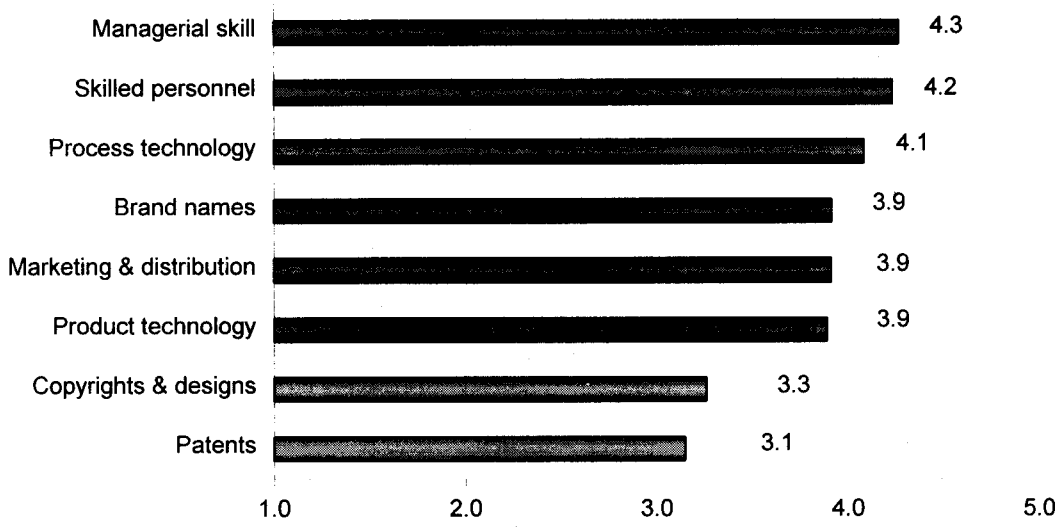
[2] The rankings were on a Likert scale from 1 to 5, the higher number indicates greater importance.

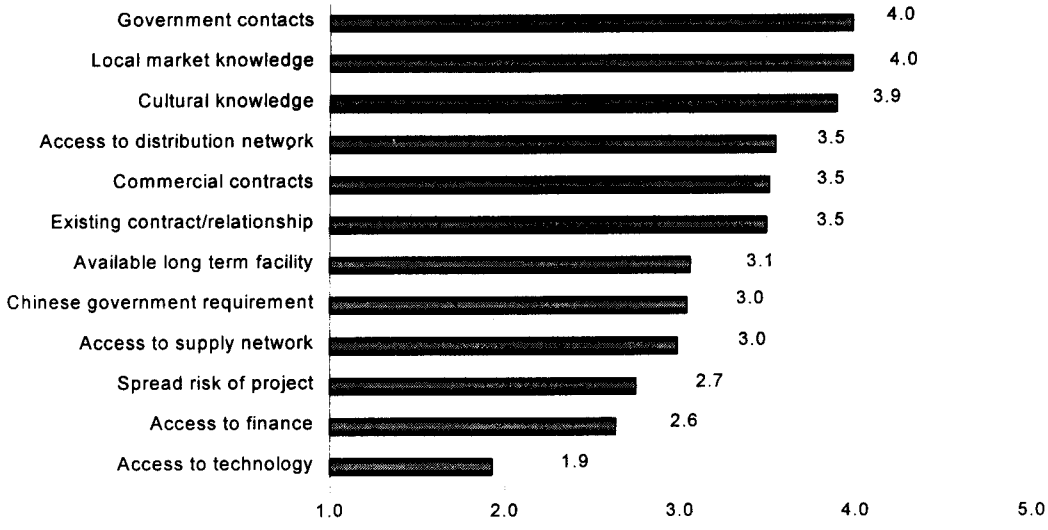
Figure 1 - Sources of Competitive Advantage



5.4 Joint Ventures: Partner Choice and Disputes

Australian firms entered into JVs with PRC firms to access complementary capabilities, as predicted by the theory of entry form choice. Chinese state-owned partners accounted for 68 percent of JV partners. PRC partners possessed strengths in interpreting the surrounding environment and providing downstream distribution connections, which complemented the operating and consumer product technologies transferred by Australian firms to China. As shown in Figure 2, Australian firms identified local market knowledge, government and commercial contacts, cultural and social knowledge and contact, and access to marketing and distribution networks as the most important capabilities supplied by the Chinese partners. Notably, Australian firms that entered China using JVs had significantly less experience in Asia, with an average of 1.8 projects, compared with Australian firms that established wholly-owned subsidiaries, with 6.5 projects.

Figure 2 - Motivations for Seeking PRC Partner



Australian MNEs guarded technology transferred to China. PRC partners were sought from outside the core business activities of the Australian firm to inhibit spill-over of know-how to Chinese partners. Further, most Chinese partners had no experience of operating outside China, which minimised technological spill-over. International inexperience proxied the PRC partner's lack of experience in operating alliances and hence the PRC partner's lack of capacity to learn from the Australian firms through demonstration effects.

Although all parents faced problems controlling subsidiaries, MNE theory identifies control and decision-making as a special challenge to JV operators. Chinese partners exercised on-site and day-to-day operational control over the JV. These management tasks reflected the skills of PRC partners in communicating with local suppliers, logistics providers and the workers. To counter immediate operational control by their Chinese partners, Australian firms implemented a range of mechanisms to control, monitor and supervise the JV, while minimising the diversion of managerial effort into dispute resolution. Australian partners appointed 65 percent of JV general managers, while PRC partners appointed 67 percent of the deputy general managers. Australians had equal or

dominant control of the JV board and most board meetings (63 percent) were held in China, providing Australian parent managers with the ability to directly monitor the activities of their JVs.

The leading sources of JV disharmony were cultural and linguistic differences (3.2), different short-term expectations (3.1), and general misunderstandings (3.1). Such difficulties are common to all international JVs. Encouragingly, Australian managers saw beyond the myopia of the current dispute, solving problems with their Chinese partners through negotiation. The dominant factor in negotiated JV conflict resolution was the desire to maintain an on-going partnership. Recourse to legal action was rated as of low importance in dealing with disputes with Chinese partners. The absence of threats of legal retribution mirrors the experience of Australian MNEs engaged in non-equity arrangements. Serious JV problems, related to benefiting at the expense of the other party, were ranked low-medium and, again, resolved primarily by negotiations.

6. Operating JVs and Wholly-Owned Subsidiaries

Monitoring, controlling and assessing operations in China posed significant challenges for Australian executives, as outlined in the theory section. Australian headquarters tightly monitored their JVs and wholly-owned operations in China, with senior parent executives receiving formal monthly reports and informal reporting on a daily or weekly basis, as shown in Table 5. Supplementing the numerous written and verbal communiqués, parent executives frequently visited their China operations. Large firms, with more than 1000 employees, monitored more intensively than small and medium size enterprises. There were no differences in the intensity of monitoring across industries (manufacturing, business services and mining firms) or with respect to the level of Asian region experience.

Table 5 - Frequency of China Head Reports

Report	Daily	Weekly	2-3 per Month	1 per Month	3-4 per Year	Half Year	Other
Formally	---	18%	17%	**48%**	5%	13%	---
Informally	15%	**60%**	12%	7%	2%	3%	2%

Intensive monitoring was coupled with the employment of experienced international managers as heads of the China operations by 48 percent of the firms in the survey. Large firms were more likely to have appointed experienced overseas general managers (61 percent) than small (37 percent) and medium (44 percent) firms.

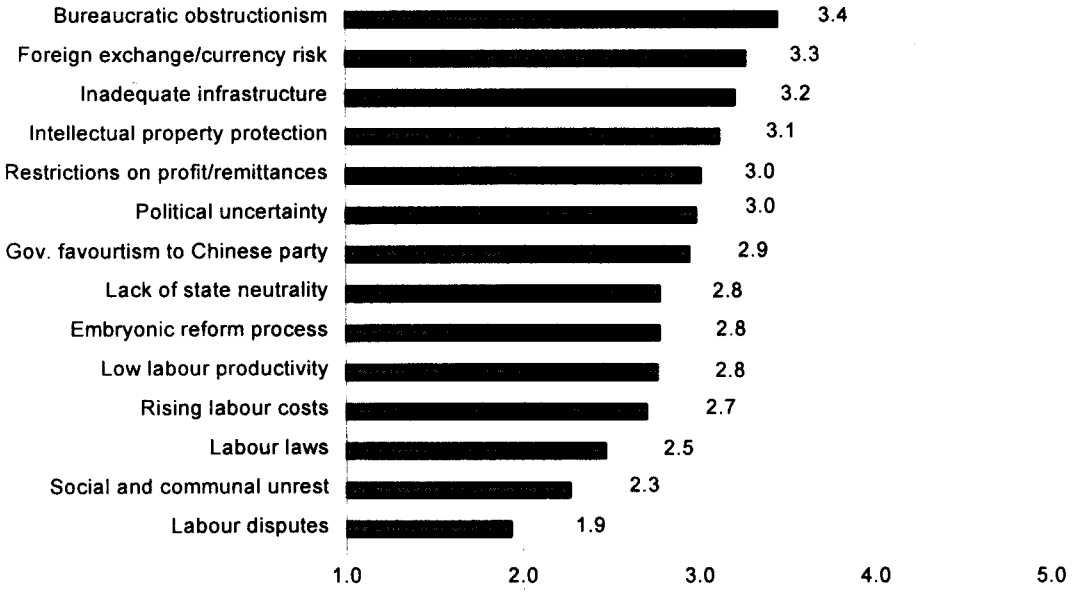
Approval from Australian headquarters or JV board was required for all decisions affecting financial and growth strategies for the venture. The Australian parent or JV Board exercised control over appointments of senior managers and decisions affecting the retention of capital in China or its repatriation for expansion elsewhere in the parent's network. Budgets (98 percent), capital budgeting (95 percent) and dividend payments (91%) were controlled, by most parents, while in-country managers retained discretion over decisions involving sensitivity to local conditions, such as work organisation (68%) and product price (58%), range (62%) and design (64%).

7. Risk Assessment

Australian managers did not view China as a particularly risky investment location. Overall risk was ranked as only of moderate concern (2.9), and no risk factor was ranked higher than 3.4 on a Likert scale of one (low) to five (high) in Figure 3. Bureaucratic obstructionism was seen as the greatest source of concern, with foreign exchange/currency risk seen as the next highest factor. These benign assessments of risk were consistent irrespective of the level of equity exposure to China.

Divergent risk assessment emerged when the sample was stratified according to the Australian parents' international experience. Firms with little overseas experience ranked inadequate infrastructure and restrictions on profit remittances as greater sources of apprehension than experienced multinationals. MNEs experienced in operating in Asia recognised the risk emanating from Government favouritism, while firms with little prior China experience saw bureaucratic obstructionism and foreign exchange/currency risk as major problems. Larger firms were particularly dissatisfied with the pace of reform in China.

Figure 3 - Risk Assessment



The perception of only moderate risk levels was consistent with the transfer of state-of-the-art know-how and the selection of contractual forms. Australian firms were not ignorant or dismissive of the difficulties of operating in China. Rather, they matched the choice of JV form to the nature of their distinctive resources and capabilities, and the characteristics of the host commercial, political and legal structures. Sixty percent of Australian firms sought equity JV involvement in China, which offers greater control and security than licenses, management contracts and other non-equity arrangements. As discussed earlier, Australian firms also closely monitored and incentivised their operations and JV partners in China.

8. Outcomes

The performance of Australian operations in China was measured according to short-term financial ratios and subjective assessments by parent managers. Australian MNEs performed well in China, with 71 percent breaking even or posting a profit. Eighty-two percent of the firms were satisfied with the performance of their China ventures--16 percent describing them as very successful. The high levels of performance and satisfaction were consistent across firm size: the operations of large firms were no more profitable than those of small firms.

However, there were two significant differences within the sample. The China operations of inexperienced MNEs performed less well than firms with extensive experience of operating outside Australia. Managerial skill as a competitive advantage was enhanced where that skill included knowledge of operating offshore and dealing with different commercial, political and legal systems. Second, JVs were more likely to post a loss than wholly-owned operations. Such findings are consistent with numerous studies of multinational experience and international JV formation.

Disputes with partners did not exert a negative effect on the performance of JVs compared to wholly-owned operations. This finding re-enforces the conclusion that partner conflict between Australian and PRC firms stemmed primarily from cross-cultural business styles, rather than fundamental differences in goal objectives. Overall, parent CEOs were happy with their business activities in China. Few Australian firms expressed a desire to seek a new PRC partner and only 10 percent would have sought a contract with tighter wording. With hindsight, few firms (less than 7 percent), would not have invested in China.

One of the most important outcomes was the new operational capabilities Australian headquarters derived from their business activities in China. Nearly 70 percent of the firms drew lessons from their experiences from negotiating entry and establishing a presence in China, which were then applied to the establishment of new foreign investments. Parent headquarters captured the new or enhanced multinational skills learnt in China. The experiences of China staff were primarily seen as offering the greatest value to the local operations, with little movement of staff to other parent investments.

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ใบสมัครสมาชิกวารสารเศรษฐศาสตร์ธรรมศาสตร์

สำนักงาน : โครงการวารสารเศรษฐศาสตร์ธรรมศาสตร์
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ระเบียบการเสนอบทความเพื่อพิจารณาตีพิมพ์ในวารสารเศรษฐศาสตร์ธรรมศาสตร์

1. ผู้เขียนจะต้องส่งต้นฉบับถึง นายพรายพล คุ้มทรัพย์ บรรณาธิการวารสารเศรษฐศาสตร์ คณะเศรษฐศาสตร์ มหาวิทยาลัยธรรมศาสตร์ ถนนพระจันทร์ กรุงเทพฯ 10200 และโปรดส่งในรูปของ Computer diskette มาด้วย

2. บทความที่อยู่ในขอบข่ายที่จะตีพิมพ์ในวารสารนี้ ประกอบด้วยบทความที่มีลักษณะดังต่อไปนี้
   - 2.1 บทความที่นำเสนอการวิเคราะห์พฤติกรรมทางเศรษฐกิจของมนุษย์และปรากฏการณ์ทางเศรษฐกิจในสังคม
   - 2.2 บทความที่มุ่งสำรวจพรมแดนแห่งความรู้ หรือสถานะของความรู้แขนงต่างๆ ในสาขาเศรษฐศาสตร์
   - 2.3 บทความที่นำเสนอผลการวิเคราะห์ทางเศรษฐศาสตร์จากงานวิจัยและวิทยานิพนธ์
   - 2.4 บทความที่นำเสนอการวิเคราะห์ปัญหาทางเศรษฐกิจปัจจุบันของไทย
   - 2.5 บทความที่ประมวลความรู้ด้านต่างๆ ของระบบเศรษฐกิจไทยจากผลงานวิจัยทั้งมวลที่มีผู้เสนอไว้
   - 2.6 บทความปริทัศน์ (review article) ว่าด้วยหนังสือหรืองานวิชาการต่างๆ
   - 2.7 บทวิจารณ์หนังสือที่นับเนื่องอยู่ในสาขาวิชาเศรษฐศาสตร์
   - 2.8 บทความที่นำเสนอการวิเคราะห์สภาพการเรียนการสอนวิชาเศรษฐศาสตร์ในประเทศไทย

3. บทความที่จะตีพิมพ์ในวารสารนี้ จักต้องเขียนเป็นภาษาไทยหรือภาษาอังกฤษ และต้องมีบทคัดย่อ (Abstract) ทั้งที่เขียนเป็นภาษาไทยและภาษาอังกฤษประกอบบทความมาด้วย

4. การอ้างอิงหนังสืออุเทศและการทำเชิงอรรถ ให้ใช้ระบบการอ้างชื่อผู้แต่งหรือชื่อบรรณาธิการและปีที่ตีพิมพ์ผลงานนั้นๆ อาทิเช่น Behrman (1968) อัมมาร สยามวาลา (2522) เป็นต้น รายละเอียดเกี่ยวกับหนังสืออุเทศ ให้จัดทำเป็นบรรณานุกรมไว้ท้ายบทความ โดยเรียงตามลำดับอักษรชื่อผู้แต่งหรือชื่อบรรณาธิการตามแต่กรณี ส่วนการทำเชิงอรรถให้เรียงลำดับหมายเลขจนจบบทความ

5. บทความที่ผ่านการกลั่นกรองและการประเมินคุณภาพ จะได้รับการตีพิมพ์ ตามปกติกระบวนการกลั่นกรองและประเมินคุณภาพ จะใช้เวลาไม่เกิน 1 เดือน หากมีเหตุล่าช้าด้วยกรณีใดก็ตาม กองบรรณาธิการจะแจ้งให้ผู้เขียนทราบเป็นกรณี ๆ ไป