

ECONOMIC AND SOCIAL COMMISSION FOR ASIA AND THE PACIFIC

**BULLETIN ON
ASIA-PACIFIC
PERSPECTIVES
2004/05**

**ASIA-PACIFIC ECONOMIES:
LIVING WITH HIGH OIL PRICES?**



UNITED NATIONS

ESCAP WORKS TOWARDS REDUCING POVERTY AND MANAGING GLOBALIZATION

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FOREWORD

This issue of the *Bulletin on Asia-Pacific Perspectives* provides a timely assessment of the confluence of several unfavourable trends in the global economy and their impact and implications for various economies or groups of economies within the ESCAP region. A more detailed review will be undertaken in the forthcoming edition of the annual *Economic and Social Survey of Asia and the Pacific*, to be published in April 2005. The assessment benefited greatly from the collective wisdom of eminent persons from 11 member countries of ESCAP as well as other international organizations.

The year 2004 has witnessed several adverse developments, including notably the oil price hike and the ongoing and geopolitical tensions in North-East and West Asia. Nevertheless, aided by an environment of exceptionally low interest rates and the dynamics of lower costs for finance, among other positive countervailing forces, global and regional economic activities have shown remarkable durability in 2004. Barring new negative shocks, growth in production and income in the ESCAP developing region in 2004 could be one half of a percentage point higher than the rate in 2003 as a whole.

Issues in global and regional interdependence and in the promotion of enterprise competitiveness and sustainable development remain the focus of the shorter articles in the *Bulletin*. These articles provide a perspective on some of the major policy challenges facing countries in fostering intellectual creativity and production efficiency and in managing stable and equitable economic and social development and integration against the backdrop of the Millennium Development Goals and intensified global and regional competition. This issue of the *Bulletin* therefore embodies the ongoing and concerted efforts that are being made to enhance the role and relevance of the secretariat in the ESCAP region.

Finally, I wish to put on record my deep appreciation to the eminent persons who so generously gave of their time in support of our work in the secretariat and to the high-level experts for their written thoughts and perspectives on major issues of concern to us all.

Kim Hak-Su
Executive Secretary

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ABBREVIATIONS

ADB	Asian Development Bank
AFTA	ASEAN Free Trade Area
APEC	Asia-Pacific Economic Cooperation
ASEAN	Association of Southeast Asian Nations
BIS	Bank for International Settlements
CIS	Commonwealth of Independent States
CPI	consumer price index
ECE	Economic Commission for Europe
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FDI	foreign direct investment
FTA	free trade agreement
GATT	General Agreement on Tariffs and Trade
GDP	gross domestic product
GNP	gross national product
ICT	information and communication technology
ILO	International Labour Organization
IMF	International Monetary Fund
IP	intellectual property
IPRs	intellectual property rights
ITC	International Trade Centre UNCTAD/WTO
OECD	Organisation for Economic Cooperation and Development
OPEC	Organization of the Petroleum Exporting Countries
PPP	purchasing power parity
R&D	research and development
SARS	severe acute respiratory syndrome
SMEs	small and medium-sized enterprises
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNIDO	United Nations Industrial Development Organization
WFP	World Food Programme
WHO	World Health Organization
WTO	World Trade Organization



GLOBAL AND REGIONAL ECONOMIC DEVELOPMENTS: IMPLICATIONS AND PROSPECTS FOR THE ESCAP REGION¹

The year 2004 was dominated by developments in the oil markets, especially in the second half of the year. Up to mid-2004 ESCAP developing economies enjoyed buoyant growth; in the second half of the year, momentum appeared to falter in response to the rising price of oil. Nevertheless, on present trends, GDP growth for this group of economies is likely to be 0.6 percentage points higher in 2004 than the estimates of 6.2 per cent made earlier in the year. This unexpectedly positive outcome would be the result mainly of continued robust growth in East Asia, led by China and the turn-around in the Japanese economy. It would appear that, on balance, the sharp rise in crude oil prices in 2004 has thus far not significantly harmed economic growth in the region despite its considerable dependence on imported energy.

Oil prices dominated developments in 2004

The sharp rise in oil prices has translated itself into higher fuel prices at the pump for motorists and surcharges on air travel; however, it has not yet contributed to a more general slowdown in consumer spending growth or in production over the region as a whole, although the situation varies between economies. How high energy prices eventually impact the overall regional economy is a matter of uncertainty and will depend upon how long the current phase of high prices lasts (see box). But for now their adverse effects on household spending and production appear to have been contained.

High oil prices have undoubtedly added to upward pressure on overall consumer prices to some degree. However, the impact so far has been relatively modest, with consumer price indices creeping up by an additional 0.5-1.0 percentage points in the region compared with 12 months earlier. In most countries in the region, the weight of energy is relatively small compared with, say, food. China and India, the two largest economies in the region, have faced more acute price pressures, but not all of them are due to higher oil prices. Nevertheless, on the basis of past experience, should crude oil prices rise further, or even remain at present levels for several more months, the risks of higher inflation will increase significantly across the region.

A major impact of higher oil prices on the region is that they may contribute to a reversal in inflationary expectations. Some central banks have begun to raise interest rates pre-emptively to counter the risk of potentially higher inflation later in 2004 and 2005. Many observers have interpreted

¹ Prepared by Shahid Ahmed, Economic Affairs Officer, Poverty and Development Division, ESCAP.

Impact of high oil prices in the ESCAP region

Two previous episodes of rapid, large and relatively long-lasting increases in oil prices – known as the “oil shocks” of 1973 and 1981 – plunged the global economy into recession on both occasions. The current level of oil prices, with spot prices standing at 14-year highs, does not yet merit the description of an oil shock. Output growth in the region continues to remain relatively strong and price pressures, by and large, appear to have increased only marginally in most economies, for the time being at any rate. Nevertheless, there are fears that should oil prices remain at their present level for some time, say, until mid-2005, the adverse effects on output and prices would become more visible and more widespread across the region. From the perspective of the ESCAP region, given its size and diversity and its growing role as a driver of regional and global GDP growth, it is important that policy makers and others be aware of the potential impact of high oil prices on the economies of the region.

A high price of oil acts as a tax on both production and consumption. According to the International Energy Agency, the effect of a sustained US\$ 10 rise in the price of a barrel of oil, i.e., a rise that persists for at least 12 months, would tend to reduce growth in the following year in the ESCAP region, other things being equal, by 0.8 percentage points. Other calculations suggest that higher production costs on account of oil would push inflation up by 0.5 percentage points. It should be stressed, however, that these numerical relationships are based upon the experience of the two oil shocks referred to above. In the interim much has changed, principally a decline in the use of oil as a proportion of GDP growth, i.e., the lower energy intensity of manufacturing and services nearly everywhere but more so in the developed than in the developing countries. Hence, it is unlikely that high oil prices will automatically lead to the same adverse effects on output and prices now. Nevertheless, the effects of a long-lasting increase in oil prices would be adverse.

From the perspective of the ESCAP region, it is self-evident that the effects of high oil prices would not be uniform: one, there would be obvious differences between oil-exporting and oil-importing countries; two, there would be differences between the more developed and less developed economies in the region; and three, Governments could and, indeed, would take countervailing measures, such as changes in the taxes and subsidies that are levied on oil products in virtually all ESCAP member countries. There would be changes, too, in monetary policy to counter the inflationary effects of high oil prices. The overall impact of high prices hence becomes difficult to measure.

In the ESCAP region, although there are a number of countries that produce oil, only seven are net exporters: Azerbaijan, Brunei Darussalam, the Islamic Republic of Iran, Kazakhstan, Malaysia, the Russian Federation and Viet Nam. Indonesia, traditionally a large producer and exporter of energy, is now a net exporter of natural gas but not of oil. China is a major oil producer (3.5 million bpd) but is also a large oil importer (2.4 million bpd). Most other economies produce varying, sometimes significant, quantities of oil but still need to import the bulk of their requirements. Japan, the Republic of Korea and Taiwan Province of China, three of the five largest economies in the region, produce no oil. India produces 0.8 million bpd and imports 2.1 million bpd, while Singapore imports 0.7 million bpd of crude and exports 0.6 million bpd of oil products. Broadly speaking, the region remains a large net importer of oil and therefore vulnerable to a sustained rise in oil prices. The consumption of oil in the ESCAP economies is estimated to be equivalent to 4.5 per cent of GDP but is on a gradual downward path, particularly in the developed and middle-income developing economies.

In principle, oil-exporting countries would benefit both from the extra revenue that higher prices would generate and from the improvement in their terms of trade. Oil-importing countries, which constitute the bulk of ESCAP members, would, however, experience higher production costs and lower consumption and a net transfer of income to the oil-exporting countries. Between developed and developing countries, even if both are significant net importers, the effects would be markedly different: the former use roughly half as much oil per unit of output as developing countries. In addition, terms of trade losses can be recouped more quickly by developed countries than by developing countries, given the different price elasticities of their tradable goods. If oil-importing countries were to lower taxes or increase subsidies on oil products within, say, a constant tax-to-GDP ratio this would redistribute income from the general taxpayers to oil product users. In other words, there would be a variety of impacts depending upon the status of the particular country as an oil exporter or

importer, its level of development, its resource situation and what policy measures its Government took to deal with the high oil prices. Whether the impact would be deleterious to growth in the region and to what extent is very difficult to judge but the following aspects might shed some light on the situation.

Essentially Governments have sought to shield consumers from the full impact of high crude oil prices by either reducing the taxes and duties they levy on oil products or by not letting the final prices paid by consumers fully reflect the rise in crude oil prices that has occurred in the last few months. But, as oil prices have remained high for several months, both approaches will prove to be a heavy financial burden on the Governments concerned. In the first instance there would be a clear fiscal cost that will have to be made up through taxes elsewhere or through higher borrowing if the Government is committed to maintaining a particular level of spending; in the second instance, the Government would need to find the resources to compensate the oil companies, whether State or private, that have not been able to pass on the full cost of the crude oil to the consumers. As an illustration, in Indonesia, oil subsidies in 2004 are likely to amount to a staggering US\$ 6 billion or nearly a quarter of total government revenues, a huge fiscal burden on the Government. It is noteworthy that similar subsidization schemes are currently operating in a number of ESCAP member countries to protect consumers from the full extent of the rise in oil prices with varying fiscal consequences.

While the logic of subsidized oil product prices is understandable, such a policy approach is almost certainly not viable over the medium term given its high fiscal and opportunity costs. Moreover, subsidies invariably distort relative prices, discourage conservation and fuel efficiency in transport and encourage overuse of the subsidized items. Even apparently well-targeted subsidies, such as for diesel fuel, are likely to prove unsustainable over the medium term and eventually have the same negative effects as more general fuel subsidies. Moreover, with all fuel subsidies, the overall environmental impact is clearly negative.

It needs to be emphasized that the ability of subsidies to preserve a higher momentum of growth than would otherwise have been the case is likely to be true, at best, only in the short term. Eventually the higher costs of fuel would need to be allowed into the calculus of costs and benefits facing both the producers and consumers of energy and all activities in the economy would need to be evaluated on a uniform basis on resource allocation grounds. In that general context, high oil prices provide Governments with a window of opportunity to bring vital environmental issues relating to energy conservation to the forefront.

such measures of monetary tightening, modest though they are, as signalling the end of the low inflationary and interest rate environment of the last two years. The small rise in interest rates is not expected to have an adverse impact on short-term growth per se, but its indirect impact on business and consumer confidence may well gradually translate into negative effects on levels of demand and output over the next 12-15 months.

Compounding developments in the energy markets, in the United States of America and Japan, two important sources of external demand for economies in the region, output growth appears to have entered a soft patch compared with much of 2003 and the first quarter of 2004. Should this soft patch persist in the rest of 2004 and into 2005 it would lead to a weaker external environment that would then feed back into the domestic economies of the region. Thus, while the regional economy has so far been only marginally affected by the rise in oil prices and the firming trend of interest rates, the outlook for 2005 suggests that overall growth in the region is almost certainly likely to be lower than in 2004 (see table 1). Forecasts for 2005 are based upon an average price of US\$ 38 a barrel.

Higher oil prices have reversed inflationary expectations and led to firmer interest rates

Table 1. Selected indicators of global economic conditions, 2001-2005

	2001	2002	2003 ^a	2004 ^b	2005 ^b
Economic growth (percentage change in GDP)					
World					
At market exchange rates	1.4	1.7	2.7	4.1	3.4
At PPP exchange rates	2.4	3.0	3.9	5.0	4.3
Developed economies	1.0	1.6	2.1	3.6	2.9
Japan	0.4	-0.3	2.4	4.4	2.3
United States of America	0.5	2.2	3.1	4.3	3.5
European Union	1.7	1.2	1.1	2.6	2.5
Developing economies	4.1	4.8	6.1	6.6	5.9
Developing economies in the ESCAP region	3.6	5.8	6.2	6.8	6.2
Trade in goods and services (percentage)					
World	0.1	3.3	5.1	8.8	7.2
Developed economies					
Exports	-0.8	2.2	2.6	8.1	6.3
Imports	-0.7	2.6	3.7	7.6	5.6
Developing economies					
Exports	3.5	6.6	10.9	10.8	10.6
Imports	3.3	6.0	11.1	12.8	11.9
Inflation rate (percentage)^c					
CPI in the developed economies	2.2	1.5	1.8	2.1	2.1
CPI in the developing economies	6.8	6.0	6.1	6.0	5.5
<p><i>Sources:</i> United Nations, Economic Monitoring and Assessment Unit, "LINK global economic outlook" (April 2004); IMF, <i>World Economic Outlook, September 2004: The Global Demographic Transition</i> (Washington, IMF, 2004); and <i>The Economist</i>, 11 September 2004.</p> <p>^a Estimate. ^b Forecast. ^c Developed and developing economy ratios weighted at purchasing power parity.</p>					

A slower momentum of growth in 2005 will have adverse social consequences

Any marked or prolonged slowdown in the momentum of growth, were it to occur, would generate significant social and macroeconomic repercussions for the Governments of the region. Sustained, buoyant growth has been instrumental in generating the increase in employment that lifted millions out of poverty after the 1997-1998 economic crisis and again after the slowdown following the ending of the dot.com boom in 2001. Buoyant growth has also enabled economies in the region to enjoy macroeconomic stability although public debts have tended to rise. A slowdown would therefore not only generate immediate social and economic consequences but may also damage the longer-term prospects for the region by reducing public investment in vitally needed physical and social infrastructure. On the macroeconomic front, a slower pace of growth would in all likelihood constrain the growth of tax revenues and could thus be instrumental in widening fiscal deficits once again in several economies. A more sustained rise in inflation would automatically trigger higher interest rates that would add to the cost of servicing the public deficits, as well as affecting consumer spending.

Experience suggests that a firmer trend in interest rates combined with rising fiscal deficits could cause private investment expenditure to be crowded out or postponed, at least in the short term. Furthermore, restraint in the growth of public spending as revenue growth flattens out would inevitably lead to slower progress or cutbacks in the delivery of public sector services and in vital social programmes in many economies of the region. In a worst-case scenario, the region could therefore not only see a deceleration in the momentum of growth over the next 12-15 months but also possible setbacks in social indicators.

But for now, little can be said with certainty as to how events will unfold in the months ahead and how the economic situation in the region will evolve. Both national Governments in the region and international and regional multilateral bodies are broadly hopeful that, despite the current hiccups, the global economy remains on track. Nevertheless, the need for vigilance, especially with regard to oil price trends and their inflationary implications, is perhaps greater than it was only a few months ago. As at October 2004 there is a degree of optimism that inflationary pressures can be contained in most economies, and interest rates, although having bottomed out, are not expected to increase rapidly, or to very high levels, over the next 12-15 months.

However, it would be prudent to concede that not all regions and not all economies may be able to conform to this rosy scenario. In the region as a whole, risks vary and individual Governments may need to critically re-examine their degree of vulnerability to current developments and to assess how they might be able to maintain the current momentum of growth.

In this context, it is worth noting that growth in the region has become more autonomous in the last few years with the rapid increase in intraregional trade, for example, rising import demand from China; it has also become more domestically driven. Nonetheless, it still remains dependent to a significant degree on external demand, and export growth remains a crucial element in maintaining the current growth momentum. Exports depend on demand from the United States and Japan, and the EU to a lesser extent. Against that background, any simultaneous slowdown in China, Japan and the United States and continuing lacklustre growth in the EU could thus have an adverse impact on the region as a whole during the remainder of 2004 and in 2005. Other downside risks emanate from developments in the commodity and financial markets and their impact on imponderables such as consumer and business confidence. Above all else, the risk of terrorism remains ever-present in the region, as are periodic episodes of avian influenza, which can lead to significant setbacks to growth in the short term. The incidence of avian influenza in 2004, while less serious compared with 2003, has already led to a number of human deaths in South-East Asia and its future progression remains uncertain.

***Significant
uncertainty lies
ahead***

Governments must ensure that the momentum of growth is maintained

Depending on how energy and commodity prices behave in the months ahead, the extent of the external slowdown in 2005 and what impact, if any, these developments have on the financial markets, Governments in the region will need to take appropriate measures to ensure that the domestic momentum of growth remains broadly unaffected and to simultaneously minimize any macroeconomic instability induced by external events. They will also need to ensure that long-term development goals continue to receive due attention.

In the following pages the outlook for the region over the next 15 months is examined against the background of the current global economic setting, developments in international trade, including trends in commodities, and the amalgam of influences currently bearing on the financial markets and how these might impact on consumer sentiment and corporate behaviour in the region. Finally, the balance of risks to growth emanating from these developments and the main policy issues that arise as a result for the Governments of the region, including some longer-term development policy challenges, are discussed.

The global setting

Developed countries

The United States economy exercises a major influence in the region

With a weight of 21 per cent in global output and 11 per cent of global imports, 42 per cent of which are sourced from Asia-Pacific, the United States economy continues to exercise a major influence on the region. For that reason, the soft patch in which the American economy has found itself in mid-2004 needs to be more carefully examined. Analysts have alluded to a number of possible causes of the soft patch but, notwithstanding these, a consensus of official and private sector forecasts suggests that the American economy is still expected to grow by between 4.2 and 4.5 per cent in 2004 as a whole, i.e., significantly faster than in 2003. However, growth in the second half of 2004 is expected to be substantially weaker than in the first half. From the perspective of the region, what is of interest is how long the current soft patch might last and what implications it might have for the region.

The strength of the American economy in the first half of 2004 was the result of the large fiscal boost that it received in late 2003. This, combined with low interest rates, kept unemployment low and stimulated both corporate and household spending. In the latter, rising house prices have played a major role via their wealth effects. However, by mid-2004 the macroeconomic stimulus was starting to wane and nascent price pressures were beginning to emerge. In response, the Federal Reserve Board raised its benchmark federal funds rate three times. Given the size of the fiscal deficit, expectations of any extra federal budgetary stimulus are considered unrealistic for 2005.

Another factor that underpinned the economy in 2003 and part of 2004 was the equity markets. Of late, equity prices have been stagnant as GDP growth has not been converted into rising corporate earnings on a sustained basis. Moreover, the rather slow pace of job creation appears to have dented consumer confidence and rising oil prices have been a negative development. Thus, taking these various factors in combination the consensus of opinion now is for the American economy to decelerate in the second half of 2004 and into 2005 to an annual rate of 3.5 per cent.² Thus, as far as the ESCAP economies are concerned, the United States is unlikely to provide a significant stimulus to growth for the remainder of 2004 and, indeed, well into 2005.

A slower rate of GDP growth is not the only potential danger emanating from the United States with external repercussions. The emergence of large current account and fiscal deficits in the United States have weakened the dollar and, superimposed upon the low domestic saving rate, suggest that the American economy will be a significant user of global savings for some time to come. But a firmer trend in interest rates is bound to aggravate the servicing of both deficits and poses the risk of a disorderly adjustment if global financial markets have become overweighted with United States assets. In such a situation, all countries could be faced with significantly increased financial market and exchange rate volatility. It should, however, be emphasized that in the past, risks to the global economy originating in the United States have not always materialized. Nevertheless, there is agreement both in the United States and in multilateral bodies that the current macro-economic imbalances in the United States cannot be sustained indefinitely and will need to be dealt with somehow over the next 18 months.

***Current soft patch
in the United States
could be compounded
by the current account
and fiscal deficits***

The Japanese economy, too, exercises a major influence in the region. Its recent buoyancy has been an unexpected source of stimulus for several economies in the region, notably in East and South-East Asia. Although slowing somewhat in the second quarter of 2004, the Japanese economy is nevertheless on track to register its highest rate of growth for 14 years in 2004. From the perspective of the region, the question, however, is whether this acceleration in the growth rate is sustainable into 2005. The evidence at this stage is rather mixed. First, on the positive side, the current upturn appears to be more broadly based than previous ones, with growing evidence of a rise in household consumption, Japan's weakest link in reviving and sustaining growth over the last decade. Second, the corporate and financial sectors have undergone fairly extensive restructuring in that many firms have shed excess capacity while banks have made considerable progress in writing off non-performing loans and in recapitalizing of their balance sheets. As a result, corporate profitability has improved and banks are in a stronger position to support the recovery. This is reflected in rising business confidence. Third, deflationary pressures seem to be finally coming to an end. Indeed, analysts expect consumer price indices to start rising in mid-2005 after seven years of decline. This should have a further positive impact on corporate profits and consumer spending after a time lag.

² IMF, *United States: 2004 Article IV Consultation – Staff Report; Staff Supplement; and Public Information Notice on the Executive Board Discussion*, Country Report No. 04/230, July 2004.

***Rapid growth
in Japan in 2004
unlikely to be
maintained
in 2005***

At the same time, however, the export sector has been the primary driving force of Japanese growth, with sales to China especially buoyant in 2003 and early 2004. The United States has been another source of demand, particularly in the high-technology sector. Both economies are expected to slow in the months ahead, the United States more so than China. Anecdotal evidence suggests that a disproportionate share of new investment expenditure is being undertaken by firms in the export sectors while such expenditure remains sluggish in firms and sectors that have limited international exposure. In other words, corporate restructuring still has some way to go. Second, the enormous size of the fiscal deficit and of public debt remains an ongoing concern. Third, given Japan's high dependence on imported energy, the rise in oil prices represents a kind of tax on expenditure that could nip consumer spending growth in the bud.³

Broadly speaking, the present pace of recovery in Japan is regarded as being too fast even allowing for the fact that there was considerable slack in the Japanese economy in 2003 after years of low growth. Hence, the recovery is expected to ease in any event in the months ahead with the pace moving closer to Japan's long-term trend rate of growth of around 2.5 per cent per annum. Thus, both cyclical and structural factors will determine Japanese economic performance in 2005. But, whatever the proximate causes of any slowdown in Japan in 2005, the impact on the wider regional economy is not expected to be large in the short term.

***Continuing
lacklustre growth
in the EU***

Outside the region, the EU is finally showing signs of a moderate pickup in activity after little or no growth in 2002 and 2003. In the 12 euro zone countries, growth is picking up, especially in France, and is expected to strengthen further in 2005 even though the appreciation of the euro vis-à-vis the dollar has reduced relative euro zone competitiveness. However, high levels of euro zone unemployment at around 9.0 per cent continue to undermine consumer confidence and spending. This phenomenon, combined with slow progress in implementing structural reforms, for instance in Germany, suggests that a significant improvement in the GDP growth rate is unlikely in the short term.

Outside the euro zone, the older members of the EU, such as the United Kingdom of Great Britain and Northern Ireland and Sweden, continue to enjoy relatively buoyant growth, while the enlargement of the EU to 25 members since May 2004 presages, at the very least, a period of consolidation as the new members learn to grapple with the EU's political and economic decision-making arrangements before enjoying the benefits of an enlarged single market. In this context, the eligibility of the new entrants to the EU for membership in the euro and the reform of the Stability and Growth Pact raise complex issues that could delay the positive impact of the enlargement on trade and output growth for some time. Given these trends and given that even the enlarged EU of 25 accounts for under 15 per cent of exports from the

³ IMF, *Japan: 2004 Article IV Consultation – Staff Report: Staff Supplement; and Public Information Notice on the Executive Board Discussion*, Country Report No. 04/249, August 2004.

ESCAP region, its economic performance is unlikely to have a major bearing on growth in Asia and the Pacific in 2005.

Recent trends in international trade

The strong growth of the global economy in 2003 and 2004 was both reflected in and driven by strong growth in world trade (see table 2). Overall, global trade growth is expected to expand by 8.8 per cent in 2004 following growth of just over 5.0 per cent in 2003. At almost 15 per cent, developing countries will once again outpace developed countries in global trade growth. The ESCAP region is the main contributor to world trade growth with both exports and imports growing faster than world exports and imports.

A feature of globalization worthy of note has been that merchandise trade expanded at roughly twice the rate of merchandise production in the 1990s.⁴ The early years of the succeeding decade saw a marked slowdown in the rate of growth of merchandise trade – in 2001 it actually declined – but in 2004 the historical relationship between trade and output growth of the 1990s appears to have been restored. Moreover, there is evidence now that trade in services is growing rapidly to match trade in merchandise, with travel the fastest-growing category in the former but vulnerable to the rise in oil prices.

Developing economies' trade growing more rapidly than the global pace

Table 2. World trade and prices,^a 1991-2004

	<i>Annual percentage changes</i>					
	<i>1991-2000</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004^b</i>
Trade in goods (volumes)	7.3	13.3	-0.4	3.5	5.5	9.1
Trade prices (in US dollars)						
Manufactures	-0.9	-5.6	-2.8	2.4	13.2	7.5
Oil	2.1	57.0	-13.8	2.5	15.8	28.9
Other commodities	-0.9	4.4	-4.1	0.6	7.1	16.8
Terms of trade						
Developed economies ^c	0.2	-3.1	0.3	1.1	1.3	-0.1
Developing economies	0.0	7.6	-3.1	0.6	0.0	3.2

Source: IMF, *World Economic Outlook, September 2004: The Global Demographic Transition* (Washington, IMF, 2004).

^a Goods only.

^b Forecast.

^c Advanced industrial economies plus newly industrializing Asian economies (Hong Kong, China; Republic of Korea; Singapore; and Taiwan Province of China).

⁴ UNCTAD, *Trade and Development Report, 2004* (United Nations publication, Sales No. E.04.II.D.29).

Within the fastest-growing categories of merchandise, some subcategories play a more dynamic role than others. In this context, the most dynamic category relevant to the ESCAP region is trade in ICT equipment and software. Together, these subcategories expanded at twice the rate of total manufactured goods over the previous 12 years. Such phenomena indicate that global trade flows are not static; over relatively short periods of time they have experienced major structural shifts and have evolved in the face of changing technology and consumer tastes and preferences. It is for individual countries to remain alert to the changes occurring around them and to adapt to such changes through responsive policies and the provision of public goods such as market intelligence and logistical support. They also need to maintain and promote competitiveness in particular lines in order to keep market share through targeted R&D expenditures. These developments are of particular relevance to the countries likely to be affected by the ending of the Agreement on Textiles and Clothing on 1 January 2005.

Rapid shifts in trade patterns

An apposite illustration in this regard, for instance, is that the share of agricultural products in global trade has declined steadily over the last 15 years. This is so despite the fact that production of most agricultural commodities has increased in recent years. The relative decline in trade is partly the result of the very rapid growth in the trade of manufactured and semi-manufactured goods, principally components, and partly because demand for agricultural goods has risen more slowly in the last two decades. The recent example of wheat is illustrative of this change. World wheat production is estimated to have risen by over 9.5 per cent in 2003/04. However, according to FAO estimates global cereal trade is set to decline sharply in 2004/05 as much of the increased production will be locally consumed and preclude the need for cross-border sales and deliveries.⁵ An accompanying trend is that processed agricultural goods have risen in importance in world trade throughout the last 12 years, indicating that value is being added to commodities in the exporting countries rather than in the importing countries.

Moderate deceleration of trade likely in 2005

Overall, most observers expect to see a moderate deceleration in world trade growth in 2005 in volume terms. Import demand in the developed economies is likely to slow so significantly that growth within the developing economies may not be able to fully compensate. Yet world trade growth is still expected to be in the 7.0 to 8.0 range, close to its average growth in the 1990s. In the ESCAP region, China's import growth is set to continue at a fast pace, if not at quite the rate of the last two years, and to provide opportunities to economies in the region to maintain the momentum of intraregional trade.

⁵ FAO, *Food Outlook No. 3*, September 2004.

Commodities

After a long period of decline, commodity prices have been on the rise since 2002 (see table 3). Prices have increased for all commodity groups, the largest increases being in agricultural raw materials, such as vegetable oilseeds and oils, and various mineral ores and metals. Rising coffee and cotton prices have brought relief to some countries where producers have often faced ruin in the face of relentless long-term price declines. However, firmer commodity price trends appear to have bypassed some agricultural products, notably coffee and bananas, for which producers continue to grapple with the consequences of oversupply and weak demand.⁶

Commodity prices on a firmer trend since 2002

In general, recent trends in commodities can be explained by the rapid increase in demand that the economic recovery of the last two years has brought in its wake. The rise in demand has been most visible in the ESCAP region, particularly in China, and has come in the face of secular trends that have reduced supplies and led to a decline in stocks. To put matters in perspective, however, the current rise in commodity prices should take into account the recent depreciation of the dollar. As most internationally traded commodities are priced in dollars, the dollar exchange rate becomes an element in the way that prices behave. Thus, for instance, while the commodity price index has risen by nearly a fifth over the last two years in dollar terms, it has actually fallen in terms of the euro and has barely moved in terms of the yen.

Table 3. Indices of major commodity prices, 1996-2004

(1995 = 100)

	1996	1997	2000	2001	2002	2003	2004 April
Palm oil (Malaysia)	84.6	86.8	49.2	45.5	62.0	70.4	85.5
Rice (Thailand)	105.4	94.3	63.5	53.8	59.8	62.2	79.0
Rubber (Malaysia)	88.7	64.4	43.7	37.6	50.0	70.8	90.7
Sugar (US import price)	97.0	95.1	84.1	92.5	90.8	93.2	91.2
Tea (Sri Lanka)	126.5	134.5	119.9	117.0	113.3	119.2	..
Timber:							
Hardwood logs (Malaysia)	98.5	92.4	73.8	62.2	63.2	72.7	76.9
Hardwood sawnwood (Malaysia)	100.1	89.5	80.9	65.9	70.0	74.3	74.6
Softwood logs (United States)	105.3	95.6	93.3	81.4	75.3	75.1	99.6
Softwood sawnwood (United States)	103.1	97.8	94.7	94.0	90.8	94.5	112.7

Sources: IMF, *International Financial Statistics Yearbook 2002* (Washington, IMF, 2002); and *International Financial Statistics* (Washington, IMF, June 2004).

⁶ UNCTAD, *Trade and Development Report, 2004* (United Nations publication, Sales No. E.04.II.D.29).

***The China factor
in the commodity
markets***

A depreciating dollar means that commodity prices have risen or fallen much less in terms of other major currencies; hence, demand has not been greatly affected by the rise in dollar values in the EU or Japan. But it is also true that the greater part of the increase in demand has occurred in the ESCAP region, where exchange rates have either remained on a fixed parity with the dollar, for example, in China, or have stabilized against the dollar over the last 18 months or so, for example, in much of the rest of Asia. Thus, it is demand emanating from China in particular and from the region in general that has essentially driven commodity prices upward over the last two years.

The rapid growth of the Chinese economy has meant that China has become the world's largest consumer and importer of several commodities, many of them sourced from within the region. As such, it has become a key factor in the commodity markets with a critical influence on price levels. China's influence extends beyond the production and sale of the commodities themselves to shipping, freight rates and related services and its market power has been most evident in vegetable oilseeds and oils, soybeans, cotton and rubber. China's economic growth has also resulted in a massive increase in the demand for energy, particularly coal and oil. While China can satisfy most of its requirements of coal, increased domestic demand and lower exports from China have raised international coal prices. It is in oil that Chinese demand has had the greatest impact. China's oil needs have doubled in less than a decade and contributed to the tightness in supplies in 2004. As car ownership expands rapidly in China, the prospect for oil prices could be one of significant upward pressure in the next two or three years.

***Upward pressure
on oil prices***

But in oil, too, the depreciation of the dollar has played a part, providing an upward momentum to prices. At the beginning of 2004, OPEC was keeping prices in the upper part of the US\$ 22-28 per barrel range. By mid-2004 prices had risen significantly above this range and even though OPEC increased production, the unanticipated higher demand from China, aggravated by supply disruptions in Iraq and some degree of speculative activity in the futures market, sent prices soaring above US\$ 55 a barrel in October 2004. At this level, they represent a doubling of prices over the previous 18 months in dollar terms, and have raised concerns regarding their negative repercussions on the broader global economy, a topic discussed later in the chapter.

The firmer trend in commodity prices witnessed over the last two years has helped the economies of commodity-producing and -exporting countries in the region by boosting export earnings. In the case of agricultural commodities, it has also bolstered farm incomes, which have stimulated overall demand and output growth and helped in the fight against poverty. But that being the case and viewed from a longer-term perspective, commodity prices in real terms continue to remain at historically low levels, considerably below their levels of 20 years ago. This has meant that over the last two decades the terms of trade of commodity producers have deteriorated. It has also meant that rising production and exports have not been translated into rising incomes and prosperity for the producers, exacerbating the

financial and social distress of commodity producers across the region that began more than a decade ago.

Thus, while rising commodity prices have undoubtedly helped commodity-producing countries in terms of higher exports and lower current account deficits, they have had only a minimal impact on the underlying financial and social problems of the commodity producers in these countries. Such producers often tend to operate on a small scale and have little, if any, financial strength either to diversify their production or to invest in value-adding facilities. This factor has played a major role in the continuation of rural poverty in the region.

***Commodity prices
still below their level
of the early 1980s
in real terms***

Financial market developments

Large current account imbalances continue to characterize the global economy. The United States deficit is estimated to exceed US\$ 570 billion or more than 5.0 per cent of GDP in 2004 and to remain at this level in 2005. Smaller current account deficits are run by the United Kingdom, Italy, Spain and Australia among the developed countries and by some of the newer members of the EU from Eastern Europe. A number of developing countries, principally in Latin America and Africa, will also run current account deficits in 2004 and beyond. Current account surpluses are found principally in Asia but also in parts of Europe (mainly Germany, Switzerland and Norway).

Since the mid-1990s, the American deficit has more than tripled in percentage points of GDP, with Japan and developing countries in Asia accounting for the bulk of the corresponding surpluses. In the United States, strong demand growth and the high value of the dollar widened the deficits in the late 1990s. Since the beginning of 2002 the deficit has continued to widen despite the weakening of the dollar.

By definition, the marked rise in United States external borrowing needs since the mid-1990s has been associated with a growing gap between American investment and saving. Before the last downturn, saving by households fell and investment as a proportion of GDP increased. These two factors drove the current account deficit up, in spite of a sharp improvement in the fiscal accounts. Following the recession, the picture changed as investment was cut back and business saving rose. Nevertheless, United States foreign borrowing continued to increase as a large public sector deficit emerged. The persistence of the American deficit and its vulnerability to shifts in foreign investor sentiment is a major source of uncertainty in the global economy today.⁷

***Funding the
United States current
account and fiscal
deficits is a major
cause of uncertainty
in the financial
markets ...***

A lower dollar, as is beginning to happen, would obviously contribute to reducing the United States current account deficit. However, the speed of any adjustment depends on relative trade elasticities, which suggest that the

⁷ BIS, *74th Annual Report, 1 April 2003–31 March 2004* (Basel, BIS, 2004).

**... as is the dollar
exchange rate**

adjustment could take a considerable time. Moreover an adjustment of the dollar exchange rate is bound to have implications beyond the United States, especially in the ESCAP region. As the dollar falls, other currencies must rise against it. Thus far, it is primarily the euro that has appreciated. In the ESCAP region, the Chinese yuan renminbi, Hong Kong, China, dollar and Malaysian ringgit maintain a fixed parity with the dollar. Other currencies, not linked to the dollar, have only appreciated marginally against it over the past 18 months. The Japanese yen has remained virtually unchanged during this period.

Many economies in the ESCAP region and elsewhere have relied on American import demand as an important driver of growth; a sizeable fall in the dollar might choke off this source of growth. In addition, a fall in the dollar could also push up inflation in the United States, possibly leading to higher American and global interest rates. For now, these scenarios lie in the realm of speculation. Nonetheless, the world has to find ways to accommodate the United States current account deficit, accumulate dollar-denominated assets in the process and deal as well as possible with a gradual decline in the dollar exchange rate that reduces the value of those assets over time. The adjustment of the current global imbalances thus poses a major challenge from the perspective of both global and regional financial markets.

Although interest rates have begun to firm in recent months, their very low levels over the past two years have encouraged the growth of a variety of alternative investment vehicles. Precious metals and real estate, especially housing, have been among the most-favoured investment modes as the equity and bond markets have barely moved in 2004 after rising significantly in 2003. These alternative investment modes have generated significant capital gains and kept consumer spending high.

**Dangers of
hedge funds**

The growth of alternative investments merits closer attention. Other than real estate and precious metals, where borrowed funds also play a role but where the amplitude of price fluctuations is limited, these have been primarily in the form of highly leveraged vehicles, such as hedge funds, usually involving a small group of wealthy individuals prepared to trade high risk for high returns on their investments. But the inherent risks of leveraging and the rather esoteric nature of the uses to which some hedge funds are being put, including oil futures, strongly suggest that financial market operators need to beef up their risk-evaluation systems and thus counter the threat of a major potential upheaval in the financial markets. Such an upheaval could come as a result of excessive risk taking by an individual fund, causing, in turn, disproportionate price volatility in the securities and commodity markets over much of the world, and conceivably lead to a prolonged, and more systemic, withdrawal of liquidity from these markets. It is worth stressing that hedge funds remain essentially unregulated and their risk profiles largely unknown from a regulatory perspective.⁸

⁸ "How hedge funds are destabilizing the markets", *Financial Times*, 28 September 2004.

Along with the emergence of global imbalances, a factor worthy of note is that developing economies in the ESCAP region have become net capital exporters since 2000, a phenomenon that has raised questions and concerns for both capital market participants and policy makers. Prior to 1997, the year of the crisis, inflows to ESCAP developing countries were the norm and there was a significant differential between, say, United States and ESCAP developing country interest rates. Inflows took the form primarily of FDI through much of the 1990s, supported in the last few years before the crisis by portfolio flows and bank loans. Since 1998-1999, while FDI has remained largely stable, the retrenchment of bank lending as interest rates have converged has led to the phenomenon of capital outflows from ESCAP developing countries. The process has been intensified of late with the accumulation of reserves by developing ESCAP countries in making Asia a large net capital exporter over the previous six years (see table 4).

**Developing
ESCAP economies
net exporters of
capital since 2000**

Table 4. Net capital flows^a of developing countries and developing Asia, 1997-2005

(Billions of US dollars)

	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total									
Net private capital flows ^b	195.0	70.5	88.1	46.6	47.8	61.2	120.4	81.6	47.5
Net private direct investment	144.9	155.0	173.4	177.1	191.2	143.5	147.6	166.9	175.2
Net private portfolio flows	63.3	41.9	66.6	16.1	-91.3	-99.6	-11.0	-21.3	-23.4
Net other private capital flows	-13.2	-126.4	-151.8	-146.6	-52.0	17.3	-16.2	-64.0	-104.4
Net official flows	34.6	49.7	6.5	-27.7	15.7	1.7	-24.8	-31.0	-42.1
Changes in reserves ^c	-103.8	-33.9	-92.5	-115.6	-113.2	-197.1	-367.0	-350.1	-291.2
Emerging Asia^d									
Net private capital flows ^{b, e}	37.6	-52.2	8.6	-4.5	9.6	25.4	52.8	79.8	8.6
Net private direct investment	56.5	56.1	66.4	67.4	60.5	53.8	70.0	77.2	77.5
Net private portfolio flows	6.7	8.1	56.1	19.8	-56.9	-59.6	5.5	12.0	-1.8
Net other private capital flows ^e	-25.5	-116.4	-113.9	-91.7	6.0	31.2	-22.8	-9.4	-67.1
Net official flows	22.6	17.9	2.2	4.5	-1.8	-1.8	-16.3	-6.9	-8.8
Changes in reserves ^c	-36.4	-52.7	-87.2	-60.9	-90.9	-158.4	-234.2	-232.6	-158.0

Source: IMF, *World Economic Outlook, September 2004: The Global Demographic Transition* (Washington, IMF, 2004).

^a Net capital flows comprise net direct investment, net portfolio investment and other long- and short-term net investment flows, including official and private borrowing. This table includes Hong Kong, China; Israel; the Republic of Korea; Singapore; and Taiwan Province of China.

^b Because of data limitations, "net other private capital flows" may include some official flows.

^c A minus sign indicates an increase.

^d Consists of developing Asia and the newly industrializing Asian economies.

^e Excluding the effects of the recapitalization of two large commercial banks in China with foreign reserves of the Bank of China (US\$ 45 billion), net private capital flows to emerging Asia in 2003 were US\$ 97.8 billion while net other private capital flows to the region amounted to US\$ 22.2 billion.

The massive increase in reserves in the ESCAP region, although providing insurance against a future debt crisis and, perhaps, minimizing the likelihood of one occurring in the first place, nonetheless has its own complications. For instance, it can and has led to a build-up of excess domestic liquidity in several economies and has created quasi-fiscal costs as central banks have sought to sterilize this increase in liquidity seeping into the domestic banking systems. An increase in liquidity and low interest rates have been the progenitors of asset bubbles in the past; at the very least they make risk assessment and risk management by the financial system more problematic. There is also the question of opportunity costs as the reserve-holding countries, in general, currently earn less on their reserves than what they pay out on their foreign loans. There are accordingly arguments both in favour of and against accumulating large foreign exchange reserves, and judgements as to where benefits outweigh costs are not easy.

The accumulation of foreign exchange reserves in the region

In increasingly globalized financial markets, global events and factors, such as the bursting of the ITC equity bubble, the rapid rise of China as a trading power, the large size of global external imbalances arising from the growing external and fiscal deficit of the United States and the large increase in liquidity available in most ESCAP economies, are bound to have major effects on the domestic economies of ESCAP developing countries via changes in exchange rates, in trading links and in the relative competitiveness and profitability of individual enterprises. As ESCAP developing countries become more mainstream in the global economy, capital allocation mechanisms and decisions will inevitably take on an international perspective. In this regard, as more ESCAP developing countries move from managed to floating exchange rates and as they gradually free up the balance-of-payments capital accounts, erring on the side of caution, in terms of large foreign exchange reserves, seems appropriate at least for the foreseeable future, at the minimum until regional financial supervisory mechanisms are developed to handle acute problems of liquidity, such as those evident in the 1997 Asian crisis. Nevertheless, the emergence of several ESCAP developing countries as net capital exporters, given their levels of development and need for financial resources for many years in the future, raises significant policy issues for the countries concerned as well as for the region as a whole.

Prospects for the ESCAP region

Slackening of output growth expected in the region in 2005

As mentioned elsewhere, developing ESCAP economies were largely unaffected by the rising price of oil and the end of the low-interest environment up to mid-2004. Some slackening in the pace of output growth is expected in the second half of 2004 but is likely to be modest. Overall, GDP growth is expected to be some 0.6 percentage points higher at 6.8 per cent in 2004 than earlier estimates for ESCAP developing economies. However, inflation is expected to pick up in response to the higher oil prices but only marginally so for the time being. Current estimates suggest that the average pickup in inflation in 2004 will be around 0.5 percentage points to an annual rate of 4.0 per cent for ESCAP developing economies. Prospects for 2005 indicate a slowdown in GDP growth to around 6.2 per cent, with inflation rising by another 0.5 percentage points to 4.0 per cent for this group of

economies (see table 5). GDP growth and inflation numbers are based on the presumption that average oil prices will be around US\$ 38 a barrel in 2005, the average level prevailing in 2003.

Table 5. Rates of economic growth and inflation of selected developing economies and North and Central Asian economies of the ESCAP region, 2002-2005

(Percentage)

	Real GDP				Inflation ^a			
	2002	2003	2004 ^b	2005 ^c	2002	2003	2004 ^b	2005 ^c
Developing economies of the ESCAP region^d	5.8	6.2	6.8	6.2	5.5	3.5	4.0	4.0
South and South-West Asia^e	5.2	7.0	6.3	6.0	14.5	10.0	7.6	7.1
Bangladesh	4.4	5.3	5.5	5.2	2.8	4.4	5.8	6.8
India	4.0	8.1	6.0	6.8	4.1	3.9	5.0	4.0
Iran (Islamic Republic of)	7.5	6.7	6.4	5.2	15.8	15.6	15.1	14.4
Pakistan	3.1	5.1	6.4	6.6	3.5	3.1	4.6	5.0
Turkey	7.9	5.8	7.0	4.5	45.0	25.3	11.2	11.4
South-East Asia	4.3	4.7	6.2	5.3	4.5	3.2	4.1	4.0
Indonesia	4.3	4.5	4.7	4.9	11.9	6.6	6.4	6.2
Malaysia	4.1	5.3	6.5	5.7	1.8	1.1	1.5	2.3
Philippines	4.4	4.5	5.5	5.2	3.1	3.1	5.6	5.2
Singapore	2.2	1.1	8.3	4.3	-0.4	0.5	1.7	1.5
Thailand	5.4	6.8	6.5	6.0	0.7	1.8	2.8	2.6
Viet Nam	7.1	7.3	7.2	7.3	3.9	3.1	7.8	6.4
East and North-East Asia	6.6	6.1	7.2	6.7	0.1	1.4	3.2	3.4
China	8.0	9.1	9.0	8.8	-0.8	1.2	4.1	4.5
Hong Kong, China	1.9	3.2	6.6	4.7	-3.1	-2.5	-0.2	0.8
Republic of Korea	7.0	3.1	5.2	4.6	2.7	3.6	3.5	3.0
Taiwan Province of China	3.6	3.2	5.7	4.8	-0.2	-0.3	1.2	1.5
North and Central Asia	5.4	7.7	7.2	6.2	15.0	12.8	10.2	9.2
Kazakhstan	9.8	9.2	9.3	8.5	5.9	6.4	6.7	6.7
Kyrgyzstan	0.0	6.7	5.3	5.2	2.1	3.1	4.0	3.8
Russian Federation	4.7	7.3	7.1	6.1	15.8	13.6	10.7	9.6
Turkmenistan	21.2	23.1	10.5	8.2	10.6	6.5	9.0	8.0
Uzbekistan	4.2	4.4	3.0	3.0	24.2	13.1	8.3	8.5
Developed economies of the ESCAP region	0.1	2.5	4.3	2.4	-0.6	-0.1	0.1	0.5

Sources: ESCAP, based on IMF, *International Financial Statistics*, vol. LVII, No. 6 (Washington, IMF, June 2004); ADB, *Key Indicators of Developing Asian and Pacific Countries 2004* (Manila, ADB, 2004) and *Asian Development Outlook 2004 Update* (Manila, ADB, 2004); Economist Intelligence Unit, *Country Reports* and *Country Forecasts* (London, 2004), various issues; web site of the Inter-State Statistical Committee of the Commonwealth of Independent States, < www.cisstat.com >, 24 September 2004; and national sources.

^a Changes in the consumer price index.

^b Estimate.

^c Forecast/target.

^d Based on data for 38 developing economies representing more than 95 per cent of the population of the region (including the Central Asian republics); GDP figures at market prices in United States dollars in 2000 (at 1995 prices) have been used as weights to calculate the regional and subregional growth rates.

^e The estimates and forecasts for countries relate to fiscal years defined as follows: fiscal year 2004/05 = 2004 for India and the Islamic Republic of Iran; and fiscal year 2003/04 = 2004 for Bangladesh, Nepal and Pakistan.

With the exception of China, where domestic consumption and investment have been the main drivers of growth over the past two years, the resilience of ESCAP developing economies is essentially built around exports, within and outside the ESCAP region (see table 6). Domestic demand emanating from both household consumption and corporate investment expenditure and driven by low interest rates has played a supportive role. East and South-East Asia have benefited from a strong revival in the ICT sector that began in 2003 and has continued into 2004, embracing a much wider range of goods now. Higher oil prices have boosted oil-producing economies and added to regional import demand without harming oil-importing economies. The stronger commodity prices, especially of agricultural products, have increased exports and simultaneously raised rural incomes, thus providing a fillip to domestic demand. Corporations have responded to the increased demand by improving capacity utilization and committing greater resources to investment in improving competitiveness, such as new products in household electronics.

Table 6. Rate of growth of exports and imports of selected ESCAP economies, 2001-2004

(Percentage)

	2001		2002		2003		2004 ^a	
	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports
Bangladesh	2.6	0.1	-5.1	-12.9	16.2	21.4	32.3	5.2
China	-2.0	8.4	22.1	21.3	34.6	39.7	49.7	29.0
Hong Kong, China	-6.0	-5.6	5.5	3.2	11.8	11.8	8.5	16.2
India	6.1	15.0	12.0	13.6	21.5	24.3	21.9	16.0
Indonesia	-9.3	-7.6	1.5	1.1	6.7	4.0	15.4	22.6
Iran (Islamic Republic of)	-7.6	0.1	-7.4	24.1	37.4	41.8	9.7	19.4
Malaysia	-10.1	-10.8	5.9	8.4	30.5	24.4	22.8	15.5
Pakistan	3.8	-5.2	7.4	10.6	19.1	37.9	17.2	36.8
Philippines	-15.9	-4.2	9.5	7.2	23.5	32.8	13.1	20.7
Republic of Korea	-12.8	-12.1	7.8	7.8	20.7	22.8	17.4	16.8
Russian Federation	-19.9	9.0	29.9	23.4	24.2	38.5	18.9	17.1
Singapore	-11.8	-13.8	2.8	0.4	15.2	9.9	22.2	27.3
Taiwan Province of China	-17.2	-23.4	6.3	4.9	10.4	13.1	25.7	35.6
Thailand	-5.6	0.2	5.7	4.3	17.0	17.1	18.3	26.8
Turkey	12.8	-24.1	11.9	23.7	30.0	34.3	31.3	46.6
Viet Nam	3.7	3.7	11.1	21.8	28.0	30.2	15.0	11.7
Memo:								
United States	-5.3	-4.7	-5.2	1.9	4.4	8.6	14.2	13.1
Japan	-15.6	-8.0	3.3	-3.4	13.8	13.6	16.6	14.5
European Union	0.6	-1.8	6.2	3.6	17.9	19.5	12.9	17.8

Sources: IMF, *Direction of Trade Statistics* (CD-ROM), September 2004; and national sources.

^a Data for January-May 2004, except for Taiwan Province of China, in which case the data refer to January-June 2004.

The sharp rise in oil prices has inevitably added to import spending. As a result, the current account balance of ESCAP developing economies, while remaining in surplus, is expected to narrow by around 1.5 percentage points of GDP between 2004 and 2005 according to some estimates (table 7). In fact, there is now a perceptible risk that in the second half of 2004 and in 2005 the overall external environment could well be significantly weaker if there is a simultaneous slowdown in China, the United States and Japan. In that event, the external situation could reduce export growth and narrow the current account balance further. However, given the accumulation of large foreign exchange reserves over the last few years, this should not impact on overall levels of activity in the region for some time.

Table 7. Current account balance as a percentage of GDP of selected developing economies and North and Central Asian economies of the ESCAP region, 2001-2004

	2001	2002	2003	2004 ^a
South and South-West Asia				
Bangladesh	-2.2	0.5	0.6	0.3
India	0.4	0.9	0.5	0.9
Iran (Islamic Republic of)	7.0	3.1	1.5	4.4
Pakistan	0.5	3.7	4.9	1.9
Turkey	2.3	-0.8	-2.9	-4.1
South-East Asia				
Indonesia	4.8	4.5	3.7	2.8
Malaysia	8.3	8.5	13.0	10.3
Philippines	1.8	5.6	4.2	3.0
Singapore	18.7	21.4	30.9	24.7
Thailand	5.4	5.5	5.6	3.5
Viet Nam	2.1	-1.7	-4.8	-4.4
East and North-East Asia				
China	1.5	2.8	3.2	1.4
Hong Kong, China	6.1	7.9	10.3	9.3
Republic of Korea	1.7	1.0	2.0	3.6
Taiwan Province of China	6.4	9.1	10.2	6.7
North and Central Asia				
Kazakhstan	-5.2	-2.9	-0.2	0.2
Kyrgyzstan	-3.4	-5.3	-2.7	-3.5
Russian Federation	11.0	8.4	8.3	8.4
Turkmenistan ^b	-2.5	3.5	4.1	3.5
Uzbekistan	-1.0	1.2	8.9	8.2

Sources: ESCAP, based on IMF, *International Financial Statistics*, vol. LVII, No. 6 (Washington, IMF, June 2004); ADB, *Key Indicators of Developing Asian and Pacific Countries 2004* (Manila, ADB, 2004) and *Asian Development Outlook 2004 Update* (Manila, ADB, 2004); and Economist Intelligence Unit, *Country Reports and Country Forecasts* (London, 2004), various issues.

^a Estimate.

^b At official exchange rates.

This broad assessment is nevertheless subject to two caveats: one, given the prevailing uncertainty regarding the future course of oil prices, the forecasts are prone to a somewhat higher margin of error than, say, a year ago; and, two, the different ESCAP subregions and, indeed, individual ESCAP economies are likely to respond very differently to the challenges of maintaining the present growth momentum in the coming months. These differences are highlighted in the succeeding paragraphs.

South and South-West Asia

South Asian prospects remain positive despite adverse natural developments

Good weather resulted in a strong agricultural performance in South Asia in 2003. Buoyant farm incomes fed into strong growth in both manufacturing and services and gave the subregion, in particular India, one of its best growth outcomes of recent years. Less favourable weather in 2004 in the north-west of India and north Pakistan and floods in Bangladesh have undermined domestic output growth for 2004, which will also now have to absorb the higher costs of oil from both the cost and demand sides. In 2005, should the global economy experience a loss of momentum, exports from the subregion, too, would be adversely affected. Overall GDP growth is thus expected to be 0.7 percentage points down from 2003 but nevertheless higher than estimates made earlier in the year for 2004. Prospects for 2005 indicate that growth should continue at, or very close to, its current pace. In India, in particular, growth has become more broad-based and on the evidence of the first two quarters of 2004 the loss of momentum following the below-average rainfall in the north-west of the country is expected to be minimal.

All the economies in this subregion have benefited in recent years from structural reform programmes that have sought to stabilize and improve macroeconomic fundamentals and provide production incentives for both agriculture and manufacturing on a sustained basis. However, success in this regard has been uneven. There has been substantial progress on the external front with stable exchange rates, high reserves and improved current account positions. On the domestic side, progress has been less substantial. Fiscal consolidation has made limited headway and with interest rates now moving up the effect on the budget of a higher burden of debt servicing could be a matter of some concern. Rising inflation is another concern as it may necessitate further monetary tightening in the near future. Also, the ending of the Agreement on Textiles and Clothing (the erstwhile Multifibre Arrangement) in January 2005 will pose a major challenge.

South-East Asia

Growth to ease in South-East Asia in 2005

By contrast, growth in South-East Asia in 2004 is likely to exceed both 2003 growth and estimates made earlier in the year. All economies, with the exception of Thailand, improved upon or matched 2003 performance, with Singapore expected to experience the sharpest rebound, from just over 1.0 per cent GDP growth in 2003 to over 8.0 per cent in 2004. Moderate inflationary pressures have emerged in recent months with the higher oil prices but the effect on output growth has been minimal, except in Thailand. Higher inflation and firmer interest rates have had a negative impact on the

stock markets in the subregion – regarded as bellwethers of business confidence – but this phenomenon is not expected to spill over into lower investment expenditures in the economies for some time. It is worth noting that while high commodity prices have boosted several economies in the subregion, with Indonesia, Malaysia and Viet Nam benefiting from the higher prices, the use of oil price subsidization in Indonesia is likely to pose a very difficult fiscal problem before too long.

As in the past, a strong performance in manufacturing and in manufactured goods exports has contributed to the impressive GDP growth in the subregion. Demand from China and the United States has been supported by domestic demand for manufactured goods, especially cars and household electronics and housing. While these factors are, by and large, expected to continue into 2005, a simultaneous slowdown in China and the United States could trigger a slowdown or even a reversal of the current buoyancy in corporate investment expenditures. In addition, a rise in interest rates could slow consumer spending in the area of household electronics purchased on credit. Prospects for 2005 accordingly point to an easing of the collective GDP growth rate of the subregion of around 1.0 per cent. In this context, it is worth stressing that Indonesia, for the reasons given above, the Philippines and Thailand are the most vulnerable to high oil prices in the months ahead; hence, in the subregion as a whole much depends upon the future course of oil prices.

East and North-East Asia

This subregion is expected to post stronger growth in 2004 than in 2003 even though China, the largest economy, is expected to experience a slight slowdown during 2004. The slight diminution in China's growth rate in 2004 has been more than offset by faster growth in the other economies, principally the Republic of Korea and Taiwan Province of China, on the basis of their strong trading performance. In common with the other subregions of ESCAP, inflation has picked up in 2004 and is expected to rise further in 2005. On the external side, the current account surplus is expected to narrow in both 2004 and 2005 on the back of higher oil prices.

***“Soft” or “hard”
landing in China?***

Prospects for the subregion are intimately bound up with the impact of measures that the Chinese Government is currently taking to slow down the economy in 2005 and whether, as a result, China's economy experiences a “soft” or a “hard” landing in the coming months. A soft landing is one in which the economy decelerates gradually to its trend rate of growth while a hard landing is one in which the economy decelerates sharply to below its trend rate of growth for a period of time. The Chinese authorities have already tightened credit policy and are restricting land to cool investment as ample liquidity and low interest rates have triggered a massive investment boom in the economy. Such measures are, however, likely to act after a time lag and there has been a reluctance to raise interest rates until recently. The consensus of opinion is that China's economy should decelerate gradually to a more sustainable pace in 2005 and beyond and would thus provide ample policy space for countries and economies in the subregion, and indeed

in the wider ESCAP region, to adjust. Alternative scenarios for China's economy are discussed more fully later in the chapter.

North and Central Asia

Oil prices dominate the Central Asian economies

Data up to mid-2004 indicate that this subregion will enjoy another year of buoyant growth in 2004, although marginally slower than the pace attained in 2003. Price pressures will abate, while the current account balance will widen somewhat as imports grow faster than exports. This holds true for the subregion, with the exception of Kazakhstan and the Russian Federation, two economies that are large producers and exporters of oil and gas. Prospects for 2005 in the subregion are for a continuation of current trends with the probability of a moderation in output growth as oil and other commodity prices ease in the months ahead.

The energy sector has been the main driver of growth over much of the subregion, accounting for approximately one third of GDP and over one half of exports in Kazakhstan and the Russian Federation. However, a backlog of investment in pipeline and port capacity and more generally in energy infrastructure puts a limit on growth in this sector, at least in the short term. In addition, despite reforms in recent years, the non-oil sectors of the economy are not yet a viable alternative source of growth. A major issue of concern in this subregion, which the current phase of high oil prices has served to mask, is the slow progress in the economies in diversifying away from a dependence on oil and gas and a few other commodities. This limits the possibilities for more broad-based growth once the current phase of high energy prices draws to a close.

Developed countries

Robust growth in the developed economies

Japan's prospects have been discussed elsewhere in the chapter. As far as Australia and New Zealand are concerned, although higher prices of oil are likely to have a dampening effect on output growth, the forecast for 2004 is for continuing robust growth underpinned by buoyant domestic demand and high commodity prices. Despite strong fiscal positions, policy has been tightened in both countries in the face of a build-up of price pressures in recent months and additional measures are expected if oil prices remain high. In that event, there is likely to be a modest slowdown in 2005 in both countries, with the likelihood of a sharper slowdown in New Zealand. The current account deficit has remained uncomfortably large in both countries and whereas it has tended to narrow in Australia in 2004 it has widened slightly in New Zealand. The high oil price will thus pose a bigger challenge for New Zealand in 2005 than for Australia.

Policy issues

Near term

Broadly speaking, the global economy is on track to show strong growth in 2004 despite a deceleration expected in the second half of the year. This

unexpected out-turn, given the rising oil prices, suggests that most economies in the region are not immediately faced with difficult policy dilemmas, other than the need to fine-tune monetary policy with the objective of pre-empting the risk of inflation building up in the months ahead and to keep the growth momentum intact as far as possible. This is far from being an easy task, but with inflation and interest rates at historically low levels the room for policy manoeuvre for most Governments is adequate and drastic interventions are not indicated in the short run in most economies. There is nevertheless a need to avoid complacency and, as stressed in previous issues of the *Bulletin* and *Survey*, to continue to give due attention to the longer-term challenges of development, some of which are discussed later.

Against this overall background, the first question with significant policy connotations in the region is whether the projected slowdown in the global economy expected by most Governments and international and regional multilateral bodies in 2005 will prove to be only a brief hiatus in a longer-term upswing of the global economy or whether it might presage the onset of a longer period of adjustment aggravated by oil prices that remain chronically high into the foreseeable future. Higher oil prices, in turn, risk higher inflation and higher interest rates. The second question has to do with the future course of oil prices. Here, there is a degree of uncertainty that might of itself feed back negatively into business and personal spending decisions. Finally, given China's central and growing influence on regional economic prospects, the question whether it can successfully manage a moderation of what is considered, within and outside China, to be an unsustainably fast growth rate will loom large in the judgements that policy makers might be faced with in the near-term future. It should, however, be recognized that none of the issues outlined above are directly amenable to policy action at the national level in the region; they simply represent the environment within which national Governments will have to operate in the months ahead.

***Is the current
slowdown mainly
cyclical?***

Prior to the sharp convulsions in the oil markets that began in mid-2004, there was widespread confidence that the global recovery that began in 2003 would be sustained and, indeed, even gather strength, in 2004 and beyond. This optimistic view tended, on the whole, to ignore the ongoing conflict in Iraq and the uncomfortably large size of global current account imbalances. Optimism was based on the perception that the Iraq conflict that had begun in 2003 had failed to act as more than an irritant to overall consumer and business confidence. It had failed, moreover, to affect the oil markets seriously. This is no longer the case. The problem of global imbalances meanwhile had bedevilled the world economy for three years or more without acting as a visible drag on levels of activity in either the developed or developing economies. It was thus not unreasonable to assume that significant upheavals from the latter source could be avoided in 2004 and 2005 if the dollar depreciated gradually.

By mid-2004, however, evidence emerged that both the United States and Japanese economies were slowing down. In the United States, to the current account deficit had been added an equally large fiscal deficit. There

was a new realization that the low interest rate environment was likely to end sooner rather than later and, when it happened, how would holders of household and corporate debt in the United States react? Could the dollar exchange rate depreciate rapidly in 2005? In Japan, the recovery to date had been mainly export-driven; with slowing growth in China and the United States, how long could the recovery be sustained? On the domestic side, deflationary pressures were stubbornly persistent, domestic demand remained fragile and corporate and financial sector restructuring was far from complete. And, looming large behind these potential difficulties lies Japan's massive public sector debt and how fiscal consolidation might impact upon the Japanese economy and private consumption demand. The broad conclusion is that the global upswing was far from being durable even before oil prices rose sharply in mid-2004. It had a number of fragile components, any one of which could fall prey to a significant outside shock, such as a prolonged period of high oil prices.

The problem of rising oil prices

As at 15 October 2004 oil prices exceeded US\$ 55 a barrel, double what they were in nominal terms two years previously and over 65 per cent more than in January 2004. In October 2004 futures prices implied an average price of around US\$ 37 a barrel in 2004 or about US\$ 8 more than in 2003. According to IMF, an average increase of this magnitude would reduce world output by approximately 0.25 per cent.⁹ Thus, while oil prices in real terms are still well below the levels they reached in the oil shocks of 1973 and 1981, their high levels in 2004 are almost certainly going to affect global growth in due course. Many causes on both the demand and supply sides can be adduced to explain the rise in oil prices: the massive increase in Chinese demand in 2004 is one and low stocks of crude and refined products are another. The Iraq conflict has now become an ongoing source of uncertainty and, taking advantage of the situation, speculative activity in the futures market driven by hedge funds has affected oil prices.

How long might this phase of supply-demand imbalance last? A precise answer is difficult, if not impossible, but the following might provide some useful clues. Analytically, the most relevant way to look at oil prices is as a tax on producers and consumers alike. In the short run, demand for oil is not very price-elastic so that even a doubling of prices does not change consumption much. The challenge for policy makers is how best to deal with the ensuing situation in which high oil prices are instrumental in both lowering output and increasing inflation: should they counter the lower output or fight higher inflation? If nominal interest rates remain unchanged, the rise in inflation lowers real interest rates, resulting in an implicit policy easing. While this should neutralize the risk of output reduction, it risks raising inflation further. Thus, until some way is found to stabilize oil prices monetary policy has to confront such policy dilemmas, such as raising interest rates in an otherwise weakening economy. Oil prices are likely to remain high until these competing policy objectives are aligned and reduce the pressure on available supplies from the demand side, or, alternatively, some new source of supplies can be tapped. In other words, there

⁹ IMF, *World Economic Outlook, September 2004: The Global Demographic Transition* (Washington, IMF, 2004).

is no effective way of dealing with high oil prices in the short term and/or by national policy initiatives alone, other than the standard prescriptions of conservation and energy-saving exhortations. Superficially at least, there appears to be a theoretical case for Governments in the ESCAP region to cooperate to create an oil reserve along the lines of the United States Strategic Petroleum Reserve, whose practical modalities are worth investigating.

China's economy has played a major role in driving and sustaining growth in the ESCAP region over the last two years. China has emerged as a production base for the region's exports to the rest of the world and as a final export market. Indeed, soaring domestic demand – both consumption and investment fuelled by low interest rates and the easy availability of credit – has stimulated strong import growth. Imports are currently projected to reach an extraordinary US\$ 512 billion in 2004, a rise of US\$ 230 billion over the last three years.¹⁰ A crucial concern both within and outside China is that despite recent indications of moderation in the fast pace of investment, a soft landing of the economy to a more sustainable growth path is not yet ensured. The overinvestment in certain sectors and low interest rates might take time to respond to the measures taken so far. In the meantime, inflationary pressures have emerged in the economy despite flat or declining prices in particular sectors of activity. This phenomenon has raised concerns that a substantial range of investments might prove uneconomic if there were to be a rapid slowdown of the economy, thus burdening the financial system with new non-performing loans and creating new sources of social tension if significant numbers of workers were then laid off in the months ahead.

It is very early to say whether China will have a soft or hard landing in 2005. A gradual and probably marginal slowdown is generally expected over the next 12-18 months. The pace at which the Chinese economy decelerates will have a major impact on commodity prices and on regional suppliers of finished goods and equipment. In a soft landing, the economy should decelerate to trend after a period of very rapid growth. In a hard landing, the deceleration would be sharper and more prolonged with adverse effects on the regional economy. Some analysts believe that a hard landing might flush out excess capacity more quickly, leading to a more pronounced rebound thereafter. But this might affect commodity prices more severely and affect the regional economy in a more profound way. It is worth noting that the momentum of growth in the Chinese economy was largely unchanged up to September 2004.

One clear lesson from the past is that while central banks cannot prevent oil prices from giving a one-off boost to inflation they must prevent them from feeding into higher wages and prices. The cyclical position of the economy will play a critical role in the conduct of monetary policy: the less slack there is in an economy the bigger the risk that oil prices will feed quickly into higher prices. Hence, in economies operating at close to potential the case for a pre-emptive tightening of monetary policy, in the face of a sharp rise in oil prices, is very strong. This would involve difficult

The role of the Chinese economy

Benefits of inflation targeting

¹⁰ "IMF concludes 2004 Article IV Consultation with the People's Republic of China", available at web site < www.imf.org/external/np/sec/pn/2004/pn-0499.htm > , 27 August 2004.

judgements between controlling inflation and preserving the momentum of output growth, but on the basis of past experience inflation is undoubtedly the greater danger. In addition, it would be useful for Governments and central banks to have clarity of purpose with respect to inflation. Inflation targeting is one solution and could be brought into play in the current low inflationary environment so that market participants are aware of the future direction and pace of interest rate changes.

What are the central policy messages for Governments in the region? First, oil prices have risen far beyond the level of any working assumptions that might have been made by Governments in the region earlier in the year. Furthermore, they are likely to remain under upward pressure for some time. They thus pose a threat to inflation and the uncertainty of their future course is likely to discourage investors from making significant commitments in the months ahead. Two, there is a distinct risk of the external environment, i.e., demand from China, Japan and the United States, deteriorating in unison in the months ahead. Some weakening of momentum was already taking place in two of the three economies prior to the recent upheavals in the oil markets; the latter have made the likelihood of a simultaneous, albeit marginal, slowdown more rather than less probable. Three, a weakening external environment, varying inflationary pressures in the region and a depreciating dollar would together pose a major challenge to maintaining growth and macroeconomic and exchange rate stability in the months ahead. Governments would thus need to assess their individual positions vis-à-vis inflation, growth, capacity utilization and their own fiscal situation before deciding upon the most appropriate course of action. In the short term, the risks of inflation outweigh the other risks as inflation left untreated can acquire its own momentum and do severe damage to the economy. Furthermore, inflation has a tendency to affect the poorer sections of society more severely than the rich. On social grounds, therefore, the need to tackle incipient inflationary pressure is paramount.

Addressing the supply side of oil

In this regard, it is the case that several Governments in the region subsidize prices of oil products. Should oil prices remain high for some time this will pose an impossible fiscal burden on them.¹¹ There is a case, therefore, for re-examining the system of subsidization, to better target the subsidies and to endeavour to phase them out over a defined time-span. Subsidies, while socially more equitable, tend to encourage overuse of the subsidized product and, hence, usually prove to be unsustainable in the long run.

As mentioned elsewhere, action is also needed to address the supply side of the oil question. While little can be done to increase supplies in the short term, Governments in the region should look into the practical aspects of maintaining higher stocks of both crude and finished products and examine whether the main oil importers in the region could take more cooperative action in this area. At least some of the volatility in oil prices might be reduced as a result.

¹¹ "Fuel subsidies begin to take toll in Asia", *Asian Wall Street Journal*, 5 October 2004.

Long-term development policy issues

The challenge posed by the ending of textile quotas

Tackling the Millennium Development Goals remains the major long-term development challenge, but, simultaneously, near-term policy issues such as those outlined above have to be tackled on a day-to-day basis by all Governments in the region and such issues often succeed in dominating the agendas of most Governments in the region. However, preoccupation with them should not come at the cost of neglecting the longer-term development challenges. One central challenge in that context is how to manage the myriad issues that globalization poses. An immediate issue in that context, for instance, will be the ending of export quotas when the Multifibre Arrangement expires at the end of 2004. The ending of the quotas for clothing and apparel exports represents a major challenge for a number of economies in the region, mainly in South Asia. In Bangladesh, such exports make up 75 per cent of total exports, while in Sri Lanka they account for close to 50 per cent. In Pakistan they represent just over a fifth of total exports. Outside South Asia such exports are proportionately less important, the highest being Viet Nam with around 15 per cent of its total exports consisting of clothing and apparel. While large shifts in trading patterns are not expected to happen overnight and countries have had several years to prepare for this event, the ending of the quota system means that such economies could well lose out to stronger competitors, mainly China and India, in international markets over the medium term. UNCTAD takes a more optimistic view based on the facts that (a) China's transitional arrangements following WTO membership will not end until 2016 (indeed, United States textile and clothing companies are already urging the United States Government to keep Chinese clothing and apparel exports to the United States subject to quota restrictions) and (b) shifts in supply-demand relationships only tend to occur gradually (hence, countries like Bangladesh and, indeed, other least developed countries involved in garment exports are unlikely to face immediate pressure to find new markets, etc).

The Governments of these countries nevertheless need to redouble their efforts towards strengthening their respective textile and garment industries. Even a gradual loss of international market share could have severe social consequences through a loss of jobs. Whether it is worthwhile to preserve the textile industry, or enhance competitiveness in other manufacturing or service activities, can only be judged by the Governments and business people of the countries concerned. What is important from a policy perspective is that given the importance of the textile sector for Governments to provide the needed logistical and technical support to assist those engaged in clothing and apparel production in supplying their markets competitively. More generally, these countries should remain committed to the trade liberalization agenda whether at WTO or at the regional and subregional levels and not to seek to delay the implementation of the Agreement on Textiles and Clothing.

Similar issues will arise as the transitional arrangements that form an essential component both of the multilateral trade liberalization agenda of WTO and in the various regional and bilateral FTAs recently concluded by

ESCAP economies draw to a close. Building, enhancing and sustaining the international competitiveness of ESCAP economies, whether in manufacturing, agriculture or services, is thus both a vital long-term development challenge as well as a major near-term policy issue for Governments in the region. Meeting it would require not merely a supportive policy environment at the macroeconomic level but also an ongoing programme of investment in both physical and social infrastructure.

***The importance
of social
infrastructure***

The importance of good physical infrastructure, such as transport facilities, ports, electricity, water, etc., is well known and does not require reiteration here. With regard to social infrastructure, much neglected in the past, its importance is now increasingly recognized within the broad rubric of governance. Social infrastructure is not merely the efficient operation of key institutions of governance, such as the legal system, the financial sector and education and health delivery agencies, but an underlying “social contract” that defines relations between the individual and the community and between the citizens and the State. The absence of such a social contract can gravely undermine the public good; equally, its presence can significantly reduce the need for more formal and quasi-legalistic arrangements that often do not work at all, or work poorly, in practice in most developing economies. The poor, for example, reduce their vulnerabilities not through insurance mechanisms but through the access that they have to the informal institutions of the larger community.

As highlighted in the *Bulletin 2003/04*, the primary objective of development is to reduce poverty and initiate sustained improvements in the living conditions of the people. It is the central responsibility of all Governments in the region to focus upon attaining this objective. However, the route taken in reaching this objective can vary from country to country depending upon its initial conditions, its resource endowments, its recent development experience, its trading links and the effectiveness of its governance in providing an appropriate framework of laws, regulations and institutions to promote development, underpinned by an effective social contract as discussed above. All these elements taken together determine, when viewed from the current perspective, a country’s ability to achieve sustainable improvements in the standards of living of its citizens while grappling with the forces of globalization.

It is well recognized that raising the productivity of investment, both public and private, is the key to successful long-term development. Some countries get both the levels and the composition of investment right and achieve high rates of economic growth. Other countries invest too much through the public sector and crowd out private investment. Yet others invest too little through the public sector – a problem manifested in poor educational facilities, poor infrastructure and poor public institutions generally – an approach that reduces the efficiency of overall investment in the economy and reduces its long-term growth potential. While the paucity of public resources is driving many countries to involve the private sector in the provision of public services, at root is the choice of what is best left to public provision and what is best provided by the private sector, in other words, what are the respective

spheres for individuals, markets and communities, including the State, and how best to guarantee both efficiency and equity in society.

Beginning with the 1980s but gathering pace since the 1990s, there has been an attempt to withdraw the State from activities where previously the public interest was seen to be equated with public ownership. With globalization and technology altering traditional distinctions between the public and private sectors, a new consensus is needed to redraw the lines between the public and private sectors and, indeed, to look again at the public sector itself. Agreeing on where markets have an enhanced role and where market failure has to be tackled seriously is therefore a critical prerequisite for fashioning such a consensus. To argue without qualification that the only kind of reform that is worth pursuing is some form of privatization of public enterprise negates the possibility of a proper debate on how a reformed public sector might contribute to the greater achievement of efficiency and equity in society, outcomes that are universally desired.

In the above context, it is worth stressing that markets are best regarded as a means and not as ends in themselves. There is no question that markets are good at efficiently creating productive assets but it is also true that they are less good at guaranteeing fairness. If the profit motive is the only incentive, public goods will rarely be provided by markets and, unless corrective measures are taken, markets will tend to widen inequality of access to public goods, like education and health, and lead eventually to greater social inequality, a recipe for chronic instability in society. It is worth remembering that any given economic system is not a discrete sphere of human activity. It is a reflection of the prevailing value system. Economic structures, in turn, generate values and outcomes that help to shape the social and political consensus. If these structures result in ever-widening inequalities, in the poor provision of public services and in a general lack of fairness, the implicit social contract will eventually break down, leading to endemic instability in society.

***Better balance
between the public
and private sectors***

Linkages between investment and productivity growth have been viewed through the lens of international competitiveness in recent years. Competitiveness can be applied at both the enterprise and the national levels. Not all countries can simultaneously improve competitiveness relative to other countries. Competitiveness is determined by both real and monetary factors. It may increase as a result of greater investment in productive assets or it may increase through a slower rise in unit labour costs, from an effective exchange rate depreciation or, more usually, from a combination of all three. The role that Governments can play in maintaining and enhancing competitiveness is either as a provider of public goods and social infrastructure or as an enabler of the process. In the latter case, Governments need to look beyond the provision of macroeconomic stability to overcoming the impediments traditionally identified – such as properly-functioning capital markets – to encourage innovation and investment in technology by enterprises. Whether particular activities are carried out in the public or private sector is less important than that they are performed efficiently and effectively.

Successful development is thus a multifaceted phenomenon. Achieving high rates of economic growth and high average per capita incomes is merely one part of the story; its obverse is social stability, which can only be achieved if the benefits of growth are shared equitably through the public provision of public services. Decentralization has often been cited as almost a panacea to this end. But decentralization raises its own complex issues and the choices involved are not easy. In the final analysis, Governments must rely not only upon their own judgement but equally upon the contribution that informed citizens can make in this regard. Development interventions should thus be viewed not only from the narrow perspective of output growth but also in terms of their impact on the social infrastructure. Social infrastructure does not exist in a vacuum; indeed, the nature and extent of interactions between individuals and society and between State institutions and citizens hold the key to the long-term development prospects of society.¹²

¹² M. Woolcock and Deepa Narayan, "Social capital: implications for development theory, research and policy", *World Bank Research Observer*, vol. 15, No. 2, August 2000.

II

CHINA'S ECONOMIC RISE: IMPLICATIONS FOR EAST ASIAN GROWTH AND INTEGRATION

By John Wong¹

China in the regional perspective

Since 1979 China's economy has experienced spectacular growth as a result of its successful economic reform and open-door policy. China has also become more closely integrated with its neighbouring economies, including those of ASEAN, with both positive and negative spillover effects on the region in the process. Initially, the more developed Japan and the four East Asian newly industrialized economies (NIEs) of Hong Kong, China; the Republic of Korea; Singapore; and Taiwan Province of China, captured most of the benefits by actively trading with and investing in China. As China continued to press ahead with its export-oriented development strategies, it started to cast a large shadow on the less developed ASEAN economies, many of which were competing head on with China to attract FDI and export manufactured products to the same third-country markets.

The rise of China was at one time considered a disruptive force to the region's economic growth, which lost much of its former dynamism after the 1997 Asian financial crisis. To allay ASEAN's growing apprehension, China took the bold step of arranging an FTA with ASEAN, which would operate to increase mutual trade and investment to the benefit of both sides. Signed in November 2002, this landmark China-ASEAN FTA has since exerted a great deal of pressure on Japan and the Republic of Korea to follow suit by intensifying their economic relations with ASEAN under the general regional cooperation umbrella of "ASEAN+ 3" (ASEAN plus China, Japan and the Republic of Korea). With China as a rising regional political and economic power, its FTA initiative with ASEAN has thus sparked a new momentum towards the so-called New Age economic integration in East Asia.

Over the longer run, the economic rise of China can be seen not only as a new engine for the region's economic growth, but also as a powerful force for integrating the East Asian economies. In fact, China in recent years has been the main driving force behind East Asia's growing regional trade interdependency, as most East Asian economies have experienced the largest percentage-point increases in their exports to China. It may be said that the rise of Japan provided the engine for the first wave of East Asian growth and integration in the 1960s and the 1970s. The rise of the four NIEs marked the

The striking emergence of China as an economic powerhouse and a positive force in regional complementarities ...

... is expected to be a further stimulus to development and integration within East Asia in the long run

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second wave to sustain the region's continuing growth and integration in the 1970s-1980s. The rise of China will now constitute the third wave. As China is a vast and diverse economic entity, its participation in the region's growth and development will not only boost the region's overall growth potential, but also profoundly affect the region's patterns of production, trade and investment, and resource flows.

In the 1980s, on account of the dynamic growth of the East Asian economies, it was common for commentators to refer to the rise of the Pacific Century. But the subsequent (relative) economic decline of Japan coupled with the increasing economic and technological predominance of the United States has rendered this notion much less credible. The rise of China, together with Japan's economic recovery, rekindles new hopes of making the twenty-first century the Pacific Century. To realize this, China will have to sustain its economic growth momentum and develop even closer economic symbiosis with its neighbouring economies so that the East Asian region as a whole can benefit from China's economic rise. Continuing economic growth and integration are essentially what all these East Asian economies aim to achieve in the long run.

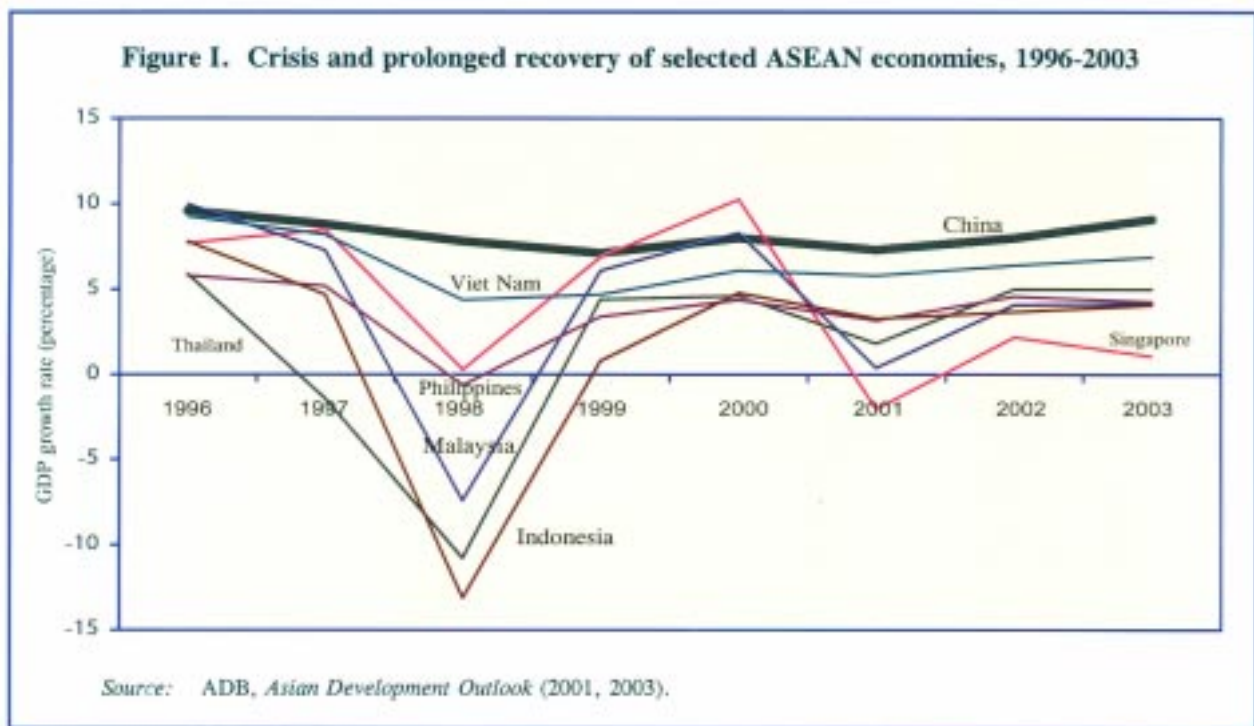
The economic rise of China

The record of economic growth in China has been highly impressive

The Chinese economy grew at a highly impressive rate of 9.4 per cent a year during the period 1978-2003. Whereas the 1997 Asian financial crisis brought down many East Asian economies, China's economy was hardly affected by the crisis as it continued to grow at 8.8 per cent in 1997 and 7.8 per cent in 1998. After the crisis, China's economy was steaming ahead with strong growth and, despite disruptions caused by SARS and global economic recession, it still chalked up a hefty 9.1 per cent growth (figure I). Furthermore, high growth was carried over to 2004, up by a sizzling 9.7 per cent in the first half.² In fact, the Chinese Government is currently much concerned over economic overheating, having taken a number of vigorous administrative and macroeconomic control measures to cool down overheated economic activities in order to achieve a soft landing.

China has been relatively unaffected by external economic shocks, mainly because over 80 per cent of its economic growth is generated by domestic demand (i.e., domestic consumption and domestic investment). At the same time, China's exports (i.e., external demand) have also been growing very rapidly, averaging 16 per cent per annum over the past two decades, rising from US\$ 9.8 billion in 1978 to US\$ 438 billion in 2003. China is now the world's fourth largest exporter after the United States, the EU and Japan. As regards FDI, China has since the early 1990s become the world's most favoured destination in comparison with all other developing countries. By mid-2004, China had attracted a total of US\$ 535 billion in FDI. In fact, China in recent years has consistently captured more than half of all FDI in Asia. Not surprisingly, over 80 per cent of the world's 500

² "National economic performance is good in the first half of 2004", National Bureau of Statistics of China, 16 July 2004, < www.stats.gov.cn/english/ > .



largest companies have set up businesses in China. Above all, on account of its strong external balance, by mid-2004 China's total foreign exchange reserves had soared to US\$ 470 billion to become the world's second largest. This, in turn, has led to mounting international pressures on China to revalue the yuan renminbi.

In 2003, China's total GDP reached Y11.7 trillion (US\$ 1.24 trillion) – or more than twice the combined GDP of Indonesia, Malaysia, the Philippines, Singapore and Thailand. China's per capita GDP in 2003, at US\$ 1,000, is about the same as that of the Philippines but higher than that of Indonesia. In nominal-terms GDP, China is the world's sixth-largest economy. In terms of purchasing power parity (PPP), the Chinese economy today is already the world's second largest after the United States – one needs, of course, to be aware of the problem of overstating China's real GDP by the PPP measure³ (table 1).

Indeed, when a huge country like China is industrializing so rapidly, every indicator of its economic activities inevitably turns out to be a jumbo number owing to the combined effect of scale and speed. In 2003, for example, the country produced 222 million tons of steel, 65 million colour TV sets, 50 million air conditioners, 22 million refrigerators, 182 million mobile phones and 32 million PCs.⁴ China also became the world's third-largest automobile

***China is now
the world's sixth
largest economy ...***

***... with massive
demand and output
covering a wide range
of goods and services***

³ World Bank, *World Development Report 2002 and 2003* (New York, Oxford University Press).

⁴ National Bureau of Statistics of China, "Statistical communiqué of the People's Republic of China on national economic and social development in 2003", *China Daily*, 27 February 2004.

Table 1. Performance indicators of China and ASEAN-5

	Population (millions)	GNP per capita (US dollars)	PPP estimates of GNP per capita (US dollars)	GDP growth (percentage)							Gross domestic investment as a percentage of GDP	Annual export growth (percentage)	Mfg. exports as a percentage of total exports	Exports as a percentage of GDP			
				2002	2002	2001	1960-1970		1970-1980						1980-1990		1990-2000
				Total GDP (billions of US dollars), 1970-2002													
China	1 285	952	3 950	1 266	5.2	5.5	10.3	10.0	7.8	7.1	7.3	8.0	9.1	39	14.5	89	26
Japan	127	33 550	25 550	3 973	10.9	4.3	4.1	1.3	-1.1	0.8	0.4	-0.3	2.1	26	4.1	93	10
NIEs																	
Republic of Korea	48	10 014	15 060	476	8.6	10.1	8.9	5.7	-6.7	10.9	3.0	6.3	2.7	27	10.1	91	43
Taiwan Province of China	23	12 900	n.a.	282	9.2	9.7	7.9	5.7	4.6	5.4	-2.2	3.6	3.2	17	7.9	n.a.	51
Hong Kong, China	7	24 532	25 560	162	10.0	9.3	6.9	3.8	-5.3	3.0	-0.2	2.3	3.0	27	8.3	95	144
ASEAN-5																	
Indonesia	211	780	2 830	173	3.9	7.2	6.1	3.8	-14.2	0.8	3.3	3.7	4.1	22	8.1	56	41
Malaysia	25	3 609	7 910	96	6.5	7.9	5.3	6.5	-7.4	6.1	0.4	4.2	4.7	24	12.2	80	116
Philippines	82	1 034	4 070	78	5.1	6.0	1.0	3.3	-0.6	3.4	3.2	4.6	4.3	18	18.8	91	49
Singapore	4	20 613	22 850	87	8.8	8.3	6.7	7.4	-0.1	6.9	-2.0	2.2	0.8	24	9.9	85	174
Thailand	63	1 960	6 230	126	8.4	7.1	7.6	3.8	-10.5	4.4	1.8	5.0	6.2	24	10.5	74	66

Sources: World Bank, *World Development Report 1995, 2000/2001 and 2002*; and *World Development Indicators 2003*, World Bank web site; Institute of Southeast Asian Studies (ISEAS), *Regional Outlook: Southeast Asia 2003-04* (Singapore, 2003); Ministry of Economic Affairs, Taiwan Province of China, <www.moea.gov.tw>; Economist Intelligence Unit (EIU) Data Services; *Taiwan Statistical Data Book, 2002*.

Notes: (1) 2003 GDP growth figures for China and Singapore are official figures; the rest are real GDP growth estimates from EIU.

(2) 1998-2001 GDP growth rates extracted from ISEAS, *Regional Outlook: Southeast Asia, 2003-04*.

(3) Per capita GNP figure for Taiwan Province of China extracted from *Taiwan Statistical Data Book, 2001*.

(4) 1996-2002 GDP growth rates for Japan represent real GDP growth rates.

(5) Figures for gross domestic investment (percentage of GDP) derived from ADB, *Asian Development Outlook 2003*.

manufacturer, with a total output of 4.4 million units, after the United States and Japan. By 2003, China had surpassed the United States as the world's largest telephone market (263 million fixed lines plus 269 million mobile phones (290 million by mid-2004)). Also, by mid-2004, China's registered Internet users had reached 87 million to form the world's second-largest "web population" after the United States.⁵

Accordingly, the meteoric rise of China's economy has become a "hot" topic in international and regional media.⁶ Many economies in East Asia are concerned about the potential displacement effect of China becoming the factory of the world. Others even point the finger at China for their own economic woes, including the accusation that China is exporting deflation to them. Even Japan was worried by China's recent dynamic industrial expansion; Kenichi Ohmae used the sensational title "Asia's next crisis: 'Made in China'" to talk alarmingly about the rise of China.⁷ Many small and mid-size American manufacturers see China as "a company killer and a job killer", largely responsible for the disappearance of 2.7 million United States factory jobs since 2001.⁸

A crucial question can be posed: Is China's dynamic economic growth warranted? Can it be sustained? To begin with, China's high economic growth of the past two decades (as reflected in its official GDP statistics), though very impressive, is actually not exceptional in the historical context of many high-performance East Asian economies. As shown in table 1, Japan had near double-digit rates of growth in the 1950s and 1960s and most of the 1970s. The four NIEs had such high growth for more than three decades, the 1960s through the 1980s, while several ASEAN economies also experienced similar high growth performance in the 1970s through part of the 1990s.

China is a much larger country than its East Asian neighbours. It should therefore have much more internal dynamics to sustain an even longer period of high growth, as China has virtually a whole continent to develop for itself. Of course, it is not possible for any economy to repeat a near double-digit rate of growth year after year without becoming overheated or running into physical and economic bottlenecks. But considering the

***The prospects for
a sustained, high
trajectory of economic
growth in China
are promising***

⁵ "China now second most wired nation on the globe", *China Daily*, 21 July 2004.

⁶ Recently at the World Economic Forum in Davos, "everything is China, China, China" according to one observer ("The talk of the town at Davos: China", *International Herald Tribune*, 26 January 2004). Indeed, China's emergence as the world's manufacturing powerhouse after two decades of dynamic growth has invited prominent worldwide attention. The international media have recently portrayed China's economic resurgence as an economic threat. David Roche, a famous Wall Street economist, commented on China being a source of global recession with its mass production of a wide range of low-priced manufactured products for the world market. In early 2003, Japan's *Nikkei Weekly* reported about China setting the pace in markets for commodities around the world. The Chinese media and academia have since come out to defend China's position.

⁷ "Asia's next crisis: 'Made in China'", *The Straits Times*, Singapore, 3 August 2001.

⁸ Charles Stein, "The rise of China Inc.", *Boston Globe*, 19 August 2003.

historical pattern and structural conditions of China's past economic growth, its future growth potential remains highly promising.

It may be remembered that, even before the reform, the Chinese economy was still growing at over 5 per cent a year during 1952-1978, despite its inherent inefficiencies and all the political disruptions. The economic reform introduced by Deng Xiaoping after 1978 set free the latent dynamic economic and social forces to further fuel China's economic growth. Nevertheless, China's growth potential remains dependent on the unfinished business of economic reform, particularly in the financial sector and the State-owned enterprises. It must also come to grips with several urgent problems like uneven development, income disparities and rural poverty (Wong, 2004).

East Asian growth and interdependence

Despite intraregional diversity, East Asian growth will also entail greater economic interdependence among economies in East Asia ...

East Asia is commonly defined as comprising Japan, China, the four NIEs and ASEAN-4 (Indonesia, Malaysia, the Philippines and Thailand). Historically speaking, the growth and integration process in East Asia is marked by three waves, as noted earlier. As the East Asian economies sustain that growth momentum, they will also increase their economic interaction with each other. Thus, an important feature of these economies is their deepening interdependence. Despite their inherent political, social and economic divergences, these economies can actually integrate quite well as an informal and loosely constituted regional economic grouping. This is essentially the underlying meaning of the "flying geese" principle. To start with, Japan is the natural economic leader of the group and has in fact been the prime source of capital and technology, first for the NIEs and then for China and ASEAN. The resource-based ASEAN-4 complement the manufacturing-based NIEs well, while both are also complement the more developed Japanese economy. The huge potential of China, with its vast resource base and diverse needs, offers additional opportunities for all.

Accordingly, the East Asian region has already developed a fairly high level of intraregional trade. In 2001, despite the economic slowdown, intraregional trade still absorbed 39-54 per cent of the export value of individual economies in East Asia. As to intraregional export dependence over the past two decades, table 2 shows Japan's remarkable shift in export orientation over the years towards a greater focus on East Asia, with its export share to the region increasing from 22 per cent in 1980 to 39 per cent in 2001. The four NIEs have similarly made significant shifts in the same period by reorienting their exports towards the region, mainly as a result of the opening up of China. China, however, has moved in the opposite direction, slightly reducing its export dependence on the region to one which has, in recent years, been geared more to the United States and EU markets. Likewise, ASEAN-4 has also shown a slight reduction in export dependence on the East Asian region from 51 per cent in 1980 to 44 per cent in 2001.

Table 2. Intraregional trade in East Asia

East Asian economy	Year	Total exports (million of US dollars)	Share of total exports destined for (percentage)									
			United States	EU	Japan	China	Republic of Korea	Taiwan Province of China	Hong Kong, China	Singapore	ASEAN-4	East Asia
Japan	1980	130 441	24.5	14.6		3.9	4.1	–	3.7	3.0	7.0	21.7
	1988	264 856	34.1	19.7		3.6	5.8	5.4	4.4	3.1	4.9	27.2
	1992	339 885	28.5	19.7		3.5	5.2	6.2	6.1	3.8	8.1	32.9
	1996	410 901	27.5	14.3		5.3	7.1	6.3	6.2	5.1	12.4	42.4
	2000	479 249	30.0	16.4		6.3	6.5	7.5	5.7	4.3	9.5	39.8
	2001	403 496	30.4	16.0		7.7	6.3	6.0	5.8	3.6	9.3	38.7
China	1980	18 099	5.4	13.7	22.3		–	–	24.1	2.3	4.3	53.0
	1988	47 540	7.1	10.4	16.9		–	–	38.4	3.1	2.8	61.2
	1992	80 517	10.7	10.8	13.8		2.9	0.8	44.2	2.5	2.8	67.0
	1996	151 197	17.7	13.1	20.4		5.0	1.9	21.8	2.5	3.4	55.0
	2000	249 297	20.9	15.3	16.7		4.5	2.0	17.9	2.3	3.7	47.1
	2001	266 620	20.4	15.3	11.0		4.7	1.9	17.5	2.2	3.8	41.1
Republic of Korea	1980	17 505	26.4	16.3	17.4	–	–	–	–	1.5	4.6	23.5
	1988	60 696	35.4	14.7	19.8	–	–	1.6	5.9	2.2	2.8	32.3
	1992	76 632	23.7	12.8	15.1	3.5	–	3.0	7.7	4.2	7.0	40.5
	1996	129 715	16.9	11.4	12.2	8.8	–	3.1	8.6	5.0	9.3	47.0
	2000	172 268	21.9	13.6	11.9	10.7	–	2.0	6.2	3.3	7.2	41.3
	2001	150 439	20.8	13.1	11.0	12.1	–	3.9	6.3	2.7	6.8	42.8
Taiwan Province of China	1980	–	–	–	–	–	–	–	–	–	–	–
	1988	60 667	–	–	–	3.7	–	–	–	–	–	–
	1992	81 470	28.9	17.7	10.9	12.9	1.4	–	18.9	3.1	6.9	41.2
	1996	115 942	23.2	13.6	11.8	17.9	2.3	–	23.1	4.0	8.3	50.1
	2000	148 321	23.5	14.8	11.2	16.9	2.6	–	21.1	3.7	7.4	48.8
	2001	122 866	22.5	14.8	10.4	17.9	2.7	–	21.9	3.3	7.2	49.4
Hong Kong, China	1980	19 730	26.1	24.5	4.6	6.3	1.2	–	–	4.4	6.8	23.3
	1988	63 163	24.8	16.9	5.9	27.0	2.6	3.6	–	2.8	3.2	41.9
	1992	119 512	23.1	17.1	5.2	29.6	1.6	3.5	–	2.6	3.1	45.6
	1996	180 750	21.2	12.7	6.5	34.3	1.6	2.4	–	2.7	3.7	51.2
	2000	201 860	23.3	15.3	5.5	34.6	1.9	2.5	–	2.3	3.3	50.1
	2001	189 894	22.3	14.5	5.9	36.9	1.8	2.4	–	2.0	3.3	52.3
Singapore	1980	19 375	12.5	12.5	8.1	1.6	1.5	–	7.7	–	20.8	39.7
	1988	39 306	23.6	13.5	8.6	3.0	2.0	2.8	6.2	–	20.3	42.9
	1992	63 483	16.6	11.9	4.4	1.8	2.6	2.4	7.2	–	14.3	32.7
	1996	125 014	18.4	12.7	8.2	2.7	3.8	3.9	8.2	–	25.5	52.3
	2000	137 804	17.3	13.2	7.5	3.9	3.6	6.0	7.9	–	24.9	53.8
	2001	121 751	15.4	13.4	7.7	4.4	3.9	5.1	8.9	–	24.2	54.2
ASEAN-4	1980	47 100	18.8	13.8	34.5	1.1	1.7	–	1.9	11.8	–	51.0
	1988	80 080	16.4	12.6	19.5	2.2	2.8	2.0	2.9	9.0	–	38.4
	1992	112 788	21.0	17.6	21.9	2.6	2.9	3.1	3.9	13.6	–	48.0
	1996	204 270	18.6	13.7	17.8	3.3	3.5	3.4	5.1	14.0	–	47.1
	2000	269 099	20.4	14.8	16.0	3.4	3.7	4.2	4.2	12.5	–	44.0
	2001	250 656	20.0	14.7	16.1	4.4	3.7	3.8	4.1	11.8	–	43.9

Source: IMF, *Direction of Trade Statistics Yearbook* (1987, 1993 and 2002 issues).

Note: Taiwan's indirect trade with mainland China is calculated from data available at < www.seftb.org > .

***... with trade-driven
FDI being a powerful
catalyst for integration***

Intraregional FDI flows have also operated as a powerful integrating force in East Asia, especially since a great deal of regional FDI is trade-related in nature. With its essentially open and outward-looking economies, the region is highly dependent on foreign trade and foreign investment for its economic growth. Both China and ASEAN have devised various incentive schemes to vie for FDI, which is generally treated not just as an additional source of capital supply but, more important, as a means of technology transfer and export market development. In particular, China in recent years has become the most favoured destination of all developing economies for FDI. By 2001, the East Asian share of FDI in China had declined to 57 per cent, down from 88 per cent in 1992. Suffice it to say that the rise of China has completely altered the FDI landscape of East Asia.

It is thus clear that China's economic growth fits in quite well with the overall development patterns in East Asia. China has been able to harness the region's vast trade and investment opportunities to facilitate its own economic growth. At the same time, China's economic growth and increasing integration with the region provide new opportunities to enhance the region's overall growth potential and new impetus for regionalism.

***The emergence of
China will have both
positive and negative
spillover effects on
other regional
economies***

However, the actual impact of the fast-growing Chinese economy on East Asia is quite uneven. By and large, Japan and the four NIEs have been able to benefit from China's open-door policy by exporting more high-tech products and by investing in China. Indeed, in the past two decades, Japan's share of exports to China almost doubled from 3.9 per cent in 1980 to 7.7 per cent in 2001. The relative share of the four NIEs also exhibited a similar upward trend, which was outstandingly steep in the case of Hong Kong, China: 6 per cent in 1980 and 37 per cent in 2001. In time to come, these five economies, which are inherently complementary with China, are set to be even more closely integrated with China.

Table 3, using a "trade intensity index" to measure the actual strength of the trading relationship between two countries relative to all their respective trading partners, brings out a clearer picture of East Asian intraregional trade than that indicated by simple trade share analysis. An index higher than "one" means that countries are trading with each other above the "normal" level. Thus, for the period 1998-2000, Japan's trade with ASEAN was more intensive than with China, while Japan was trading more intensively with China than with the United States. The Republic of Korea and Hong Kong, China, have a very intense trade relationship with China, more than with ASEAN. The ASEAN countries, however, are trading far more intensively with each other than with China, even though Indonesia, Singapore and Thailand are still trading with China above their "normal" levels. In short, China has become a strong trading partner with Japan and the Asian NIEs.

***Pressures on China's
economic relations
with ASEAN***

However, the economies of China and ASEAN (minus Singapore) at their present stages of development tend to be more competitive than complementary with each other. In many ways, China's dynamic economic growth has exerted strong competitive pressures on the ASEAN economies,

Table 3. Intra-regional trade intensity index for East Asia, 1998-2000

	Japan	China	Republic of Korea	Taiwan Province of China	Hong Kong, China	Singapore	Indonesia	Malaysia	Philippines	Thailand	ASEAN	United States
Japan	-	1.8	2.5	3.5	1.6	2.0	2.3	2.2	3.6	3.0	2.3	1.6
China	2.8	-	1.7	0.8	6.2	1.1	1.5	0.7	1.1	0.7	1.0	1.3
Republic of Korea	1.9	3.2	-	2.3	1.9	1.5	3.2	2.1	3.9	1.3	2.3	1.1
Taiwan Province of China	1.8	-	1.0	-	6.6	1.7	2.0	1.9	3.6	2.0	2.1	1.4
Hong Kong, China	1.0	11.1	0.7	1.0	-	1.2	0.8	0.7	1.8	1.0	1.1	1.2
Singapore	1.3	1.2	1.5	2.1	1.8	-	4.3	14.0	4.4	4.8	8.1	1.0
Indonesia	3.8	1.6	3.0	2.0	0.9	5.7	-	2.5	2.4	2.0	3.7	0.8
Malaysia	2.1	0.9	1.4	2.3	1.4	8.9	2.9	-	2.9	3.7	5.9	1.2
Philippines	2.6	0.5	1.3	4.0	1.5	3.6	0.7	3.5	-	2.8	2.9	1.8
Thailand	2.7	1.2	0.8	1.9	1.6	4.6	3.7	3.2	2.9	-	4.1	1.2

Source: Computed from data in IMF, *Direction of Trade Statistics* (various issues).

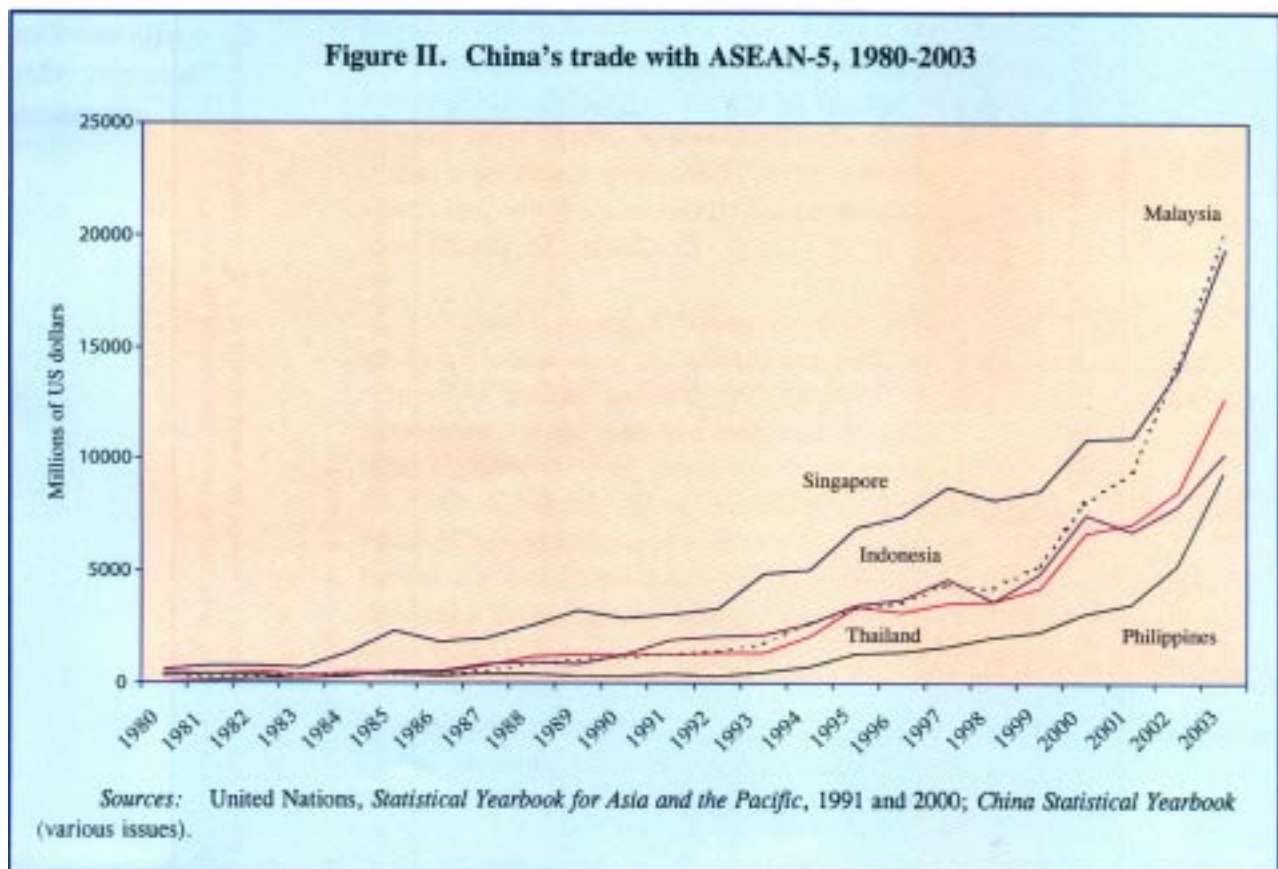
Note: The trade intensity index is defined as:

$$T_{ij} = [x_{ij}/X_{ij}] / [X_{ij}/X_{wt}]$$

where x_{ij} and X_{ij} are the values of i 's exports and world exports to j , X_{ij} is i 's total exports and X_{wt} is total world exports. As such, the index reflects the ratio of the share of country i 's exports going to country j , relative to the share of world trade destined for country j .

which are vying for FDI with China as well as competing head on with China's manufactured exports in developed country markets.⁹ The structure and pattern of China's economic relations with ASEAN have been shaped by many complicated factors. Traditionally, China's relations with "South-East Asia", referred to as "Nanyang" (or literally "south sea") by the Chinese, have been extensive and deep-rooted on account of history, geography and migration. After the Communist revolution in 1949, their relations assumed new dimensions, with complex ideological and political elements coming into play, and this gave rise to a period of "Cold War relations". With the advent of détente in the early 1970s, individual South-East Asian States started to normalize their relations with China (Wong, 1984).

Initially, China's success in economic reform and development had produced very little impact on the ASEAN countries to its south. China-ASEAN trade was very small – in fact, only a small fraction of each other's total trade and with a large part being centred in Singapore (figure II). Even by the early 1990s, when massive FDI began to flow into China, there was no evidence that China had been the recipient of much capital from the ethnic Chinese in South-East Asia (Wong, 1998). However, it was a different scenario towards the end of the 1990s. While many ASEAN countries were plagued by persistent economic crises and domestic political instability, China



⁹ For a further discussion of this topic, see Prakash Loungani (2000).

has been intent on its single-minded pursuit of economic modernization. This has resulted in the further narrowing of development gaps between ASEAN and China. In fact, ASEAN risks being left behind by China's relentless economic growth. Not surprisingly, many ASEAN economies are watching the recent economic rise of China with apprehension.

New impetus for East Asian economic integration

Mindful of ASEAN's worries over the possible disruptive effects of its rapid economic growth, China in recent years has been under mounting pressures to dispel the fears of a new "China threat" by improving its overall relations with its ASEAN neighbours. During the 1997 Asian financial crisis, China's determined efforts to maintain the exchange value of its currency were much appreciated by ASEAN as a devaluation would have aggravated the region's economic crisis. But the single most important step undertaken by China in recent years to upgrade its long-term political and economic relations with the ASEAN region is the bold FTA scheme.

At the ASEAN-China Summit in November 2001, former Chinese Premier Zhu Rongji proposed the establishment of a free trade area between China and ASEAN within 10 years. On 4 November 2002, China and ASEAN formally signed a landmark framework agreement in Cambodia to establish an FTA by 2010.¹⁰ The China-ASEAN FTA covers an economic region of 1.7 billion consumers with a combined GDP of US\$ 2 trillion. It offers an effective means for smaller ASEAN economies to overcome the disadvantage of smallness by pooling resources and combining markets. This will in time lead to greater economic integration between China and ASEAN, clearly a win-win situation for both sides. The perceived economic threat of China will then become an opportunity for ASEAN (Wattanapruttipaisan, 2003; and Wong and Chan, 2003a).

In the short run, however, ASEAN has to deal with the initial risks of a potential trade diversion effect and related structural adjustments. In general, the FTA scheme will give rise to an uneven distribution of costs and benefits between different industries, different sectors and even different ASEAN countries. After the initial process of adjustment, individual ASEAN economies will then develop their own niches in their economic relations with China. In particular, apart from its primary commodities, ASEAN's resource-based products will be in great demand in China. Beyond merchandise trade, FTA also promotes trade in services, including tourism. China may generally have a strong comparative advantage in manufacturing because it enjoys economies of scale which, however, may not apply to many service activities. In fact, many of China's service activities, on account of their socialist legacies, are known to be more backward than those in ASEAN.

***China's bold
FTA initiative
with ASEAN***

***Uneven distribution
of short-run costs
and benefits but
significant mutual
gains in the long run***

¹⁰ The framework agreement signed by the 11 States sets out a road map for trade liberalization in goods and services for most countries by 2010 and for the less developed ASEAN nations (namely, Cambodia, the Lao People's Democratic Republic, Myanmar and Viet Nam) by 2015.

In recent years, many economies in East Asia have started to experience the positive spillovers of China's economic growth. Apart from the surge in Chinese tourists to other Asian countries, imports by China from other East Asian economies plus India and Australia for the past two years exceeded its exports to those economies, thereby resulting in trade deficits with them, which were offset by China's trade surplus with the United States and the EU. In the past two years, for example, China had been a major source of export growth for many economies in East Asia, among other regions.

Over the years as the FTA scheme is gradually phased in, multinationals in the region will gradually restructure their supply chains and rationalize their production networks by taking China and ASEAN together as a single market. This will eventually lead to a reshuffle of regional production networks and hence a redistribution of regional FDI flows. The new regional production patterns will be based on a larger and more diverse market. In short, both trade and FDI in the region should continue to grow under the impact of the ASEAN-China FTA. And this will certainly be a boon to both ASEAN and China.

China is also a catalyst for greater integration between North-East and South-East Asian economies

In addition to creating a new source of economic growth for the region, China is also seen as a new force for revitalizing the region's economic integration process. China's FTA with ASEAN has exerted a tremendous pressure on Japan and the Republic of Korea to follow suit, prompting similar responses from them. Indeed, in the wake of the China-ASEAN FTA, Japan had to take action by signing a framework for a comprehensive economic partnership with ASEAN, which is not an FTA but which can comprise Japan's bilateral FTA arrangements with individual ASEAN member countries.

In June 2003, China signed the Closer Economic Partnership Arrangement with Hong Kong, China (and subsequently with Macau) (Wong and Chan, 2003b). Prior to this, China had agreed to initiate a joint study with Japan and the Republic of Korea on possible North-East Asian economic cooperation. At the Ninth ASEAN Summit in Bali in October 2003, China, Japan and the Republic of Korea signed the Joint Declaration on the Promotion of Tripartite Cooperation among these three North-East Asian countries. This tripartite cooperation is also aimed at strengthening the process of ASEAN economic integration with East Asian economies, i.e., a more concrete way of accelerating the realization of greater East Asian economic integration through the ASEAN+ 3 process.

Of equal importance, at the same Summit, China also signed the Treaty of Amity and Cooperation (TAC) with ASEAN in order to express China's goal of establishing a strategic partnership with ASEAN for "peace and prosperity". China is the first country to accede to ASEAN's TAC, which is a distinctive regional code of conduct governing State-to-State relations within ASEAN. The most important principle in TAC requires all parties involved to renounce the use of force in the settlement of any dispute. In concluding this historic treaty, China has signalled to ASEAN its acceptance of ASEAN's norms and values and its willingness to play by the rules. Since India also

followed China by concluding a similar TAC with ASEAN, Japan was once again under tremendous pressure to follow.

Viewed in a larger context, China's FTA initiative with ASEAN not only marks the most important first step in the "ASEAN+ 3" scheme. It also plays a crucial catalytic role in galvanizing what may be called the New Age economic integration process for the East Asian region as a whole. As long as China's economy sustains its dynamic growth, its regional integration initiatives will carry weight and keep the momentum going. In short, the spate of new cooperation initiatives in recent years has shown that such an economic integration scheme for East Asia is no longer an abstract notion, but something that is achievable once major players like China and Japan are serious about it.

As a rising regional political and economic power, China is destined to play a more important role in the growth and development of the ASEAN region. However, there is still a great deal of uncertainty as to how China will play out its geopolitical role in the region. Additionally, what kind of new security architecture will the region eventually develop? Moreover, will China push for a greater leadership role in the region in order to counter Western (American) influence?

***Some broad
geopolitical
implications
in the region***

It is commonly assumed that, as China grows stronger economically, it will also become politically more assertive in its dealings with neighbouring countries. However, if China were able to manage its rise as a gradual process of its "peaceful ascendancy" (*heping jueqi*), the total spillover effect on the region would be much less disruptive.¹¹ On balance, ASEAN should have no problem adjusting to the rise of China, particularly when China's economy is operating as another engine of economic growth and a means for closer East Asian integration. China, for its part, is likely to continue its warm relations with ASEAN so long as the latter subscribes to China's core principles, like the One-China principle.

¹¹ Yoichi Funabashi, "China is preparing a 'peaceful ascendancy'", *International Herald Tribune*, 30 December 2003. See also Bruce Klingner, "'Peaceful rising' seeks to allay 'China threat'" (www.atimes.com).

REFERENCES

- Loungani, Prakash, 2000. "Comrades or competitors? Trade links between China and other East Asian economies", *Finance & Development*, vol. 37, No. 2, June.
- Wattanapruttipaisan, Thitapha, 2003. "ASEAN-China free trade area: advantages, challenges, and implications for the newer ASEAN member countries", *ASEAN Economic Bulletin*, vol. 20, No. 1, April, pp. 31-48.
- Wong, John and Sarah Chan, 2003a. "China-ASEAN free trade agreement: shaping future economic relations", *Asian Survey*, vol. XLIII, No. 3, May/June.
- _____, 2003b. "China's closer economic partnership arrangement (CEPA) with Hong Kong: a gift from Beijing?", East Asian Institute Background Brief No. 177, 12 December.
- Wong, John, 1984. *The Political Economy of China's Changing Relations with Southeast Asia* (London, Macmillan).
- _____, 1998. "Southeast Asian ethnic Chinese investing in China", East Asian Institute Working Paper No. 15, 23 October.
- _____, 2004. "Sustaining China's high economic growth: challenges and risks for the new leadership", *Cross-Strait and International Affairs Quarterly*, vol. 1, No. 2 (Institute of Mainland China Studies, Kaohsiung, Taiwan Province of China).



SOUTH-EAST ASIA AND EAST ASIAN COMMUNITY: THE NUCLEUS OF BINDING GLUES

Djisman S. Simandjuntak¹

The region as a product of gene-culture co-evolution

Around 200,000 years ago there roamed perhaps two groups of humans on the great plains of Eurasia. One group, the Neanderthals, perished before the last Ice Age, leaving *homo sapiens sapiens* as the only species endowed with the potential to carry on the survival game of seeking a larger share in life's gene pool. Like many other animals, humans are territorial animals. They set boundaries and defended fertile valleys, river deltas and other peculiar parts of the natural environment where elements of food were stored relatively abundantly. The increased number of people in such strange attractors, to borrow from chaos vocabulary, opened up the gates for technology change. Thanks to food surplus, humans could spend parts of their time on accumulation or the production of tools. Yet, in spite of compression technologies, the number of people that can squeeze into a given space is limited, even perhaps under the physical phenomenon of singularity. What is more, survival necessitates differentiation among humans. Indeed, diversity is the womb of progress or higher evolutionary fitness or the entirety of features that please the environment of gene-culture co-evolution. Even the ephemeral life of the "philosopher Greeks" was possible only with the support of slaves, barbarians and traders of foreign origin who were deprived of political rights.

Finding petrified egalitarian traditions unbearable and energy insufficiency increasingly stifling, modern humans were quick to discover the exciting sides of migration. Some of them found their way very early to what later on has been named South-East Asia for lack of a better name. Their footprints are found as fossils in numerous caves. More ancient footprints might have been drowned under the mud of the South China Sea, the Java Sea and the Strait of Malacca, which were part of the Asian landmass during glacial epochs. The first South-East Asians moved farther East and South East, driven out perhaps by the second South-East Asians, who in turn were chased away from the fertile lands south of the Yangtze Kiang by the guns and steel of the Hans. The second wave of South-East Asians innovated innumerable ethnic groupings. In the course of time, they accumulated "sediments of identity" comprised of animism, Hinduism, Buddhism, Islam, Christianity and communism, each with variations. Even in belief system or ideology East Asians are pragmatic. The Abrahamic religions became mixed with

***South-East Asia
was a region of
migratory flows and
fauna wealth ...***

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other belief systems when they arrived in East Asia. Some people find such a mixture heretical and fight to death for its eradication.

In short, the diversity of life and cultures makes South-East Asia home to great diversity north and south of the equator. Its fauna drew the attention of Alfred Russel Wallace, who, with Charles Darwin, was the co-founder of the theory of evolutionary natural selection. The archipelago of South-East Asia is also home to coral reefs and mangrove forests containing invaluable living treasures. Of the floral wealth, a few varieties ascended to global fame: cloves, nutmeg, sandalwood and pepper. They lured European discoverers to the region, including Magellan, who tragically paid for the European curiosity and greed with his own life. Succumbing to the tyranny of avarice, the traders metamorphosed into political colonizers, seeking to monopolize the spice trade or at least certain geographical hubs of it. European traders-turned-conquerors parcelled South-East Asia out in accordance with the European power balance or imbalance and established colonial rule in their respective spoils. The power balance changed dramatically in the twentieth century with the arrival of the "American system". Europeans were dethroned with the signing of the Atlantic Charter. Their indubitable supremacy ended. Seeds of new nations were strewn in the region. Ten of them have joined ASEAN. Papua New Guinea, whose people are ethnically no less Asian than those of Indonesian Papua, and the newly independent Timor-Leste may find their way to ASEAN one day. Even Australia and New Zealand may not be too Antarctic to be eligible for ASEAN, the boundaries of which are nothing but a cultural conception.

***... thus embodying
a diverse and evolving
nexus of cultures
and ethnicity***

Needless to say, the borders between the new nations do not precisely coincide with ethnicity. The Malays, for instance, are scattered in Indonesia, Malaysia, Thailand, the Philippines and even Viet Nam. No nation in South-East Asia is ethnically uniform. Each is home to ethnic diversity, although to different degrees. The region is also lucky to have always lived with religious diversity and political ideologies. Cultural desertification has never been a serious aberration in the history of South-East Asia. On the contrary, one of the core challenges facing South-East Asians has been how to live with multiple equilibria with a sufficient amount of the "standardization" that is needed in the arena of global competition and cooperation. Living with diversity has not been among the fine repertoire of human ingenuity. Diversity is written in lower capitals in most republics of the twentieth century. The mastery of leading and managing under diversity is also yet to be crafted among South-East Asians who aspire to leadership and managerial positions in politics, business and civil society.

South-East Asian struggles for a diversity-based polity have evolved at a relatively slow pace. Indonesia in the early twenty-first century is still grappling with symptoms of disunion. Java-centred political power was found excessive by different groups of people in the outer islands, who at different points in time rebelled against the central Government. Even today the central Government of Indonesia is confronted with independence movements at the northern tip of Sumatra as well as in the province of Papua. Not so long ago Muslims and Christians from the same ethnic groups of Ambon

and Central Sulawesi engaged in bloody violence in spite of a verbal commitment to religious pluralism. Admittedly, Indonesia has progressed quite far in terms of democratic reform in the aftermath of the financial crisis of 1997, but there is a non-zero probability of frightening surprises of a primordial nature erupting while the country is advancing to maturity in the reform life cycle.

On the north-west fringes of South-East Asia conflicts abound. Ethnic disintegration is still a real threat in Myanmar. On the score of human rights protection, little has changed in Myanmar since the tumultuous year of 1988. Thailand is not Arcadia either. The small Muslim share of 3.8 per cent in the total population does not make the political disharmony trivial. Jumping to the north-east, one arrives in the Philippines, where followers of two Abrahamic religions, Christianity and Islam, live in mutual distrust. Cambodia was a theatre of genocide only a little more than a generation ago. Dissatisfied minorities are also found in Malaysia. Singapore has managed its basically uneven diversity in a pragmatic way with remarkable success. Brunei Darussalam enjoys plenty under a political monarchy while Viet Nam is under a one-party system.

It may sound like an exaggeration to start a discussion of South-East Asia with unfinished business, which looks absurd in some instances from the point of view of humanity in the twenty-first century. However, the reality of life in South-East Asia is far from tranquil. Within the ethno-religious diversity, people have yet to master the art of living in harmony on the basis of non-discrimination. On top of the ethno-religious animosities, the politico-security risks of destabilization are far from trivial. Views differ on the security architecture of South-East Asia. The design of the republics varies from one country to another. Some border issues have yet to be resolved. Sea piracy occasionally has regional or even global effects because of the region's centrality as one of the world's busiest communication sea lanes. South-East Asia has been implicated in international terrorism in recent times. It has in fact been rocked by repeated bombings of a transnational nature.

On paper, South-East Asian Governments have signed numerous agreements committing themselves to the peaceful resolution of any regional conflicts and the advancement of cooperation such as the Treaty of Amity and Cooperation in Southeast Asia and the two Bali Declarations of ASEAN Concord. To promote confidence-building measures among South-East Asian Governments and Governments of friendly countries, the ASEAN Regional Forum has been established. It undoubtedly is not immaterial that the region has long been free of intraregional warfare. However, perhaps it is only possible because the seeds of conflicts are defused rather than addressed straightforwardly. Nothing is fundamentally wrong with the approach of defusing frictions rather than pushing a solution hard at the risk of disintegration. The ability to defuse differences indefinitely is a sign that the parties involved can live with the differences. However, refusal to address differences can also be seen as a sign of a lack of cohesion. Investors and traders are aware of the tactic of avoiding difficult issues for the sake of nominal concord. If South-East Asia is to be seen as a cohesive region, it should learn to resolve disputes rather than keep sweeping them under the rug.

The associated tensions and pressures have led to a search for the peaceful resolution of conflicts and various confidence-building measures

Return to a high-growth path

Economically speaking, South-East Asia was a divided region throughout the Cold War period, though less so thereafter. On the one hand, the founding member countries were sailing along a high-growth path together with the Republic of Korea; Hong Kong, China; and Taiwan Province of China. Unlike Gunnar Myrdal, who saw Asia as a theatre of poverty, or Karl Marx, who looked at the Asian way as one of deadlock, the World Bank included Indonesia, Malaysia, Singapore and Thailand in its group of high-performing Asian economies.

There have been different growth patterns and orientations in South-East Asia

Singapore has been transformed from a third-world economy into a first-world one in less than a generation. Malaysia and Thailand have climbed up the development ladder to the group of middle-income economies. Their chances of getting through to the smaller group of high-income economies appear to be good. In the history of Indonesia, the first 30 years under former President Suharto were a period of great economic growth. Such a long period of a sustained rapid growth is rare in Indonesian history. There have been a few episodes of rapid growth in Indonesian history, but they have amounted to a Sisyphean cycle, each of which ended in a deep fall. The Philippines was the first country to industrialize in the developing Asia of the post-war period. Its progress was halted in the 1980s under a frozen structure of authoritarianism that included nepotism among its elements. However, the Philippines can still be seen as a success story compared with many other developing economies.

However, South-East Asia is also home to Viet Nam, the Lao People's Democratic Republic and Cambodia (or Indo-China), which was a theatre of hot war for another 30 years after the end of the Second World War. The people of the three countries were exposed to extreme suffering. They could not immediately proceed to economic reconstruction following the end of the War. It took another 10 years or so before major economic reform was launched. Their proximity to large and rapidly growing economies seems to have sped up development in the three countries. Viet Nam has been growing at over 6 per cent, the Lao People's Democratic Republic at close to 6 per cent and Cambodia at over 5 per cent a year since 2000. Myanmar, too, is part of South-East Asia. This most western land of South-East Asia has suffered from a wide range of obstacles to sustainable development. Its basic development model is one of isolated socialism and changes have been very slow. As a result, very little is known about the Myanmar economy other than the facts that it is richly endowed with fertile soil, forestry resources and gemstones on the one hand and that it is globally notorious for illicit drugs on the other hand.

It would be a gross exaggeration to picture the current South-East Asia as an Eden of economic development. It is infinitely far from being such an idyll. Indeed, South-East Asians are compelled to draw lessons from the miraculous growth of the past, probe the future and craft a consensus on how to resume a winning participation in the merciless global competition. There are at least three reasons for such a strategic redirection: the need for restated strategic intents and dramatically reconfigured globalization, the imperative

of a new approach to economic development, and the extent to which regional integration is instrumental to attaining the redefined strategic intents.

When work and leisure are as highly mechanized as they are in the early twenty-first century, people increasingly lose the ability to steer life in a desired ideological or philosophical direction. Fordist processes have in fact reduced humans to adjuncts to machinery. Under such a system, humans propose and machines impose. Neo-Fordist processes, which centre around control mechanization, constitute no forces of freedom either. They narrow the room for intelligent work that is exclusively human. Bureaucracy obviously obeys a similar code of routines. Once established, an institution like ASEAN not only seeks to perpetuate itself, it also seeks to get the greatest possible human attention. ASEAN has firmly established itself in the political agenda of South-East Asia. It has given birth to the Treaty of Amity and Cooperation, the Bali Declarations of ASEAN Concord, ASEAN industrial projects, AFTA, the ASEAN Economic Community and many other initiatives. Just to service them, a relatively large bureaucracy is needed in the Secretariat in Jakarta and in different branches of national Governments. Ministers, senior officials and diplomats may have been too busy to rethink ASEAN in the light of the new environment.

***The rapid growth
of the past generates
both lessons for
consideration
as well as issues to be
managed in the future***

Genetically speaking, South-East Asia has been a success, precisely perhaps because it is a theatre for genetic recombination. Its share in the world population has risen and is projected to rise further in the course of the next 50 years. Such genetic success is not to be belittled. It proves an ability to grow and distribute sufficient food to a growing population. However, there is more to a lasting commonwealth than a rising share in the human genetic pool and even more in competitive commonwealths, which dominate the design of the manufactured things that humans rely on while seeking to maximize their prosperity. If one represents genetic treasure by the size of the population, **P**, the expected length of life by **L** and the welfare one enjoys the whole life through by **U**, then the content of life can perhaps be written as **P x L x U**.

Culture or the entirety of human-made things is critical to the magnitude of P, L and U. It can aid humans to optimize P, lengthen L and maximize U out of every unit of resources consumed. Unfortunately it also includes elements of destruction such as extremism of all sorts that often ends in wars, local and otherwise. Admittedly, South-East Asians might have contributed taro and ocean voyages to civilization a long time ago. They have also played an important role in introducing to the world diverse spices that helped humans in temperate zones to preserve food for the winter, thereby making the “Age of Commerce” that spanned almost the whole world a reality. Some important lessons may have lain hidden in the pre-crisis success of South-East Asian economic development, such as the design and deployment of market-conforming government interventions. However, most of the contributions have aged and declined in importance to civilization. South-East Asia’s lustre as a growth centre has dimmed with the rise of China and India. Investors and traders are becoming obsessed with securing a slice of the fastest-growing cakes of the early twenty-first century.

Whether one talks about science, literature, business firms or spiritual achievements, South-East Asians do not compare with Europe, China, India or Japan as originators. South-East Asian performance as a second mover in the context of development as rapid creative imitation of frontier industries is also less impressive compared with the Republic of Korea. In an increasingly science-driven civilization, such contributions are critical to lasting participation in the gene-culture co-evolution.

Difficult development circumstances and an unfinished post-crisis agenda for renewal and reinvigoration in the region

The initial condition facing South-East Asians in their endeavours to return to shared and sustainable rapid economic growth is difficult. Pending issues abounded even before the financial crisis of 1997. A large number of South-East Asians have to struggle for a better tomorrow by relying on inadequate human capital, as reflected in the limited literacy of the workforce and the prevalence of chronic diseases. South-East Asia's natural capital such as forests, mangroves, coral reefs and minerals has been greatly depleted without increases of comparable magnitude in physical and human capital. Transplanted institutions have yet to take firm root in the political universe of South-East Asians. The equality of all citizens before the law or adherence to non-discrimination has yet to be internalized by South-East Asians, including members of the ruling elites. Practices of governance leave a great deal to be desired among Governments and political parties, corporate organizations and civil society. Corruption is widespread in many places. It has become so cancerous in Indonesia, for instance, that any time the Government announces an anti-corruption initiative people are unmoved. Best-practice corporate governance has also yet to be diffused among South-East Asian companies.

On top of the unfinished pre-crisis agenda, the debris of the financial crisis of 1997 has turned out to be enormous. Capital formation as a percentage of GDP plunged in the crisis economies of Indonesia, Malaysia and Thailand in contrast to an exorbitant rise in China. Trade decelerated in South-East Asia, but accelerated in China, although the fluctuation is partly attributable to the global cycle. Flows of FDI to South-East Asia fell deeply in the post-crisis years. They even turned negative in the case of Indonesia. However, China rose to supremacy in the competition for FDI. The capital drain is even more dramatic if other flows of capital are taken into account. The average annual aggregate net resource flows to South-East Asia fell from US\$ 41,456 million in 1992-1996 to US\$ 22,306 million in 1997-2001, and the trend has yet to be reversed. The total external debt of South-East Asia shot from US\$ 371,329 million in 1996 to US\$ 652,287 million in 1998 before going down to US\$ 558,806 million in 2002. External debt-service payments rose in tandem from US\$ 47,753 million in 1996 to US\$ 55,343 million in 2002. The least that can be said about South-East Asia in the post-crisis period is that the constraints within which it has to struggle to return to shared and sustainable rapid economic growth have tightened a great deal. By contrast, the world market, where South-East Asia expects to find a tailwind to its reconstruction initiatives, is undergoing a wide range of changes that amount to an enormous challenge to all its participants.

Concentration and fragmentation after two waves of globalization

A good understanding of the co-evolution of competition and cooperation at the global level is a sine qua non condition for a winning return to shared and sustainable rapid growth. The word “globalization” has been used so frequently that it may feel uncomfortable to be confronted with it again. However, dwelling on it is an eternal agenda for fundamental reasons relating to life’s evolution.

Life perhaps began only once in only one physical location, whence it radiated to the entire earth. The ancestors of modern humans perhaps descended from the trees to the savannah only once and in a single physical location. Their descendants migrated and filled the earth within a relatively short period of time. As the descendants found new habitats, some replicated successfully, perhaps because the niches they were settling in happened to be so richly endowed as to allow time to be used for capital formation, notably the production of tools and the domestication of plants and animals. Large numbers in turn set forth physical differentiation. The little technologies that they brought along with them also evolved into an increasingly complex diversity. Following variations in physical environments and technologies, different ways for humans to relate to each other, to their ancestors, to the future and to nature, including other life forms, evolved. The dispersion of humans to different parts of the globe, and the cultural differentiation that goes along with it, was the first wave of globalization. It was centrifugal in nature and thereby laden with little seeds of conflict. Underprivileged members of a community could opt to avoid diametrical competition with the privileged ones and move farther away to the four winds.

The first wave ended perhaps 12,000 years ago with the colonization of the Americas. The second wave followed millennia later. It was a wave of conquests. Larger villages took over smaller ones, allowing the conqueror to build cities and larger commonwealths and States based on cities. It culminated in the victories of European clerics, traders and mercenaries over local elites in Asia, the Americas and Africa. Unlike the differentiation that was characteristic of the first wave of globalization, it was confiscation of treasures and forced conversion to imported religions that served as the distinguishing features of the second wave of globalization. The second wave was centripetal in nature. People fought their way to unusual concentrations of resources such as salt, coal, gold, nickel, silver, copper, zinc, diamond, cod, whales, nutmeg, cloves, pepper and sandalwood. They raced to secure a share of the world’s most beautiful beaches, lakes, meanders, mountains, valleys and strangely shaped rocks. The children of Eve from all continents competed for admission to the few top-ranking learning institutions. Noble and commercially promising ideas invited ambitious entrepreneurs. Friction, conflicts, disputes or even wars abounded in the centripetal motions of the second wave of globalization.

The early part of the twenty-first century is a product of the second wave of globalization. It consists of over 200 nations or human groupings possessing some features of a commonwealth. The world of the early twenty-

***Life and the
two waves of
globalization and
of cross-community
interaction in
human history***

first century is highly asymmetric on a number of accounts. In 2002, almost one half of the world's population was squeezed together in only five countries (China, India, the United States, Indonesia and Brazil). These countries together account for 24.6 per cent of the world's surface area and 43.3 per cent of gross national income in PPP dollars. Within each nation, a few mega-cities shine where humans are hived one on top of another. Wealth, work and income are also unevenly spread. The five largest national economies account for 48 per cent of the world's gross national income in PPP dollars. The five largest exporters have a combined share of 37.4 per cent in world exports of goods, and the five largest sources of FDI share 56 per cent of FDI outward stock in 2001 among themselves. By contrast, some nations suffer from extreme poverty, unable to engage in positive catching up for reasons related primarily to institutional weaknesses, such as an inability to enforce the laws. The average citizen of Sierra Leone has a gross national income in PPP dollars of only 490, or 1.4 per cent of that of an average Norwegian. Humans in some nations witness the perpetrators of atrocities going unpunished. The intercountry gap may have moderated with the economic rise of China and India. However, the interpersonal imbalance is more difficult to alleviate.

The multidimensional challenges of development and sustainability in the new millennium in Asia and the Pacific

Rising scientific and technological intensity is another distinctive feature of the early twenty-first century. The physical sciences have led to the rapid growth of a number of large-scale industries such as telecommunication and transport machinery and equipment, synthetic materials, including smart materials, pharmaceuticals and nanotechnology. Humans of the early twenty-first century have had a glimpse of genetic-based farming and animal husbandry. Advances in each of the streams of science are astonishing. Their integration into the science of technology may turn out to be even more so. The Internet provides a foretaste of what may come, if computers all over the globe unite into a global brain.

Humans often overrate their ability to keep their creations under control. However, the world of made things seems to have developed codes of evolution of its own. City planners are notoriously unable to control the expansion and decay of a city. The builders of the pyramids could not prevent other great builders from impressing the world with different wonders. No inventor or innovator is able to arrest technological change. Love of fame and greed force artists, entrepreneurs and professionals to outperform reigning champions by delivering uniqueness, which first may look anomalous before it turns into a dominant design, only to be pushed aside later by new uniqueness. Some made things backfire unexpectedly even with the best of precautions. The hole in the ozone layer, the Exxon Valdez, Union Carbide's Bhopal and the Chernobyl meltdown are a few examples of how man-made things can lead to catastrophe.

The uncontrollability of man-made things applies to their impacts on globalization or the movement of goods, services, information, capital and people as well. Accumulation over time allows technologies to overcome increasingly greater distances. Physical distances and time are said to be compressed following the adoption of new technologies. Information and

communication technologies and transport technologies are cases in point. With them other man-made things increase tremendously in mobility, including perishable goods and a wide range of services. It can indeed be argued that technological change serves as a push factor for globalization. Governments may take a defensive position against new technologies for reasons related to job preservation. They may also erect high barriers against technologies originating in foreign countries to protect local producers. Such defensive measures have turned out time and again to be unsustainable. Sooner or later they are relaxed or even removed. Similar forces of globalization are also hidden in any best practices. No tyrant is able to permanently ban great musical opuses or great literary works.

If best practices of man-made things are endowed with the force to spread out to even most distant coordinates from their respective origins, then globalization is an inherent human evolution. That the fruits and costs of globalization are spread unevenly is another issue. Some symptoms of the imbalance were mentioned earlier. The world as it exists in the early part of the twenty-first century is a puzzling mixture of very high concentration on the one hand and fragmentation into micronations on the other. The mixture can be seen as the outcome of the first two waves of globalization. Being centrifugal in nature, the first wave created fragments of human groupings. The centripetal second wave consolidated some of the fragments into larger groupings, of which some became very big indeed. However, a great number of the first wave's fragments have survived the forces of concentration in the second wave.

Reinvention of the region: the binding glues

Will there ever be a third wave of globalization? The finale of evolution is yet to come. Between now and the reduction of matter to dust, globalization may still have to evolve through countless stages unknown to contemporary humans. Some nations are very big and seem cohesive like China and the United States. Some are very big but look unstable like Indonesia, the Russian Federation and India. Some nations are small in population size but huge in terms of territory such as Australia and Canada. A great many appear to be too small to sustain some of the usual national symbols such as national currencies and airlines. However, the world has repeatedly witnessed buoyant city States such as Venice in the age of commerce and Singapore and Hong Kong, China, in the current era. Some have underexploited their advantages such as Indonesia. If nations were like businesses, mergers and acquisitions on the one hand would have been occurring very frequently and so would spin-offs on the other hand.

Reconfiguration is an ongoing process in global politics. The United States reached its current size partly because of takeovers in the literal sense of the word. The future direction of change is hard to guess, however. Technologies of demassification carry the forces of deconcentration, while those of massification release forces of agglomeration. The constellation of nations is bound to oscillate within the band of the two forces. Evolution is indifferent to whether or not the United States, the Russian Federation and

Reconfiguration of relationships, cross-border integration and sovereignty

Indonesia maintain their current borders or disintegrate into smaller units and whether or not Switzerland, Austria and Lichtenstein remain as they are or fuse into a single State. Nevertheless, one can argue in favour of smaller nations coming together in a larger nation. Gravity, as we know from Isaac Newton, depends on mass. An inward-looking nation may have no interest in raising its gravity. In a world of multinational competition, having a higher gravity means strength. It pulls in superior talent, capital and trade in goods and services or the factors that serve as sources of distinction.

In spite of globalization, the nation has remained the dominant mode of how humans are grouped with one another. Its fundamental glue lies in sovereignty. Challenging the nation and sovereignty as outmoded features of human commonwealth is counterproductive, however valid. The United Republic of Eve's Children is not only not realistic, it is also a danger to diversity, serving, as it has, as a springboard to cultural advances and rejuvenation. To be adopted, any new mode of grouping will have to live with national sovereignty. Given such an initial condition, a reinvented regionalism appears to be a promising third way.

Under regional integration, member States do not dissolve. What happens is a pooling of some elements of sovereignty into a quasi-regional sovereignty. Classic examples include the sovereignty to formulate border protection, be it through tariff or non-tariff barriers. The EU is a case in point. It has evolved from modest integration to deeper integration and has proved so far to be the most successful of all regional integration initiatives. Needless to say, there are other successes, but they are either very modest or are short-lived or Sisyphean in nature. Failure to pass the test of time is attributable to trivial disputes in some cases, including, of course, ones that do not relate to regional integration at all.

***Capitalizing on
developed networks
and relationships,
regional integration
has been reinvented
in South-East Asia
and elsewhere
as well ...***

Factors behind the current tsunami of regional integration are hard to discern. Whatever they are, it is indisputable that Governments around the globe have reinvented regional integration in a number of ways. Regional integration has become the rule rather than the exception as is implied in article XXIV of GATT. Even countries which used to avoid membership in a regional grouping in favour of multilateralism and have profited handsomely from such a basic policy have recently jumped on the bandwagon of regional integration. All the major trading countries have joined or are in the process of joining regional integration. What is more, the new designs of regional integration are more daring than their predecessors. They are no longer confined to border measures, partly perhaps because such confinement would mean little in terms of liberalization effects, given the success of GATT or WTO in bringing border protection measures down to triviality. Domestic measures such as investment performance requirements, elements of competition policy and elements of environmental policy and standards have entered into regional integration agreements. Obviously, Governments are more willing to negotiate on domestic measures in a regional context than they are under WTO.

ASEAN, too, has become more receptive to economic integration. Twenty years ago, when the region was hit by recession, integration was still considered taboo. In the 1990s leaders of the region changed their position. AFTA was agreed upon in 1992. In the following decade, ASEAN experienced a number of important developments in favour of integration. Its membership widened to cover the whole of South-East Asia. Relations with the rest of the world were strengthened. ASEAN is linked more closely with North-East Asia, i.e., China, Japan and the Republic of Korea. An East Asian free trade area is expected to come out of the ASEAN+ 3 arrangement. Beyond East Asia, India, Australia and New Zealand have been drawn closer to ASEAN. It may only be a matter of time before a similar relationship is woven between ASEAN and other major trading areas, notably the EU, the United States and Latin America. ASEAN once again is being given the honour of playing a central role in giving birth to a large regional grouping having had a similar chance of playing the role of a hub in the early days of APEC.

Nothing is by necessity wrong with the current enthusiasm of East Asians about regional integration. The inclination of China, Japan and the Republic of Korea is to capitalize on the networks that ASEAN and its dialogue partners have stitched together over a relatively long history of ASEAN's external dialogues. This is also no surprise considering the unfinished business of normalization of relations between Japan on the one hand and China and the Republic of Korea on the other. However, South-East Asians are well advised to speed up doing their homework to do justice to their status as the hub of East Asian regional integration. It can never be overemphasized that ASEAN failed to play the role of a hub in respect of APEC.

***... but with
varying degrees of
enthusiasm, among
other inherent
constraints***

First of all South-East Asians are no fanatics of regional integration. Even within the narrower boundaries of ASEAN, real support for regional integration has not been as strong as the verbal support suggests. The successes or failures that the member countries have experienced are only remotely attributable to ASEAN integration and cooperation. It is global orientation that makes Singapore a success. The same can be said of Malaysia and Thailand as well as Indonesia and the Philippines. Considering the thin support at the grass-roots level, any regional integration initiatives should be prepared thoroughly. Repeated failures can accumulate to give a fatal blow to ASEAN's existence.

Second, other countries of East Asia are no enthusiasts of regional integration either. China is a region on its own merits. Its special administrative region, Hong Kong, and Taiwan Province of China add to its huge size as a region. Japan is completely new to regional integration. APEC has not been a real test for seriousness about regional integration among its members, including Japan. It and other sceptics can point to the successes of Japan, the Asian newly industrialized economies and China as undeniable evidence that multilateral non-discrimination is a viable route to economic transformation. Bringing China, Japan and the Republic of Korea into an agreement on deep East Asian integration is a mammoth task. Furthermore, China is faced with the issue of Taiwan Province of China. The one-China policy which most

Governments still adhere to coexists with an economic policy which is friendly to both China and Taiwan Province. In addition, East Asia is home to the thorny issue of the Democratic People's Republic of Korea seemingly leveraging nuclear capability with inflows of economic resources.

East Asian integration among private sector players and actors has been more advanced ...

Third, private sector-driven integration has advanced in East Asia without a formal agreement on regional integration. It is reflected in very high and rising intra-East Asian trade, a large and growing share of intra-East Asian investment in the region's FDI thanks to the graduation of the Republic of Korea; China; Taiwan Province of China; Hong Kong, China; Singapore; Malaysia; and Thailand into the group of FDI originators following Japan. The movement of people for business and tourism purposes has also risen strongly in the region. If they are only for the sake of rising East Asian economic interactions, formal agreements on regional integration may not be a necessity for East Asia. Judged from the scale of intraregional flows, East Asia, rather than South-East Asia, appears to be the optimal region, although within an East Asian community, South-East Asia can still survive as a subregion, at least temporarily. Interestingly, the East Asian region is linked strongly with the Pacific economies of the Americas on the one hand and the European economies on the other. The three form a triangular relationship, which has lately started to receive more serious attention with a view to exploring possible linkages between them on top of the linkages that the private sector has accumulated over a very long history.

Fourth, within the world economy, ASEAN is small. Even in East Asia the combined economy of South-East Asia is much smaller than those of China and Japan respectively. ASEAN's gravity is limited. Its relatively small economy is fragmented into smaller national economies. Some of the national economies also suffer from divisive forces. Under the newly gained democracy, for example, district governments of Indonesia, of which there are roughly 400 at the time of writing, are fond of fencing their respective districts with barriers to inter-district movements of goods, services, capital and people. Myanmar is one of the few economies which are exposed to economic sanctions or warfare in the post-Cold War period. Some places in South-East Asia are notorious for illicit drug production.

... and deeper and faster integration within South-East Asia will render the subregion effective and relevant as a binding glue for East Asian integration

Fifth, ASEAN has no choice but to accelerate economic integration if it is to do good service to East Asian integration. The only way South-East Asians can compensate for the handicaps described earlier is to integrate deeply and quickly. To be effective as the centre of gravity of East Asian integration, intra-ASEAN integration should be deeper than extra-ASEAN integration. Intra-ASEAN integration must also precede extra-ASEAN integration. Macroeconomic cooperation should proceed faster within ASEAN than between it and the rest of the world, notably with the three East Asian dialogue partners. Greater integration and earlier movement in intra-ASEAN integration will prevent the dilution of ASEAN inside its huge neighbours from occurring. The differential in depth and timing should be designed as a tactical matter to allow regional integration to granulate. After a relatively short transition, the differential should be abolished in the sense that preferential relations should be uniform across East Asia rather than sandwiched in two or even more layers.

How can ASEAN be made to move faster? The experience in its first 37 years is not very encouraging. If the depth of integration that ASEAN has undertaken were divided into 37 units, the result would look too trivial to justify the resources sunk into it. The only encouraging part of the history is the acceleration over the last decade or so. The history of regional integration shows that strange attractors are needed to produce great ideas of integration and to push their implementation ahead. Around such strange attractors, elements of integration would granulate. In the case of European integration, the strange attractors consist of a few visionary political leaders; artists, especially poets, who coined Europeanness time and time again; scientists who discovered the codes of life through cross-sectional and intertemporal reinforcements; union leaders who minted regional solidarity as a way of improving bargaining with employers; capitalists who dare to fight vehemently against detrimental government acts of discrimination; and last but not least, activists from different walks of life who look at regional integration positively in the sense of having the potential to offer greater room for the advancement of humanity than individual nations usually can.

East Asia is not particularly fertile soil for deeper regional integration. Student and teacher exchanges are very limited among East Asian institutions of learning. East Asian children prefer the torture of American, European and Australian learning rather than that of their respective East Asian neighbours. Yet strong glues are difficult to conceive among people who happen to come across each other by accident. To breed the strange attractors, especially people of different East Asian origins who are mutually committed to East Asian integration, strong and wide networks of learned people with shared experience and future expectations are needed. The Governments of East Asia should invest in such networks or else the steps that they have taken will lead nowhere and East Asian integration will remain a daydream which easily sinks into oblivion.

IV

BUSINESS PROCESS OUTSOURCING: IMPACT AND IMPLICATIONS

By Biswajit Nag¹

Introduction

Business process outsourcing (BPO) from the United States to India has become a hot topic for the media in both countries in recent times. About 20 states in the United States have tried to put up legal barriers against the awarding of state contracts to non-United States companies. The flight of white-collar jobs from developed countries to low-wage developing countries in the form of BPO has threatened the prospects of many IT-enabled services (ITES), especially in low-skill sectors in developed countries. The issue has become politically sensitive, as several lobbies want to stop this flight of jobs. In an era of globalization, when the free trade of goods and services is being promoted, the wave of protectionist attitudes in cross-border trade in services has raised the eyebrows of many pundits.

Outsourcing is an arrangement in which one company provides services for another company that could also be or usually have been provided in-house. Outsourcing in manufacturing is nothing new. The rapid development of the IT sector, leading to increased cross-border trade of ITES, has widened the scope of outsourcing. In recent times, however, the concept of outsourcing has experienced a sea change. The traditional perception of outsourcing has gone far beyond the use of other local firms in various operations (such as hiring law firms for legal advice or companies like FedEx or UPS for logistics control). ITES offers companies more complex jobs to achieve transformational outcomes much more quickly (such as payroll or bank loan processing, and customer relations management through call centres), hence the term BPO.²

Today, outsourcing is possible from single aspects of IT to offloading the entire business functions to be performed and managed away from clients' locations and even in a different country.³ Most of these services were previously tradable only by the movement of providers. Rebecca Scholl,⁴ an

***Rapid development
of ICT has intensified
cross-border
trade in services,
especially in ITES***

¹ Indian Institute of Foreign Trade, New Delhi, India.

² According to Dataquest, BPO implies the delegation of an IT-intensive business process to an external provider which owns, administers and manages it according to a defined set of metrics. *Source:* < <http://www.cio.com/archive/050101/bpo.html> > , 24 March 2004.

³ Companies may procure these services either through external contracts with BPO vendors (outsourced) or through a remote subsidiary of the same company (offshored/out-located).

⁴ < <http://www.cio.com/archive/050101/bpo.html> > .

analyst from Gartner who views BPO as a distinct, expanding market, acknowledges that many of the services that vendors are labelling BPO do not fit any definition. “Lots of vendors trying to reposition as BPO providers are just doing IT outsourcing”, she says. “They’re providing an application. They are not really responsible for a process”. However, whatever may be the definition of BPO, there is a definite payoff in engaging in many activities that have been labelled as BPO⁵ in general. “Early inhibitors to BPO were security risks, bandwidth shortcomings and general technological immaturity”, says Scholl. “But recent improvements in collaborative technology and interconnectivity have strongly encouraged it”.

Cheaper labour cost, higher efficiency and better quality are the main driving forces of BPO providers

Countries like India, Brazil, the Philippines, Dominica, Israel, China, Romania and the Russian Federation have witnessed a surge of BPO provider companies catering for the needs of companies of the developed world and creating many employment opportunities in the process. FDI from developed countries in the BPO sectors of these countries is also growing rapidly. Cheaper labour cost, higher efficiency and better quality are the main driving forces of these BPO providers. As a consequence of this, the debate about job loss versus productivity gain has been geared up in the developed world.

Dimensions of BPO

BPO is often divided into two categories: back office outsourcing, which includes internal business functions such as billing or purchasing, and front office outsourcing, which includes customer-related services such as marketing or technology support. BPO that is contracted outside a company’s own country is sometimes called offshore outsourcing. BPO that is contracted to a neighbouring country is sometimes called nearshore outsourcing and BPO that is contracted within the company’s own country is sometimes called “onshore” outsourcing.⁶

Apart from IT applications, companies are outsourcing front and back office operations also

Outsourcing is a trend that is becoming more common in information technology and other industries for services that have usually been regarded as intrinsic to managing a business. In some cases, the entire information management of a company is outsourced, including planning and business analysis as well as the installation, management and servicing of the network and workstations.⁷ However, as mentioned earlier, from offering single IT services BPO has come a long way and now covers an array of operations from finance, banking, insurance, human resources development and training

⁵ In this article, BPO will be used as a generic term to include basic and advanced ITES and processes, IT application and related services and more complex business transformation outsourcing.

⁶ < http://searchcio.techtarget.com/sDefinition/0,,sid19_gci928308,00.html > , 20 April 2004.

⁷ Outsourcing can range from the large contract in which a company like IBM manages IT services for a company like Xerox to the practice of hiring contractors and temporary office workers on an individual basis. *Source:* < http://searchcio.techtarget.com/sDefinition/0,,sid19_gci212731,00.html > , 20 April 2004.

to health care, mortgage and credit card services, asset management, customer care, logistics and distribution, engineering, procurement, real estate, sales and marketing and web-related services. The table below lists some of the important services which are increasingly being outsourced.

Elements of business process outsourcing					
<i>Customer interaction services</i>	<i>Back office transaction processing</i>	<i>IT/software operations</i>	<i>Finance and accounting services</i>	<i>Human resource services</i>	<i>Knowledge services</i>
Customer service	Cheque, credit/debit card processing	Requirements engineering	Billing services	Payroll services	Data analytics
Voice/e-mail	Collections and receivables	Application development	Accounts payable	Health-care administration	Data mining
Marketing services	Direct and indirect procurement	Application testing	Accounts receivable	Hiring and recruitment	Data/knowledge management
Telesales	Transport administration	Packaged application outsourcing	General accounting	Workforce training	Customer feedback
Order processing	Logistics and dispatch	Implementation services	Auditing and compliance	Retirement benefits	
Customer support	Warehouse management	IT help desk			
Warranty administration					
Customer feedback					

Source: < <http://www.ebstrategy.com/BPO/basics/default.htm> > , 24 March 2004.

According to Namasivayam (2004),⁸ non-core and critical business processes such as IT services, manufacturing and finance are the fastest-growing outsourcing segments, as companies are moving towards outsourcing these services to third-party providers. Over time, many business processes which were treated as core have become non-core and companies opt to outsource them.

It may be pointed out that simpler services such as data entry and other basic processing tasks are considered as low-value and low-risk operations and bring low margins. Rules-based operations such as payroll processing are at the intermediate level in terms of value and risk. BPO relating to decision-making and problem-solving operations involves high-value and high-risk jobs. When BPO services include direct contact with

⁸ S. Namasivayam (2004), "Profiting from business process outsourcing", *IT Pro, January-February*, < <http://www.computer.org/itpro/it2004/f1012.pdf> > , 17 April 2004.

customers or clients (e.g., call centre operations) the skill requirement increases dramatically as the success of a deal depends on excellent communication and knowledge of the industry concerned and the client’s mindset. When service providers offer consulting and advisory services, complex services requiring business skills and advanced services (such as risk management and sophisticated data analysis), profit margins of BPO providers are significantly higher.

Benefits of BPO: more than just cost-cutting

Changing nature and scope of BPO

After over a decade of economic boom times, the recent global economic turndown has significantly accelerated and intensified market competition pressures, causing many corporations to seek innovative ways to deal with the changed economic landscape. In the process, an increasing number of organizations worldwide have turned to BPO, which has significantly lower overhead costs without sacrificing quality and productivity levels. Today, BPO is considered not only as a simple cost-cutting mechanism but also as a strategic initiative, which is expected to shape and ready the organization for future business dynamics. Apart from cost-cutting, BPO saves precious management time and resources by allowing companies to concentrate on core competencies. BPO providers always have a process expertise and enjoy significant economies of scale and scope by offering the same services to different clients. Figure I shows how BPO can save a significant amount of costs for companies.

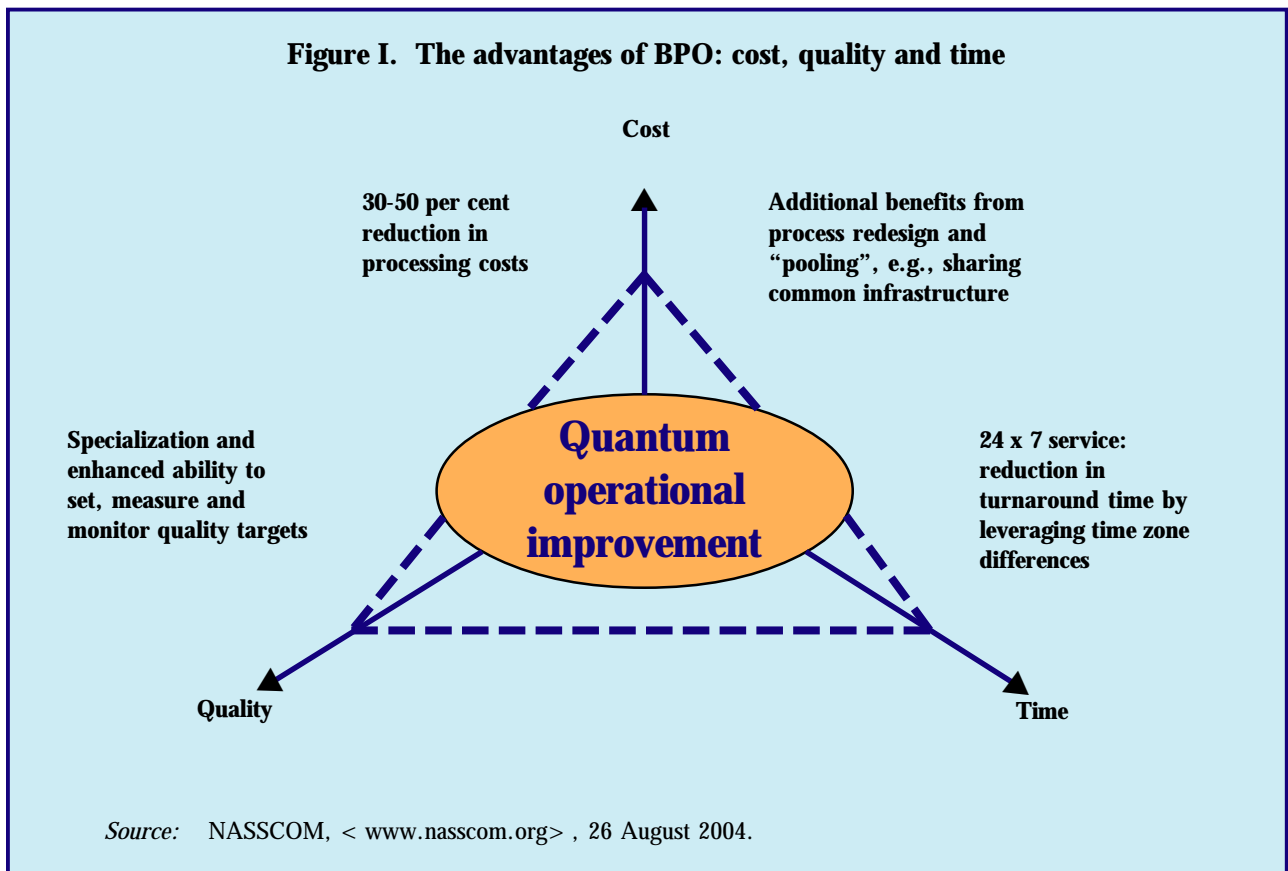
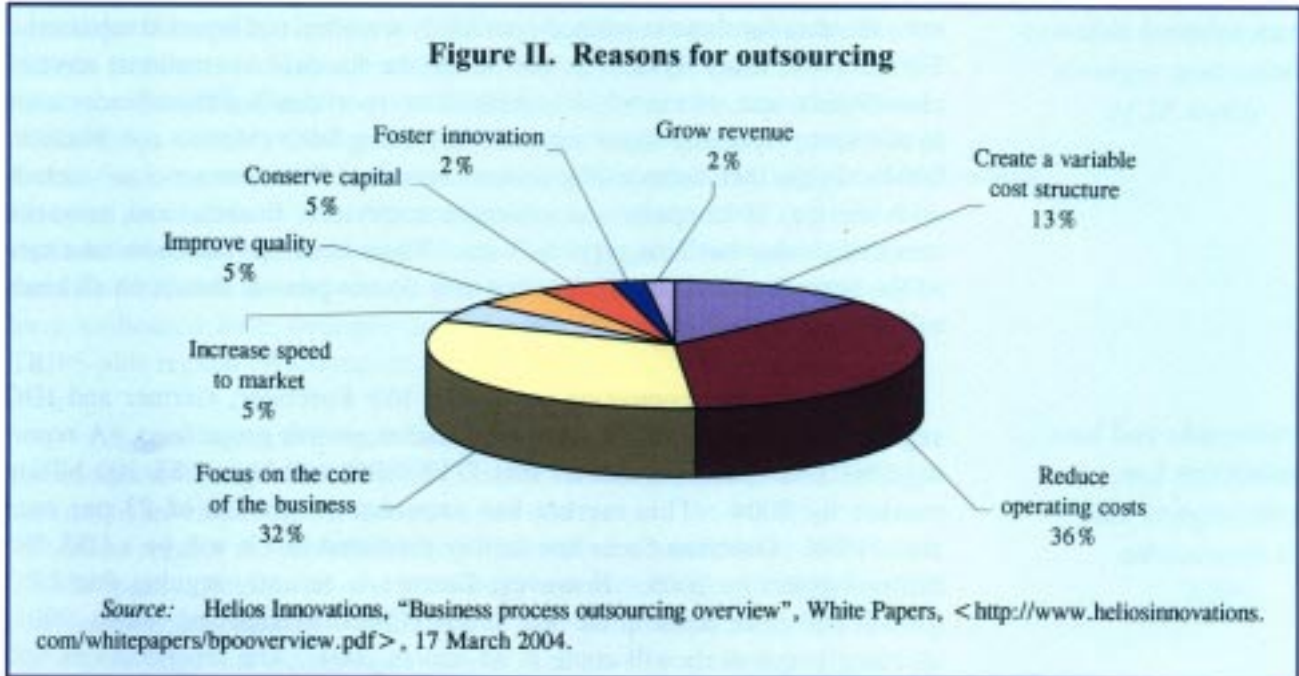


Figure II shows the importance of various factors which induce companies to outsource some processes. Reducing operating costs and focusing more attention on the core activities of the company are the main reasons behind outsourcing. Additionally, the availability of variable cost structures, improved quality and speedier services are other important considerations and plus factors as well.



However, the positive implications of BPO services for a company's performance also depend on the managerial ability of the BPO client company. They are closely related to the company's goals, objectives and vision, the selection of the BPO provider, the development of a structured contract, the mutual relationship between provide and buyer and the financial justification. More than ever, managers of IT outsourcing and BPO need a sophisticated set of skills to keep the dynamic relationships in balance. Before engaging any vendor to provide BPO, a company needs to clearly understand the requirements for BPO and their technical feasibility. During the engagement of a BPO vendor, a detailed solution design needs to be articulated and a pilot project may be run so as to transfer the knowledge base to the vendor. BPO contracts should be evaluated regularly as technology requirements and cost structures vary considerably over time.⁹

Technological feasibility, managerial skill and understanding between vendors and clients are important for successful BPO

⁹ Source: < <http://www.heliosinnovations.com/whitepapers/bpooverview.pdf> > , 17 March 2004.

Analysing trends in cross-border BPO trade

BPO market size and trade

Inadequate measures of cross-border BPO

Lack of reliable estimates has made it difficult for researchers to analyse the trend and predict the future of the BPO market. It is hard to distinguish among many BPO services, as customer care often combines the operation of a call centre, customer database upgrade, technical support, etc.; the data for these combined operations are often not reported separately. Furthermore, many services do not fit into the standard international services classification and, as a result, it is difficult to report detailed cross-border trade in services, especially those segments involving BPO (Mattoo and Wunsch, 2004). In the IMF balance-of-payments statistics, “business services” include such services as computer and information services, financial and insurance services, “other business services”, etc. These headings somehow take care of the aggregate trade in services but they do not provide details on all kinds of BPO.

International consulting companies like Forrester, Gartner and IDC report opportunities in BPO and offer market growth projections. A report by UNCTAD (2003) indicates that ITES/BPO will be a US\$ 300 billion market by 2004. This market has experienced growth of 23 per cent since 1999. Goldman Sachs has further predicted that it will be a US\$ 585 billion market by 2005. However, Gartner is recently arguing that BPO growth will come down in the near future (Chandrasekhar and Ghosh, 2003) as many major deals will come to an end in 2004. The renegotiations will have to give due importance to a number of problematic issues such as the lack of quality and timely delivery, which have arisen in many cases in practice, and the potential of various BPO providers for further growth. Forrester Research predicts that a BPO market bonanza is a myth and the market will grow to only US\$ 145 billion in 2008.¹⁰ The market itself will also be fragmented into segments such as simple bulk transactions (e.g., credit card operations), broad shared services (such as finance and administration), high-volume vertical processes (including policy administration, claims and loan processing) and niche vertical applications (such as environmental data reporting and chemical process monitoring).

The BPO market is still immature but has huge potential

The majority of companies obtaining services from BPO providers have their headquarters in the United States. According to an IDC-TPI survey,¹¹ 42 per cent of all active outsourcing engagements now have an offshore component. In addition, 63 per cent of the outsourcing advisers surveyed identified offshore labour supply as the top driver of IT services, edging out economic conditions by 1 per cent. However, until now most of the big companies have shopped around for BPO providers. Of late, SMEs from developed countries have started choosing outsourcing as a business policy in order to obtain quality service at a cheaper rate (UNCTAD, 2003). This reveals a huge potential but needs some time to be realized.

¹⁰ John C. McCarthy and others, “BPO’s fragmented future”, Forrester Research Inc., 2003.

¹¹ Ibid.

Opportunities for developing countries

According to UNCTAD, the steady improvements in IT infrastructure, a steep decline in the costs of telecommunications and IT equipment, and the increased accessibility of the Internet have opened the way to the development of BPO services in both developed and developing countries. The process has been further fuelled by the increasing demand for cost-saving measures from enterprises in the United States and Europe. The lower cost of employing skilled and specialized workers is said to reduce operational costs by up to 60 per cent. Thus, the rapid internationalization of these services offers developing countries a chance to exploit higher-value niches.

Drawing examples from different countries, the same UNCTAD study also notes that with the minimum telecommunication infrastructure, BPO can materialize in developing countries, including the least developed countries, especially in the form of basic data entry services, where the required skill level is low. In Cambodia, for example, a charity-funded enterprise called DDD (Digital Divide Data) is providing outsourced data services to clients while at the same time offering jobs and educational opportunities to disadvantaged groups. DDD partners with an Indian firm, Cyberdata, which provides it with clients in exchange for software and IT and management training. DDD outsourced 60 per cent of its activities to Cyberdata in 2002, as compared with just 30 per cent in 2003.

The benefits of BPO in developing countries could come directly in the form of job creation, a positive impact on infrastructure development, and diffusion of technology and ideas in domestic manufacturing and even in agriculture. This applies especially to the provision of information on marketing and prices, helping business-to-business communications and e-commerce applications, and even the processing of some services of domestic companies. Developing countries may also receive substantial amounts of FDI in the BPO sector (Baily and Farrell, 2004). The UNCTAD report (2003) also mentions that once the required ICT infrastructure is ensured, ITES will broaden the job prospects for women interested in working from home. Women are also employed on a large scale in different services such as call centres and data entry jobs.¹²

The BPO industry, moreover, has produced a promising niche for SMEs from developing countries as the enterprises require a small amount of start-up capital, basic telecommunication and other ICT infrastructure, and low-wage workers. In the absence of largely English-speaking, highly skilled and professionally trained manpower, national Governments in many countries with international support can win a slot in the BPO market especially in non-voice-based low- to medium-skill segments of BPO such as payroll and database preparation. This is not necessarily true in the case of IT services, which require more advanced skills and infrastructure.

Countries with minimum telecom infrastructure can also become BPO providers

¹² More than 50 per cent of employees are female in large Indian BPO companies such as Wipro's BPO segment, ICICI One Source and Daksh E-Service (UNCTAD, 2003).

Successful examples of BPO providers

India, with its skilled English-speaking workforce and salaries up to 80 per cent lower than those in developed countries, has captured a dominant share of the international outsourcing market. It is a primary outsourcing centre for software contracts. The ITES-BPO market remains a high-growth segment for the Indian software and services industry. According to NASSCOM,¹³ more than 200 companies are directly involved in this business and in 2003/04 the industry registered a growth rate of 54 per cent and total revenue reached US\$ 3.6 billion. The sector has employed more than 240,000 people and employment is expected to reach 1.1 million by 2008. Almost of a quarter of the total of India's IT and related exports are from the ITES/BPO segment. The box below describes the key trends in the Indian BPO sector.

Diversifying sources of BPO providers

Of late, however, countries like the Russian Federation, Romania, Brazil, the Philippines, Thailand and China are increasingly being considered as favourable destinations since companies from many developed countries find greater benefits in outsourcing processes there. Furthermore, a study by A.T. Kearney¹⁴ showed that Latin American countries are fast becoming popular because of their low-labour costs, their proximity to the United States and their location in the same time zone. Companies such as Xerox and Unisys have committed to outsourcing in Brazil owing to its large investments in ICT infrastructure and large pool of skilled labour. AOL Time Warner has opened call centre services for its Spanish-speaking customers in Mexico. The Philippines, owing to its familiarity with United States standards of service, especially in accounting, has become a popular outsourcing centre for such companies as Procter and Gamble, AIG, American Express and Citibank.

For European transnational corporations, Central European countries are becoming the popular source for outsourcing activities owing to their cultural and linguistic similarities, greater ease of ensuring compliance with European regulations (e.g., those pertaining to privacy) and the high levels of their technical capabilities. General Electric has invested significantly in Hungary over the past 12 years, moving a number of business processes to that country, in particular to support GE units across Western Europe. The Russian Federation, too, has a large pool of technical talent and Russian aeronautics specialists in seven cities are designing parts of the 777 aircraft.

BPO trends have shown that the comparative advantage of developing countries will not be limited to standard "back office" services. In India cross-border service exports have already started to be transformed from lower-end, disentangled BPO services to more integrated services. In the process, companies are moving up the value chain by focusing on innovation, consulting, branding and increasingly integrated services such as online training and product design. The rising wages in the BPO sector in India and the movement of Indian service suppliers to higher-value analytical tasks are expected to induce other countries to step in where wages in BPO are relatively low.

¹³ Source: < http://bpo.nasscom.org/artdisplay.aspx?cat_id=619 > , 31 August 2004.

¹⁴ Sources: Mattoo and Wunsch (2004) and < <http://www.atkearney.com> > , 20 April 2004.

Indian BPO sector: key trends

The Indian ITES-BPO industry was a key driver of the overall Indian IT software and services sector during 2003/04, recording revenues of US\$ 3.6 billion in that period. The key trends of the industry are as follows:

- **Increasing maturity:** The industry is rapidly gaining maturity and consolidation, following a large number of mergers and acquisitions during 2002/03. The trend towards maturity has been escalated by the entry of traditional IT services players, which have added the ITES-BPO portfolio to their existing offerings in order to provide customers with a complete umbrella of end-to-end services. The idea is to leverage the synergies between their ITES-BPO operations and the IT services offerings.
- **Growth in multiple vendor and BOT contracts:** The Indian ITES-BPO industry is witnessing an increase in multi-vendor and build-operate-transfer contracts which offer customers advantages such as low risks, scalability and competitive pricing.
- **Expansion of the services footprint:** Indian ITES-BPO vendors are expanding the spectrum of their service offering in client locations and even setting up facilities in other low-cost ITES-BPO destinations such as China and the Philippines, in order to tap these markets.
- **Higher value added offerings:** A number of Indian ITES-BPO vendors are moving up the value chain to offer high-end services such as equity research and analytics, insurance, and technology support and development.
- **Vendor polarization:** Growth within the ITES-BPO segment is becoming centred around the larger players that can offer clients benefits such as scalability, delivery capability, track record, customer referrals, etc. Industry observers believe that by 2005 the Indian BPO industry will have 8 to 10 US\$ 100 million third-party BPO companies. This will give companies a critical mass to compete against multinationals such as EDS, Computer Sciences Corporation and Accenture. Further, it gives prospective clients enough confidence to trust them with larger contracts.
- **Expanding capacity:** The Indian ITES-BPO industry, including MNC, and third-party service providers have been expanding their capacities during 2002-2004. The number of seats has increased from 140,000 at the end of March 2003 to around 210,000 in March 2004. Captive units account for almost 65-70 per cent of the existing capacity.

Source: < http://www.nasscom.org/artdisplay.asp?cat_id=667 > , 2 August 2004.

Emerging issues

To estimate the potential of the BPO industry in a particular country is a difficult task as the size of the market depends on a variety of assumptions and predictions; furthermore, BPO in a developing country is typically a new issue. Commonly quoted estimates do not make clear which segments of the market are involved. Many BPO deals are also being renegotiated and scrutinized as increasingly it is being realized that finding the best single vendor to manage complex processes is a difficult proposition. There are other issues like the lack of performance matrices, inflexible contracts, delivery and quality problems (especially in voice-based BPO) that pose new questions about the growth of the BPO industry in developing countries in the coming years. Poor privacy laws and monitoring violations in developing countries are another set of issues for consideration by many companies from the developed world.¹⁵

***Excessive competition
will drive down prices
leaving little benefit
to BPO vendors***

¹⁵ Economic and Political Weekly, "BPO: cautioned ahead", EPW Editorial, 27 March 2004.

If the market is unlikely to grow rapidly, then the scope for new players is limited unless the market is redistributed. Many critics argue¹⁶ that, as in the case of primary products, competition between developing country providers of lower-end services will commoditize some of the basic processes. This would drive down the prices and transfer the benefits of low wages to international corporations, leaving little behind in the developing world. Moreover, BPO clients typically try to minimize their risk exposure, committing a small amount of investment in developing countries, thus transferring the entire risk to BPO providers. It is also expected that BPO business will become fragmented into different lines and there is a possibility that different countries will specialize in different aspects of BPO.

Finally, BPO services constitute a tiny portion of the organized service sector and employment opportunities are limited mainly to educated youth in urban areas. Interestingly, in a country like India, high staff turnover is observed in the BPO sector (annually around 50 per cent in call centres) for such reasons as job-related stresses and the availability of jobs in rival companies with higher wages (Chithelen, 2004). Rising costs for hiring and training and the higher wages needed to attract quality employees are making India's BPO services more expensive.

Issues in developed countries: productivity gain versus job loss

Productivity gain through BPO is significant in the United States

The impact of the global division of labour through cross-border BPO on efficiency gains in developed countries is remarkable. Prudential, the British insurance company, is expected to save US\$ 26.2 million through the creation of 1,000 offshore customer service jobs in India.¹⁷ General Electric saves about US\$ 350 million per year through the 18,000 offshore Indian employees.¹⁸ The United States banking industry alone saved around US\$ 8 billion in the last four years as a result of outsourcing.¹⁹ In general, the savings figures usually range from 30 to 60 per cent.²⁰ Most BPO clients have reported significant productivity gains, ranging from 15 to 25 per cent. McKinsey Global Institute showed that for every dollar of corporate spending outsourced to India, the United States economy gains as much as US\$ 1.14 in return.²¹ As only around 5 per cent of United States firms with revenues

¹⁶ C.P. Chandrasekhar and Jayati Ghosh, "Outsourcing for development", published in *The Hindu Business Line*, 02 December 2003.

¹⁷ "India fears impact of bid to curb jobs exports", in *The Financial Times*, 4 June 2003, cited in Mattoo and Wunsch (2004).

¹⁸ "US firms saved US\$ 8 billion via local outsourcing", in *Business Standard*, 16 April 2003, cited in Mattoo and Wunsch (2004).

¹⁹ Ibid.

²⁰ "U.S. gained US\$ 17 billion from outsourcing to India", in *Deccan Chronicle*, 7 July 2003, "Indian outsourcing costs", at < www.vnunet.com >, 1 January 2003, and "The case for, and against, shifting backoffice operations overseas", in *Wharton Papers*, 9 October 2002.

²¹ Baily and Farrell, "Exploding the myths of offshoring", *The McKinsey Quarterly*, July 2004.

from US\$ 100 million to US\$ 4 billion have started to outsource, much untapped potential for this sort of cost saving and productivity gain remains (Mattoo and Wunsch, 2004).²²

Business Week (22 March 2004) reports that since the start of the recession in March 2001, output per hour in the United States has risen at an astounding 4.6 per cent annual rate, which is far ahead of the 1.8 per cent productivity growth of the previous recession and recovery of the early 1990s. Higher productivity has enabled corporations to boost profits while holding down price increases. Higher corporate operating profits are associated with a very low inflation rate, averaging 1.5 per cent a year since 2001, and this has helped consumers to save hundreds of billions of dollars.

While BPO and IT outsourcing may contribute positively to productivity growth via price decline, the specter of losing “white collar” jobs abroad looms large. Stories that report dramatic movements of jobs offshore need to be put into the current economic perspective. First, these citations frequently use the peak of the economy and technology boom as the base for their analysis, thus ignoring the business cycle (downturn) decline in manufacturing employment, dollar overvaluation and technology bust.²³ Second, data on international trade do not corroborate these frequent citations but rather point to sustained international competitiveness on the part of United States service providers (Baily and Farrell, 2004).

***Many job losses are
due to economic
downturn***

During the period from 1999 to October 2003, for example, employment data from the United States labour market confirm disproportionate and continuing employment losses in manufacturing (2.7 million or 16 per cent since 1999). In terms of occupational categories, there has been a trend decline in “management occupations”, where 1.1 million jobs have disappeared since 1999 (a 14 per cent decline). In contrast, employment in the private service sector increased throughout the period and is 1.5 per cent higher in October 2003 than in 1999 (Mann, 2003).

Employment in white collar occupations related to IT or deemed vulnerable to IT-enabled international trade was stable and recovering or higher in October 2003 than in 1999. The expansion of domestic jobs in many white collar occupations deemed particularly at risk to offshore operations has also been recorded. Moreover, net export of services from the United States during 1997 and 2003 (Q1) increased from US\$ 42 billion to US\$ 50

²² More specific estimates confirm the potential of BPO services. A survey by Deloitte Research, for instance, found that the world’s 100 largest financial services firms expect to transfer US\$ 350 billion of their cost bases abroad by 2008. The value of medical transcription outsourcing in America alone is expected to double by 2005 to US\$ 4 billion. The United States market for “contact centres” alone has a turnover of US\$ 100 billion (Mattoo and Wunsch, 2004).

²³ “There are no publicly available data on jobs ‘lost’ to workers in foreign countries. Publicly available data show the number of people in occupations defined by occupational class and by sector. When the number of jobs falls in a particular cell of this matrix, there is no way to determine whether that job was regained in another cell of the matrix (different occupation or different sector) or whether this job no longer exists, either because the job has moved abroad or because technology has made it obsolete” (Catherine L. Mann, 2003).

billion; such exports included the vulnerable service groups despite the appreciation of the dollar.

According to Kirkegaard (2004), the job losses in the United States from 2000 to 2002 in occupational categories threatened by offshore outsourcing occurred in the manufacturing sector. This means that white-collar job losses cannot be separated from economic problems in the manufacturing sector. Moreover, the trend is not uniform across the United States, with some states gaining and others losing jobs. This suggests that no singular nationwide trend, other than the regular business cycle, can be specifically identified. The majority of United States jobs thought to be lost in occupational categories threatened by offshore outsourcing pay less than the United States average wage. The implication is that many of these jobs may face medium-term elimination through technological change regardless of whether they are outsourced to offshore locations or not.

Low-wage service jobs are at risk owing to both BPO and technological change

Kirkegaard (2004) also notes that the decline in jobs is concentrated in low-skilled IT occupations and in occupations where economy-wide trends dominate (managers and manufacturing). For example, more than 70,000 computer programmers have lost their jobs since 1999, but more than 115,000 higher-paid computer software engineers have been inducted during the period. However, jobs for bank tellers, switchboard operators (including answering services) and telephone operators are all projected to shrink. But this contraction is as much due to automated teller machines and voice-answering technologies as to jobs going offshore. In the recent past, productivity growth and an expanded technology sector have added not just engineers and programmers, but also marketers, cable installers and web-site designers.

A major question is therefore how flexible workers from the United States are to adapting to change and upgrading their skills to compete in the world market. It has been suggested that adjustment assistance may be made available to white-collar workers hurt by international competition the same way as trade adjustment assistance helps those in the manufacturing sector. The new programme of wage insurance is expected to help some IT workers to find new jobs but not necessarily those with white-collar skills.²⁴ Basu (2004) and Baily and Farrell (2004) opine that outsourcing will in turn create jobs in rich countries, not in the sectors that moved to developing countries but in other sectors. Likewise, offshore work in developing countries is expected to increase income and demand in those countries, resulting in a possible rise in exports from the developed world. So a large part of the responsibility lies with developed country Governments to provide relocation benefits and social welfare to vulnerable workers during times of adjustment.

²⁴ As implemented in the trade promotion authority legislation, workers older than 50 years and earning less than US\$ 50,000 at their previous jobs can receive half of the difference between their old and new wages for up to two years. The objective of this programme is to encourage workers to return to work as soon as possible and for the new employer to provide on-the-job training, which has proved to be more effective than government-financed classroom training. The programme is limited, however, by age as well as by type of job lost (only manufacturing jobs are covered) (Mann, 2003).

WTO and outsourcing

Despite the substantial global benefits from cross-border trade in IT services, the adjustment pressures could provoke a protectionist backlash in the developed countries. The current negotiations under the Doha Development Agenda offer an opportunity to reap the benefit of outsourcing by locking in the current openness and pre-empting protectionism. A bold initiative through comprehensive commitments by WTO members under the General Agreement on Trade in Services (GATS) can help to secure such openness. The current practice of services negotiation through a “positive listing”²⁵ approach places a heavy burden on the services classification scheme used by WTO members.

In particular, the existing classification scheme does not cover all the services being traded today, such as the services offered by call centres. Moreover, the services classification scheme needs to be dynamic as technology itself is changing, thus rendering new services tradable. According to Mattoo and Wunsch (2004), the negotiation process based on a “request-and-offer” approach involves negotiating commitments trading partner by trading partner and sector by sector. This is a slow task with high transaction costs and may not necessarily produce efficient or equitable outcomes owing to the unequal bargaining powers of countries. An essential step is to map the IT and BPO services being traded today into the existing GATS classification scheme.

Up until now much attention has been given in WTO to reduction of barriers such as tariffs, which are transparent, but not to outright bans or discriminatory internal regulations and taxation as instruments of protectionism. The full implementation of specific commitments by countries regarding various services under GATS obligations can lead to a reduction of protectionism. The recent wave of protectionism is observed in United States government procurement contracts, which are currently excluded from the scope of the GATS rules.²⁶ Exporting countries need to reassess their current position on the subject of government procurement and a clear negotiating position needs to be mapped out.

According to Chanda (2004), countries like India need to be more proactive to get market access in government procurement²⁷ as the potential for public sector procurement in a country like the United States is huge, given the likely pressure for cost reduction and budgetary savings by the Government. Moreover, the issue of intellectual property rights and cybercrimes also needs to be evaluated on its own merit and not as a regulatory tool for trade diversion as in the case of services. Enhanced participation of developing countries is required to obtain more fully the benefits of trade in services. Finally, developed countries have also pushed to secure market access for their

The existing classification of services under GATS is insufficient to capture the dynamics of BPOs

²⁵ It applies only to the sectors a member chooses to list. So if a service is not explicitly listed, a member remains free to restrict trade in that service.

²⁶ “US outsourcing ban legally valid: experts”, published in < <http://www.rediff.com/money/2003/jun/16bpo.htm>> , 16 July 2003.

²⁷ The current share of United States federal government contracts in exports of IT software and services from India is less than 2 per cent (Nawn, 2004).

exportable services in developing countries. The negotiation aspect should take into account all these issues in the light of the Doha Development Agenda, perhaps not including all WTO members immediately (concentrating on the participation of a critical mass of countries, for the time being).

Conclusion: development issues and challenges facing the BPO sector

Both entrepreneurs and Governments face challenges in developing a thriving BPO sector

Cross-border outsourcing is expected to continue growing in the near future, since it represents a positive business option for reducing costs and increasing efficiency. Outsourcing, and especially BPO, has become a means for developing countries to exploit that competitive advantage while embarking on e-commerce fuelled by the development of ICT. Government and international support can help to ensure that the benefits of developing a BPO industry will actually materialize. Potential BPO service providers need to assess infrastructure and skills requirements, define a rigorous business plan, arrange funding possibilities, develop marketing strategies to promote local competencies and find clients, and maintain competitiveness.

There are challenges at the enterprise level as well as the government level. The biggest challenge for the entrepreneur is the commoditization of services as international competition is now only on the basis of cost. BPO-providing companies as well as countries need to go up the value chain of BPOs. Hence, along with supplying basic services, other dimensions for increased attention are improving efficiency, being on the learning curve, utilizing management talent, and improving the capacity to bring integrity between tech and consulting culture together. BPO providers will also need to consider branding the services they provide and how quickly they can move from horizontal BPOs to vertical BPOs. UNCTAD (2003) has pointed out that in order to offer high levels of cheap and quality services, entrepreneurs require better communication skills with clients, greater business acumen (marketing, partnering and labelling), more utilization of the diaspora as a network for outsourcing, and enhanced capacity to deliver concise service requirements.

The expansion of BPO services in a developing country depends to a considerable extent on its capacity to identify potential niches and make the required investments in telecommunications infrastructure, education, legal framework and tax incentives to attract overseas clients. Tailoring a national development strategy to benefit fully from the new BPO marketplace is crucial to ensure the development of a profitable market. National ICT policies and strategies embrace several sectors such as telecommunications, human resources, law and taxation, and finance and payment systems to promote the use of IT in commercial activities. Many government officials in developing countries are still not fully aware of the potential of developing a BPO industry, and some awareness-building activities by international agencies and non-governmental organizations should be pursued. The biggest challenge to government is to bring the benefits of ICT to all citizens, including the underprivileged communities which would also like to have a share in the BPO revolution.

REFERENCES

- Baily, M.N. and D. Farrell, 2004. "Exploding the myths of offshoring", *The McKinsey Quarterly*, July.
- Basu, K., 2004. "The politics of business outsourcing", published in *Asia Media*, < <http://www.asiamedia.ucla.edu/article.asp?parentid=9010>> , 29 March 2004.
- Chanda, R., 2004. "Will new US law on outsourcing affect India?", published in *The Economic Times*, 03 February 2004.
- Chandrasekhar, C.P. and Jayati Ghosh, 2003. "Outsourcing for development", published in *The Hindu Business Line*, 02 December 2003.
- Chithelen, I., 2004. "Outsourcing to India: causes, reaction and prospects", *Economic and Political Weekly*, 6 March 2004.
- CIO, 2001. "Be prepared for BPO", available at < <http://www.cio.com/archive/050101/bpo.html>> , 16 April 2004.
- Economic and Political Weekly, 2004. "BPO: caution ahead", EPW Editorial, 27 March 2004.
- Helios Innovations, 2004. "Business process outsourcing overview", Helios Innovations White Papers, < <http://www.heliosinnovations.com/whitepapers/bpoverview.pdf>> , 17 March 2004.
- Kirkegaard, J.F., 2004. "Outsourcing: stains on the white collar?", published by the Institute for International Economics, available at < <http://www.iese.com/publications/papers/kirkegaard0204.pdf>> , 20 April 2004.
- Mann, Catherine L., 2003. "Globalization of IT services and white collar jobs: the next wave of productivity growth", *International Economics Policy Briefs*, Institute for International Economics, December 2003.
- Mattoo, A. and S. Wunsch, 2004. "Pre-empting protectionism in services: the WTO and outsourcing", World Bank Policy Research Working Paper 3237, March 2004.
- McCarthy, John C. and others, 2003. "BPO's fragmented future", Forrester Research Inc.
- Namasivayam, S., 2004, "Profiting from business process outsourcing", *IT Pro*, January-February, < <http://www.computer.org/itpro/it2004/f1012.pdf>> , 17 April 2004.
- NASSCOM, 2004. < www.nasscom.org> , 26 August 2004.
- Nawn, N., 2004. "Blame the politicised outburst", *The Statesman*, 12 March 2004.
- UNCTAD, 2003. *E-commerce and Development Report 2003* (UNCTAD/PRESS/PR/2003/108).



A PERSPECTIVE ON ENTREPRENEURSHIP, INTELLECTUAL PROPERTY CREATION, ENTERPRISE DEVELOPMENT AND COMPETITIVENESS IN ASEAN¹

Overview of issues

Research and development (R&D) and the accelerating progress in science and technology have been the backbone of the global information revolution, dated as beginning in 1969 with the commercial production of a computer on a silicon chip. All these have, in turn, greatly facilitated the emergence of knowledge-based economies (KBEs), inventive entrepreneurs and technology-driven SMEs. In the process, radical ways and means have also been devised and applied to industrial organization and value creation with significant success both within and across geographical, cultural and political divides.

Yet the creation of intellectual property (IP) and the generation of intellectual property rights (IPRs) have long been the Achilles' heel of virtually all economies in ASEAN. This weakness has been a serious drag on higher levels of local value addition in production and service activities. It has made it more difficult as well to foster, attract and internalize activities of high value added in the region. A clear symptom of this weakness is the so-called "race to the bottom": it is the cheaper prices of physical and human resources and of infrastructure and environmental inputs that have, by and large, been the main determinant of gained external markets and inward flows of FDI among many industries and economies, most of those within ASEAN included.²

Intellectual property creation has become even more important under the new economy and new global competition

R&D and the associated development of IP assets are a critical weakness in ASEAN, however

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² As observed by Daly (2000), this is a process in which developing economies with a comparative advantage in attracting trade-driven FDI projects often have a poorer record of internalizing all social and environmental costs of production and trade into the prices of their products and services and into the generous incentive packages made available to external investors. There is currently little evidence in support of Daly's hypothesis (Frankel, 2003, p. 21) but there are, nevertheless, scattered examples of competitive offers which lead to a lower domestic living standard while doing nothing to improve local productivity (UNIDO, 2002, p. 111). At the same time, however, the precautionary principle as applied selectively in some developed countries can well lead to a race to the top (Otsuki, Wilson and Sewadeh, 2001).

ASEAN must break through the vicious circle of accumulation-led growth to a virtuous development circle driven by knowledge formation and life-long learning

It is well known globally that the patterns of accumulation-led growth have contributed powerfully to rapid and broad-based income generation, social progress and poverty reduction in ASEAN over the last 40 years. But the same growth model of the past decades will not be adequate or sustainable in meeting the changing aspirations and multiplying needs of future generations. This is not just because of the inevitable decreases in social and economic returns to capital in the long run. There are also absolute limits to the accumulation and utilization of tangible resources – economic, social, demographic and environmental. Moreover, quality matters greatly at more advanced stages of development.

The technological and inventive capabilities of ASEAN entrepreneurs, industries and economies have to be shifted to a higher orbit. This qualitative transformation is needed to bring about the virtuous circle of productivity growth pulled in the main by knowledge formation, ongoing innovation and life-long learning and competence-building in the region. But such a transformation can also be regarded as a sequential, albeit overdue, progression in development strategy and policy in this part of the world. For these reasons, this imperative in transformed development deserves to be at the forefront of national and regional policy attention given a variety of difficult challenges, many with transboundary impact and implications, to be managed in the complex, massive and time-consuming undertakings ahead.

Knowledge-based advantages

The information revolution has spawned new and innovative ways for industrial organization and value creation across geographical, political and cultural divides

The rapid and cumulative advances in science and technology have led to an astounding and continuous decline in the prices of ICT.³ In turn, cheaper ICT goods have permitted “intelligence” to be built progressively and innovatively into an ever larger number of products, production methods and services in most human endeavours. But new and innovative modalities in industrial organization and sources of value creation have also arisen along with the truncated frontier, distance and time brought about by the information revolution and related advances in transport technologies and logistics.

It has been reinforced by far-reaching liberalization and deregulation ...

Meanwhile, a complementary global trend is embodied in the multi-dimensional liberalization and deregulation of a variety of cross-border transactions in goods and selected services, finance and investment. In addition, there are parallel measures in the liberalization and deregulation of domestic product and factor markets in virtually all economies regardless of their former shades of ideology. All these have led, on the one hand, to a

³ The most extreme example is the unmatched drop in the cost of computing power. Microprocessor speed was only 400 kilohertz in November 1971. It reached 2 megahertz in April 1974, over 1 gigahertz in March 2001 and in excess of 3.4 gigahertz in March 2004. In particular, a Pentium processor with 42 million transistors arrived in 2000 and the commercial introduction a year later of the Itanium processor was, in fact, ahead of Moore’s prediction as it has 320 million transistors (Gordon Moore is a co-founder of Intel). It has been suggested that such exponential growth can go on for another 20 years so that a processor chip will then have at least 1 trillion transistors, the computing power of the human brain (Jovanovic and Rousseau, 2002).

huge expansion of trade and financial flows and the emergence of vast, new sources of demand for goods and services across the world.⁴ On the other hand, the trading environment itself has been characterized by increasingly intensified competition and commercial rivalries and by more sophisticated and frequently changing consumer choices.⁵

The above development trend is then reinforced by the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), which is administered by WTO (set up in 1995 as the final institution in the Bretton Woods structural troika). For the first time, this global treaty links the protection of IPRs directly to multilateral trade benefits and obligations. Additionally, provisions under the TRIPS Agreement extend IPR protection in developing countries to a level comparable to the generally high levels of IP asset protection in developed countries (Maskus, 2000, pp. 20-22). Furthermore, a large number of bilateral or regional free trade agreements concluded between developed and developing economies since the mid-1990s have embodied both stronger and broader IP protection, the so-called TRIPS-plus regime (Wattanaputtipaisan, 2004).

All these interactive trends in development have sharpened significantly the competitive edge of KBEs and multiplied the comparative advantages enjoyed by invention-driven industries and enterprises. At one level, this can be seen as regards the self-reinforcing nature of new and existing knowledge, and the speedy diffusion of new knowledge and technologies through learning and competence-building. Additionally, the proprietary IP assets gained (both knowledge and technologies) can be, and have been, deployed tactically and strategically so as to maximize lead time and other business advantages of inventors and IPR owners. But such deployment has also served to retard or make it more costly and difficult for follow-on or substitute inventions and

... and by the worldwide trend towards broader and stronger protection of IP rights ...

... and has sharpened and multiplied the comparative advantages of KBEs ...

⁴ Indeed, a larger proportion of domestic output is now traded; the ratio of global merchandise exports to world GDP being 12 per cent in 1980, 17 per cent in 1995 and 20.5 per cent in 2003. By and large, international trade has also expanded much faster, by 7 per cent during 1995-2000 for example, than the rates of increase in world production, by 4 per cent in the same period. Furthermore, manufactured goods accounted for almost 85 per cent of non-oil export value in the early 2000s, compared with 28 per cent in 1975 and 47 per cent a decade later (WTO, 2003).

⁵ Currently, for example, consumer preferences are also determined by such non-price parameters and considerations as the quality and design of products and services, health and safety in consumption, social equity in employment and production, and the ecological compatibility of products and production processes. Pertinent in this connection are two related developments. First, marketing research in developed countries has indicated that consumers are willing to pay a price premium of up to 200 per cent for technology, functionality or social and emotional appeal in products (also known alternatively as the social and ethical responsibility premium). These range from high-tech vacuum cleaners, consumer audio and video equipment and specialty olive oil to "fair trade" and organically grown primary and manufactured produce ("Best of the best", *Newsweek*, 12 April 2004, p. 43). Secondly, there is the concept of "decent work", which implies not only freely chosen employment with adequate working conditions and income sufficient to satisfy economic and family needs. Decent work also encompasses broader aspirations of those employed, including the rights to representation and basic social protection. For further details as regards the interface between decent work and globalization, see World Commission on the Social Dimension of Globalization (2004, pp. 12-23 and 64-66).

innovations (Carr, 2003; Popp, 2003; Shapiro, 2000; and Lanjouw and Schankerman, 1999).

... as well as increased the inherent significance of inventive entrepreneurship and technology-driven SMEs

At another level, the intrinsic importance of entrepreneurship and SMEs has become even more significant along with the proliferation of domestic and transborder production arrangements and services platforms, especially since the mid-1980s. There is, meanwhile, a parallel shift towards more decentralization, greater dispersion (or de-verticalization) and leaner systems in production and services activities, especially in many developed countries. Indeed, a significant share of domestic employment creation and the commercialization of new economic knowledge is currently associated with clusters of hightech manufacturing and service activities populated largely by innovative and entrepreneurial SMEs in cooperative linkages with R&D and science and technology institutions. These trends are evident not just in the United States but in many parts of Western Europe as well (Yusuf and others, 2003; Audretsch, 2002; and Audretsch and Thurik, 2001).

Revealing weaknesses in IP creativity

Productivity growth has been modest among the miracle economies of East and South-East Asia

Most economies in East and South-East Asia have achieved a “miraculous” performance over the last several decades. However, such an impressive achievement appears to have been pushed largely by higher rates of physical accumulation of tangible productive factors (such as labour force participation and capital resources). The contribution of indigenous, R&D-based inventions and innovations has been subdued, albeit not insignificant, in the tiger economies in East and South-East Asia. Total factor productivity (TFP), for example, accounted generally for a third or less of the GDP expansion of the four Asian newly industrializing economies (NIEs), China, Indonesia, Malaysia and Thailand, in various periods from the early 1960s to the mid-1990s (Eichengreen, 2002, pp. 17-22). In comparison, the same stimulus to growth was as much as four fifths in the United States, and about two thirds in France, Germany and the United Kingdom in the post-War years.⁶

By and large, IP creativity and inventions in ASEAN have been limited ...

In ASEAN, the critical weakness above is well revealed by the very small amount of IP asset creation, either as innovation patents or grain-sized innovations patented under the utility model (Lam and Wattanaputtipaisan, 2004b and c). Patents provide a good indicator of a country's R&D capabilities and productivity and of the sophistication of its science and technology base, support industries and services, and legal and financing infrastructure and facilities. They are also the cornerstone of discrete gains in efficiency and productivity at the level of firms and industries, and hence of the dynamism and competitiveness displayed by sectors and economies as a

⁶ Under the growth accounting methodology, TFP (or the Solow residual) is that part of output gains which cannot be explained by increases in tangible factor inputs. TFP became a controversial matter in East and South-East Asia in the pre-crisis mid-1990s after a provocative article by Klugman, who had based his observations largely on the research results from Young. There are numerous complex conceptual, specification, estimation and data problems in TFP accounting. For a recent discussion on these issues and related estimates, see Bosworth and Collins (2003, pp. 2-5 and 33-34), Lau (1998, pp. 48-63), Pack (2001, pp. 134-135) and Yusuf (2001, pp. 15-21).

whole.⁷ Qualitatively, however, a patented asset has limited value until or unless it is successfully commercialized and protected, or its application and diffusion (as public-domain knowledge) lead to a subsequent surge in innovative output and flow-on inventions.

The volume of inventions registered to ASEAN residents (including subsidiaries of transnational corporations or TNCs) at national IP offices in the region totalled less than 1,600 patents during 1993-2002. This number was below 1 per cent of all the ASEAN patents granted by these offices to both resident and non-resident owners (Lam and Wattanapruttipaisan, 2004b). The overwhelming and persistent dominance of developed countries as owners of patented IP assets in the region is thus evident in both absolute and relative terms. Within ASEAN, however, Singapore has become technologically the most dynamic, an achievement underpinned by greatly intensified efforts to foster science and technology and R&D-intensive activities from the 1990s (Wong, 2003, pp. 10-20). This island economy had a relative share of only 25 per cent (or 50 patents) of regional patent grants to ASEAN residents during 1995-1996; the proportion jumped to 59 per cent (or 140 patents) in 2000-2001.

Globally, data from the United States Patent and Trademark Office (USPTO) also indicate a similar, entrenched divide in knowledge accumulation and applied technology.⁸ Developing countries as a whole accounted for only 5 per cent (or 64,363) of the United States patents granted to all countries during 1991-2001. Meanwhile, residents of ASEAN were the owners of only 1,584 (or 0.1 per cent of the total) United States patents issued in the same decade. Notably, most of these proprietary assets cover microelectronics fields in the case of USPTO patents received by residents of Singapore and, to a lesser extent, Malaysia. In addition, TNC subsidiaries operating in the region are the owners of a large proportion of United States patent grants to ASEAN residents, except those in Singapore.

... in both absolute and relative terms, with the exception of Singapore since the mid-1990s

ASEAN-based patents are also negligible in global terms

⁷ It should be noted that patents do not capture all of the techno-scientific progress so far achieved. First, most fundamental insights and much of the basic research for the creation of “pure” or pre-commercial knowledge are not subject to patent or copyright (Stiglitz, 2003; and Daly, 2000). Secondly, many other discoveries are not patentable because they are intangible or informal in nature, or because they may not rise to the level of novel and non-obviousness inventions, or of original and creative works of authorship that still dominate current thinking and practice as regards IP assets and their registration and protection. Thirdly, the propensity to patent varies considerably across industry; it is itself influenced by a variety of tactical and strategic considerations, as indicated earlier.

⁸ Foreign inventors seeking the international commercialization and diffusion of their IP assets tend to take out patents in the United States, given the country’s sheer size as a market for goods and services (including IP assets) plus its sustained strength and dynamism in science and technology and R&D (Lall, 2001). Additionally, there are the relatively more stringent standards for patentability, including strict requirements (backed by legal sanctions) regarding the full disclosure of prior-art in patent applications in the United States. European patent law does not have an equivalent provision, however (MacGarvie, 2003; and Trajtenberg, 1999). Moreover, legal standards create a formidable environment for third-party efforts made to invalidate a patent issued in the United States; patent grants enjoy a strong presumption that they are “born valid” (Graham and others, 2002).

Singapore is by far the largest holder of United States patents granted to ASEAN residents

Chartered Semiconductor Manufacturing of Singapore, the world's third-largest dedicated chip foundry, is the most important owner of USPTO patents in ASEAN. During 1997-2001, it accounted for 282 patents (or 32 per cent of the total of 872 registered to Singapore residents), with another 34 patents (or 4 per cent of the total) held by the National University of Singapore. The six highly inventive TNC subsidiaries (with 19 or more United States patents each) were the sources of 163 patents, or just under 19 per cent of the total, in Singapore. All these represent a remarkable achievement; Singapore had less than 50 United States patents to its technological credit during 1991-1992. Malaysia is the second-largest holder of United States patents in ASEAN (151 during 1997-2001) and Motorola is the biggest single owner of these patents (numbering 33 or 22 per cent of the total) in this country.

Sobering undertones

Efficiency gains from mature, readily available and widely shared technologies are limited

Such an unfavourable record in science and technology and R&D achievements casts a large shadow on the otherwise impressive picture of economic growth and social transformation in most parts of ASEAN. This is a matter for significant concern to all stakeholders in the region. On the one hand, the social and economic returns from R&D are far higher than those associated with imitation and reverse engineering activities, or with the formation of tacit skills and knowledge (such as know-how and then know-why).⁹ On the other hand, efficiency gains tend to be limited in technologies which are mature, readily available and widely shared (more in footnote 11 below). A compounding difficulty in this context is the rapid technological changes and the resulting fast-paced obsolescence of skills, equipment, processes and products, and hence degradation of current cost advantages.

A good case in point is the microelectronics industry in most parts of ASEAN

A good illustration in the above context is the FDI-driven commoditization of ICT-related production and trade, and the dominance within a short decade by East and South-East Asian economies in those closely networked and interlinked activities. This is another impressive achievement of tiger capitalism in the 1990s. Notably, the share of ICT items exported from developing economies in East and South-East Asia reached almost 65 per cent of intraregional exports (totalling US\$ 418 billion) in 2001, compared with less than 19 per cent (or US\$ 44 billion) in 1985 (Ng and Yeats, 2003, pp. 14 and 37-39). Exceptionally, the first- and second-generation NIEs generally

⁹ Tacit knowledge and skills are basically gained through learning by doing and shared through social interaction. The concept of tacit knowledge was put forward by Polanyi in 1958, with know-how denoting the attainment of a minimum level of operational capability required in all industrial and, more generally, technological undertakings. This may or may not lead to a deeper understanding (know-why) of the underlying theories or principles concerned. Audretsch and Thurik (2001, pp. 14-16) and Senker (1995, pp. 425-447) provide an extensive review of recent discussions on tacit knowledge (including the heuristic, subjective, sticky and internalized variety) in comparison with the codified, structured and explicit knowledge whose diffusion relies mostly on the use of formal and systematic languages and methods. It should be noted, however, that the distinction between these two kinds of knowledge is a contentious issue in the literature.

enjoyed a faster rate of expansion as well as a higher share in world production of microelectronics products than they did in world trade itself in the last decade; Hong Kong, China, being the only exception.¹⁰

Within ASEAN, however, microelectronics production remains mired in labour-intensive, low value added and standard-product segments. This has become a structural problem because external resources and technologies have enabled most ASEAN economies to move up the ladder of production complexity without first building a strong and extensive domestic science and technology and R&D base. Such a foundation is necessary to underpin and diversify a nexus of interwoven support industries, infrastructure and services.¹¹ The problem is further compounded by the chronic and acute shortage of skilled human resources and IP creation virtually across the whole region (Best and Rasiah, 2003; UNIDO, 2002; Ernst, 2000; and Hobday, 2000). Exceptionally, Singapore has successfully shifted to an integrated base of microelectronics production characterized by high-capital and skilled-labour intensities and increasing value addition locally.

Malaysia has the largest electronics industry in terms of employment (with a workforce of 330,000 in the late 1990s) and a production value of US\$ 27.4 billion in 1998 (compared with US\$ 37.8 billion in the case of Singapore). As a whole, however, the estimated share of value added is modest – ranging from less than 1 per cent in computers and 7 per cent in consumer electronics to 21 per cent in semiconductors in 2000. What is more, the local addition to value rose only marginally between 1994 and 2000, by 10 per cent or less, except in consumer electronics (Yusuf and others, 2003, p. 272). The overall situation and circumstances are not that dissimilar as regards the electronics industry in Thailand (with output valued at US\$ 14.6 billion in 1998), the Philippines (US\$ 7.3 billion) and Indonesia (US\$ 5.2 billion).¹²

¹⁰ The relative shares (in order of importance) of Singapore, Malaysia, Thailand, the Philippines and Indonesia in global electronics production combined to reach 1.8 per cent in 1985, 4.2 per cent in 1990 and 8.5 per cent in 1998. The corresponding ratios for the Republic of Korea plus Taiwan Province of China were 2.6 per cent, 5.4 per cent and 6.7 per cent (Wong, 2001, p. 4).

¹¹ Indeed, the low levels of local value creation in a variety of export-oriented production activities under supply subcontracts or as part of an international production network are relatively well established. However, research based on enterprise-level data on gained TFP and value added is much less extensive and systematic. In the spring of 2001, the World Bank carried out a large-scale survey of 1,500 firms in China and 326 enterprises in six other countries in East and South-East Asia. The results show generally that firms within international production networks experienced more export growth and innovations. These favourable outcomes, however, were not often translated into faster growth in value addition (relative to non-networked firms), or into broad-based, direct employment and income expansion (Yusuf and others, 2003, pp. 295-305).

¹² For a more detailed discussion on these matters, see Tham (2004, pp. 31-33); Tangkivanich, Nikomborirak and Krairiksh (2004, pp. 20-24); Lall (2001, pp. 22-24); UNCTAD (2003, pp. 112-123); Dodgson (2000, pp. 245-248); and Linden (2000, pp. 213-218). Meanwhile, the new electronics-based specialization in production and trade plus related opportunity costs, in terms of defensive and positive restructuring and of the heightened vulnerability to cyclical external demand, in ASEAN during the 1990s are examined at some length in Lam and Wattanaputtipaisan (2004c, pp. 28-31).

The ready availability of external technology has reduced the need to build up a solid science and technology and R&D foundation ...

... so that most segments of the industry exhibit low levels of value addition locally

Social and economic returns on R&D investment are far larger than those associated with most economic activities and services

In the above context, social and economic returns on investment in R&D activities are far higher than those obtainable from investment in most other activities and services. At the aggregate level, for example, R&D spending produces economic payback rates of 20-40 per cent for OECD countries. In the case of middle-income economies, these rates approach 60 per cent but they are as high as 100 per cent in low-income countries. The overall economic gains average 78 per cent while the rates of social returns are in the range of 70-100 per cent.¹³ Another survey of 57 published studies on industrial R&D plus 292 publications on agricultural R&D shows consistently double-digit rates of economic returns (Watson, Crawford and Farley, 2003, p. 10).

In addition, the necessary technologies may not be available on reasonable commercial terms and conditions

Indeed, innovation rents have become a substantial proportion of the increasingly sophisticated flows of goods and services in global production and trade (Lau, 1998, pp. 54-55). The cursory evidence available on the supply side is sufficiently illustrative of the substantial magnitude of such rents although the terms and conditions of licensing contracts are normally a commercial secret. Indeed, it should be remembered in this connection that there is no guarantee that the necessary technologies or the additional licences required can be obtained on reasonable commercial terms or in a timely manner. Even if such technologies are available, there are normally geographical and field-of-use restrictions in technology transfer contracts to ensure that IPR owners can determine the timing, conditions and circumstances of market entry of both business partners and commercial rivals.

In absolute terms, the innovation rents are a substantial share of gross revenue

Illustratively, the royalties and licensing fees paid by China, currently the world's largest supplier of digital versatile disk players, were equivalent to about 25-33 per cent of the unit retail price of US\$ 60 in 2003.¹⁴ Such outward payments absorbed up to 30 per cent of the revenue of semiconductor firms in the Republic of Korea in the mid-1990s (Dodgson, 2000, p. 242). In total, they averaged around US\$ 100 million a year in the 1970s and, after the liberalization of licensing agreements in 1978, jumped to US\$ 1 billion in 1990 and US\$ 2 billion five years later (OECD, 2000, p. 58). Meanwhile, the technology fee on genetically modified cotton seeds sold by Monsanto in China is about 44 per cent of the retail price of 42 yuan renminbi (US\$ 8) per kilogram; this fee is equivalent to 27 per cent of the value of the estimated harvested crop (Keeley, 2003, pp. 8 and 20-21).

¹³ (Lederman and Maloney, 2003, pp. 3 and 12-14). The study sample covers 99 countries with 1,386 observations of five-year averages for the period 1975-2000. R&D includes expenditure on fundamental as well as applied research and experimental activities; the latter two components are more commercially oriented in nature.

¹⁴ Japanese and United States corporations are the owners of most of the DVD technologies used by manufacturers in China. The high royalty fees coupled with intense competition render manufacturing activities less attractive because of the severely squeezed margins and low value addition locally. These are the main reasons behind concerted efforts in China to develop local video standards and technologies ("China spins a new disk", *Far Eastern Economic Review*, 26 February 2004, pp. 34-35).

Back to the basics

Thus, IP creativity and proprietary asset generation are indispensable as differentiators in business competitiveness and dynamic inputs to fuel the race to higher trajectories of productivity and growth. Indeed, the large and widening gap in new knowledge and applied technology is the characteristic, and probably unbridgeable, divide between the industrialized North and the developing South (Stiglitz, 2003, p. 4; and Romer, 1993, pp. 64-66). A strategic response at the policy and firm levels is to foster ongoing inventions, innovations and competence-building processes. Such an approach is considered essential, first, in regaining the dynamism and resilience of the miracle years and, secondly, in ensuring the availability of “decent work” and social safety for all. All these apply especially to middle- and high-income economies as well as to those enterprises which need to leapfrog technologically in global competition (World Commission on the Social Dimension of Globalization, 2004; Yusuf and others, 2003; UNCTAD, 2003; and Yusuf and Evenett, 2002).

The critical role of entrepreneurship and SMEs in the KBEs deserves a brief note in the above context. There is solid evidence that SMEs in the United States (defined as those firms with fewer than 500 workers) produce a disproportionate share of breakthrough inventions. For example, SME patents are at least twice as likely (than those of large firms) to be found among the top 1 per cent of the highest-impact patents, technology-wise and commercially. In addition, the citation index (a measure of technological diffusion) associated with SME patents averages 1.53, compared with 1.19 in the case of large firm patents. Furthermore, SME inventions cover a wider spectrum of technologies while the technological influence of SMEs has also been on the rise. The percentage of highly inventive SMEs (those with 15 or more United States patents) constituted two thirds of all firms in 2000 (sample database of 488 companies) and two fifths in 2002 (622-firm sample size).¹⁵

Indeed, the enhanced importance of technology-driven entrepreneurship and the innovative SMEs in the KBEs has been well appreciated by most developing countries in the world. This is best exemplified by, for example, a re-focus on the removal of long-standing policy and other biases against SMEs together with the additional allocation of resources for SME development in East and South-East Asia, especially in the aftermath of the 1997/98 economic crisis (Wattanaputtipaisan, 2002, pp. 57-58 and 65). Moreover, massive investments have been made across East and South-East Asian economies, among many others, to foster and replicate local versions of California’s Silicon Valley, Boston’s Route 121 and high-tech corridors

A technological transformation is necessary to sustain high growth and the availability of decent work in ASEAN

Entrepreneurship and SMEs have played an important role in the above regards among developed countries

Most developing economies are trying to replicate this pattern of development ...

¹⁵ CHI Research Inc. (2003 and 2004). Baumol (2004, p. 15) reproduces a highly interesting list of 68 inventions of enormous commercial and technological significance by American SMEs in the twentieth century. This list ranges from A (air conditioning and aeroplane) to Z (zipper). Other listed items include audio tape recording, catalytic petroleum cracking, computerized and X-ray scanning, DNA fingerprinting, frequency modulation radio, gyrocompass, heat sensor, helicopter, integrated circuit, desktop and portable personal computers, Polaroid camera, computer operating software, soft contact lens and xerography.

of interlinked clusters of dynamic SMEs and inventive entrepreneurialships in R&D, manufacturing and services activities (Cook, 2003, pp. 11-21; and Yusuf and others, 2003, pp. 236-245).

... which is likely to have both large firms and SMEs as the key players in IP creation and commercialization

Many large firms are highly inventive as well, although many others tend to focus more on less risky technological breakthroughs. These inventions are essentially derivative, incremental and cumulative in nature as speed and cutting-edge creativity are often not a hallmark of big companies. However, most large corporations have a decided advantage over SMEs in their extensive and established sales and distribution networks as well as in their internal capabilities to undertake costly commercialization projects based on newly developed technologies of their own or purchased and licensed from elsewhere (Baumol, 2004, pp. 13-14). As such, an ideal development scenario contains a mix of large firms, which provide not only a production and export platform for their allied networks of innovative and competitive SME suppliers. Those large enterprises can be both the initiators and the sources of in-house R&D activities and IP generation on a broad front. Meanwhile, many SME start-ups act as vehicles for the incubation and eventual transmission of leading-edge ideas and breakthrough technologies to the industrial mainstream. The transfer process can be mediated through mergers and acquisitions, through the formation of collaborative linkages and alliances (or value networks) between small and large firms or, as circumstances permit, through export-driven transformation of the dynamic SMEs into large enterprises or TNCs themselves.

The technological miracle in East Asia

The Republic of Korea and Taiwan Province of China achieved an outstanding technological transformation in the 1990s

Recognition of the current structural problems to foster IP creation through the adoption of a strategic approach for technological transition is an important step forward. In this connection, there may be useful insights for consideration and good practices for possible replication from the technological transformation achieved largely within a decade by the Republic of Korea and Taiwan Province of China. Such a transformation, in which both SMEs and large corporations are playing a critical role, is perhaps one of the few most outstanding achievements of these two East Asian NIEs in the 1990s.

Globally, they are now leaders in several fields of microelectronics in their own right

The Republic of Korea and Taiwan Province of China were technological followers, copiers and imitators in the 1960s and early 1970s. They graduated into junior partners in R&D linkages with external business partners and technological leaders in the following decade and since the 1990s have become major players and pioneers in R&D of a commercial and, to a much lesser extent, basic nature.¹⁶ In terms of United States invention

¹⁶ It is worth noting that February 2004 witnessed a breakthrough in the creation of the first cloned human embryo (from which a human embryonic stem cell line was generated) in the Republic of Korea. All but 1 of the 15 scientists involved in this pioneering, basic work were local scientists and researchers. Such an achievement will lay the foundation for a variety of follow-through R&D activities, especially those in therapeutic cloning, and this will certainly lead to a large number of patented inventions and commercial applications in a variety of fields. Needless to say, however, there are basic moral issues and legal implications to be resolved in many of these R&D activities and related business spin-offs.

patents, for example, the Republic of Korea was ranked thirtieth (with a total of 34 patents) and Taiwan Province of China twenty-fourth (with 196 patents) during 1977-1980. In 2000-2001, however, the latter economy (with 12,351 United States patents) moved up to fourth position and the Republic of Korea to eighth (with 7,235 patents).¹⁷ Additionally, data on patent citations of prior art show different patterns of knowledge diffusion. Patents from the Republic of Korea tend to cite much more frequently inventions patented by Japan, while those from Taiwan Province of China lean more evenly on both United States and Japanese inventions (Hu and Jaffe, 2001, pp. 21-22).

The large bulk of inventions in these two economies relate to micro-electronics fields and are registered mostly to home-grown entities (individuals, institutions and business corporations).¹⁸ Structurally, almost 80 per cent of United States patents belonged to only four business groups (*chaebols*) in the Republic of Korea during 1997-2001; about another 10 per cent went to various research institutions there. The Samsung group, currently with some 26,000 researchers on its payroll, has dominated IP asset creation in the country, having 6,749 United States patents (or 44 per cent of the total) to its credit. Following at a distance are other *chaebols* such as LG Electronics (13.8 per cent), Hyundai (11.9 per cent) and Daewoo (7 per cent). In contrast, individual owners accounted for 42 per cent of United States patents registered to Taiwan Province of China (totalling 18,888) during the same period, reflecting the economic durability and structural importance of SMEs and inventive entrepreneurship. Patents registered to large corporations accrued largely to Taiwan Semiconductor Manufacturing Company (TSM) and United Microelectronics Corporation (UMC), with a combined share of 16.4 per cent or 3,106 patents over 1997-2001 (Lam and Wattanaputtipaisan, 2004b, pp. 21 and 30-31).

In particular, Samsung Electronics is one of the very few entities from a developing country to be among the global leaders in nanotechnology, a term coined by K. Eric Drexler in 1986.¹⁹ This corporation (together with, for that

¹⁷ Other principal inventor countries are the United States (with 195,680 USPTO patents), Japan (67,815 patents), Germany (22,717 patents), France (7,860 patents), the United Kingdom (7,632 patents) and Canada (7,025 patents).

¹⁸ One of the main reasons for such R&D specialization relates to the nature of the technologies themselves. It is postulated that microelectronics are more engineering-driven than science-based chemicals and pharmaceuticals. Technological progress in microelectronics is both very fast and characterized by discontinuities, thus offering good entry opportunities and niches for the late comers. By contrast, earlier movers have a decided advantage in chemicals and pharmaceuticals, which require time-consuming learning by doing and painstaking selection through a process of trial and error. All these pose considerable difficulties to countries with a relatively short period of industrial experience and a shallow and narrow science and technology base (Luthria and Maskus, 2003, pp. 147-148).

¹⁹ A nanometre is 1 billionth of a metre in length and generally the term nanotechnology covers R&D in subject matters of less than 1,000 nanos in width (e.g., nanoinstrumentation in microelectronics, ribonucleic acid and deoxyribonucleic acid sequencing, viruses and proteins, atoms and molecules in advanced materials, etc.). However, the most common view of inventions in nanotechnology limits them to products and processes measured at 100 nanos or less. For more details on the coming technological revolution, see Dutfield (2003, pp. 44-49) and Anton, Silbergliitt and Schneider (2001, pp. 5-33).

Most inventors are local entities, either large corporations as in the Republic of Korea or individuals and SMEs as in Taiwan Province of China ...

The global successes of Samsung Electronics are due, to a considerable extent, to IP creativity ...

matter, LG Electronics) has taken a pole position technologically and has consequently enjoyed strong pricing power over several major rival corporations in a variety of consumer electronics items. Such a performance is due to astute foresight, substantial market “savvy” and contrarian decisions in making huge investment projects for the commercialization of newly developed technologies in the aftermath of the 1997 financial and economic crisis in East and South-East Asia (Yusuf and others, 2003, p. 148). The widespread popularity of Samsung Electronics’ product mixes and the current cyclical upturn in global demand for ICT parts and components are other helpful factors as well.

... and such commercial achievements have overshadowed several other major rivals in consumer electronics

Comparatively, the market capitalization of Sony Corporation (the world’s largest consumer electronics firm with 5,475 United States patents during 1997-2001) was more than twice that of Samsung Electronics in 2000 but dropped to 52 per cent (or US\$ 38 billion) by February 2004. Global Samsung sales, at US\$ 50.2 billion in 2003, were about four fifths of Sony’s, but the former recorded a much higher profit margin on sales, 12 per cent, compared with less than 2 per cent in the case of Sony. In May 2004, Samsung Electronics was ranked on a composite index by Forbes magazine forty-fifth among the world’s 2000 leading companies.²⁰ Sony Corporation was ranked eighty-second and Matsushita Electric Industrial Company four hundred and fifteenth. The latter is the world’s second-largest consumer electronics firm (with global revenue of US\$ 62.6 billion and a net loss of US\$ 145 million in 2003) and secured 5,284 United States patents during 1997-2001.

Research institutions have played a crucial role in both economies, although in different ways

Another equally notable feature is that research institutions have played an important role, although in different ways, in both the Republic of Korea and Taiwan Province of China. The institutional research infrastructure in the former economy was particularly important in creating technological diffusion capacity in the copying and imitation stages during the 1960s and 1970s. In particular, researchers in public sector institutions (excluding universities) and government expenditure on R&D were about twice larger than the pertinent number and magnitude in the private sector up to the late 1970s. From then on, however, the situation has been reversed so that private sector researchers and spending on R&D by business conglomerates (noted earlier) were more than three and a half times greater than those of public sector institutions (Lee, 2000, pp. 272-277). During 1997-2001, for example, the four largest institutes (each with more than 100 United States patent grants) accounted for only 5.8 per cent (or 901) of the total of 15,564 patents issued to entities in the Republic of Korea. Another 126 patents (or 0.8 per cent of the total) were shared by 10 other research outfits.

²⁰ It is the largest or among the principal global suppliers of colour monitors, advanced plasma flat-screen display panels, various semiconductors (such as memory chips), wireless hand phones and microwave ovens and other household white goods. See “Forbes 2000”, *Forbes*, 23 May 2004, pp. 46-76.

The Industrial Technology Research Institute (ITRI), set up in 1973 in the Hinshu-Taipei science corridor in Taiwan Province of China, was the source of 986 United States patents (or 5.2 per cent of the total of 18,888) during 1997-2001. Another 7.8 per cent of the patents were granted to seven other research institutions (123 patents) and the National Science Council (361 patents). Institutional research efforts, especially those by ITRI, have been instrumental in sustaining successful R&D networking and commercialization and hence the continuing importance of SMEs in Taiwan Province of China. In particular, these firms have remained the dominant players in both desktop and notebook computers at the global scale, despite the considerable barriers facing them in terms of technology and economies of scale.²¹ This provides a sharp contrast to the failure of the much larger and resource-rich corporations in the Republic of Korea to sustain even a modest presence in these particular segments of the electronics industry (Ernst, 2000, p. 114).

ITRI has a major influence on science and technology and R&D in Taiwan Province of China ...

The spin-offs from wafer-related fabrication technologies and design expertise developed by ITRI have also contributed to the success of the local semiconductor foundries. TSM and UMC, the world's largest and second-largest dedicated fabricators of semiconductors, are highly profitable.²² ITRI also plays an intermediary role in R&D activities (for example, through the Open Lab Program), provides consultancy and incubation services on technology and management (with a partial subsidy from the Government), fosters and coordinates multiparty technological R&D consortia, and disseminates technological information. ITRI is now the key player in a large nanotechnology project, with government funding from 2003 of some US\$ 650 million over a six-year period. In 2002, the Institute had 6,190 employees, of whom 77 per cent were R&D personnel with one half having more than 10 years of research experience (many being returning expatriates) and three fifths with postgraduate qualifications.

... in terms of the multifaceted spin-offs from its activities ...

²¹ By the mid-1990s, some three fifths of the global supply of desktop personal computers had come from this island economy, which had also become the world's largest producer of notebook personal computers. The electronics industry in Taiwan Province of China had its roots in the local assembly of vacuum-tube radios in 1948, and the first transistor radio factory was set up in 1961. In the production of personal desktop computers and computer peripherals especially, SMEs there have overcome the technological barriers to entry through vertical disintegration and a de-technology arrangement whereby the most advanced and demanding technology functions are outsourced to specialist, independent subcontractors. In addition, economies of scale and scope are realized through the pooling of work orders and other inter-firm linkage and coordination arrangements in the capital-intensive segments of production and manufacturing. Moreover, the flexibility and capacity to adjust to abrupt and often unexpected changes are another decided comparative advantage of SMEs in an industry characterized by high volatility, great uncertainty, and disruptive inventions and technologies (Chen and Ku, 2003, pp. 38-51; Ernst, 2000, pp. 100-140; and Hobday, 2000, pp. 143-154).

²² The former, established in 1979 as a manufacturer of electronics parts, went into the dedicated semiconductor business in 1987 and had a current payroll of some 15,000 employees worldwide in 2003. It recorded a net profit of US\$ 8.1 billion, which was equivalent to a net return of almost 42 per cent on sales revenue of US\$ 19.4 billion, during 2000-2003. UMC has been in operation since 1980 but went into the pure-play foundry business in 1995 with about 8,500 workers worldwide at present. Net income totalled US\$ 2 billion during the same 4 years (including a net loss of US\$ 90.3 million for 2001), or about 23 per cent of sales receipts of US\$ 8.8 billion.

***... and as a catalyst
in the future
development of
both basic research
and commercial
technologies***

Currently, the R&D program at ITRI is structured and organized with one fifth of the resources going to technologies and inventions which can be commercialized within 1-2 years. Another one fifth is allocated to fundamental research with commercial applications one or two decades down the road. The middle segment of three fifths is channelled to leading-edge inventions and related technologies which can push up the productivity frontier and hence the competitive advantage of enterprises in this island economy. About one half of the ITRI operating budget of just over US\$ 430 million a year during 2001-2002 came from the Government (mainly the Department of Industrial Technology, Ministry of Economic Affairs) and the other half from earned revenue. Notably, its net income (after taxes) during 2001-2002 averaged 4.5 per cent of operating revenue, one half of which was earned from fees and other services.²³

Significant underinvestment in science and technology and R&D

***Meanwhile, there
has been inadequate
allocation of public
and private sector
resources to science
and technology
and R&D in ASEAN,
except Singapore***

All these present another sharp contrast to the situation in ASEAN, one which reflects the cause as well as the consequence of a shorter history in R&D activities, a more shallow and narrow science and technology base at the starting point, and a persistence of significant underinvestment in R&D activities in the region; Singapore being an exception but only from the early 1990s. The regional economies are well known for their manufacturing prowess based on foreign investment and imported technologies, both hard and soft. By and large, however, they have yet to be widely recognized as centres of science and technology excellence and cutting-edge R&D activities of world-class standard.

***This underinvestment
has resulted in a
series of entrenched
bottlenecks and
constraints ...***

Public spending on R&D averages in general less than 0.3 per cent of GDP among ASEAN economies, way below the 2.5-2.8 per cent range in, for example, Japan, the Republic of Korea and the United States. Exceptionally, Singapore has been successful in hiking R&D expenditure to 1.8 per cent of GDP from the late 1990s.²⁴ In turn, this persistent and sizeable underinvestment has created a bottleneck in terms of inadequate job creation in science and technology and R&D. The consequent constraint on employment opportunities contributes to the low enrolment rates in the hard sciences in ASEAN, again with the exception of Singapore. These low rates are one of the reasons behind the grossly inadequate supply of scientists, engineers, computer specialists and research technologists and technicians, knowledge

²³ See Dodgson (2000, pp. 285-288) and the references cited therein for a further discussion on ITRI, and access < www.itri.org > for current information on R&D focus areas and activities, personnel and financial statements.

²⁴ Wong (2003, pp. 5-22) provides a detailed examination of the strategic policy shift, plus a variety of promotion and facilitation measures, to lift the operational trajectories of industries and enterprises from using to creating technologies in Singapore. Amsden, Tschang and Goto (2001, pp. 5-18) give a conceptual framework and an extensive assessment of the exceptionally large share of general expenditure on R&D (GERD) from the private sector in this island economy (some 63 per cent for most of the 1990s). In particular, R&D outlays by TNCs operating in OECD countries typically average 12 per cent of their total spending but the share of foreign private sector in total private sector GERD is as high as 44 per cent in Singapore.

managers workers in most regional economies (see table below). Meanwhile, returning nationals and expatriate workers have helped to bridge the knowledge gap in Singapore, but this is not an equally feasible solution in other parts of the region at present.

Some indicators of research and development in selected countries, latest years available					
	<i>R&D expenditure (percentage of GDP)</i>		<i>Scientists and engineers per million persons (late 1990s)</i>	<i>Knowledge workers (percentage of labour force, 2002)^a</i>	<i>Patents granted in the United States during 1995-2001^b (annual average)</i>
	<i>Government (late 1990s)</i>	<i>Business (late 1990s)</i>			
ASEAN					
Malaysia	0.2	0.1	93	25.2	33
Philippines	0.2	n.a.	157	12.7	14
Singapore	1.8	0.9	2 318	35.8	156
Thailand	0.2	... ^c	103	12.7	23
Other economies					
Australia	1.7	0.8	3 357	36.6	748
China	0.6	0.3	454	n.a.	113
Japan	2.8	2.2	4 909	36.4	29 081
Republic of Korea	2.8	2.2	2 193	18.4	2 721
Taiwan Province of China	1.5	0.8	2 114	n.a.	3 969
United States	2.5	1.9	3 676	47.3	83 475
OECD average	2.1	1.0	2 163	31.4	2 092 ^d
<p><i>Sources:</i> APEC, "Towards knowledge-based economies in APEC", pp. 195-202; International Labour Office, <i>Yearbook of Labour Statistics</i>, various issues; OECD, <i>Knowledge-based Industries in Asia</i>, p. 59; and United States Patent and Trademark Office at < http://www.uspto.gov/web/offices/ac/ido/oeip/taf/cst_all.pdf > .</p> <p>^a Knowledge workers are defined as those engaged in professional, technical, managerial, administrative and clerical occupations.</p> <p>^b Including both resident and non-resident inventors and owners.</p> <p>^c Negligible.</p> <p>^d Excluding United States patents granted to resident and non-resident inventors and owners in Japan and the United States.</p>					

Another major bottleneck is reflected in the limited scope and shallowness of R&D activities and the science and technology base in ASEAN. In consequence, this has had an adverse impact on the quality, skills, versatility and experience of the existing, but highly limited, pool of trained and professional workers. There is, indeed, no substitute for professional apprenticeship and incubation, on-the-job learning and practical experience in R&D as well as in business management (Amsden, Tsang and Goto, 2001, pp. 11-12). Furthermore, the lack of a minimum critical mass in technological capabilities in ASEAN has made it more difficult to foster strategic linkages with transborder entities in science and technology and R&D so as to share risks. Meanwhile, the sustainability of such networking also depends on the age-old "Catch 22" situation of mutual trust, reliability, quality and timeliness in the delivery of IP results and outcomes among partners and collaborators (Wagner, and others, 2001; and UNCTAD, 1995).

... including a shallow science and technology base and limited employment opportunities in R&D

Closer stakeholder interaction and synergies

Progress in education reform and restructuring has been slower than expected in most parts of ASEAN

And the above problems and bottlenecks cannot be resolved with just money. Higher spending on science and technology and R&D will not be cost-effective and productive without a commensurate supply of the necessary human resources in ASEAN. However, such resources will not be available without a well-endowed, forward-looking and flexible educational and training system – one which is explicitly geared to encouraging and incubating a culture of technological creativity, business entrepreneurship and collaborative networking. Indeed, systemic reform in education and training has been high on the policy agenda in ASEAN. Regrettably, however, the progress so far achieved has been slower than expected virtually across the region. In part, this is because such reform is a long-term issue requiring significant changes in mindsets, long gestation periods and the costly provision of ancillary facilities, resources and expertise (Yusuf and others, 2003, pp. 181-216; and APEC, 2000, pp. 195-198).

Business spending on R&D and technological cooperation remains unsatisfactory ...

Another issue of concern is that spending on R&D by the business sector has been virtually negligible in ASEAN. In addition, the record of technology cooperation and linkages between local business enterprises remains generally unsatisfactory. Moreover, there is the persistent and conspicuous absence of established networks of science and technology infrastructure and R&D activities which are in close synergy with, or tightly interwoven into, the domestic industrial fabric in the region. This applies, in particular, to the development and transfer of commercially relevant and viable technologies from science and technology and R&D institutions to the private sector. Singapore is the only notable exception in the above contexts (OECD, 2000, p. 59).

... while there is considerable scope for improvement in IPR systems and instruments in the region

Lastly, there is also much room for improvement and greater user-friendliness in IPR systems and instruments within ASEAN. In particular, front-end outlays in patent filings are quite substantial in absolute value; they also account for about one third of the total cost over the 20-year life typical of an invention patent. Indicatively, the basic expenses for patent agents' fees and related charges by national IP offices (but excluding translation fees) range from US\$ 11,000 and US\$ 12,000 in Indonesia, Malaysia, the Philippines and Thailand, to US\$ 14,000 in Viet Nam. In comparison, the corresponding cost is estimated at US\$ 21,000 in Japan, US\$ 10,000 in the United States and US\$ 16,000 in the United Kingdom (Lam and Wattanaputtipaisan, 2004a, pp. 70-71).

In particular, national IP offices can be a potent force in fostering inventions and entrepreneurship

Currently, there are also long delays of several years in the processing of patent filings in the region. This means in effect a shorter protection time after patent approval and a depreciated lead-time advantage and commercial value to the prospective owners because of the statutory publication of the invention as public-domain information (normally within 18 months of the filing date). The long delays are partly due to the time-consuming nature of prior-art search and examination and partly due to the fact that most IP offices in ASEAN are typically underfunded in terms of resources and facilities. Indeed, a more proactive role for these offices will not only relieve

the burdens, delays and other costs of the patenting process. It will also be a great stimulus to IP asset creation and technological upgrading in the region.²⁵

The ways ahead

In sum, physical capital accumulation alone will not be adequate to sustain development under the new economy and the new global competition. ASEAN must attain a higher trajectory of technological capabilities and competitiveness. Such a qualitative transformation has to be based on knowledge formation, driven by innovation, steered by collaborative linkages and sustained by life-long learning. The Achilles' heel in the current patterns of development has been well perceived by many stakeholders for quite some time; and so have the multidimensional changes and adjustments needed in the transition process. However, the road ahead is mostly uncharted. Great faith, enlightened leadership and lasting perseverance are required to engineer an agenda for transformation, to ensure a consensus for action, and to push persistently forward despite the inevitable setbacks and slippages in implementation.

Only time can tell how long it would take to alter fixed mindsets, loosen institutional inertia and sustain a forged coalition for the technological transition required in ASEAN. However, the striking technological transformation in the Republic of Korea and Taiwan Province of China within a short decade gives grounds for cautious optimism as to the prospects for success among the miracle economies in South-East Asia.

There are difficult tasks ahead in initiating and sustaining a technological transformation in ASEAN ...

... but the outstanding success in the two East Asian NIEs gives some grounds for cautious optimism

²⁵ A variety of systemic and institutional issues and constraints on patenting on the demand side in ASEAN are discussed in detail in Lam and Wattanaputtipaisan (2004a, pp. 67-75).

REFERENCES

- Amsden, Alice H., Ted Tschang and Akira Goto, 2001. "Do foreign companies conduct R&D in developing countries?", Asian Development Bank Institute Working Paper 14 (Tokyo, Asian Development Bank Institute), March.
- Anton, Philip S., Richard Silbergliitt and James Schneider, 2001. *The Global Technology Revolution: Bio/Nano/Materials Trends and Their Synergies with Information Technology by 2015* (Arlington, Virginia, RAND Corporation).
- APEC, 2000. "Towards knowledge-based economies in APEC", report by the APEC Economic Committee to the APEC Ministerial Meeting, Brunei Darussalam, November.
- Audretsch, David B., 2002. "Entrepreneurship: a survey of the literature", background paper prepared for the Enterprise Directorate General of the European Commission, Brussels.
- Audretsch, David B. and Roy Thurik, 2001. "Linking entrepreneurship to growth", STI Working Papers 2001/2 (Paris, OECD Directorate for Science, Technology and Industry).
- Baumol, William J., 2004. "Education for innovation: entrepreneurial breakthroughs vs. corporate incremental improvements", in Adam B. Jaffe, Joshua Lerner and Scott Stern, eds., *Innovation Policy and the Economy*, vol. 5 (Cambridge, Massachusetts, MIT Press).
- Best, Michael and Rajah Rasiah, 2003. "Malaysian electronics: at the crossroads", Small and Medium Enterprises Branch Technical Working Paper Series, Working Paper No. 12 (Vienna, UNIDO).
- Bosworth, Barry P. and Susan M. Collins, 2003. "The empirics of growth: an update" (Washington, Brookings Institution), unpublished manuscript.
- Carr, Nicholas G., 2003. "IT doesn't matter", *Harvard Business Review*, vol. 81, No. 5, May, pp. 41-49.
- Chen, Tain-Jy and Ying-Hua Ku, 2003. "The development of Taiwan's personal computer industry", *East Asian Economic Perspectives*, vol. 14, No. 2, August, pp. 38-51.
- CHI Research Inc., 2003. "Small serial innovators: the small firm contribution to technical change", report to the United States Small Business Administration Office of Advocacy, Washington, February.
- _____, 2004. "Small firms and technology: acquisitions, inventor movement, and technology transfer", report to the United States Small Business Administration Office of Advocacy, Washington, January.
- Cook, Philip, 2003. "Strategies for regional innovation systems: learning transfer and applications", UNIDO Policy Papers, Vienna.
- Daly, Herman E., 2000. "Globalization and its discontents", paper presented at the Fiftieth Anniversary Conference of the Aspen Institute, Aspen, Colorado, August.
- Dodgson, Mark, 2000. "Policies for science, technology, and innovation in Asian newly industrializing economies", in Linsu Kim and Richard R. Nelson, eds., *Technology, Learning, and Innovation: Experiences of Newly Industrializing Economies* (Cambridge, Cambridge University Press).
- Dutfield, Graham, 2003. "Literature survey on intellectual property rights and sustainable human development", background paper prepared for the UNCTAD/ICTSD Capacity Building Project on Intellectual Property Rights and Sustainable Development, Geneva, UNCTAD and ICTSD.
- Eichengreen, Barry, 2002. "Capitalizing on globalization", *Asian Development Review*, vol. 19, No. 1, pp. 14-66.
- Ernst, Dieter, 2000. "What permits David to grow in the shadow of Goliath?: the Taiwanese model in the computer industry", in Michael Borrus, Dieter Ernst and Stephan Haggard, eds., *International Production Networks in Asia: Rivalry or Riches?* (London, Routledge).

- Ernst, Dieter and John Ravenhill, 2000. "Convergence and diversity: how globalization reshapes Asian production networks", in Michael Borrus, Dieter Ernst and Stephan Haggard, eds., *International Production Networks in Asia: Rivalry or Riches?* (London, Routledge).
- Frankel, Jeffrey A., 2003. "The environment and globalization", Working Paper 10090 (Cambridge, Massachusetts, National Bureau of Economic Research), November.
- Graham, Stuart and others, 2002. "Post-issue patent 'quality control': a comparative study of US patent re-examinations and European patent oppositions", Working Paper 8807 (Cambridge, Massachusetts, National Bureau of Economic Research), February.
- Hobday, Michael, 2000. "East versus Southeast Asian innovation systems: comparing OEM-and TNC-led growth in electronics", in Linsu Kim and Richard R. Nelson, eds., *Technology, Learning, and Innovation: Experiences of Newly Industrializing Economies* (Cambridge, Cambridge University Press).
- Hu, Albert and Adam Jaffe, 2001. "Patent citations and international knowledge flow: the cases of Korea and Taiwan", Working Paper 8528 (Cambridge, Massachusetts, National Bureau of Economic Research), October.
- Jovanovic, Boyan and Peter Rousseau, 2002. "Moore's law and learning-by-doing", Working Paper 8762 (Cambridge, Massachusetts, National Bureau of Economic Research), February.
- Keeley, James, 2003. "The biotech development State? Investigating the Chinese gene revolution", IDS Working Paper 207 (Brighton, Sussex, Institute of Development Studies), September.
- Lall, Sanjaya, 2001. "Indicators of the relative importance of IPRs in developing countries", paper prepared for the UNCTAD/ICTSD Capacity Building Project on Intellectual Property Rights and Sustainable Development, Geneva, UNCTAD and ICTSD.
- _____ and Manuel Albaladejo, 2003. "Indicators of the relative importance of IPRs in developing countries", Issue Paper No. 3, UNCTAD/ICTSD Capacity Building Project on Intellectual Property Rights and Sustainable Development, Geneva, UNCTAD and ICTSD.
- Lam, Ngo V. and Thitapha Wattanapruttipaisan, 2004a. "Intellectual property rights and enterprise development in ASEAN", *The Journal of World Intellectual Property*, vol. 7, No. 1, January, pp. 53-97.
- _____ , 2004b. "Intellectual property creation as invention patents in ASEAN", unpublished manuscript, April.
- _____ , 2004c. "From grain-sized innovations to triple-test patents in ASEAN: patterns, issues and implications in development and competitiveness", unpublished manuscript, May.
- Lanjouw, Jean O. and Mark Schankerman, 1999. "The quality of ideas: measuring innovation with multiple indicators", Working Paper 7345 (Cambridge, Massachusetts, National Bureau of Economic Research), September.
- Lau, Laurence J., 1998. "The sources of East Asian economic growth", in F. Gerard Adams and Shinichi Ichimura, eds., *East Asian Development: Will the East Asian Miracle Survive?* (London, Praeger).
- Lee, Won-Young, 2000. "The role of science and technology policy in Korea's industrial development", in Linsu Kim and Richard Nelson, eds., *Technology, Learning, and Innovation* (Cambridge, Cambridge University Press).
- Lederman, Daniel and William Maloney, 2003. "R&D and development", World Bank Policy Research Working Paper 3024 (Washington, World Bank), April.
- Linden, Greg, 2000. "Japan and the United States in the Malaysian electronics sector", in Michael Borrus, Dieter Ernst and Stephan Haggard, eds., *International Production Networks in Asia: Rivalry or Riches?* (London, Routledge).
- Luthria, Manjula and Keith E. Maskus, 2003. "Protecting industrial inventions, authors' rights, and traditional knowledge: relevance, lessons, and unresolved issues", in Kathie Krumm and Homi Kharas, eds., *East Asia Integrates: A Trade Policy Agenda for Shared Growth* (Washington, World Bank).

- MacGarvie, Megan, 2003. "Do firms learn from international trade? Evidence from patent citations and micro data", working paper available at < www.cid.harvard.edu/cidtrade/site/new.html > .
- Maskus, Keith E., 2000. *Intellectual Property Rights in the Global Economy* (Washington, Institute for International Economics).
- Ng, Francis and Alexander Yeats, 2003. "Major trade trends in East Asia: what are their implications for regional cooperation and growth?", World Bank Policy Research Working Paper 3084 (Washington, World Bank), June.
- OECD, 2000. *Knowledge-based Industries in Asia* (Paris, OECD).
- Otsuki, Tsunehiro, John S. Wilson and Mirvat Sewadeh, 2001. "A race to the top? A case study of food safety standards and African exports", World Bank Policy Research Working Paper 2563 (Washington, World Bank, Development Research Group), February.
- Pack, Howard, 2001. "Technological change and growth in East Asia: macro versus micro perspectives", in Joseph E. Stiglitz and Shahid Yusuf, eds., *Rethinking the East Asia Miracle* (New York, Oxford University Press).
- Popp, David, 2003. "Lessons from patents: using patents to measure technological change in environmental models", Working Paper 9978 (Cambridge, Massachusetts, National Bureau of Economic Research), September.
- Popp, David, Ted Juhl and Daniel Johnson, 2003. "Time in purgatory: determinants of the grant lag for U.S. patent applications", Working Paper 9518 (Cambridge, Massachusetts, National Bureau of Economic Research), February.
- Romer, Paul, 1993. "Two strategies for economic development: using ideas and producing ideas", in World Bank, *Proceedings of the World Bank Annual Conference on Development Economics 1992* (Washington, World Bank).
- Shapiro, Carl, 2000. "Competition policy and innovation", STI Working Paper 2000/11 (Paris, OECD Directorate for Science, Technology and Industry).
- Senker, John, 1995. "Tacit knowledge and models of innovation", *Industrial and Corporate Change*, vol. 4, No. 2, April, pp. 425-447.
- Stiglitz, Joseph, E., 2003. "Globalization, technology, and Asian development", *Asian Development Review*, vol. 20, No. 2, pp. 1-18.
- Tangkitvanich, Somkiat, Deunden Nikomborirak and Busaba Krairiksh, 2004. "Country studies on foreign direct investment – Thailand", in Douglas H. Brooks and Hal Hill, eds., *Managing FDI in a Globalizing Economy: Asian Experiences* (London, Palgrave Macmillan).
- Tham, Siew-Yean, 2004. "Country studies on foreign direct investment – Malaysia", in Douglas H. Brooks and Hal Hill, eds., *Managing FDI in a Globalizing Economy: Asian Experiences* (London, Palgrave Macmillan).
- Trajtenberg, Manuel, 1999. "Innovation in Israel 1968-97: a comparative analysis using patent data", Working Paper 7022 (Cambridge, Massachusetts, National Bureau of Economic Research), March.
- UNCTAD, 1995. *World Investment Report 1995: Transnational Corporations and Competitiveness* (United Nations publication, Sales No. E.95.II.A.9).
- _____, 2003. *Trade and Development Report 2003* (United Nations publication, Sales No. E.03.II.D.7).
- UNIDO, 2002. *Industrial Development Report 2002/2003: Competing through Innovation and Learning* (United Nations publication, Sales No. E.02.II.B.13).
- Wagner, Caroline S. and others, 2001. *Science and Technology Collaboration: Building Capacity in Developing Countries* (Arlington, Virginia, RAND Corporation).
- Walsh, Keith, 2003. "Foreign high-tech R&D in China: risks, rewards, and implications for US-China relations" (Washington, Henry L. Stimson Center), unpublished manuscript.

- Watson, Robert, Michael Crawford and Sarah Farley, 2003. "Strategic approaches to science and technology in development", World Bank Policy Research Working Paper 3026 (Washington, World Bank), April.
- Wattanapruttipaisan, Thitapha, 2002. "Promoting SME development: some issues and suggestions for policy consideration", *Bulletin on Asia-Pacific Perspectives 2002/03* (United Nations publication, Sales No. E.02.II.F.69).
- _____, 2004. "Intellectual property rights and enterprise development: some policy issues and options in ASEAN", *Asia-Pacific Development Journal*, vol. 11, No. 1, June (United Nations publication, Sales No. E.04.II.F.41).
- Wong, Poh-Kam, 2001. "ICT production and diffusion in Asia: digital dividends or digital divide?", Discussion Paper No. 2001/8 (Helsinki, United Nations University/World Institute for Development Economic Research).
- _____, 2003. "From using to creating technology: the evolution of Singapore's national innovation system and the changing role of public policy", in Sanjaya Lall and Shurijo Urata, eds., *Foreign Direct Investment, Technology Development and Competitiveness in East Asia* (Cheltenham, Edward Elgar).
- World Commission on the Social Dimension of Globalization, 2004. *A Fair Globalization: Creating Opportunities for All* (Geneva, ILO).
- WTO, 2003. *International Trade Statistics 2003* (Geneva, WTO).
- Yusuf, Shahid, 2001. "The East Asian miracle at the millennium", in Joseph E. Stiglitz and Shahid Yusuf, eds., *Rethinking the East Asian Miracle* (New York, Oxford University Press, World Bank).
- Yusuf, Shahid and Simon J. Evenett, 2002. *Can East Asia Compete? Innovation for Global Markets* (New York, Oxford University Press, World Bank).
- Yusuf, Shahid and others, 2003. *Innovative East Asia: The Future of Growth* (New York, Oxford University Press, World Bank).



FOOD SECURITY: A DEVELOPMENT ISSUE FOR PACIFIC ISLAND COUNTRIES¹

Introduction

The adoption of the Millennium Declaration by world leaders in 2000 has ensured that poverty reduction strategies now occupy the centre stage of policy debates in many developing countries. Many of the Pacific island countries (PICs), however, have argued that poverty does not exist in their societies. The lack of reliable data on the indicators of poverty makes it difficult to gauge the true extent of poverty in the PICs, but recent studies indicate that, depending on the definitions used, poverty exists in the PICs, and in some cases it is increasing (Yari, 2003).

Generally speaking, poverty is best measured in terms of access to nutrition, basic education, health care, clean water and sanitation facilities. Among the most broadly used standards for measuring poverty in practice is the adequacy of food consumption, shelter and clothing. The purpose of this article is threefold. It begins with a presentation of background information on poverty and how poverty is defined in PICs. The paper then provides some examples of actions taken at the national and regional levels to address food security concerns. The discussion concludes with a summary of policy issues and options for the future.

Adequate food for subsistence is widespread in most PICs but these countries are increasingly reliant on imports of food. However, the agricultural sector will continue to be important in most PICs, and therefore these countries will need to find ways to increase agricultural productivity. But several developments – such as increasing population, limited and complex land ownership systems and unfavourable economic growth in recent years, coupled with the threat of HIV/AIDS and frequent natural disasters – have made food security a growing concern. Given the PICs' vulnerability to external shocks, and their lack of resources in many cases, regional cooperation initiatives may offer small and micro-economies one of the modalities for addressing food security issues.

Adequate food for subsistence is widespread in PICs but several developmental problems have made food security a growing concern for many island economies

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Global efforts at ensuring food security

FAO is playing a major role in highlighting and helping member countries to address food security concerns

While the first goal of the Millennium Declaration is the elimination of extreme poverty, the need to fast-track the elimination of hunger and undernourishment in the world received the highest political attention at the World Food Summit in Rome in November 1996. That meeting focused solely on food security and resulted in an international commitment to ensure “food for all” by the adoption of the Rome Declaration on World Food Security and the World Food Summit Plan of Action. An immediate objective is to reduce the number of undernourished people to one-half the present level by 2015.²

Globally, a notable recent development concerning food security was the adoption by FAO of an International Treaty on Plant Genetic Resources for Food and Agriculture in November 2001 (Swaminathan and Pinstrup-Andersen, 2004). The Treaty derives its energy, in part, from a unique instrument known as the Global Crop Diversity Trust. This Trust, established by FAO and the Consultative Group on International Agricultural Research, is building an endowment fund with the interest earned to be used to fund crop diversity collections around the world. Such diversity collections form the basis of much innovation in agriculture. They contain genes that may help to improve yields, to cope with new or old pests and diseases and to cope with changing conditions such as extended drought or the salinization of soils. Each year, farmers and breeders around the world generate scores of new crop varieties without which world agriculture production would spiral downwards.³

Regional organizations are also playing a major role in focusing attention on food security issues

The importance of food security in the Asia-Pacific region was recently highlighted when stakeholders (e.g., ADB, ESCAP and FAO) jointly organized a meeting that brought together subregional organizations to discuss this issue.⁴ A similar meeting was held for the African region in July 2004, at which the Secretary-General of the United Nations observed that given the right kind of national and international support, Africa could achieve the green revolution it needs (Agence France-Pres, 2004). The Secretary-General also noted that hunger was a complex issue and thus every effort must be made to address the interconnected challenges of agriculture, health care, nutrition, adverse and unfair market conditions, weak infrastructure and environmental degradation if the problem was to be solved.

² FAO, World Food Summit, Rome, 1996.

³ For example, in the 1970s, a virus was wreaking havoc with maize (corn) harvests in many parts of Africa and the islands of the Indian Ocean, leaving corn plants with half-formed cobs. Scientists turned to crop diversity collections, gaining access to corn varieties from a number of countries. Eventually, more than 100 new varieties of maize were produced, suited to all of the farming systems and ecologies in Africa, improving maize yields for poor farmers across the continent.

⁴ Regional High-level Round-table Meeting: Spearheading Subregional Programmes and Cooperation for Eradication of Poverty and Food Insecurity in Asia and the Pacific, Bangkok, 23-24 February 2004. Representatives of the ASEAN Secretariat, SAARC and the Pacific Islands Forum Secretariat attended the Meeting.

FAO, with support from relevant agencies, continues to play a major role in assisting countries in implementing the provisions of the World Food Summit Plan of Action, as well as in monitoring (through its Committee on World Food Security) the progress made by member States in achieving the World Food Summit's goals. Information obtained through the Food Insecurity and Vulnerability Information and Mapping System has revealed that progress towards reducing by half the number of hungry people has been slow. If the present trend continues, the goal of the World Food Summit will not be achieved until 2030 (instead of 2015).

WFP is the United Nations' main agency in the fight against hunger, especially in times of emergencies like war and drought. It also attacks the root causes of hunger by helping people to improve their lives. In 2003, WFP operated in 81 countries and shipped 5.9 billion tons of food which was distributed to about 104 million of the poorest people in the world. This compares with 3.8 billion tons shipped in 2002 and 4.2 billion tons in 2001. Almost half of WFP's food aid went to sub-Saharan Africa while Asia-Pacific accounted for only 15 per cent of total aid in 2003. Afghanistan and the Democratic People's Republic of Korea were the main beneficiaries in the Asia-Pacific region, with each accounting for 4 per cent of WFP's total food assistance in 2003 (WFP, 2004).

***WFP is a great
friend to millions
of people in times
of emergencies***

Worldwide, some 842 million people suffer from hunger. Almost 95 per cent of these people (798 million) live in developing countries. Approximately 503 million (63 per cent) of the undernourished people in developing countries are found in the Asia-Pacific region. This region is also home to about two thirds of the world's poor – people who are living on an income of less than US\$ 1 a day.⁵ The background papers for the 1996 World Food Summit addressed the various issues, including the definition of food security (FAO, 1996a and b). The discussion of some of these issues is summarized herein as a backdrop to discussing the food security situation in the PICs.

Issues in food security

Food security is defined as a situation in which all households have physical and economic access to adequate food for all members and where households are not at risk of losing such access. This definition implies adequate availability, stability and access. Adequate food availability means that, on average, sufficient food supplies should be available to meet consumption needs. Stability refers to sustained food intake in difficult years or seasons. Access draws attention to the fact that, even with bountiful supplies, many people still go hungry because they are too poor to produce or purchase the food they need. In addition, if food needs are met through exploiting non-renewable natural resources or degrading the environment there is no guarantee of food security in the longer term.

⁵ This result is in spite of the rapid economic growth experienced by countries in the Asia-Pacific region, especially in China, Indonesia, Malaysia and Thailand, over the last three decades and the green revolution, which has resulted in higher agricultural output and rural incomes in the Asia-Pacific region.

Policies for food self-sufficiency or food self-reliance

Food security can be defined at different levels, for the world as a whole or for individual nations, regions or households. Ultimately, however, food security concerns the individual (or family unit) and its principal determinant is purchasing power, income adjusted for the cost of what that income can buy. Similarly, purchasing power at the national level, i.e., the amount of foreign exchange available to pay for necessary food imports, is a key determinant of national food security.

There are two broad options for achieving food security at the national level, namely, the pursuit of food self-sufficiency or food self-reliance. Food self-sufficiency means meeting food needs as far as possible from domestic supplies and minimizing dependence on food trade. In several developed countries, the policy goal of high self-sufficiency in food has often taken the form of income transfers to farmers rather than protection against uncertain world markets. A few developing countries have adopted this policy in part because their import requirements would otherwise have been large enough to affect world prices; this is particularly true with respect to rice as the volume of rice entering the world market is relatively small. Another consideration behind self-sufficiency policies in some countries is that under a free trade regime they would be exporters of basic food commodities, thus raising domestic prices to the detriment of the food security of poorer consumers. Other countries have tried to produce enough food domestically to guard against the contingency that they might be unable to import food at any cost – as in a time of war or global shortages.

The concept of food self-reliance takes into account the possibilities offered by international trade. It implies maintaining a level of domestic production, plus the capacity to import in order to meet the food needs of the population by exporting other products. A major contribution of trade to food security has been to permit food consumption to grow faster than domestic production in countries where there are economic constraints on increased production.

Food imports can make a vital contribution to food security but there are constraints on spending on imports

Developing countries can meet their domestic food needs from domestic production provided that food prices are allowed to increase sufficiently or that alternative incentives are provided to producers. Therefore, the important role of trade is that it allows domestic food consumption to be met more cheaply through less costly imported supplies. While food imports can make a vital contribution to food security, countries relying on food imports have two key concerns: first, their capacity to maintain food imports at desired levels, and second, the reliability of access to imports. The former depends on the prices and other terms on which food can be imported as well as the country's foreign exchange situation. The ability of many developing countries to import, however, is limited by debt repayments, declining terms of trade and limited export potential.

Dimensions of hunger

The causes and consequences of hunger vary widely.⁶ Those defined as hungry can be grouped into four main categories. The largest group comprises those with low and variable incomes, limited assets, few marketable skills and few powerful advocates to act on their behalf. The second group comprises those who are more vulnerable than others at critical times in the life cycle, including unborn babies, the newborn and young childbearing/lactating women. The unborn may suffer a deficiency of nutrients if their mothers are themselves malnourished. If the constraints before birth are compounded by continued lack of food, the danger of infant and child mortality, or a least suboptimal growth, is huge. Even if children survive severe malnutrition in early childhood, they are likely to become disadvantaged adults.

The third group of the hungry includes those individuals or households that suffer seasonal hunger related to cycles of food growing and harvest. Poor households in many developing countries often suffer from a coincidence of peaks in work requirements, levels of infection, food prices and informal-loan interest rates with troughs in food stocks, food intake and body weights. This situation occurs during what is called the “hungry season” – usually in the weeks before a new harvest in those countries with a rainy season. The fourth group of the hungry comprises people who face acute hunger owing to humanitarian crises. Where the cause of acute hunger is a natural disaster, such as drought or floods, actions need to be swift to assist people and protect their livelihoods. But acute hunger is also caused by displacement of people associated with civil or international conflict – the immediate cause of most humanitarian crises over the past 10 years, especially in Africa.

It is thus clear that no place is immune from hunger if conditions lend themselves to failures in access to adequate, nutritious and safe food. The hungry are to be found in rich as well as poor countries.⁷ Within developing countries, they can be found among rural landowners as well as the landless unemployed, among civil servants as well as new arrivals in urban slums and among male-headed as well as female-headed households. Furthermore, often mirroring the geography of poverty, the chronically hungry tend to be concentrated in regions and countries where incomes are low. Countries highly dependent on agriculture tend to have a higher concentration of hungry people than other countries. In agriculture-dependent countries, the absolute numbers of the food-insecure tend to be large in the rural areas, where most of the population is located, although the proportion in urban areas, may be as high or higher and could increase with rapid rural-urban migration.

⁶ Drought is seen as the most common immediate cause of severe food shortages in developing countries, along with conflict, economic problems and flooding. However, at the root of these problems there are often policies in the developing countries that discriminate against the agricultural sector.

⁷ Although the majority of the hungry are in the developing countries, hunger is also evident in affluent societies. Here the problem is not lack of access to sufficient food but more usually the incapacity of individuals to access the food provided by society.

Drought, conflict, refugees, economic problems and flooding were the main causes of food emergencies in that order in recent years

Within the rural areas, landless labourers and those with little land tend to be poorer and more food-insecure than the adequately-landed groups. Urban slums and squatter settlements mainly in – but not limited to – developing countries tend to have a higher concentration of the food-insecure than those parts of cities where the rich live. Given that the urban poverty growth rate is generally higher than the rural rate, poverty and hunger in the urban areas can be expected to assume even greater proportions if, as seems likely, urbanization continues to increase at recent rates.

Food security concerns in Pacific island countries

The development problems faced by PICs are widely reported. They include limited natural resources and fragile environments, scattered islands resulting in high freight costs from international and domestic markets, high energy costs, poor physical infrastructure for transport and communication, low human and institutional capacities and a heavy dependence on the public sector for goods and services. Until recently, Pacific societies appear to have been self-sufficient in food production because of the near-universality of their subsistence livelihoods. There have been no reported cases of extreme hunger in the PICs, but changing circumstances gives cause for concern. There are anecdotal reports of poverty and food security concerns in certain sectors of their societies.⁸ It is also clear that malnutrition has been growing, along with an increasing incidence of non-communicable diseases.

Declining food production per capita

PICs still depend heavily on the agricultural sector for food, income and employment, but the sector itself is constrained by low productivity

Most PICs still depend very heavily on the agricultural sector for food, income and employment, but the sector itself is constrained by low productivity – particularly in subsistence activities. Except in Cook Islands, French Polynesia, New Caledonia and Tuvalu, agricultural exports constituted over 17 per cent of the total exports of Pacific island countries during 1999-2001 (table 1). However, agricultural production in the PICs is mainly to meet domestic demand and in many cases it appears to be failing to keep up with such demand. Most countries have seen higher food production since 1980 (see figure I).⁹ The exceptions are French Polynesia, Samoa and Tonga, which have recorded large declines in food output since 1980. Tonga's production index, which was slightly below 140 in 1980, declined to around 98 in 2000. However, food production was marginally lower in Fiji and there was a slight reduction in food output in Vanuatu between the late 1990s and 2003.¹⁰ Little growth in food production was recorded in the Federated States of Micronesia, New Caledonia, Papua New Guinea and Solomon Islands in this period.

⁸ For example, Samoa's Minister for Agriculture called for cooperation and collaboration among Pacific islands to ensure the region's food safety and security when he officially opened the First Regional Agriculture and Forestry Ministers Meeting in Suva on 9 September 2004.

⁹ The food production indexes have a large component of subsistence production, which has to be estimated, and therefore these indexes have to be treated with caution.

¹⁰ The decline in food production and production per capita in Fiji would be largely on account of the decline in fish production in recent years. In Vanuatu it was due to the decline in copra and beef production.

Table 1. Selected indicators for selected Pacific island economies

	Annual population growth ^a mid-2004	GDP growth (percentage) av. 2000-2003	Agriculture, value added (% of GDP) 2002	Agricultural production index (1999-2001 = 100) 2003	Food production index (1999-2001 = 100) 2003	Agricultural exports as % of total exports av. 1999-2001	Agricultural imports as % of total imports av. 1999-2001	Imports/GDP (percentage) av. 1999-2001	Exports/GDP (percentage) av. 1999-2001	Dietary energy supply in total population ^b (kcal/person/day) 1999-2001
Cook Islands	0.1	4.3	12.4 ^c	..	..	2.6	11.4	59.1	8.4	2 782
Fiji	0.9	2.2	..	99.0	99.1	28.6	13.2	48.1	34.4	2 881
French Polynesia	1.5	..	..	106.5	106.5	2.2	18.8	..	..	2 917
Kiribati	2.3	1.7	14.2	103.0	103.0	38.4	34.6	79.1	15.0	2 917
Marshall Islands	1.6	0.8 ^d	13.8 ^c	..	..	..	..	60.4	7.9	..
Micronesia (Federated States of)	1.2	2.1 ^d	..	100.1	100.1	16.6	23.7	46.2	6.6	..
New Caledonia	1.9	..	..	101.3	101.3	0.4	8.8	..	..	2 769
Papua New Guinea	2.1	-0.6	26.9	104.0	104.9	16.6	18.3	31.2	60.5	2 176
Samoa	0.9	4.6	14.3	101.4	101.4	34.6	14.1	50.3	6.7	..
Solomon Islands	2.8	-5.9	..	105.5	105.5	54.2	26.4	29.6	29.2	2 236
Tonga	0.9	2.6	28.6	103.1	103.1	59.4	28.3	71.6	10.8	..
Tuvalu	0.4	2.8	16.8 ^e	..	..	0.0	21.2	..	..	..
Vanuatu	2.4	-0.3	17.4	93.0	93.0	65.2	19.4	34.0	10.3	2 575

Sources: ESCAP, 2004 ESCAP Population Data Sheet (Bangkok, 2004); FAO, FAOSTAT Database, 2004 and The State of Food and Agriculture 2003-2004 (Rome, FAO, 2004); IMF, World Economic Outlook Database, April 2004; UNDP, Human Development Report 2004 (New York, UNDP, 2004) and Pacific Human Development Report 1999 (Suva, UNDP, 1999); ESCAP, Economic and Social Survey of Asia and the Pacific: 2004 (United Nations publication, Sales No. E.04.II.F.20); and ADB, Key Indicators of Developing Asian and Pacific Countries 2003 (Manila, ADB, 2003).

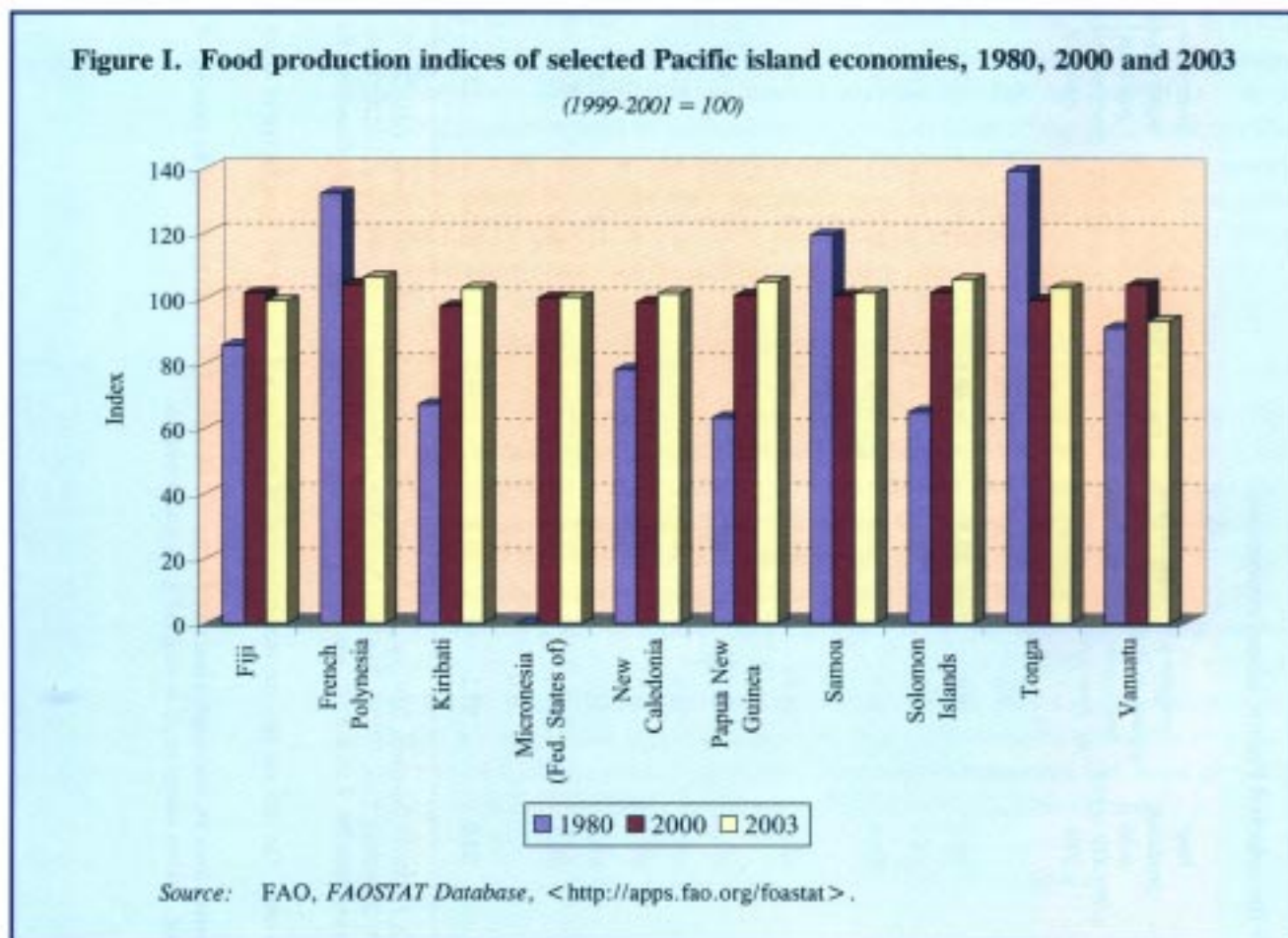
^a Annual population annual growth rates are calculated based on exponential growth rates. The rates also take into account international migration and thus may not equal the rate of natural increase.

^b Dietary energy supply refers to per capita supplies in terms of product weight derived from the total supplies available for human consumption (i.e., food) by dividing the quantities of food by the total population actually partaking of the food supplies during the reference period. Dietary energy supply is weighted by the total population.

^c 2001.

^d Average 2000-2002.

^e 1998.



Several PICs have seen large falls in food production per capita in recent years

The picture is even more discouraging with respect to per capita food production (see figures IIa and IIb). Food production per head of population has been maintained at or around the 1995 levels in the Federated States of Micronesia, Papua New Guinea, Solomon Islands, and Tonga. However, in both Papua New Guinea and Solomon Islands, per capita production declined between the late 1990s and 2003. Fiji, French Polynesia, New Caledonia and Vanuatu have seen large fall-offs in food production per capita in recent years while the declines in New Caledonia and Vanuatu are a matter of concern.

Changing dynamics of population

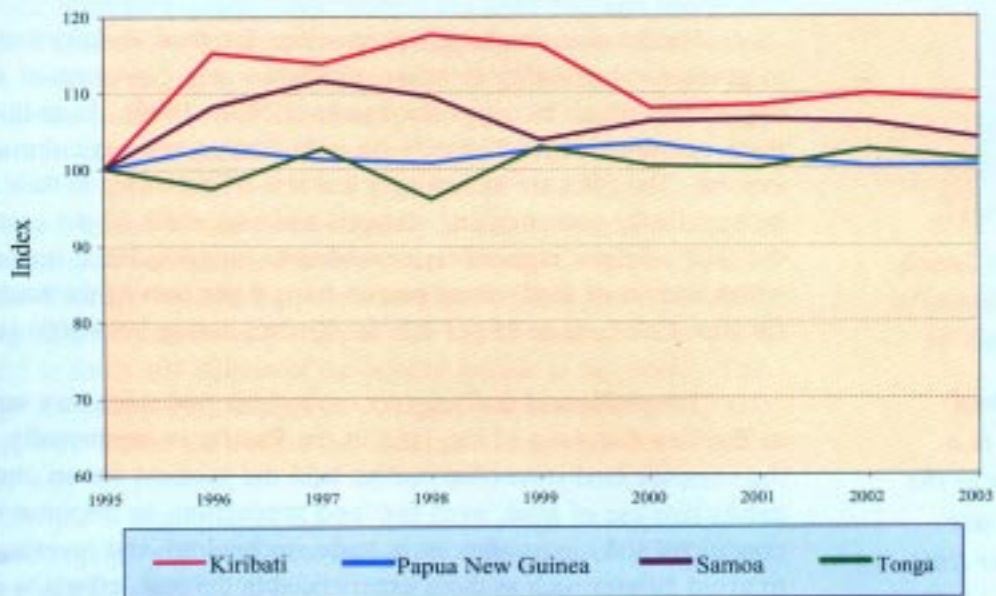
Traditional village systems are unable to cope with rapid population growth

The majority of the PICs' population live in the rural areas and rely on the subsistence sector for the bulk of their livelihood.¹¹ While traditional Pacific island agricultural systems were generally sustainable, these systems appear to be breaking down. It is difficult to imagine agricultural production in communal land ownership systems keeping pace with the recent rapid growth in populations resulting from the reductions in infant,

¹¹ This situation is changing rapidly. Most PICs (except Papua New Guinea) are expected to have a mostly urban population by 2010.

Figure IIa. Net food production per capita for selected Pacific island economies, 1995-2003

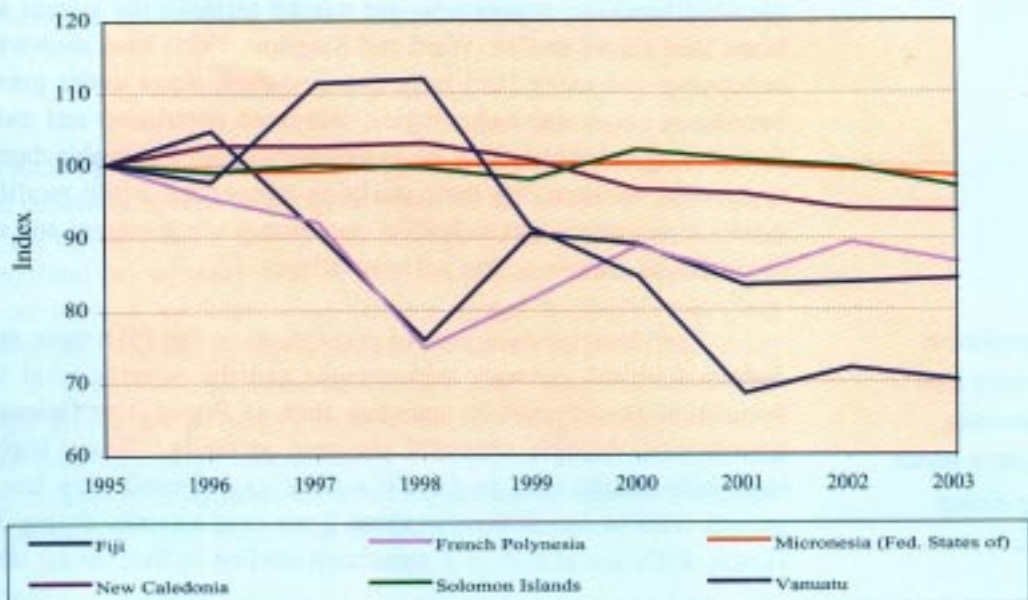
(1995 = 100)



Source: FAO, FAOSTAT Database, 2004.

Figure IIb. Net food production per capita for selected Pacific island economies, 1995-2003

(1995 = 100)



Source: FAO, FAOSTAT Database, 2004.

maternal and adult mortality. The growth in squatter settlements in peri-urban areas, due to heavy rural-urban migration, also appears to support the notion that the traditional village systems are unable to cope with the rapid population growth.¹²

The breakdowns have repercussions for food security and could lead to greater vulnerability to other disasters – e.g., overuse of land causes degradation which increases flood risks (UNDP, 1999). In addition, most of these countries depend heavily on only one or two agricultural crops for exports. The PICs are increasingly less self-reliant owing to their dependence on imports for consumption. Imports make up about 50 per cent or more of the GDP of these economies; expenditures on agricultural imports (most of which consist of food) alone ranged from 9 per cent of the total import bill for New Caledonia to 35 per cent for Kiribati during 1999-2001 (table 1).

Complex land ownership is a hinderance to the productive use of land over time

The problem of declining per capita food production may well be related to the fact that most of the land in the Pacific is communally owned and the complex land ownership and/or land use systems are an obstacle to the productive use of land, even for food production, in response to changing conditions and circumstances in trade, technology and investment. Thus, to avoid failures such as those experienced in the past, efforts to improve the productivity of the agricultural sector must include initiatives to address land tenure issues. Creating freehold land tenure is not politically feasible at this stage; it is also not necessary in order to provide certainty of tenure to secure increased investment and productivity.

Provision of long-term leaseholds within the customary ownership system seems to be the best course of action and is easiest to achieve in areas offering high-value developments. Fiji's land tenure system with registered land leases to support the sugar industry was successful for several decades; however, adjustments are needed to make the system sustainable. Some land tenure studies (Ward and Kingdon, 1995) have shown how people occupying and using land have changed their ways under pressure from introduced crops and technologies, increased population and monetization. Enterprising individuals have developed approaches that enable them to respect traditional customs for their unifying properties while modifying their details to accommodate individual investment accumulation and distribution of wealth on a more or less permanent basis.

High population growth rates and poor economic performance mean declining living standards

The changing dynamics of populations in the PICs have major implications for food security in particular and the poverty level in general. Population growth rates in countries such as Papua New Guinea, Solomon Islands and Vanuatu exceed 2 per cent annually. These high rates are especially challenging as the PICs have experienced very low economic growth rates in recent years – about 2 per cent annually during 2000-2003. Hence, PICs are at risk of a significant decline in their living standards, as

¹² While the attraction of urban life may help to explain the rural-urban migration, the migration cannot be attributed to employment prospects in urban areas as there is very limited jobs growth in these countries.

was the case for Kiribati, the Marshall Islands, Papua New Guinea, Solomon Islands and Vanuatu during the period 2000-2003 (table 2).

Table 2. Total land use and agricultural area and its elements in selected Pacific island economies

	<i>Total land use ('000 ha) 2001</i>	<i>Agricultural area per capita (ha/person) 2001</i>	<i>Arable land (% of agricultural area) 2001</i>	<i>Permanent crops^a (% of agricultural area) 2001</i>	<i>Permanent pasture^b (% of agricultural area) 2001</i>
Cook Islands	23	0.35	57.1	42.9	0.0
Fiji	1 827	0.56	43.5	18.5	38.0
French Polynesia	366	0.18	7.0	46.5	46.5
Kiribati	73	0.46	5.1	94.9	0.0
Marshall Islands	18	0.27	21.4	50.0	28.6
Micronesia (Federated States of)	70	0.37	8.5	68.1	23.4
New Caledonia	1 828	1.04	3.1	2.6	94.3
Niue	26	4.00	50.0	37.5	12.5
Northern Mariana Islands	46	0.17	46.2	15.4	38.5
Palau	46	0.45	44.4	22.2	33.3
Papua New Guinea	45 286	0.21	20.3	62.8	16.9
Samoa	283	0.82	45.8	52.7	1.5
Solomon Islands	2 799	0.25	15.8	49.1	35.1
Tonga	72	0.53	32.7	59.6	7.7
Vanuatu	1 219	0.80	18.5	55.6	25.9
Asia and the Pacific	2 014 355	0.32	39.8	5.2	55.0
World	13 041 038	0.82	27.9	2.6	69.5

Source: FAO, *The State of Food and Agriculture 2003-2004* (Rome, FAO, 2004).

^a Permanent crop area refers to land cultivated with crops that occupy the land for long periods and need not be replanted after each harvest.

^b Permanent pasture area refers to land used permanently (five years or more) for herbaceous forage crops, either cultivated or growing wild (wild prairie or grazing land).

Pacific societies are seeing significant rural-to-urban migration, which is putting great pressure on the limited services available in urban centres. PIC societies are also experiencing fast-changing lifestyles, with growing demand for non-traditional foods. Despite the many projects that have aimed to promote good nutrition and increase food security, and despite strong economic and health arguments for the consumption of traditional foods, almost everywhere the opposite has happened. The traditional diets of Pacific islanders were once predominantly fresh fish and other seafood, root crops (taro, manioc, yams, sweet potatoes), coconuts and leafy vegetables. As less food is produced locally (and with the higher prices for local food items), more is imported and diets have become nutritionally inferior, being higher in refined oils, fats, salt and sugar.

Consumption of more imported food is resulting in an upsurge of lifestyle diseases such as cardiovascular disease, strokes, cancer and diabetes

The dietary energy supply in PICs ranges from a low of 2,176 calories per person per day in Papua New Guinea to a high of 2,917 calories per day in Kiribati (table 1). About 27 per cent of Papua New Guinea's population was classified as undernourished during 1998-2000 (ESCAP, 2003). Within the Asia-Pacific region, only Afghanistan, with 70 per cent, and Bangladesh and Cambodia, with 35 and 36 per cent respectively, have much higher levels of undernourishment than Papua New Guinea. The impact is evident in emerging patterns of ill health in Papua New Guinea.

In general, PICs have witnessed an upsurge in lifestyle diseases such as cardiovascular disease, strokes, cancer and diabetes. Some non-communicable diseases have reached epidemic levels in some countries, including diabetes. In Fiji, for example, diabetes cases occupy 15-20 per cent of all hospital beds. Hypertension and other circulatory diseases are also rising fast, fuelled by diets high in fats and sugar (UNDP, 1999).

Vulnerability to environmental shocks

It is inevitable that unsustainable development is connected with environmental degradation, poor diets, ill health from degenerative and lifestyle diseases, and other forms of impoverishment. Increasing populations also increase competition for the finite amount of land useful for food production. This problem is becoming more pronounced in the small atoll island economies. Indeed, PICs present a contrasting picture in terms of the availability of arable land with several countries comparing poorly to the average for the Asia-Pacific region. Countries such as Cook Islands, Fiji, Niue, Northern Mariana Islands, Palau and Samoa have arable land ranging from 44 to 57 per cent of total agricultural area, higher than the Asia-Pacific average. Most Pacific island countries, however, do not fare well against the averages for Asia-Pacific and the world in terms of permanent pasture as a percentage of agricultural area, but they compare well in terms of permanent crops as a percentage of total agricultural area (table 2).

As noted above, the PICs' smallness and isolation make them more vulnerable to external economic fluctuations and environmental shocks. PICs have no control over world market prices for their exports but they can help themselves by adopting initiatives leading to export diversification. Such initiatives could include attempts at identifying "niche" markets as well as developing more value added products (i.e., products that are further processed and/or produced in higher-quality form. Except for Papua New Guinea and Tonga, value added from agricultural products contribute less than 20 per cent of GDP in Pacific island countries (table 1).

Natural disasters often threaten food security in PICs

Natural disasters, such as cyclones and drought, often threaten food security in the Pacific. Normally, few lives are lost during natural disasters but there is costly damage to infrastructure and the physical environment; repair and rehabilitation costs can take 30 per cent or more of the development budget. In addition, agricultural production usually takes years to recover from a cyclone, flood or drought. For example, cyclone Heta, which struck American Samoa, Cook Islands, Niue, Samoa and Tonga in early 2004, caused

considerable damage to property and destroyed crops. In the case of Samoa, the damage from cyclone Heta was estimated at US\$ 35.4 million. The agricultural sector is one of the most vulnerable sectors of Pacific island economies and the one least prepared to counter the impact of disasters (Chung, 1996). This sector also occasionally suffers from devastating pests and diseases.

Following a natural disaster, one of the main relief activities is the provision of food¹³ because the loss of crops in rural communities constitutes a loss of both food supply and cash income, often for long periods. The costs of food relief and rehabilitation are always very high, but the economic value of lost crop production is higher. This is because of the reduction in export earnings, the increase in food imports and higher prices in domestic food markets caused by food shortages.

Importance of sustainable development

The overexploitation of the PICs' limited natural resources also has serious implications for food security. Overfishing by commercial ventures, mainly large foreign operators from distant-water fishing nations (DWFNs), depletes fish stocks. Unsustainable commercial logging, also dominated by foreign companies, leads to a reduction of biodiversity as well as the destruction of natural habitats for some of the animals and plants that people rely on for food and medicine (Duncan and Temu, 1997). Many logging problems have been linked to the corrupt practices of a few resource owners, developers and government officials; hence there is a need to improve governance. Indeed, exploitation of natural resources has contributed to unrest in several Pacific nations, as communities become divided over the ownership, use and distribution of incomes obtained from these resources.¹⁴

Resource owners must become involved in decisions concerning the issuing of licences for the use of resources and the process of providing access to resources must be transparent. In the Pacific, this means that there must be sufficient time for stakeholders to reflect and to learn so that they can ensure that the full benefits from such activities are evenly distributed among the resource owners and in accordance with the conditions of the agreements. PICs need to closely monitor the activities of foreign companies to ensure that they comply fully with the terms and conditions of their contracts, and thereby ensure the long-term sustainability of their natural resources.

It is important for PICs to ensure the sustainable development of their non-renewable resources

Local resource owners must be involved in the decision-making processes concerning the exploitation of their natural resources

¹³ No Pacific island country received such assistance from WFP during 2000-2003. Instead, such assistance mainly came from their traditional donors, namely, Australia and New Zealand, as well as from other sources. For example, Taiwan Province of China donated 720 bags of rice to Tuvalu in August 2004 to ease food problems faced by residents in Funafuti. Rice is the main staple for people living in Funafuti, as most of them came from the outer islands and do not own land on the mainland.

¹⁴ Arguments over land ownership have been mainly responsible for the political and social problems experienced in Fiji, Papua New Guinea and Solomon Islands in recent years.

Regional cooperation offers PICs a useful option for regulating the activities of foreign firms and addressing concerns over the sustainable exploitation of natural resources

Regional cooperation offers these small countries a useful option for regulating the activities of foreign firms and addressing concerns about the sustainable exploitation of natural resources. The fishing industry, especially tuna fishing, is a very important industry for several Pacific island countries, with around 2 million tonnes of tuna stock (worth up to US\$ 2 billion) caught every year. But the use of large, modern fishing boats such as purse seiners is threatening the long-term future of the fishing industry itself. Pacific island countries have delegated to the Forum Fisheries Agency control of access to tuna and other fish. The Agency has imposed a 205-tuna-boat ceiling and, in the face of concerns about the larger boats, limited the number of days that boats are allowed to fish in Pacific waters. The new Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific, which came into force in June 2004, is expected to ensure, through effective management, sustainable use of highly migratory fish stocks in the Western and Central Pacific Ocean.¹⁵

Increasing threat from HIV/AIDS

HIV/AIDS is posing a very serious threat to PICs

The incidence of HIV/AIDS is increasing in the PICs and is likely to affect adversely the welfare of Pacific societies in important ways if steps are not taken to limit its spread. From experiences in Africa and parts of Asia, the disease has major implications for food security in Pacific societies. A recent United Nations report estimated that 5 million people around the world became infected with HIV in 2003 and that one out of every four new infections was occurring in the Asia-Pacific region. The number of people infected with HIV in Oceania in 2003 was estimated at 32,000.

The rate of new infections in Papua New Guinea is believed to be growing by 50 per cent a year, the highest growth rate in the Pacific region. While there were 8,300 registered HIV/AIDS cases in Papua New Guinea, the authorities estimate that between 40,000 and 60,000 could be affected out of the population of 5.2 million (Niesi, 2004). AIDS is far more than a health crisis; it threatens development. Experiences in countries such as Thailand show that it is important to have adequate political commitment at the highest level and adequate resources to fight the disease and that educating the public about the disease must be an integral part of any anti-AIDS endeavour.

National and subregional initiatives to foster food security

A common theme of all declarations and action plans adopted at recent global conferences, including the Rome World Food Summit, is that of national

¹⁵ This major agreement was the result of a long and arduous process of negotiations among Pacific island countries and the DWFNs in the Pacific Ocean region to establish a new regional fisheries management organization, the Western and Central Pacific Fisheries Commission, with its secretariat located in the Federated States of Micronesia. The negotiations, which began in 1994, have ensured that the Pacific Ocean now has in place a comprehensive and legally binding regime to conserve and manage the region's valuable tuna fishery.

responsibility and international solidarity. The goals defined in those declarations and plans are ones that only States can achieve. However, all developing economies will require assistance from the international community to achieve their goals.¹⁶

One of FAO's first follow-up actions to the World Food Summit was the preparation of documents on national strategies for agriculture development and food security (NSAFS) for its member countries. With the exception of Nauru, all the FAO member countries in the Pacific (Cook Islands, Fiji, Kiribati, the Federated States of Micronesia, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu) had produced NSAFS documents by 2004. Despite these actions, evidence is mixed regarding whether the strategies are influencing prioritization of agriculture and rural development in the allocation of national resources.

The PICs have initiated a variety of activities and policies to improve their agricultural sectors. For example, the Ministry of Agriculture and Forestry in Tonga has changed its operations to focus more on the provision of services to farmers, such as research and extension, and to be less directly involved in commercial activities (ADB, 2002). However, individual PICs have limited financial and human resources, and thus regional cooperation initiatives to achieve food security will be of great importance. It is also important that the PICs work closely among themselves and with other developing countries with similar problems so that they can learn from each other's experiences in moving towards greater food security.¹⁷ For instance, cooperation between agricultural experts from the Federated States of Micronesia, Palau and Samoa in sharing genetic materials on taro revitalized Samoa's taro industry after it was hit by the dreaded leaf blight disease. Taro has now resumed its position as the predominant staple food as well as a major export in Samoa (Pacnews, 2004).

Recent subregional initiatives to address food security and poverty, especially in rural areas, include the Regional Programme for Food Security in the Pacific Islands. This project is funded from an Italian Government contribution of about US\$ 4.5 million to the FAO Trust Fund.¹⁸ The first component of the project is to enhance food production and security activities to address the supply side in Pacific agriculture, forestry and fisheries. Also, there is considerable scope for applied research and development of appropriate technologies for smallholder agriculture. The second component of the project will strengthen PICs' agricultural trade and policy, with a focus on building institutional capacity on trade facilitation

Evidence is mixed concerning prioritization in the allocation of national resources for agriculture and rural development

The Secretariat of the Pacific Community is taking the lead in assisting PICs in agricultural development, including food security initiatives

¹⁶ It is one thing for countries to be signatories to the action plans adopted by global conferences; it is another for them to put the plans into action.

¹⁷ See, for example, FAO, "Success stories in food security" (WFS96/TECH/11), a paper prepared for the World Food Summit, July 1996.

¹⁸ To maximize its impact, FAO is working closely with relevant subregional agencies such as the University of the South Pacific, the Secretariat of the Pacific Community, the South Pacific Regional Environment Programme and the Forum Fisheries Agency to implement this project.

related to the establishment of sanitary and phytosanitary standards for agriculture exports.

The Secretariat of the Pacific Community (SPC) has been helping PICs to develop their agricultural sectors for many years. A recent SPC initiative is its project on the development of sustainable agriculture in the Pacific. The project began in November 2003 with the assistance of 6.2 million euros from the European Union. It aims to improve food security and contribute to developing sustainable agriculture for farm families in participating countries¹⁹ through its focus on four major areas: establishing improved systems to identify farmer's production problems and solutions; identifying appropriate technologies through on-farm demonstrations; upgrading farmer participatory extension methods and technical skills; and promoting and enhancing capacity in extension communications.

Other SPC agriculture programmes with food security implications are in entomology, plant pathology, weed management and information and extension services, with special groups for fruit fly control and taro beetle management. Fruit fly management is one of SPC's best-known and most successful projects. Through the development of high-temperature forced air disinfestation protocols, export constraints have been removed from several key crops, namely, pawpaw and breadfruit in Samoa, grapefruit in Vanuatu, chilies in Fiji and pawpaw and lime in New Caledonia. Other SPC activities include work on improving the most important crops in the Pacific (banana, taro, coconut and yam), on animal health and production, on agriculture policy, on farming systems, on marketing and on food and nutrition improvement. Additionally, under its regional forestry programme, SPC helps to strengthen national capacities for promoting sustainable land use, forest management and forest utilization. Under its fisheries programme, SPC provides scientific advice on the status of highly migratory species, primarily tuna stocks.

The full accreditation of the University of the South Pacific's Institute of Applied Sciences is a major step towards food security in the Pacific

The awarding of full accreditation of the University of the South Pacific's Institute of Applied Science by the world-renowned accreditation body, International Accreditation New Zealand, is a major step towards food security in the Pacific region. The University of the South Pacific's laboratory is the only one in the south-west Pacific qualified to carry out tests to determine the contents of nutrients and contaminants in food. The University achieved the accreditation with the support of FAO because food composition data are fundamental to food trade, agriculture policy development, nutrition education and the setting of nutritional guidelines.

Since the PICs' first reported case of HIV in 1982, several initiatives have been undertaken, including the first Pacific Regional HIV/AIDS Conference, held in Fiji in 1992. However, international donors and agencies have largely led the response to HIV/AIDS in the Pacific. SPC has also been

¹⁹ The countries are Cook Islands, Fiji, Kiribati, the Marshall Islands, the Federated States of Micronesia, Nauru, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu.

helping PICs in their fight to control the spread of HIV/AIDS. Pacific island Governments, for their part, need to acknowledge that the threat of HIV/AIDS to their vulnerable societies is a serious one, and their leaders need to take a more active role and work closely with relevant donors and subregional agencies such as WHO and SPC in fighting the disease (see Duncan, 1995, for an early warning of the looming crisis).

Conclusions and policy options

PICs need to recognize that food security will continue to be a major problem as long as a large proportion of society does not earn sufficient income to obtain enough food to meet their nutritional needs. However, it is important for PICs to note that measures to improve food security should not only be focused on increases in per capita food supplies. Other measures such as trade liberalization – to allow the country to exploit more fully its comparative advantage – improvements in the investment environment to promote employment growth and policies to promote gender equality, health and education can all contribute to improved food security. Moreover, policies that lead to increased income inequality, such as the creation of monopolies for favoured interest groups, and policies that are biased towards the urban centres should be reformed.

For the majority of the Pacific islanders who live in rural areas with few alternative sources of income, agriculture provides the best avenue to ameliorate food security. Therefore, the agriculture sector will continue to be important in meeting their food needs as well as for the employment and income that expand their horizons with respect to their other needs. Given this, it is important that PICs take appropriate measures to fill critical gaps in agricultural technology to increase productivity. In order for PICs to formulate achievable agricultural policies and strategies, they need to have access to reliable agricultural statistics and other information. As mentioned earlier, the PICs will also have to develop more effective land tenure/use systems if they are to improve the performance of the agricultural sector.

PICs also need to invest more on transport infrastructure (especially roads and ports) and on communications (with an eye on improving the poor market integration that exists between producers, especially small farmers, and consumers). Achieving such investments would, among other things, call for measures to encourage the active participation of the private sector in the agricultural sector – and much of that private sector will consist of small and medium-sized enterprises.

Pacific Governments also need to invest more in developing their human resources, strengthening their institutional capacities in research and development and providing extension services that help to improve the relevance of research and to quickly put research findings to use. Measures taken should include strengthening national agricultural research institutes, especially in their efforts to diversify their nations' exports, and ensuring the viability of staple crops such as taro, yam, banana and kava. The priorities in the larger PICs would include plant protection, strengthening of the

Measures to improve food security in PICs must also address other related issues

Reliable agricultural statistics and other information are essential in designing achievable agricultural policies and strategies

More investment in infrastructure and human resources is needed ...

biosecurity situation and facilitation of trade by harmonizing in-country procedures and standards (quarantine, food quality and safety, etc.) to conform to international standards.

In the above connection, PICs also need to improve their quarantine systems to safeguard against the introduction of diseases that could cause extensive damage to staple crops, as happened with the taro blight in Samoa in the 1980s. The countries must be encouraged to continue working closely with relevant agencies such as FAO and SPC, especially in the areas of research and development, so that they can provide inputs to and benefit from global initiatives such as the Global Crop Diversity Trust.

... and so are sustained efforts to diversify the currently narrow export base

PICs currently rely on a few commodities for export earnings, and the need to diversify their exports is self-evident. One way to achieve diversification would be to find “niche” exports such as noni, kava and squash. They could also invest more in value added industries to create jobs and earn foreign exchange. In this connection, it is essential to have an investor-friendly environment, low-cost essential services and infrastructure, and effective trade liberalization and facilitation measures.

Cooperation among all stakeholders as well as among PICs is crucial in addressing concerns for sustainable exploitation of natural resources and food security

Nevertheless, overexploitation of natural resources in Pacific island countries has often been closely associated with the large commercial activities of mainly foreign investors. Thus, the onus is on resource owners and their Governments to work together to ensure that investors, both local and foreign, who are granted the right to exploit natural resources fully comply with the conditions of their contracts. Additionally, such contracts, among other things, must ensure a sustainable rate of exploitation as well as the equitable disbursement of benefits to the resource owners in a transparent manner.

At the same time, national Governments need to recognize the important role played by non-governmental organizations (NGOs) in assisting local communities in the Pacific in taking more control of decisions concerning the exploitation of their natural resources and in working closely with the NGOs on this important issue. Here again, regional cooperation initiatives offer these small countries options in regulating the activities of foreign firms to address concerns related to sustainable exploitation of natural resources. But it is important to stress that all the parties involved must derive some benefits from such cooperation if these initiatives are to achieve their intended results. Hence, Pacific island countries ought to be congratulated on their efforts towards the adoption of the new Convention on the Conservation and Management of Highly Migratory Fish Stocks.

REFERENCES

- Agence France-Pres, 2004. "Annan leads call for African green revolution to end hunger crisis", 5 July.
- ADB, 2002. *Tonga: Natural Resource Use and Sustainable Socioeconomic Development* (Manila, ADB).
- Aleki, F.S., 2004. "Combating poverty and food insecurity in the Pacific: subregional programmes in the agriculture, forestry and fisheries sectors", statement made at the Regional High-level Round-table Meeting: Spearheading Subregional Programmes and Cooperation for Eradication of Poverty and Food Insecurity in Asia and the Pacific, Bangkok, 23-24 February 2004.
- Chung, J., 1996. "Mitigating disasters in agriculture", discussion paper prepared for the PHALPS Conference, Rarotonga, 28 February-6 March 1996.
- Duncan, R., 1995. "HIV/AIDS: adding to the Pacific nightmare", *Pacific Health Dialog*, vol. 2, No. 2, pp. 147-152.
- Duncan, R. and Ila Temu, 1997. "Trade, investment and sustainable development of natural resources in the Pacific: the case of fish and timber", in ESCAP, *Enhancing Cooperation in Trade and Investment between Pacific Island Countries and Economies of East and South-East Asia, vol. I: Issues* (United Nations publication, Sales No. E.97.II.F.15), pp. 175-211.
- ESCAP, 2003. *Promoting the Millennium Development Goals in Asia and the Pacific: Meeting the Challenges of Poverty Reduction* (United Nations publication, Sales No. E.03.II.F.29).
- FAO, 1996a. "Food and international trade" (WFS96/TECH/8, prepared for the World Food Summit).
- _____, 1996b. "Food requirements and population growth" (WFS96/TECH/10, prepared for the World Food Summit).
- _____, 1996c. "Success stories in food security" (WFS96/TECH/11, prepared for the World Food Summit).
- Niesi, P., 2004. "AIDS pandemic threat in PNG", in *Papua New Guinea Post-Courier*, 27 July, available at < www.massiveeffort.org/showstory.asp?id=2576 >, 9 September 2004.
- Pacnews, 2004. "Samoa Minister encourages cooperation", 9 September.
- Swaminathan, M.S. and Per Pinstrup-Andersen, 2004. "A big step towards global food security", *Financial Times*, 5 July.
- UNDP, 1999. *Pacific Human Development Report 1999: Creating Opportunities* (Suva, UNDP).
- Ward, R.G. and Elizabeth Kingdon, eds., 1995. *Land, Custom and Practice in the South Pacific* (Cambridge, Cambridge University Press).
- WFP, 2004. "Hunger in the developing world", available at < www.wfp.org/country_brief/hunger_map/map/hungermap_popup/map_popup.html >, 11 August 2004.
- Yari, M., 2003. "Beyond 'subsistence' affluence: poverty in Pacific island countries", in United Nations, *Bulletin on Asia-Pacific Perspectives 2003/04* (United Nations publication, Sales No. E.03.II.F.52), pp. 41-53.

Introduction

Extrême absolute poverty in Central Asian countries was not considered to be a serious problem during the former Soviet Union period.² Guaranteed employment, social safety nets and subsidies from the State provided food and other basic necessities to almost all the population. However, the standards of living in Central Asian republics in general were low as compared with other republics in the former Soviet Union. After the Central Asian countries gained independence in 1991, their transition to market economies resulted in severe economic hardships for most of the population.

Many of the economic privileges enjoyed by the people under the former Soviet Union were removed as such privileges appeared to be an obstacle to the transformation process and could not be provided by scarce government resources. The outset of the economic transition was characterized by fully fledged recession and an erosion in living standards in all the Central Asian countries. At the same time, the sharp output declines were aggravated by hyperinflation resulting from price liberalization and the monetization of large fiscal deficits. The drop in output and the resulting high unemployment led to significant increases in poverty levels in the subregion.

Since 1995, however, the Central Asian countries have pursued anti-inflation policies and initiated the implementation of macroeconomic reforms which led to economic recovery and greater price stability. Annual inflation rates fell from their hyper levels during the mid-1990s to relatively modest rates in recent years. The economies of Central Asia also managed to display strong performances in recent years. However, despite a return to positive economic growth rates since 1996, real output in most countries in the region still remained 10-30 per cent below that of 1989. Job opportunities have not grown in parallel as the transition process has yet to create a conducive environment for private sector businesses to emerge.

The main objectives of this paper are to review the poverty situation in selected countries of Central Asia, analyse development policies and

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² The countries included within the scope of the analysis in this paper are Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan.

*Poverty is considered
a new phenomenon
in Central Asia*

programmes adopted since independence, identify the remaining challenges and suggest policy options for reducing poverty.

The socio-economic profile of Central Asia

Central Asia still enjoys favourable social indicators

The population of the Central Asian countries stood at 74.5 million in 2003, reflecting an increase from 66.1 million in 1990 owing to high population growth rates. Kazakhstan is the largest country in area and the second most populous. However, the population of Kazakhstan fell from 16.7 million in 1990 to 15.1 million in 2003 owing mainly to the emigration of Russians. The share of Russians in the total population of Kazakhstan fell from about 38 per cent in 1989 to 15 per cent in 2003. The most populous country in the subregion is Uzbekistan with more than 26 million people. The least populous and the smallest country is Armenia (table 1).

Table 1. Geographic and social indicators

	Population (thousands) ^a	Surface area (thousands of sq km)	Adult literacy	Life expectancy (at birth) ^b	Infant mortality (per 1,000 live births) ^b
Armenia	3 799	30	99 ^c	75	30
Azerbaijan	8 117	87	..	65	76
Georgia	5 126	70	..	73	24
Kazakhstan	15 154	2 725	99	62	76
Kyrgyzstan	5 138	200	..	65	52
Tajikistan	6 245	143	99 ^d	67	90
Turkmenistan	4 867	488	..	65	70
Uzbekistan	26 093	447	99	67	55

Source: ESCAP, *ESCAP Population Data Sheet 2004* (ESCAP, Bangkok, 2004); and World Bank, *World Development Indicators 2004* (CD-ROM).

^a 2003.
^b 2002.
^c 2001.
^d 2000.

Natural endowments are a strength for Central Asia

The Central Asian subregion is richly endowed with agricultural, mineral and fuel resources. Reflecting these conditions, the agricultural, industrial and manufacturing sectors account for a sizeable share of GDP. For example, agriculture accounts for over 20 per cent of GDP in Central Asian countries except Azerbaijan and Kazakhstan, reflecting the naturally ideal conditions for agriculture (table 2).

The share of industry and manufacturing in GDP in Azerbaijan, Kazakhstan and Turkmenistan is high, reflecting significant oil and gas deposits as well as large deposits of coal and many rare and precious metals, including gold. Central Asian countries were among the main producers of electric power, some machine building, heavy industry and building

materials in the former Soviet Union. The services sector accounted for more than half of GDP in Georgia, Kazakhstan and Tajikistan in 2002. All the Central Asian countries have highly specialized, trade-dependent economies based largely on natural resources and agricultural production, which account for the bulk of their total exports. In foreign trade, the Central Asian countries were more oriented to inter-republic trade within the former Soviet Union. Trade as a percentage of GDP ranged from 66.5 per cent in Georgia to 130.1 per cent in Tajikistan in 2002.

Table 2. Economic indicators for Central Asian countries

	GDP per capita (current US\$) ^a	Economic sectors (value-added % of GDP) ^b				Trade (% of GDP) ^b
		Agriculture	Industry	Manufacturing	Services	
Armenia	725	26	37	23	37	77
Azerbaijan	887	16	52	20	32	95
Georgia	769	21	23	..	56	67
Kazakhstan	2 001	9	39	16	53	93
Kyrgyzstan	350	39	26	11	35	82
Tajikistan	240	24	24	21	52	130
Turkmenistan	2 266	..	..	..	..	..
Uzbekistan	341	35	22	9	44	72

Source: IMF, *World Economic Outlook Database September 2004*, < <http://www.imf.org/external/pubs/ft/weo/2004/02/data/index.htm> >, 25 October 2004; and World Bank, *World Development Indicators 2004* (CD-ROM).

^a 2003.
^b 2002.

All the Central Asian countries had high birth rates and large families, especially in rural areas, and a resulting low per capita income except in Turkmenistan and Kazakhstan. Reflecting the universal coverage of education under the Soviet Union, the literacy rates remained high at over 99 per cent in most countries in the subregion.

Poverty situation

As mentioned earlier, absolute poverty was not considered a serious issue during the former Soviet Union period. Research documentation from the World Bank and IMF provides some indication of the levels of absolute poverty that prevailed in Central Asian countries prior to independence. The poverty estimates prepared for Central Asian countries for 1988 were based on national poverty lines, which were set around US\$ 2 (in purchasing power parity terms).³ The setting of the poverty line at a somewhat higher level was necessitated by the cooler climate of Central Asian countries, requiring additional expenditure on heating, winter clothing and food. The

Poverty levels rose sharply in the early phase of transition to a market economy

³ For more details, see IMF and World Bank (2002).

results indicate that poverty levels were quite pronounced even in 1988 (table 3). In Tajikistan, the incidence of poverty stood at 59 per cent, followed by Kyrgyzstan (37 per cent), Azerbaijan (33 per cent) and Armenia (18 per cent). Although not too much should be read into the precise magnitudes because of the limitations of the data,⁴ these results show not only that absolute poverty existed in 1988 but also that it was quite significant in some Central Asian countries.

Table 3. Percentage of the population below the national poverty line in selected countries, 1988-2003

	1988	1995	1996	1997	1998	1999	2000	2001	2002	2003
Armenia	18.0	..	54.7	..	55.0	..	..	50.9	..	..
Azerbaijan	33.0	62.0	..	..	..	..	..	49.0	46.7	43.0
Kazakhstan	..	..	34.6	43.0	43.4	34.5	31.8	28.4	24.2	..
Kyrgyzstan	37.0	..	..	51.0	..	64.1	52.0	47.6	44.4	..
Tajikistan	59.0	..	..	..	..	83.0	..	..	..	68.0

Sources: ESCAP, based on IMF and World Bank (2002), and country studies on Armenia, Azerbaijan, Kazakhstan, Kyrgyzstan and Tajikistan prepared for national seminars on strengthening income and employment generation programmes for poverty eradication in Central Asian and Caucasus countries held in the respective countries during April-May 2004.

The incidence of poverty increased rapidly after the Central Asian countries gained independence and embarked on the process of transition to a market economy. During the second half of the 1990s, more work was carried out on estimation of poverty levels in these countries. Further estimates of poverty levels based on national poverty lines are reported in table 3. The incidence of poverty reached 55 per cent in Armenia in 1998, 62 per cent in Azerbaijan in 1995, 43.4 per cent in Kazakhstan in 1998, 64.1 per cent in Kyrgyzstan in 1999 and 83 per cent in Tajikistan in 1999.

Severe contraction of GDP and high inflation contributed to sharp increases in poverty

A number of factors contributed to the steep rise in poverty in Central Asian countries during most of the 1990s. Prominent among those were a severe contraction of GDP, galloping inflation, widespread unemployment and falling real wages and incomes. Gross domestic production fell on average by 2.9 per cent per annum in Uzbekistan and by as much as 15.4 per cent per annum in Georgia during 1991-1996 (table 4), thus dragging a large number of people into poverty. Real output in most countries in the region still remained below the 1989 level. For example, the GDP levels of Georgia and Tajikistan in 2003 were 61 and 52 per cent lower than in 1989, respectively. Turkmenistan and Uzbekistan were the only two countries which managed to raise production in excess of their 1989 GDP levels in

⁴ There was hardly any tradition of monitoring income poverty levels in Central Asian countries. The concept of income poverty is becoming clearer over time in these countries and the estimation of poverty levels is improving. Therefore, strict comparison of poverty results over time and across countries is not advisable.

2001-2002. Meanwhile, average inflation during 1991-1996 ranged from 330 to 3,317 per cent per annum.

Table 4. GDP growth, inflation and human development index in selected countries

	Average annual GDP growth rate		Average annual inflation rate		Human development index		
	1991-1996	1997-2003	1991-1996	1997-2003	1990	1995	2002
Armenia	-10.1	8.0	1 687.6	4.5	0.756	0.709	0.754
Azerbaijan	-12.8	9.4	707.3	0.4	..	..	0.746
Georgia	-15.4	5.3	3 316.6	7.0	..	..	0.739
Kazakhstan	-7.6	6.4	894.1	9.6	0.781	0.738	0.766
Kyrgyzstan	-8.9	4.6	329.5	13.8	..	..	0.701
Russian Federation	-10.0	4.3	543.1	27.7	0.809	0.766	0.795
Tajikistan	-14.2	7.0	807.0	35.0	0.736	0.665	0.671
Turkmenistan	-8.5	13.6	1 468.2	23.7	..	..	0.752
Uzbekistan	-2.9	3.7	536.0	29.5	0.728	0.712	0.709

Sources: ESCAP, based on national sources; IMF, *International Financial Statistics*, vol. LVI, No. 12 (Washington, IMF, December 2003); ADB, *Key Indicators of Developing Asian and Pacific Countries 2003* (Manila, ADB, 2003) and *Asian Development Outlook 2003 Update* (Manila, ADB, 2003); Economist Intelligence Unit, *Country Reports and Country Forecasts*, various issues (London, 2003 and 2004); web site of the CIS Inter-State Statistical Committee, < www.cisstat.com >, 4 February 2004; and UNDP, *Human Development Report 2004* (New York, Oxford University Press, 2004).

Official data on unemployment rates are available for some years only. Generally, the open unemployment rates are reported to be low with the registered unemployment rate in Tajikistan, for example, being around 3 per cent in 2003. A similarly low figure was reported for Kyrgyzstan for 2000 in unemployment rates, Azerbaijan was even less than 2 per cent in recent years. All these figures capture only the registered unemployed, while actual unemployment rates might have been over 10 per cent.⁵ Moreover, the problem of disguised unemployment has been much more serious as a very large number of people are only partially employed. Data on disguised unemployment rates are generally not available; in Kyrgyzstan, the rate stood at around 22 per cent in 1998.

The transition to a market economy was expected to increase income inequality within the countries of Central Asia. However, the observed deterioration in income distribution was very fast and, in some countries, the Gini coefficient doubled its value from the pre-transition level.⁶ In Kyrgyzstan,

Guaranteed employment gave way to serious unemployment problems

Income inequality rose sharply and aggravated the poverty situation

⁵ This impression comes from country studies on Armenia, Azerbaijan, Kazakhstan, Kyrgyzstan and Tajikistan prepared for national seminars on strengthening income and employment generation programmes for poverty eradication in Central Asian and Caucasus countries held in the respective countries during April-May 2004.

⁶ This point has also been raised by ECE in a recent publication. For details, see ECE (2004, pp. 165-167).

for instance, the value of the Gini coefficient increased from 26.0 in 1988 to 53.1 in 1993. It came down to 40.5 in 1997 and the downward trend has continued since then (table 5). In Uzbekistan, the Gini coefficient was 25.0 in 1988 and 45.4 in 1998 but it went down to 27.0 in 2000. The increase in income inequality in Kazakhstan was relatively moderate but Turkmenistan saw the value of its Gini coefficient rise from 26.4 in 1988 to 40.8 in 1998. Despite various problems with the quality of distributional data, it can be concluded broadly that income distribution became much worse in most countries of Central Asia after 1990 although some improvements have been recorded in more recent years. Worsening income inequality coupled with the sharp decline in aggregate output not only aggravated the poverty situation in countries of the region, these developments also had a negative impact on the human development index (table 4).

Table 5. Gini coefficient in selected countries, 1988-2001

	1988	1993	1995	1996	1997	1998	1999	2000	2001
Armenia	..	..	..	44.4	..	37.9	..	..	..
Azerbaijan	..	..	34.7	..	..	..	..	..	36.5
Georgia	..	..	..	37.1	36.1	36.0	38.1	38.9	36.9
Kazakhstan	25.7	32.7	..	35.3	..	..	..	..	31.3
Kyrgyzstan	26.0	53.1	..	..	40.5	36.0	34.6	30.3	29.0
Tajikistan	..	..	..	..	..	34.7	..	..	..
Turkmenistan	26.4	35.8	..	..	..	40.8	..	..	..
Uzbekistan	25.0	33.3	..	..	..	45.4	..	27.0	..

Source: World Bank, Global Poverty Monitoring web site, < <http://www.worldbank.org/research/povmonitor/> > , 14 September 2004.

Poverty levels have started to come down in recent years

As the economies in the region started to recover in the late 1990s, poverty levels started to drop. Along with the implementation of economic reforms have come positive growth and relatively low inflation rates in all Central Asian economies. The latest available poverty data show that all the countries have registered a notable reduction in poverty in recent years (table 3). It appears that the worst is over as far as the poverty situation is concerned.

Difficulties in measuring progress in achieving the Millennium Development Goals

Regarding the achievement of the Millennium Development Goals, there is a need to rethink the time frame for evaluating the progress in these countries. The base year for the Goals is 1990 and these countries had a very good record in terms of many goal indicators at that time. The situation started to get worse after that. Under the Goals, extreme poverty is to be reduced by half in 2015 as compared with 1990. Extreme poverty is defined as the percentage of population with income below the poverty line of one dollar per capita defined in terms of purchasing power

parity.⁷ Data on extreme poverty for these countries are not available for 1990. For some countries, the available data for 1988 show that extreme poverty defined in terms of the one dollar poverty line was non-existent (table 6). Extreme poverty increased only after 1990. Therefore, it is not appropriate to expect a reduction in extreme poverty by one half from the very low levels prevailing prior to 1990. One option would be to move the base year for these countries to a subsequent year when there were higher poverty levels. In this context, there is thus a need for serious debate on how the targets should be interpreted and their progress measured in the case of the countries in Central Asia.

Table 6. Percentage of the population below the one dollar poverty line in selected countries, 1988-2001

	1988	1993	1995	1996	1997	1998	1999	2000	2001
Armenia	..	..	..	7.8	..	12.8	..	..	..
Azerbaijan	..	..	< 2.0	..	..	..	..	..	3.7
Georgia	..	..	..	..	..	..	2.6	..	2.7
Kazakhstan	0.0	1.1	..	1.5	..	..	..	..	0.1
Kyrgyzstan	0.0	23.0	..	..	1.6	..	0.7	2.0	0.9
Tajikistan	..	..	..	..	..	10.3	..	..	..
Turkmenistan	0.0	20.9	..	..	..	12.1	..	..	..
Uzbekistan	0.0	3.3	..	..	..	19.1	..	21.8	..

Source: World Bank, Global Poverty Monitoring web site, < <http://www.worldbank.org/research/povmonitor/>> , 14 September 2004.

Policies and programmes adopted for poverty reduction

The countries in Central Asia, while implementing structural reforms to support the transformation to a market economy since independence, have adopted various measures aimed at poverty reduction. A number of countries in Central Asia⁸ have introduced Poverty Reduction Strategy Papers (PRSPs) as a vehicle for reducing poverty; others have initiated their own policies outside the PRSP process to tackle poverty problems. Strategies for poverty reduction will take centre stage in Central Asia for two reasons. First, poverty in Central Asian countries is the result of structural changes that have taken place in their transition to a market economy system. Secondly, wide disparities could arise in newly established, market-driven economies.

PRSPs could be an efficient vehicle for reducing poverty

⁷ As the cold climate of these countries requires extra spending on food, clothing and heat, a higher poverty line such as two dollars is considered more appropriate. For details of this argument, see World Bank, "The Millennium Development Goals in Europe and Central Asia", available at < [http://Inweb18.worldbank.org/eca/eca.nsf/MDG+Booklet/\\$File/MDGs.pdf](http://Inweb18.worldbank.org/eca/eca.nsf/MDG+Booklet/$File/MDGs.pdf)> , 7 September 2004.

⁸ These include Armenia, Azerbaijan, Georgia, Kyrgyzstan and Tajikistan.

This could disrupt the growth process, thus dragging more people into poverty and making it more difficult to tackle poverty on a sustainable basis.

Rural infrastructure development, capacity-building of the poor and provision of social safety nets gained priority in PRSPs

Of the three main areas of focus under PRSPs,⁹ infrastructure development serves to develop and maintain rural road networks and basic utilities in Kyrgyzstan and Tajikistan. However, improving irrigation systems has received priority attention in Armenia, Azerbaijan and Tajikistan. Meanwhile, Georgia focuses more on establishing rural markets and improving their linkages to urban markets. Agriculture being the dominant sector in all economies in Central Asia, the establishment of distribution networks and storage facilities, land reforms to overcome the small size of land holdings and related productivity losses, and initiatives to increase agricultural productivity to compensate for falling prices will be necessary if such strategies in rural infrastructure development are to make a meaningful contribution to poverty reduction.

Among the capacity-building measures are training of farmers in management practices and agricultural inputs and the provision of technical support in Azerbaijan and Tajikistan. Government support is aimed at encouraging school attendance in Armenia, Azerbaijan, Kyrgyzstan and Tajikistan while microcredit facilities are made available for the poor in Armenia and Kyrgyzstan. Meanwhile, social safety nets have become a major support system especially for the most vulnerable, including the internally displaced people in Azerbaijan and Georgia. Improving efficiency, including through better targeting, would be needed to make such initiatives sustainable. Rehabilitation of institutions for invalids, the elderly and mentally retarded children has also become a major component of social safety nets in Kyrgyzstan and Tajikistan. Meanwhile, food for work programmes in Georgia provide support for idle men and women during off seasons by utilizing their labour for productive purposes.

Policy challenges ahead

The challenges faced by the Central Asian countries in their transition to a market economy and economic development with equitable distribution of the benefits of growth are manifold.

- The Central Asian countries need to continue undertaking broad areas of reform. The agenda includes completing the creation of market structures, developing the private sector, restructuring industries and SMEs to increase job opportunities and accelerating output growth. All these should lead to improved living standards and poverty reduction. In this context, a stable macroeconomic environment with a set of consistent policies geared to accelerating economic growth would be of paramount importance. This

A properly functioning institutional set-up is crucial for sustaining growth

⁹ For a detailed analysis, see ESCAP (2004). PRSPs for Central Asian countries are available at < <http://www.imf.org/> > .

should be supported by an efficient institutional set-up which includes a properly functioning regulatory mechanism.

- Good governance with clear and transparent signals would be required to foster investor confidence, among other stimuli to economic production and trade. Monetary, fiscal and exchange rate policies would play a critical role in growth and development and as such should be appropriately exercised taking account of the lessons learned from the Asian financial crisis.
- As discussed earlier, worsening income inequality coupled with a sharp decline in aggregate output aggravated considerably the poverty situation in countries of Central Asia. Therefore, it is a major challenge for these countries to continue to ensure broad-based progress towards a full market economy and at the same time prevent a deterioration in the distribution of income among various social and economic groups. The economic recovery together with some improvement in income distribution in recent years augurs well for future efforts at poverty reduction.
- As shown by table 5, high economic growth may itself reduce inequality in the medium term. Nevertheless, policies and programmes for broad-based growth should be strengthened on an ongoing basis so that the poor are not left out of the progressive economic restructuring and recovery to come as in many transition economies, including China and Viet Nam. Employment generation and provision of social and basic services, particularly to the poor, including through agricultural extension services and the development of SMEs, should be integral components of such programmes.
- The public sector still plays a major role in Central Asian economies.¹⁰ The growth of the private sector is most visible in the informal sector as the lack of employment opportunities has forced people of working age to become self-employed by starting small businesses for survival. There is a need for rapid development of formal sector activities so as to generate much-needed employment opportunities and economic diversification in a more efficient way.
- Countries in the subregion still face the challenge of how to foster, unleash and sustain entrepreneurship and private sector activities. In these connections, there is a clear need for more effective institutions, policies and basic infrastructure to promote and facilitate building of the private sector. In this regard, a change in

Broad-based growth is important for reducing income disparities

Rapid development of an efficient private sector is needed

¹⁰ Many inefficient public sector firms are kept alive through government budgetary support. While this may be necessary to protect the employment and livelihood of those working in these firms, it makes it hard for new firms trying to gain entry and delays the evolution of competitive firms.

mindset away from a centrally planned economic setting to a more dynamic private sector entrepreneurial setting and understanding that there is a trade-off between heavy public intervention and growth will be critical.

More resources need to be allocated to maintain achievements in human resources development

- During the former Soviet Union period, countries in Central Asia had a good record of human resources development. In particular, educational indicators in terms of literacy rates and school enrolment rates have been comparable to those in developed countries. However, the same cannot be said for the quality of education. Health indicators show considerable deterioration. Infant and child mortality rates increased, for example, in Armenia, Kazakhstan, Turkmenistan and Uzbekistan between 1980 and 2001¹¹ and life expectancy fell in Azerbaijan and Kazakhstan over the same period. A major challenge for these countries, therefore, is to restore and maintain their achievements in human resources development. More financial resources will be needed in the education and health sectors, particularly for rural areas and poor people who have suffered most from the reduction in public expenditure during the early phase of economic transition.

Social support for vulnerable groups should be strengthened

- Investment in human capital is essential not only to transform the private sector into an engine of growth and diversification. It is also necessary as a measure to counter the negative impact on development arising from the migration of educated and skilled people, particularly those of Russian origin, out of Central Asia. Educational reforms with particular emphasis on the needs of the society at large, including those of private enterprises, would play a critical role in this respect. Such initiatives should be accompanied by efforts to foster employment generation, particularly in labour-intensive sectors.
- Development efforts must also go hand in hand with the provision of social support for vulnerable socio-economic groups. The main reform measures implemented so far have included direct social transfers to poor families, targeted social benefits and privileges and the granting of other incentives and payments. However, countries in the region need to adopt comprehensive poverty reduction strategies which focus on growth, equity and social protection, particularly for the rural population.

Sustaining high growth and creating jobs requires economic diversification

- Diversification of the production and trade base of Central Asian countries is another challenging, but essential, policy option to promote growth and generate employment. Most countries are currently heavily dependent on a limited range of products, which in turn exposes them to vulnerability in terms of external price fluctuations. As such, diversification into labour-intensive sectors would be necessary for broad-based growth in employment and

¹¹ ESCAP (2004, p. 251).

income as well as to reduce the high levels of vulnerability to unexpected swings in the price of oil and other primary commodities and to relatively inelastic external demand for these commodities. However, individual countries need to prioritize their sectoral development needs taking account of domestic and external trade-offs.

- The subregional economies have an advantage in power generation, agricultural production and mineral resources extraction. Productivity improvements in those sectors should be considered on a priority basis. The means used could be privatization and the formation of public-private partnerships and community-based programmes.
- The Central Asian subregion is richly endowed with mineral and fuel resources and Azerbaijan, Kazakhstan, Turkmenistan and Uzbekistan have significant oil and/or gas deposits. These countries produced more than 7 per cent of crude oil and 18 per cent of gas in the former Soviet Union in 1989. They also have significant deposits of coal and many rare and precious metals, including gold. Appropriate management and exploitation of such resources, in particular oil reserves, will be crucial in securing sustained investment and growth.
- Additionally, a revival of the agricultural sector would be another key to generating employment in Central Asia, where fertile land is abundant. For example, the countries of the subregion accounted for 21 per cent of the total agricultural production of the former Soviet Union in 1989, about equal to their share of the population. Indeed, the cotton, fruit and vegetable production of the former Soviet Union was mainly concentrated in Central Asia. Kazakhstan was one of the main producers of grain and wool in 1989. Productivity improvement and the re-establishment of an extensive distribution network within the subregion would be necessary to exploit the advantageous conditions and economies of scale in agriculture.
- In the above context, poverty reduction strategies would greatly benefit from the formation and strengthening of regional cooperation and cross-border ties. The landlocked nature of Central Asian economies and their abundant natural resources make regional cooperation an effective vehicle for economic development in the subregion. This would enable them to overcome the locational disadvantage of being landlocked, limited internal markets and other bottlenecks to development, and high transport costs.

The strengths of Central Asian countries need to be exploited

Re-establishing/deepening linkages which existed under the former Soviet Union

Conclusions

Poverty has become a serious problem in Central Asian countries

In their transition to market-based economies since independence, Central Asian countries experienced sharp increases in poverty levels due to output contraction, high inflation, increase in income inequality and a deterioration in social services and infrastructure. Annual GDP dropped as much as 50 per cent in some countries following independence, with severe repercussions on poverty and employment. Despite a reversal of asset depletion in most Central Asian economies since 1996 as a result of wide-ranging reforms, the growth in job opportunities has not been adequate and economic gains have yet to be translated into a broad-based improvement in living standards.

Policies as well as regional cooperation to promote growth and reduce poverty need to be strengthened and sustained over the long term

The problems encountered by Central Asian economies are numerous. Adjusting to a market-based system from centrally planned economies is a daunting task in itself. Fundamental changes that are needed to support the operation of a market economy efficiently have not always properly in place in many Central Asian economies. While economic policies have yet to be pursued in a consistent manner, many integral elements of an institutional set-up required for the efficient functioning of markets are still missing. Among other things, it is essential to devise and implement a consistent macroeconomic framework that would support economic growth, particularly with enhanced private sector participation; an institutional mechanism, including a regulatory system, that would ensure the efficient functioning of markets; good governance, including adequate transparency and accountability rules; adequate investment in human capital and measures to increase employment generation, particularly in labour-intensive sectors; and extensive social protection for vulnerable groups. Regional cooperation for better and more sustainable exploitation of the inherent strengths and complementarities of the countries of the subregion is crucial for promoting growth and reducing poverty.

Central Asian countries are receiving technical and financial assistance from various sources regarding the measurement of poverty and the implementation of poverty reduction strategies. However, understanding of poverty implications and issues needs to be enhanced among policy makers and high-level officials, a precondition for the effective and timely design of appropriate policies for poverty reduction. To achieve all this, all stakeholders including international organizations have to enhance their assistance to the subregion and monitor pertinent developments in it on an ongoing basis.

REFERENCES

- ECE, 2004. *Economic Survey of Europe 2004 No. 1* (United Nations publication, Sales No. E.04.II.E.7).
- ESCAP, 2004. *Economic and Social Survey of Asia and the Pacific 2004* (United Nations publication, Sales No. E.04.II.F.20).
- IMF and World Bank, 2002. "Poverty reduction, growth and debt sustainability in low-income CIS countries" (Washington).
- UNDP, 2004. *Human Development Report 2004* (New York, Oxford University Press).

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- INTELLECTUAL PROPERTY DEVELOPMENT AND COMPETITIVENESS
- FOOD SECURITY IN PACIFIC ISLAND COUNTRIES
- POVERTY IN COUNTRIES OF CENTRAL ASIA

