Developing Indicators of ASEAN Integration – A Preliminary Survey for a Roadmap

REPSF Project 02/001

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List of abbreviations and acronyms

AADCP	ASEAN Australian Development Cooperation Program
ACCSQ	ASEAN Consultative Committee for Standards and Quality
AEC	ASEAN Economic Community
AEM	ASEAN Economic Ministers meeting
AFAS	ASEAN Framework Agreement on Services
AFTA	ASEAN Free Trade Area
AHTN	ASEAN Harmonized Tariff Nomenclature
AIA	ASEAN Investment Area
AICO	ASEAN Industrial Cooperation scheme
AII	ASEAN Information Infrastructure
AISP	ASEAN Integrated System of Preferences (for CLMV countries)
APEC	Asia Pacific Economic Cooperation
ASEAN	Association of South East Asian Nations
ASEAN 6	Brunei, Indonesia, Malaysia, Philippines, Singapore and Thailand
ASEAN 5	Brunei, Cambodia, Laos PDR, Myanmar and Vietnam
ASP	ASEAN Surveillance Process
BEC	Bureau of Economic Cooperation (ASEAN)
BFS	Bureau of Finance and Surveillance (ASEAN)
BIMP-EAGA	Brunei-Indonesia-Malaysia-Philippines East Asia Growth Area
BCLMV	Brunei, Cambodia, Laos PDR, Myanmar and Vietnam
B2B	Business to business
B2C	Business to consumer
CAP	Common agricultural policy (European Union)
CAPM	Capital asset pricing model
CEPT	Common Effective Preferential Tariff
CER	Common Economic Relations (between Australia and New Zealand)
CIF	Cost, insurance and freight
CLMV Countries	Cambodia, Laos, Myanmar and Vietnam
CPI	Consumer price index
EEC	European Economic Community
EFTA	European Free Trade Area
ERM	Exchange rate mechanism
ESCU	European Coal and Steel Community
EU	European Union
e-ASEAN	Electronic ASEAN
FDI	Foreign direct investment
FOB	Free on board
FTA	Free trade agreement
GATS	General Agreement on Trade in Services
GDP	Gross domestic product
GEL	General exclusion list (for CEPT)
HPA	Hanoi Plan of Action
IAI	Initiative for ASEAN Integration (of CLMV countries)

IAIS	International Association of Insurance Supervisors
ICT	Information and communications technology
IIT	Intra-industry trade
IL	Inclusion list (for CEPT)
IMF	International Monetary Fund
IP	Intellectual property
ISP	Internet service provider
Lao PDR	Lao Peoples Democratic Republic
LDC	Less developed country
MFN	Most favoured nation
MoU	Memorandum of understanding
MRA	Mutual recognition agreement
MUPL	Melbourne University Private Ltd
NAFTA	North American Free Trade Area
NTB	Non tariff barrier
OECD	Organization for Economic Cooperation Development
PECC	Pacific Economic Cooperation Council
REPSF	Regional Economic Policy Support Facility
RIA	Roadmap for the Integration of ASEAN
SEOM	Senior Economics Officials Meeting (ASEAN)
SITC	Standard Industrial Trade Classification
SL	Sensitive list (for CEPT)
SME	Small and medium enterprise(s)
SOM	Senior Officials Meeting (ASEAN)
SREZ	Sub regional economic zone
TEL	Temporary exclusion list (for CEPT)
TNC	Transnational corporation
TRIPS	Trade Related Intellectual Property rights
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
WTO	World Trade Organization

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Executive summary

The main purpose of this study is to identify indicators of important parameters in intra-ASEAN trade, investment and services, especially financial services, which will measure progress towards the goal of an ASEAN Economic Community (AEC) by 2020.

Economic integration in these areas will lead towards the creation of a single ASEAN market much larger than that of any of the individual nations within ASEAN. Integration should promote intra-ASEAN trade and allow for economies of scale for production. It should also encourage domestic, intra-ASEAN and foreign investment in the region.

Integration is also to be sought in trade facilitation initiatives affecting trade between ASEAN Member Countries. Issues such as standardized product specifications; no or reduced tariffs; national treatment for non host ASEAN companies in tenders for government procurement in other ASEAN countries; and harmonization of customs procedures, all have a role to play in the creation of an ASEAN Economic Community. Qualitative process integration indicators for these areas have been developed in this study.

Chapter 1 examines the actual and potential barriers to ASEAN economic integration and identifies barriers under five headings – those which are external to ASEAN such as the performance of the global or regional economy; tariff and non tariff barriers within ASEAN which restrict intra-ASEAN trade; implementation barriers, which come under two categories, 1) where ASEAN countries do not follow up on their commitments to ASEAN, and 2) where ASEAN has insufficient funds to implement agreed projects; independent actions by an ASEAN country which do not seem to be in the best interest of ASEAN as a whole (the development of a free trade agreement between an ASEAN country and a non-ASEAN partner may fall into this category); and, political factors where disputes between Member Countries may spill over into trade and economic issues.

Chapter 1 also looks at the progress of harmonization of ASEAN policies and institutions. There has been a lot of trade facilitation work done, and much work ongoing, in areas including statistics, standards and customs. Initiatives are generally based on world best practice and standards.

Chapter 2 is the methodology chapter. It examines the various types of indicators used in this study. These include process indicators, which often have relevance in the context of trade facilitating initiatives where an enabling legal, regulatory and administrative structure is required before intra-ASEAN trade and investment can be optimised. These indicators could be said to be qualitative in nature.

Indicator types also include input indicators, such as an increase in the number of items in the general inclusion list of the Common Effective Preferential Tariff scheme (CEPT) under the ASEAN Free Trade Agreement (AFTA).

Output indicators record what actually happens in the market place when a new policy framework or initiative is in place and appropriate implementation measures have been taken. An output indicator would seek to answer questions like: when intra-ASEAN tariffs are lowered, does intra-ASEAN trade increase?

Outcome indicators relate mainly to infrastructure projects and measure physical progress in implementation.

Stock and flow indicators are relevant for the integration of financial services and also of investment.

Chapter 2 also addresses the selection criteria for indicators. These include:

- Policy relevance; is the indicator measuring something that can be affected by a change in policy?
- Simplicity; can the indicator be easily understood, both by practitioners who will use it as a basis for policy formulation, and also by the ASEAN public who are interested to see progress towards ASEAN integration and the economic benefits which it brings.
- Statistical consistency; are the available statistics comparable across different ASEAN countries and over time? A lot of work has gone into the harmonization of statistical codes among the ASEAN members.
- Validity; is the indicator appropriate to measure progress towards particular aspects of economic integration? For example, is an increase in the number of products subject to reduced tariffs under the Common Effective Preferential Tariff scheme (CEPT) an appropriate indicator of closer integration or would the value of intra-ASEAN trade actually transacted under the scheme be more appropriate?
- Data availability; is good data currently available at reasonable cost or can it be collected at reasonable cost in the future? Much good data is currently available for trade and foreign direct investment and somewhat less for portfolio investment and for financial and other services.
- Indicator coverage; does the indicator cover a narrow aspect of economic integration or is coverage broader? Broad is better. This relates to the simplicity criteria above.

Chapter 2 also discusses the use of indices. An index is created when two or more indicators are aggregated mathematically. Indices usually combine simplicity of understanding and broad coverage. Most of the indicators suggested in Chapter 4 are indices. In particular, there are many comparative indices where the percentage of a certain variable (say intra-ASEAN exports) to another variable (say GDP) in a country for a given year is compared with the same percentage for ASEAN as a whole. This allows for comparison with the ASEAN average and also with the results for other ASEAN countries for that year, irrespective of the different stages of development and sizes of the economies of the countries being compared. Comparisons can also be made of progress towards ASEAN integration by each of the various Member Countries over time.

In chapter 3, concepts of economic integration are examined and the stages of international economic integration arrangements between countries are set out. The stages include preferential trade arrangements, free trade areas (FTAs), customs unions, common markets, economic unions and political unions. The current target for the AEC is to be FTA plus. However the idea of the AEC is at an early stage and the desired features and timelines have not yet been spelt out. An examination of the features and results of the economic integration stages above could help to chart the way forward for the AEC and lead to new indicators being required. For example, there is currently no requirement to develop indicators that measure moves towards a common external tariff as ASEAN, at least for now, has not declared it's intention to become a customs union. Similarly, measurement of progress

towards free movement of capital, labour, enterprises and technology within ASEAN would be required only if ASEAN seeks to become a common market, the next stage of integration beyond a customs union.

Chapter 4, the integration indicators, forms the heart of the study and presents indicators and indices that measure integration progress in several sectors, the most important being trade, investment and financial services. Where data are available, the suggested indicators have been quantified and the results are included in this chapter. Indicators/indices have also been suggested in areas where appropriate data is not currently available but which appear to be important in the context of measuring integration.

For trade in goods, separate indices were developed for intra-ASEAN exports, imports and trade (exports plus imports). The intra-ASEAN export to GDP figure for ASEAN as a whole increased from 11.7 percent in 1996 to 17.0 percent in 2000, with a high of 40.8 percent (Singapore) and a low of 2.3 percent (Cambodia) in the latter year.

The intra-ASEAN import percentage for ASEAN as a whole also increased, from 9.4 percent in 1996 to 13.6 percent in 2000[3]. For individual countries, Singapore had the highest intra-ASEAN import to GDP percentage in 2000 at 35.9 percent and Indonesia the lowest at 4.5 percent.

The intra-ASEAN trade percentage for ASEAN as a whole increased from 21.1 percent of GDP in 1996 to 30.6 percent in 2000, with Singapore the highest at 76.7 percent in 2000 followed by Malaysia at 45.0 per cent. Lowest was Indonesia at 11.7 percent.

So from a trade in goods point of view, ASEAN integration has been progressing quite well, with all seven ASEAN countries for which data are available having higher intra-ASEAN trade to GDP percentages in 2000 than they did in 1996.

For intra-ASEAN foreign direct investment (ASEAN parties investing in ASEAN countries other than their own), the picture is not so rosy. There was an increase from 1995 to 1997, with the percentage of intra-ASEAN investment rising from 0.49 per cent of ASEAN GDP to 0.79 percent. The financial crisis of 1997 saw the percentage decline quite sharply and by 2000 it was down to 0.17 percent. This decline is almost certainly due to a general lack of investible funds within the region, which was compounded by a downturn in the region's economies.

The study has developed an overall index to measure ASEAN economic integration combining the intra-ASEAN trade and intra-ASEAN foreign direct investment indices. It shows a mixed record on ASEAN integration in the 1995-2000 period, mainly due to a sharp decline in intra-ASEAN investment following the 1997 financial crisis.

Indicators and a comparative index have also been developed which compares the success of the Member Countries in attracting intra-ASEAN visitors, a category which includes people

[3] It might be expected that the intra-ASEAN export and intra-ASEAN import values and percentages of GDP for ASEAN as a whole would be about the same and the fact that they are not might bear further examination, beyond the scope of this study. Typically, intra- ASEAN-imports for ASEAN as a whole are about 80 percent of the value of intra-ASEAN exports. It would be expected that the value of intra-ASEAN imports would be greater as they are valued including insurance and freight (cif) while intra-ASEAN exports are valued free on board (fob).

providing business services, tourists and other categories. The index gives an overview of the progress of ASEAN integration in terms of intra-ASEAN human contact. For the period 1995 to 2000, intra-ASEAN visitors have grown at 5.21 per cent per annum. This can be compared to the growth rate for all visitors to ASEAN at 4.97 percent per annum. Intra-ASEAN visitors were 40.2 per cent of all visitors in 2000, up from 38.9 percent in 1995.

Chapter 5 is the concluding chapter. It suggests that a limited number of the more important indicators in trade and investment should be quantified in the first instance and then widely used when assessing trends in ASEAN. Suitable core indicators are identified and, once these are agreed by Member Countries, a suitable measurement and review regime can be established. This would involve the statistical agencies of Member Countries, guided and coordinated by the Secretariat.

Thus the collection and dissemination of statistics on economic integration should become part of the statistical system of ASEAN. Where new data collections are required, it is recommended that responsibility should rest with Member Countries, using technical support from the Secretariat. The Secretariat would provide definitions, classifications, questionnaires, reporting formats etc to ensure that the data collected is consistent across ASEAN and would be responsible for combining the data, analysis and distribution of the results.

The concept of a scoreboard to monitor a country's performance in meeting its commitments to ASEAN is suggested as an idea that requires further study. The scoreboard results would be a qualitative process indicator of a country's commitment to ASEAN integration. Its emphasis would be on facilitation of trade initiatives which provide an enabling background for intra-ASEAN trade in goods and services and for intra-ASEAN investment.

A recommendation is made that an ASEAN balance of payments should be developed. Statistics derived from the balance of payments trade can provide a reliable framework to track the intra-ASEAN transactions of ASEAN countries. Statistics on the trade, services, capital and financial accounts will provide a common source and better understanding of the nature and trends of intra-ASEAN transactions and of economic integration.

Suggestions for further study that appear in the text are pulled together in chapter 5.

Chapter 1

Objective, barriers and harmonization

1.1 Objective of the study

The objective of the study is to develop indicators for important variables that will indicate progress towards economic integration of the 10 ASEAN nations in the context of the aim to move towards an ASEAN Economic Community. The areas to be covered are: trade in goods; investment; trade in financial and other services[4]; infrastructure; customs; standards, mutual recognition agreements and conformity assessment; small and medium enterprises; e-ASEAN; and, intellectual property.

Economic integration is to be encouraged in all of these areas as they all impact on the creation of a single market much larger than that of any of the individual nations within the 10 members of ASEAN. Market integration should promote intra-ASEAN trade and allow for economies of scale for production. It should also encourage foreign direct and other investment into the region and offers the potential for increased domestic and intra-ASEAN investment within the region.

However, it needs always to be remembered that economic integration should not be pursued for its own sake. The overall developmental goal of the ASEAN nations is to generate economic growth and raise the living standards of ASEAN nationals. To the extent that economic integration contributes to the achievement of this goal, then it is to be encouraged. Based on economic theory and the experiences of the European Union and other international integration initiatives, economic integration, particularly in the key areas of trade, investment and services, appears to offer considerable potential in promoting growth. But there is no ideal level of integration that should be targeted or used as a benchmark for all countries in all circumstances.

Movements in the indicators developed in this study should thus be considered in the overall context of whether they indicate contributions by integration to economic growth and increased standards of living. Quantitative and qualitative aspects will play a part in this assessment.

It is anticipated that ASEAN economic integration will contribute to the narrowing of economic disparities or imbalances between Member countries and this is where consideration of the gap between the CLMV countries (Cambodia, Laos PDR, Myanmar and Vietnam) and the others becomes important. Indicators need to be looked at with this objective in mind[5].

[4] The other services to be addressed in the context of ASEAN integration are: air transport, business services, construction, maritime transport, telecommunications and tourism.

[5] Closing the gap may be assisted by the process of conditional convergence, the tendency for poorer countries to grow faster than richer ones. A low per capita income base gives opportunity for very rapid accumulation of capital, technology, improved management and skills upgrading. Higher income countries do not have this opportunity. It has been estimated that for every doubling of income levels in a country the growth rate tends to be reduced by 1.25 percent per annum. See Jeffery Sachs in the Malaysian Journal of Economic Studies (2000).

An appropriate policy and implementation regime is necessary to optimise growth of the poorer countries and it may be in this area of policy advice that ASEAN can best contribute to the closing of the gap.

Integration is also to be encouraged in terms of its effect on openness and trade facilitation between ASEAN members. Issues such as standardized product specifications; common health and safety requirements; zero or reduced tariffs; national treatment for non host ASEAN companies in tenders for government procurement in other ASEAN countries; harmonization of customs procedures; the reduction of non tariff barriers, all have a role to play in the creation of an ASEAN Economic Community. Facilitation initiatives can often be benchmarked against world best practice and this is happening in ASEAN in areas including statistics – the introduction of the ASEAN Harmonized Tariff Nomenclature; customs – the Customs Vision 2020 which calls for world class standards for the 'ASEAN customs partnership' and; standards – ASEAN standards are consistent with international standards.

Indicators developed in this study will be both quantitative and qualitative. Where data is available for a suggested indicator it will be quantified. Where statistical availability is a problem for a particular indicator, recommendations will be made about data gathering and the formulas to use to calculate the indicator.

1.2 Barriers to economic integration

Progress has been made in the integration of ASEAN. A key concern, however, is whether the progress could have been greater than that which has been achieved so far. Would the pace and extent of ASEAN integration have been as fast or faster without the concerted efforts of cooperation? If the underlying trend in ASEAN is towards greater integration of the economies anyway, can we conclude that the cooperation programs merely took advantage of the movement towards integration?

The evidence on ASEAN integration is somewhat mixed. Progress has been better in some areas than in others. In an assessment of ASEAN integration and in highlighting the current barriers to integration, there are three key areas that should be considered: trade in goods; investment; and services, especially financial services. Of course there are other programs of cooperation that cover a number of economic sectors that will enhance integration, but these three areas can be considered as the core areas of ASEAN integration.

Intra-ASEAN exports, i.e. goods exported from one ASEAN member to another, over the period 1993-1996, grew at a rate of 22.4 percent per annum, increasing from US$44.2 billion in 1993 to US$81.0 billion in 1996. Total ASEAN exports grew at an average annual rate of 18.8 percent over the same period. Intra-ASEAN exports as a share of total exports increased from 21.1 percent in 1993 to 25.0 percent in 1996. Since 1997 and the Asian financial crisis, ASEAN economic growth and international trade have stalled. The pace of integration through trade has slowed down.

ASEAN has long been an important destination for foreign direct investment (FDI). But even before 1997, ASEAN was losing out in the competition for FDI. The rise of China as an economic power, its opening up and membership of the World Trade Organization (WTO) have diverted FDI flows. China's rise has spurred ASEAN to accelerate its integration.

The services sector is an important sector in the economy and trade in services forms an important part of total trade. In 2000, for ASEAN as a whole, services contributed 47.2

percent of the collective GDP, making it the largest sector[6]. It was the largest sector in Malaysia, the Philippines, Singapore, Thailand and Vietnam but not in the other Member Countries.

In ASEAN, the ASEAN Framework Agreement for Services (AFAS) provides the framework for fostering greater cooperation in ASEAN and is indicative of the priority accorded to services for bringing about greater integration. Despite efforts, the opening up of services has been somewhat slow and much more remains to be done.

There are still barriers to integration in ASEAN. These can be broadly divided into a number of types. Firstly, there are barriers which are exogenous or external to ASEAN. The performance of global and regional economies is a factor which can hinder the process of integration. Secondly, there are the barriers to trade within ASEAN and these can be subdivided into tariffs and non-tariff barriers (NTBs). Thirdly, there are barriers to integration that are related to the implementation process. These barriers have to do with commitment i.e. the undertaking to follow or not to follow through with that which has been agreed. Domestic or national reforms, for example, should complement ASEAN-wide reforms. Fourthly, there are actions and measures of ASEAN members that may appear to be inimical to the interest of economic integration for ASEAN as a whole. Finally, there are the political factors, such as the ups and downs in bilateral relations between members of ASEAN. These can spill over into the economic sphere and that can hinder economic integration.

1.2.1 Global and regional economic factors and integration

Economic growth can hinder or assist the process and speed of ASEAN economic integration. Expanding global and regional economies can provide the impetus to integration. Generally, ASEAN is an outward looking economic grouping with economies that are open. Trade accounts for a sizable share of the region's GDP. Singapore and Malaysia, for example, are very open economies. ASEAN depends a great deal on export markets, these markets being outside ASEAN, especially in the USA, Europe and Japan, as well as Asian markets and the markets of the 500 million people in ASEAN. The world economy and ASEAN as a group grew at a higher level in the first half of the 1990s before the region was struck by the 1997 financial crisis.

Capital flows to ASEAN were badly affected by the financial crisis. Short term capital, portfolio capital, moved out of the Southeast Asian region. Trading volumes on the stock exchanges and market capitalisation dropped significantly. While FDI inflows did not drop precipitously, investor sentiments were badly dented and FDI inflows into ASEAN slackened.

A number of processes and forces have contributed towards greater integration. Firstly, there is the growing interdependence that has been market driven. This interdependence has linked Northeast and Southeast Asia and North America. The international production sharing of the multinational corporations (MNCs) of the developed economies has played a vital role in this process of interdependence. The key part of the process has been the relocation of labour intensive segments of their operations to low wage economies, including ASEAN. Secondly, the formal institutional arrangements, such as AFTA, AFAS, AIA and the various cooperation programmes, have added to the integration impetus. Thirdly, there has been a

[6] See tables IV.4 and IV.5 in the ASEAN Statistical yearbook, 2001.

contribution to integration by the sub-regional economic zones (SREZs), which are led by the private sector.

1.2.2 ASEAN trade and integration

Trade integration seemed to be proceeding at a higher pace during the first half of the 1990s compared to the second half. Over the period 1993-2000, intra-ASEAN exports grew at about 12 percent per annum increasing from US$44.2 billion in 1993 to US$97.9 billion in 2000. Intra-ASEAN exports grew at 28.3 percent per annum over the 1993-1996 period, more than twice the average for the period 1993-2000. As for imports, intra-ASEAN imports increased as a share of total ASEAN imports over the period and grew at about 10 percent annually.
Trade imbalances between the CLMV countries (Cambodia, Lao PDR, Myanmar and Viet Nam) and more developed ASEAN economies are still sizable. The ASEAN 6 is still dominant in intra-ASEAN trade with shares of intra-ASEAN exports and imports exceeding 90 percent. The CLMV countries accounted for about 1.4 percent of total ASEAN exports in 1993 and increased their share to about 4.1 percent in 2000. Their import share increased from about 1.3 percent in 1993 to 5.0 percent in 2003.

Tariff barriers to intra-ASEAN trade have been declining, but not evenly, between the ASEAN 6 and the CLMV. Protectionism through tariffs has fallen more and faster for the ASEAN 6. For the ASEAN 6, the target is to remove all import duties by 2010 and by 2015 for the CLMV members, with some allowance for flexibility. According to the Mid-Term Review of the Ha Noi Plan of Action (Mid-Term Review of the HPA) (2001), by 2003 the ASEAN 6 would remove duties on 60 percent of the products on their Inclusion Lists (ILs). Four countries had already achieved this target when the Mid-Term Review was written.

Some less developed Member Countries have genuine concerns about the pace of ASEAN economic integration. While agreeing in principle, they are concerned that if they open up their markets to intra-ASEAN competition too quickly, their domestic producers will be faced with strong competition from more developed Member Countries, without the compensation of expanding their own intra-ASEAN exports (or other exports). An additional concern for less developed Member Countries is that Customs revenue is usually a higher proportion of government income than it is for wealthier countries and alternative income streams need to be identified before tariffs can be reduced[7].

The ASEAN Secretariat estimates that by the conclusion of the 2003 CEPT package, the ASEAN 6 will have reduced their tariffs to 0-5 percent on 99.55 percent of the 44,000 tariff lines on their ILs. For the CLMV countries, the percentage is lower, at 55.67 percent of 16,000 tariff lines.

Exports under the Common Effective Preferential Tariff scheme (CEPT) are not huge and will vary from country to country. In Malaysia, for example, exports under CEPT increased from RM1.8 billion in 2000 to RM2.4 billion in 2001. However this accounted for only 2.9 percent of Malaysia's total exports of RM84.1 billion, mainly made up of electrical machinery and equipment, to other ASEAN countries. The level of the most favoured nation (MFN) tariff structure has a bearing on the relatively small amount of intra-ASEAN trade

[7] The revenue loss issue is being addressed in a separate study under the Regional Economic Policy Support Facility, ASEAN – Australian Development Cooperation Program. The study is entitled Options for Managing Revenue Losses and Other Adjustment Costs of Cambodia, Laos, Myanmar, and Vietnam Participation in AFTA.

using CEPT concessions. Where the MFN tariff exceeds the CEPT tariff, the ASEAN exporters will enjoy the benefits of the CEPT tariff rate. In Malaysia the average MFN tariff is 9.2 percent compared to a CEPT average rate of 1.95 percent, in Brunei the MFN average is 3.1 percent compared to a CEPT average of 1.04 percent, for Indonesia the MFN average is 7.3 percent and the CEPT average is 2.17 percent, 18.6 percent average MFN for Thailand compared to 4.63 percent for CEPT, 7.8 percent MFN for the Philippines compared to 3.82 under CEPT. For Singapore the average MFN and CEPT rates are the same at 0 percent.

The CEPT average tariff rate for ASEAN as a whole has declined from 11.44 percent in 1993 (ASEAN 6) to 3.3 percent in 2003 (ASEAN 10). The ASEAN 6 average in 2003 was 2.39 percent.

CEPT schemes can run into implementation problems. Non-conferment of CEPT concessions on products can arise and disputes need to be resolved. There can be deferments of the transfer of products to the IL such as in the case of Malaysia's deferment in the transfer of automotive products into the CEPT Scheme for AFTA.

As has been noted, the pace of removing and reducing tariff barriers can be accelerated (but note the concerns of the CLMV countries). The range of tariff reduction could be extended if countries undertake to expand the coverage of their products for inclusion in the IL. At the same time, they are being encouraged to reduce the number of products in their temporary exclusion list (TEL), sensitive list (SL) and the general exception list (GEL).

Much of the attention on tariff barriers is on nominal tariffs. Hardly any attention has been given to the nature and trends in effective tariffs. The level of effective protection is thought to be of relevance when an assessment is made of tariff barriers. The imports of raw materials may enter an economy duty free or at a lower tariff rate than the rate levied on the final product produced with the imported input. The rate of effective protection which can be estimated on the basis of the domestic value added, or processing, that takes place in the importing economy, can exceed the nominal tariff which is calculated on the value of the final product. The effective tariff rate shows to producers the extent of protection enjoyed by domestic producers of the imported product.

The extent and importance of the levels of effective protection as barriers to trade and integration within ASEAN is uncertain. How many of the products on the various lists – IL, TEL, SL and GEL – are inputs meant for further processing? How many of the tariff lines cover the imports of capital and intermediate goods? This is an area which would be suitable for further study.

Non-tariff barriers (NTBs) pose problems for the growth of trade and in accelerating the pace of integration in ASEAN. While tariff levels are coming down, there is the sometimes an inclination to turn to an increasing use of NTBs to protect domestic producers. This has the potential to undermine integration. The general forms of NTBs include import quotas, 'voluntary' export restraints and antidumping actions. There are also technical, administrative and other regulations which can be exploited for protectionist purposes. Safety regulations, health regulations, requirements for hygienic production and packaging of imported food products, and labelling requirements are forms of NTBs. Government procurement policies restricted to or favouring domestic producers are also barriers to trade. The use of minimum standards can also be seen as a form of NTB. Customs procedures and the lack of

harmonisation of customs rules and procedures can also add to transaction costs and impede integration.

The ASEAN database on NTBs gives a detailed picture of the types of NTBs in place in each ASEAN country. The NTBs cover a wide range of products and the products are governed by a variety of laws, regulations and administrative conditions. Some of the conditions appear to be detailed and time consuming. There is an extensive list of products that are required to undergo testing, face the imposition of import quotas, require import licensing, face import bans, and must meet standards, labelling and certification permits requirements.

1.2.3 Exchange rate regimes and trade – constraints?

Exchange rates play a role in influencing international trade and therefore on integration. ASEAN economies are dependent on trade, which is usually invoiced in foreign currencies. Exchange rate movements, therefore, can have a significant impact on trade. It has been argued and proposed that developing countries have two options for an exchange rate regime: they can either float their exchange rate freely, or peg it to one key currency, usually the US dollar, through a currency board arrangement or using the US dollar as the national currency. There are still disputes as to the alleged benefits of a floating exchange rate regime as it can lead to persistent currency misalignments and large trade imbalances. Countries with floating currencies appear to be more vulnerable to financial crises. However, countries under fixed and flexible exchange rate regimes are also not immune to financial crises. In a world of free capital mobility and integrated capital markets, capital controls are an option that should be considered.

In the East Asian economies prior to the financial crisis in 1997, the central banks intervened to stabilise the spot rate according to explicit guidelines. During 1990-96 the real exchange rates of the East Asian economies experienced limited movements. Indonesia experienced a small depreciation followed by a reversal. Malaysia had a small appreciation and Thailand also experienced a slight appreciation between 1993-96. Stronger appreciations were experienced by the Philippines and Singapore over the same period. With the large capital inflows during the 1990s, the governments decided to intervene to prevent appreciation of their respective currencies. Since the late 1980s the exchange rates in the East Asian region had been generally stable within a band of about 10 percent in relation to the US dollar. The yen-dollar rate, however, was very volatile in the 1990s.

Maintaining a stable exchange rate regime would make a valuable contribution to trade, growth and integration. Stable exchange rates contributed to the successful export-oriented development strategy of the East Asian economies. The exchange rates should not be misaligned and it is important to sustain competitive exchange rates in an environment of rapid capital flows. As destabilising capital flows can adversely affect trade policy, autonomy will be required to respond to exogenous shocks.

1.2.4 Investment and integration

Capital flows, especially long-term capital flows, will play a pivotal part in enhancing integration in ASEAN. The more recent trends in FDI flows have been somewhat discouraging. Global FDI flows, mostly into developed countries, increased from US$1,075 billion in 1999 to US$1,270 billion in 2000. Against this trend, the inflows to ASEAN fell

from US$14.7 billion in 1999 to US$13.8 billion in 2000. Intra-ASEAN investment fell from US$1.4 billion in 1999 to US$969.1 million in 2000.

To address this issue, the overall approach by ASEAN is to speed up the implementation of the ASEAN Investment Area (AIA) initiative through the opening up of industries and the granting of national treatment to investments from other ASEAN countries. Exceptions are embodied in the temporary exclusion lists, sensitive lists and general exclusion lists. The ASEAN 6 and Myanmar are to phase out their TELs by 2003, Vietnam, Cambodia, and Laos PDR by 2010.

In the implementation of the AIA, according to the Mid-Term Review of the Hanoi Plan of Action, some countries have faced difficulties in drawing up the TEL and sensitive list for the services that are incidental to manufacturing, agriculture, fishery, forestry and mining.

The extent and type of barriers to investment are indicated by the length and content of the various lists – TEL, SL and GEL. The longer the list and the more industries included, the greater the extent of protection and the slower the speed of liberalisation.

1.2.5 Services and integration

A lot of focus has been placed on the services sector as a growth sector and also as a vital component and input for the other sectors of the economy. Trade in services has increasingly been promoted and the target is to achieve the free flow of services by 2020. The second round of services liberalisation was completed in 2001 and the third round is scheduled for completion in 2004.

There are essentially two approaches to enhancing integration through services. First, is through the liberalisation of trade in services. Second, is through the cooperation programs in the financial services sub-sector and in other key sectors including tourism, communications and transport. Liberalisation, facilitation and cooperation are the three means of increasing the flow of trade in services.

As for liberalising trade in services, the approach is to start with Supply Mode 1 and Supply Mode 2, i.e cross-border supply allowing ASEAN service providers to supply services in the territory of the other members without establishing a presence (Supply Mode 1) and consumption abroad which allows ASEAN nationals to purchase services in the territory of other member countries (Supply Mode 2). Short term liberalization is sought for services supplied under these modes.

Supply Mode 3 involves commercial presence and Supply Mode 4 requires the presence of natural persons from other ASEAN countries. These last two modes are to be progressively liberalised. It is uncertain which services in ASEAN are expected to be approved for supply under Supply Modes 3 and 4.

The assessment made in the Mid-Term Review of the HPA suggests that there are still substantial barriers to integration in services. The progress in the negotiations on trade in services has been somewhat slow and the indicative offers by members have also been slow in coming. Officials sent to negotiate often do not have the authority to make commitments and this has slowed down negotiations.

Financial cooperation and financial programmes in ASEAN are fairly extensive. The ASEAN Surveillance Process (ASP) has been set up to monitor economic and financial developments. Other programs include the Chiang Mai Initiative, a financing arrangement to help countries with temporary shortfalls in their foreign exchange reserves; the ASEAN Swap Arrangement which has been enlarged; bilateral swap arrangements; the promotion of ASEAN currencies; and, the assessment of the feasibility of an ASEAN Currency and Exchange Rate System. Progress has also been made in developing the ASEAN capital market and a study has been initiated to deepen the ASEAN bond market.

Despite the progress, the cooperation programs have been hampered by a lack of finance for the activities that have been identified. There have also been delays in submitting information required to expedite the surveillance work. Overall it has been noted that the liberalisation of financial services has proceeded at a slow pace. Barriers to financial integration therefore are still significant.

1.2.6 Implementation barriers to integration

Good plans, programs and projects will not deliver their promises if they are not carried out and implemented properly. Targets and objectives will remain as targets and objectives if they are not translated into concrete measures and steps. Implementation of action plans, programs and projects plays a vital part in bringing about growth and development. If implementation is weak and inconsistent then the barriers to integration still remain. In the Mid-Term Review of the HPA various references were made to some of the implementation problems faced by the various liberalisation programs and efforts to enhance cooperation further.

The commitment to some of the decisions that have been made to promote liberalisation and cooperation programs has been questioned. Basic information that is necessary for implementation has not always been forthcoming or the submission of the information has been delayed. Weak commitment can also be reflected in the level of representation to negotiations and meetings. The level of representation from some ASEAN countries has frequently been such that the delegate is not authorised by his country to make decisions on matters to be addressed at working groups and other meetings.

Lack of financial resources to support ASEAN's programs seems to be a pervasive problem. There were 198 projects implemented (completed and on-going) in the first three years of the Ha Noi Plan of Action. The cost of these was US$36.7 million, of which Dialogue Partners contributed 67 per cent (US$24.6 million) and international agencies contributed a further 7 per cent (US$2.7 million). These amounts cover all sectors in which ASEAN is involved, not just those covered in this study[8], but this dependence on outside donors leads to uncertainty and concerns about changes in priorities of the donor countries/agencies.

More concerning, there were 30 major projects that were pending awaiting financial resources. A further US$115.9 million was required to implement these. ASEAN was able to implement only 22 percent of the activities identified during the first phase of the HPA[9].

[8] e-ASEAN, finance and banking, industry, investment, and trade and services, collectively, were allocated US$3.1 million between January, 1999 and June, 2001

[9] Mid-Term Review, 2001, p114.

Inadequate finance has been widely cited as a constraint to implementing programs and projects.

There has been overlapping of some of the activities under some of the cooperation programs. Suggestions have been made to remove the duplications. Part of the problem of duplication has to do with the fact that some new activities have been initiated without adequate awareness of existing activities.

The duplication of projects as well as the slowness in the implementation of ASEAN's programs points to the need for stronger and better coordination. As the activities of ASEAN expand in scope and depth, there are bound to be problems with coordination. The problems can be compounded if the roles of the respective institutions and groups become more and more blurred.

Continuity and clarity in membership of the various committees and groups working in ASEAN are important for smooth and effective implementation. It has been noted that the changes in the chairmanship of some of the committees and groups have undermined the continuity of the work. At the same time, changes in the focus of the coordinators has had the same effect.

Many of the policies, programs and projects require more time than has been envisaged by the planners and decision makers. New legislation and changes to existing legislation by Member Countries to accommodate the requirements of decisions taken at the ASEAN level can be time consuming.

The slowness in implementing the decisions that have been taken is also due to the need to consider the national interests of all parties concerned. Consultations within the country are necessary and will take time. Where there are perceived conflicts between ASEAN commitments and the national interest, these will have to be resolved[10].

Some of the activities of ASEAN are influenced by market conditions and the private sector will need to be involved. Consultations with the relevant interests in the private sector will have to be initiated.

In some cases the delays in implementation are due to the lack of appropriate and sufficient technical capacity to implement the decisions. Some aspects of the activities can be technical in nature and will require training.

A poor or weak awareness of the benefits of liberalisation can also slow down the speed of implementation. This gap may be due to a genuine lack of knowledge and insufficient evidence regarding the benefits of liberalisation in the context of ASEAN.

1.2.7 Extra-ASEAN initiatives and integration

The idealised version of economic cooperation is that members belonging to a group would always be united and that they would always behave in a way that would further the interest of the group rather than their own national interest. Such hopes may not be fulfilled all the

[10] See Kwik, 2002 for the perspective of the Indonesian National Development Planning Minister. In an ASEAN Secretariat news release, he states that ASEAN integration should tie in with the national development goals of each Member Country.

time. A united approach could be conditional on a convergence of the national interest with the interest of the group. Interest in the group may flag when conditions change and the disparate interests of group members put strains on economic relations.

One of the latest developments in ASEAN has been the increasing interest in forging bilateral relations with non-ASEAN members and in making initiatives to establish free trade agreements (FTAs). These independent initiatives will be seen by some sections of ASEAN as inconsistent and inimical to the economic interests of ASEAN as a whole and as having adverse effects on ASEAN integration. Singapore has initiated a number of FTAs and more are in the pipeline. Malaysia and Thailand have also expressed interest in forging FTAs. Breaking the ranks of ASEAN can create a chain reaction and more countries could follow the same route and establish their own separate FTAs. The possibility of a growing number of FTAs involving separate members of ASEAN is increasing.

The effects on ASEAN integration of separate FTAs concluded by individual ASEAN Member Countries remain uncertain at the present time. Will FTAs undermine ASEAN integration? Will the non-ASEAN party to the FTA gain a "backdoor" entry into the markets of the other members of ASEAN, or will intra-ASEAN rules of origin prevent this?

1.2.8 Politics and integration barriers

Economic cooperation efforts are based on the premise of mutual interest and reasonably good relations with neighbouring countries that are parties to regional groupings like ASEAN. Security and some sense of harmony are necessary for cooperation. The implicit assumption that is usually made is that political and economic matters can be kept in separate compartments. These can provide the foundation for some commitments to be made on a multilateral basis and allow the process of integration to proceed.

Political and economic relations, however, can feed each other and can either improve or worsen relations between countries. Differences of views on matters unrelated to ASEAN initiatives can affect the level of commitment of the parties concerned. The spillover effects can move in both directions. Political disputes and strained relations on the political front can affect relations on the economic front and vice versa. This can affect the pace of implementation of ASEAN commitments. The relations between Malaysia and Singapore can be strained with disagreements, for example, over the agreement under which Malaysia supplies water to Singapore at stipulated amounts and prices. There is also the dispute over the reclamation of land across the causeway by Singapore. Efforts and measures to combat terrorism can also lead to strains in economic relations. While Malaysia and Singapore are more aggressive in detaining suspected terrorists, Indonesia was seen by both countries, at least initially, as taking a softer approach to the threats. Malaysia's moves in detaining, and deporting illegal immigrants from Indonesia and the Philippines have met with denunciations by those countries. Reports of abuses in Singapore of foreign maids from Indonesia and the Philippines have attracted adverse attention from both countries.

1.3 Harmonization of policies and institutions

Harmonization refers to the process whereby the ASEAN Member Countries seek to promote the integration of their economies and the move towards a single market by adopting similar policies, legislation, regulations and implementation arrangements. Collectively,

harmonization of these issues provides the necessary framework for increased trade in goods and services among the members and also makes the ASEAN region more attractive for direct investment – both foreign and intra-ASEAN.

The term 'harmonization' is regarded as being derived from the musical notion of harmony. But musical harmony comes from differences that are complementary. Harmonization in economic terms is more concerned with reducing dissimilarities between countries, so that their policy and other frameworks are almost the same.

1.3.1 Statistics

Significant progress has been made has been made in the context of the Framework of Cooperation on Statistics. ASEAN Member Countries have developed an ASEAN Harmonized Trade Nomenclature (AHTN) which can be used for both trade and customs. The AHTN has been completed at an 8 digit level for over 10,000 items. It is consistent with the 6 digit international HS 2002, which is used by most of the world. The deadline for implementation of the AHTN by all ASEAN Members is 1st January, 2004.

The implementation of the AHTN will facilitate intra-ASEAN trade and also the analysis of intra-ASEAN trade statistics.

Work is now proceeding on the harmonization of foreign direct investment (FDI) statistics throughout ASEAN.

Common codes and definitions are required for monitoring progress towards the goals of economic integration and also to measure social progress. Like can then be compared with like. The ASEAN Statistics Section continues to have an important role in strengthening the capacities and efficiencies of Member Countries' statistical bureaux.

1.3.2 Policies and implementation

There are three phases towards the implementation of economic integration initiatives agreed by ASEAN member countries.

The first phase is complete when the Framework Agreement is signed for the sector or aspect under consideration. All ASEAN members must sign for the Framework before it can become effective. The signature shows intent to move towards harmonization in the area in question.

The second phase includes countries that have passed enabling legislation and regulations. This shows commitment to move towards harmonization.

In the third phase are countries that have implemented legislation and regulations. This is the final set of process indicators on the way to harmonization.

Unfortunately, there can often be considerable time elapse between the commitment to harmonize and the implementation of appropriate legislation and regulations. In the context of the proposed creation of the ASEAN Economic Community, the development of closer economic cooperation and the expediting of the economic integration process need to be emphasized.

A factor in the slow implementation of agreements has been the absence of effective compliance and dispute settlement mechanisms. Until the recent creation of the ASEAN Compliance Monitoring Board in the ASEAN Secretariat, compliance pressure was mainly conducted by exhortation by ASEAN officials.

There is a need to make non compliance and dispute settlement a legal process rather than a political one. The European Union has established the European Court of Justice to interpret treaties where there is disagreement. Such interpretations can help the integration process without the need for further discussions and the lengthy period for countries to agree to and pass enabling legislation[11].

The core of the ASEAN economic integration initiatives to date has related to trade in goods – the ASEAN Free Trade Area (AFTA); services – the ASEAN Framework Agreement on Services (AFAS) and; investment – the ASEAN Investment Area (AIA). These agreements will remain the most important programs in moving towards the ASEAN Economic Community. The possibility of increased inward investment under the AIA is perhaps the greatest economic attraction to joining ASEAN for the CLMV countries.

Recognizing the economic gaps that exist between the ASEAN 6 and the CLMV countries, different time frames for implementation of the various Framework Agreements have been agreed for the two groups. However the time differences are not great, five years or less, and it remains to be seen whether the targets for the CLMV countries are realistic given their current economic and technological position. To open up their markets too early could mean losses in their domestic competitiveness without a compensating gain in exports to other ASEAN countries (or elsewhere). The necessary strengthening and restructuring of CLMV economies may take longer than five years. This is an area where there is scope for further research with a view to identifying what needs to be done to smooth the way for the CLMV countries to more fully integrate with the rest of ASEAN in an agreed timetable. The cost of CLMV structural adjustment will need to be estimated and appropriate sources of funds identified.

A lot of effort has been put into the monitoring and harmonisation of financial sector policies in an attempt to avoid financial crises in future. This is covered elsewhere in this report in the context of the examination of the financial services sector.

1.3.3 Customs

The ASEAN Customs Vision 2020 was agreed in May, 1997. It calls for 'an ASEAN customs partnership for world class standards and excellence in efficiency, professionalism and service, and uniformity through harmonized procedures to promote trade and investment and to protect the health and well being of the ASEAN community'.

Consistent with this Vision, harmonization initiatives in ASEAN Customs Administrations are designed to facilitate intra ASEAN trade and investment by ensuring the smooth cross border flow of goods and services within the region. It is intended to keep ASEAN Custom's practices in line with best practices internationally.

[11] See European Union, 1995

The ASEAN Agreement on Customs was signed on 1st March, 1997. The first objective was to simplify and harmonize tariff nomenclature[12], Customs procedures and Customs valuation. These initiatives will make Customs processes more transparent and will facilitate trade. Customs procedures in each Member Country will be the same.

The Roadmap for the Integration of ASEAN (RIA)[13] sees harmonization of customs procedures and formalities as being completed in steps from 2003 to 2006. The RIA suggests that a Working Group needs to be formed to address these issues.

In the area of customs valuation, the ASEAN Customs Valuation Guidelines are being developed to bring uniformity, common interpretations and best practices to the Customs in Member Countries. The Guidelines are consistent with the World Trade Organization (WTO) Customs Valuation Agreement. The timeframe for achieving the various steps towards valuation harmonization covers the period from 2002 to 2006.

ASEAN seeks to implement a post clearance audit (PCA) system to facilitate trade in the region. The system would be consistent with internationally recognized best practices for PCA. The Ha Noi Plan of Action had a target for implementation of the PCA system by 2003. The RIA subsequently suggested that this exercise should be completed by 2004.

The RIA also calls for harmonization in the area of Customs automation. Much of this relates to the introduction of appropriate Customs information and communications technology (ICT) systems to expedite cargo clearance. The ICT systems should be consistent with internationally accepted practices of Customs ICT. The current timetable calls for completion of this exercise by 2006 for the ASEAN 6 and by 2008 for the CLMV countries.

Technical assistance is to be provided by the ASEAN 6 to CLMV Customs authorities to help them introduce international best practices and reforms and generally catch up with the customs initiatives proposed by ASEAN. This process, which focuses largely on human resource development, spans the period 2002 to 2008.

Looking forward, the RIA suggests that there should be a regional workshop on change management toward good governance in 2003. This would address issues relating to higher efficiency and transparency in Customs. It is intended that the Workshop should develop a plan of action and that this should form the basis of future reform and modernization of Customs in the ASEAN countries. The plan of action process is due to commence in 2003, with implementation in all Member Countries being scheduled for 2007.

Consistent with the Customs goals above, the ASEAN Customs policy implementation and work programme, 1999-2004, breaks down into details the work that needs to be done if the goals in 15 customs areas are to be achieved.

The areas are:

- Tariff classification
- Customs valuation

[12] This objective has been nearly achieved, with agreement on the AHTN classifications and implementation by all ASEAN countries due by July 1st, 2003.
[13] See The ASEAN Secretariat, 2002.

- Cargo processing
- Post clearance audit
- Transit
- Temporary admission
- Enforcement
- Mutual assistance
- Automation
- Strategic planning and management
- Transparency enhancement
- Training and human resource development
- Technical assistance to CLMV
- International customs forums
- Partnership with the business community

1.3.4 Standards, mutual recognition agreements and conformity assessment

ASEAN Cooperation on Standards and Conformity Assessment is undertaken mainly through the ASEAN Consultative Committee on Standards and Quality (ACCSQ). The main objective of the ACCSQ is to facilitate the removal of technical barriers to trade within ASEAN in order to promote intra and extra ASEAN trade. In achieving its objective, ACCSQ has been working on four following broad areas, which were identified by the Ha Noi Plan of Action:

- Implementation of the ASEAN Framework Agreement on Mutual Recognition Arrangements;
- Harmonization of standards;
- Enhancement of standards and conformity assessment infrastructure in Member Countries; and
- Transparency of standards, technical regulations and conformity assessment regimes in the region.

Mutual Recognition Arrangements (MRAs) are agreements between two or more parties to mutually recognize or accept some or all aspects of one another's conformity assessment result. Through MRAs, products that are tested and certified before export can enter the importing country directly without having to undergo similar conformity assessment procedures in the importing country.

With the increasing importance of standardization and conformity assessment in international trade, MRAs have emerged as a key strategy to facilitate trade by reducing the need for multiple testing and certification that incur unnecessary costs to exports and delay delivery to markets.

Among five sectors identified for MRAs, namely electrical and electronic equipment, telecommunication equipment, cosmetics, pharmaceuticals and prepared foodstuff, two MRAs have been endorsed for implementation (electrical and electronic equipment and telecommunication equipment) and the cosmetics MRA is ready for signing.

Harmonization of standards is to ensure that products will be designed, manufactured and tested according to only one standard. Harmonization of standards for 20 priority product

groups covering 59 international standards will be completed by end of 2003. Another 72 safety standards and 10 electromagnetic compatibility standards are being harmonized.

MRAs for professional services seek to give recognition to the qualifications and experience gained in other jurisdictions. The national professional bodies frequently make licensing requirements that involve local experience or conformance with local education requirements as barriers to entry by foreign professionals. ASEAN is keen to encourage the free flow of professional services within the region through the networking of professional accreditation bodies to promote the mutual recognition of technical and professional standards. However, there does not seem to have been much progress in this area, although the Mid-Term Review indicates that consultations have been undertaken with professional associations in accountancy, engineering and surveying to get a better understanding of the issues involved in the liberalization of trade in those disciplines. The RIA goal is that there be a free flow of professional services in the region by 2020.

In the ASEAN Framework Agreement on Services, signed in December 1995, there was provision for each Member State to recognise the education, experience gained, requirements met, or licences or certifications gained in another Member State for the purposes of licensing or certification of services suppliers. This could be done bilaterally by agreement or arrangement with the Member State concerned or autonomously. Involvement in such arrangements was purely voluntary and there does not seem to have been much action in this area since (or before) 1995.

1.3.5 Intellectual property cooperation

ASEAN is continuing with efforts to develop regional trademark and patent systems. The objective of these initiatives is to create an ASEAN regional identity in intellectual property (IP) matters. An ASEAN trademark system is to be established whereby a single filing and registration will provide trademark protection throughout ASEAN. Pursuant to this, a common trademark domestic application form has been developed as a guide for Member States to modify their existing domestic forms.

There is also an ASEAN Patents Database for which development is ongoing. The database will enable the sharing of bibliographic data and abstracts among Member Countries. To take full advantage of the database, there will need to be some capacity and capability building among Member Countries regarding ICT requirements. The RIA advises that there was no regular group or subcommittee to address ICT-IP related matters, specifically the establishment and sharing of the ASEAN database system.

The possibility of introducing an ASEAN Design System is under consideration, with a decision on whether to proceed to an agreement due by the end of 2003.

Member Countries are being encouraged to align their IP legislation and enforcement with world standards through membership of international IP treaties; ensuring TRIPs (Trade Related Intellectual Property rights) conformance; and information dissemination and exchange of views.

It is probably fair to say that progress in intellectual property cooperation has been fairly slow, with Member Countries affording it a low priority.

1.3.6 Government procurement

ASEAN has been promoting the principle of national treatment to enable involvement in each ASEAN country's government procurement by companies of other Member States. However, no working group has been formed and there is no consensus on establishing government procurement as a critical area of cooperation.

1.3.7 Institutional harmonization

Perhaps the most important institutional factor in the harmonization of the ASEAN economies is the regular Leaders' Summit. The Summits raise the public profile of ASEAN as an institution and harmonization commitments made at the Summits by the Leaders are not easily ignored in the following years.

The ASEAN Secretariat provides essential policy and administrative support to the Summits, both directly and also through its structure of arranging and supporting meetings for Ministers and for senior officials from ASEAN Member Countries with responsibilities in the sectors identified as important for ASEAN economic integration. The senior officers' meetings suggest measures to implement commitments made at past Summits and also prepare new initiatives for consideration by Ministers' Meetings and for forthcoming Summits.

ASEAN institutional support contributes to ASEAN wide standards in various fields of competence. The Mid-Term Review of the HPA (covering the period 1st January, 1999, to 30th June, 2001) states that ASEAN insurance regulators have agreed to substantially comply with the insurance core principles (models of supervision) of the International Associations of Insurance Supervisors (IAIS) and to harmonize insurance laws relating to intra-ASEAN trade and services. An ASEAN Insurance Training and Research Institute was being set up and a training course on IAIS core principles was organized for ASEAN insurance regulators.

Cooperation among banks is conducted through the ASEAN Bankers Association and there is also an ASEAN Insurance Council.

The Mid-Term Review also indicates that an ASEAN Association of Internet Service Providers and an ASEAN internet exchange were being established in the context of the e-ASEAN initiative. Comparative studies of Member States' e-commerce laws were being undertaken.

In tourism, there is the ASEAN Tourism Information Centre and the ASEAN Tourism Forum, which is a venue for ASEAN sellers and buyers from elsewhere in the world to meet and make deals.

An ASEAN investment portal has been proposed. Its role is to link ASEAN to the world of investors. The Mid-Term Review (late 2001) states that funding was yet to be found and that more credible and comprehensive information was needed as content. If the Portal was established, the number of hits that it receives could be used as an indicator of interest in investing in ASEAN. If hits can be traced to country of origin, comparison of interest from intra-ASEAN investors and from the rest of the world would be possible. Relative interest could be compared to actual investment in the following year(s) to see if the comparison of interest is a reasonable indicator to use.

In October 2000, the ASEAN Telecommunication Regulators Council adopted a mutual recognition agreement for telecommunications equipment.

The ASEAN Centre for Energy, with international support, has undertaken programs for energy efficiency and conservation, the development of renewable energy sources, and cooperation on coal. There is also an ASEAN Energy Business Forum which seeks to promote investments by the private sector in appropriate elements of the ASEAN energy program.

Other specialized bodies within ASEAN include:

- ASEAN University Network
- ASEAN-EC Management Centre
- ASEAN Agricultural Development Planning Centre
- ASEAN Earthquake Information Centre
- ASEAN Poultry Research and Training Centre
- ASEAN Regional Centre for Biodiversity Conservation
- ASEAN Rural Youth Development Centre
- ASEAN Specialized Meteorological Centre
- ASEAN Timber Technology Centre

In addition, ASEAN promotes the following:

- ASEAN Chambers of Commerce and Industry
- ASEAN Business Forum
- ASEAN Tourism Association
- ASEAN Council on Petroleum
- ASEAN Ports Association
- ASEAN Vegetable Oils Club
- ASEAN Institutes for Strategic and International Studies

It is felt that consideration of these initiatives is beyond the scope of the present study but they all have a role to play in the development of ASEAN standards in their various areas of interest.

1.3.8 Facilitation of Goods in Transit

The Framework Agreement on the Facilitation of Goods in Transit allows goods to be moved by road or rail across ASEAN countries with minimum customs inspections and regulations for drivers. Types and quantity of road vehicles have been agreed as have technical requirements of vehicles. The development of harmonized ASEAN vehicle standards and specifications for road transport vehicles has begun.

The Agreement came into force on 2nd October, 2000. The RIA (November, 2002) suggests that it be operationalized in 2003. This is an ambitious target, given that conclusion and signing of the five remaining Protocols were still outstanding and that all nine Protocols needed to be ratified/accepted.

The Framework Agreement on Multimodal Transport has been targeted for implementation in 2003. Again, this is ambitious as the agreement needs to be concluded, signed and ratified/accepted.

The RIA has scheduled implementation of the Framework Agreement on the Facilitation of Inter-State Transport for 2004/5. The Agreement is still to be concluded and signed. The RIA has targeted ratification/acceptance by 2005.

The RIA has suggested that the ASEAN-X principle could be considered for transport facilitation agreements.

1.3.9 Small and medium enterprises

ASEAN conducts matchmaking exercises to promote SME joint ventures under the ASEAN Industrial Cooperation scheme (AICO) and other initiatives. Forms of funding support are also being explored, including regional export financing and credit guarantee schemes. These would appear to be in competition with the various schemes promoted by the Member States. Given ASEAN's limited personnel and financial resources, this might be an area that could be left to the Members, with ASEAN providing policy guidance and advice on best practice in management, marketing and technology.

The ASEAN SME Agencies Working Group is being guided by the Regional Action Plan for the ASEAN SME Development Decade 2002-2012. This covers access to markets, finance, information technology, technology sharing, and human resource capacity building. The statement was made that 90 per cent of all manufacturing firms in ASEAN were SMEs. Depending on the (unstated) definition of SMEs used, this may be reasonable enough.

In August, 2002, an Abridged Final Draft was released of a report by Dr Chris Hall, Pacific Economic Cooperation Council (PECC) SME Network Leader. The report was entitled Profile of SMEs and SME issues in APEC, 1990-2000. It was sponsored by PECC for the Asia Pacific Economic Caucus (APEC). In the report, Dr Hall estimates that over 98 per cent of all enterprises in APEC economies are SMEs. He goes on to estimate that SMEs generate up to 30 per cent of direct exports and 10 per cent of FDI by value. His definition of SMEs is firms which employ 1 to 99 people.

In APEC economies, SMEs make a smaller than proportionate contribution to international activity. They make up more than half of most national economies, and about half when it comes to output, sales or value added. The development of e-commerce and the moves towards a single ASEAN market should offer the potential for an expanded role for SMEs in intra-ASEAN trade.

Chapter 2

Methodology

2.1 Research program

The research program for this study began with secondary research conducted in the pre-project start-up period and also in Kuala Lumpur in the first week of January, 2003. Library and internet searches were conducted and ASEAN documents and data were considered. The purpose of this phase of research was to develop a knowledge base about the project and project coverage and about ASEAN in general as areas for discussions with senior officials at the ASEAN Secretariat in Jakarta during the January visit by the consultants.

More material about ASEAN was made available during the visit and this was used as input to the inception report, along with the findings from the Key Contacts Interview Program and the material gathered previously. The inception report was presented to the Secretariat as a basis for consideration. Comments were received and a revised inception report was submitted and endorsed.

A long list of possible indicators was then developed using the selection criteria described below. This was forwarded to the Secretariat, together with two separate working papers, one on harmonization of ASEAN policies and institutions, and the other on barriers to ASEAN integration. Collectively the three documents formed the basis for further discussions with senior ASEAN officials during the second visit by the consultants in April, 2003[14]. One of the suggestions made related to the development of indices as broader based and easier to understand indicators of ASEAN economic integration. This suggestion has been acted upon and there are many indices outlined in this report. These have been quantified where data is available.

Secondary research continued following the second visit and this was complemented by interviews with knowledgeable people in Singapore, at the Institute of Southeast Asian Studies, in Jakarta, at the Centre of Strategic and International Studies and at the Delegation of the European Union, and in Malaysia, at the Department of Statistics, the Malaysian Industrial Development Authority and at the Ministry of International Trade and Industry.

2.2 Types of indicators

Indicators are presentations of measurement. They quantify and simplify complex realities into easy to understand forms. They are aggregates of raw and processed data that help in assessing the current situation (where we are), the direction in which change is heading (where we are going), and how far away is the ultimate goal. Well chosen indicators provide a sense of whether expected results are being achieved and point to policy areas which may need further examination if targets are to be met[15].

[14] The First Secretary and Head of Section (Trade) of the Delegation of the European Commission in Jakarta was also interviewed during this visit.

[15] For further discussion about indicators and selection criteria, see International Institute for Sustainable Development (2000) and also Horsch, Karen (2000).

In this report, there are several types of indicator suggested for measurement of progress towards various aspects of economic integration within ASEAN. The indicators are based on process, input, outcome, output, stock and flows, as appropriate to the economic integration topic under discussion.

2.2.1 Process indicators

In the context of ASEAN economic integration, process indicators are used for topics where discussion is at an early point. For each topic there are various steps needed to reach the stage where an agreement is reached and implemented. Process indicators measure the progress towards the establishment of an appropriate legislative, regulatory and implementation environment for the topic under consideration in each ASEAN country.

Once these processes have been completed in each country, the process indicator would no longer be used and the focus would switch to indicators relating to the effectiveness of implementation.

2.2.2 Input indicators

Input indicators measure the background of resources and programs that are put into place to support a particular aspect of ASEAN economic integration. An example of a program that seeks to encourage integration is the general lowering of tariffs between the ASEAN members. This has been done to promote intra-ASEAN trade.

Input indicators can be compared to outcome indicators for the same topic area. If the reduction of intra-ASEAN tariffs does not lead to increased intra-ASEAN trade, the hoped for outcome, then the policy framework needs to be examined to see why a more positive result was not achieved.

2.2.3 Outcome indicators

Outcome indicators record what actually happens in the market place when the new policy framework is in place and appropriate implementation measures have been taken. Care needs to be taken regarding the causal relationship between the policy (the reduction of intra-ASEAN tariffs) and the outcome (expanded intra-ASEAN trade). Hypothetically, it is possible to imagine a situation where an increase in intra-ASEAN trade is because the loss of other markets has forced ASEAN producers to focus more on ASEAN markets. In this scenario, intra-ASEAN trade may well have increased without the reduction of intra-ASEAN tariffs.

2.2.4 Output indicators

In the ASEAN context, output indicators relate mainly to infrastructure projects and measure the physical progress of construction of large scale projects such as the Singapore-Kunming railway. In this example an output indicator would be kilometres of track laid over time.

2.2.5 Stock and flow indicators

These are relevant in the case of the integration of financial services and also of investment. The stock of intra-ASEAN investment in a particular ASEAN country would indicate the

cumulative importance of intra-ASEAN investment to that country over time, while the annual flow to the country would indicate the importance for the period under consideration. Intra-ASEAN investment may have not been important historically, as shown by a small stock figure, while being more important in recent years, as shown by increases in the level of annual flows during that period.

2.3 Selection criteria for indicators

Often it is not a lack of measures to indicate progress towards an aspect of economic integration that is a problem, but rather that there are too many indicators and overall progress can be lost in the detail. Selection criteria can help to limit the number of indicators to those which best illustrate economic integration in the sector under consideration[16].

Selection criteria can include the following:

- Policy relevance – does the indicator assess progress in an economic integration issue(s) that can be affected by policy formulation? If the indicator is not linked to decisions and policies, it is unlikely to arouse much interest.
- Simplicity – can the indicator be presented in a way that is easily understood, both by practitioners and by the public?
- Statistical consistency – have the statistics used for calculation of the indicator been based on the same coding systems over time and between countries? If differing codes have been used, does this affect the analysis of indicators?
- Validity – is the indicator appropriate to measure progress towards particular aspects of economic integration? For example, increases in the number of products subject to reduced tariffs under the CEPT arrangements are often taken as indicative of ASEAN integration in trade in goods. But the number of reduced tariff lines is really an input indicator which measures the progress in establishing the necessary enabling background for increased intra-ASEAN trade. The more important outcome indicator is the actual increase in intra-ASEAN trade as a result of reduced tariffs for products covered under CEPT. If intra-ASEAN exporters and importers do not seek to take advantage of the CEPT reduced tariffs, then including more products in the general inclusion list will not represent progress towards economic integration.
- Data availability – is good data currently available at a reasonable cost or can it be collected at reasonable cost in the future. Data collection can be expensive and this needs to be considered in decisions about which indicators should be selected as measures of the economic integration of ASEAN.
- Indicator coverage – does the indicator measure a fairly narrow aspect of economic integration or can it be used to measure progress towards ASEAN economic integration, either as a whole, or for a particular sector. Indicators with a broader coverage are to be preferred.

[16] This section has drawn on comments in International Institute for Sustained Development, 2000.

2.4 Indices

Indices have been defined by Canada's International Institute for Sustainable Development (IISD)[17] as follows:

'Indices are aggregrated measures that combine indicators most important to describe the performance of an institution, region or economic sector.'

An index is created when two or more indicators are aggregated mathematically. The index can itself be used as an indicator and has the advantage that it simplifies and gives a summary overview of the information contained in the several indicators which have been combined to create it. This makes sectoral analysis easier as individual indicators may be moving in different directions. The index combines both positive and negative movements in the indicators and presents an overall assessment of progress.

Common examples of indices are the consumer price index and the stock exchange index, which measure average price movements of a fixed basket of goods (consumer price index) and of shares in selected companies (stock exchange index) respectively.

Two or more different indices can themselves be combined into a single index to give a broader overview of the topic under consideration. The Human Development Index compiled by the United Nations Development Programme (UNDP) is an example of this.

The transnationality index of host countries developed by UNCTAD is an example of a combination of indices which has more relevance to this study. It was presented in the World Investment Report, 2002[18].

The index measures the transnationality of economic activity of host countries in which transnational corporations (TNCs) operate. It takes into account both the production potential created through foreign direct investment and also the results of this investment. The transnationality index for a country is based on two FDI variables and two variables related to the operations of foreign firms in the host countries:

- FDI inflows as a percentage of gross fixed capital formation.
- FDI inward stock as a percentage of GDP.
- Value added by foreign affiliates as a percentage of GDP; and
- Employment by foreign affiliates as a percentage of total employment.

The simple average of these four shares gives the transnationality index of a host country.

Many of the indices suggested in chapter 4, the integration indicators, are comparative indices. They calculate the percentage of a certain variable (say intra-ASEAN exports) to another variable (say GDP) in a country for a given year and then compare the result with the same percentage for ASEAN as a whole. This allows for comparison with the ASEAN average and also with the results for other ASEAN economies for that year, irrespective of size. It also allows for ranking between countries as to their state of integration in terms of the ASEAN average for intra-ASEAN exports over GDP.

[17] International Institute for Sustainable Development (2000).
[18] See United Nations Conference on Trade and Development (2002).

For underachievers, the ASEAN percentage (or the percentage of the best performer) can offer a target for future endeavour. The movements of the average ASEAN percentage over time are good indicators for the progress of ASEAN integration as a whole

Another advantage is that the compilation of each comparative index requires raw data (the value of intra-ASEAN exports and GDP in this example) which can themselves be used as indicators. Thus a country can compare its intra-ASEAN exports over GDP percentage with its own performance in earlier years, not solely with ASEAN and the other countries in the same year. It can also track the absolute values of intra-ASEAN exports for itself and for other ASEAN countries.

The indices that have been suggested in this study are unweighted indices, consistent with the criteria for selection of indices that they should be fairly simple to compute and understand. Statistical indices can be weighted to reflect or to incorporate the relative influence of parts, or components, that make up the indices. The assignment of weights to the components of the indices, however, can be subjective and problematic. There is no clear hard and fast rule for the assigning of statistical weights and subjectivity can encroach into the procedure of weighting. In the light of these problems, this preliminary study on integration indicators has not used weights in formulating the indices and indicators. Further work is required to arrive at a consensus on the assigning of weights to the various integration indicators that are proposed in this study.

Several of the indices, particularly those relating to trade in goods and foreign direct investment, use GDP expressed in US dollars as a common measurement of values. Thus the indices can be affected by movements in exchange rates.

Using GDP (and other variables) expressed in purchasing power parity terms would address this issue but it requires an appropriate reliable statistical base, which itself would be subject to decisions regarding weighting.

It is suggested that, where the statistical base allows it, suitable indices should be calculated on both a GDP and a PPP GDP basis. Decisions can then be made on which is the most suitable to use.

Chapter 3

Approach and conceptual framework

3.1 Concepts of integration

Integration involves the combination of parts into a whole[19]. Embedded is the idea of increasing the size and coverage of the entities involved. While the term integration usually refers to international integration which involves countries, it can also refer to national integration which involves regions within countries. Essentially, integration can be interpreted either in the wider or narrower sense. The narrow sense of integration covers only the notion of economic integration. The wider concept of integration tends to include more than the idea or notion of economic integration and to include political and social integration too. In this study the focus will be on the notion of economic integration and the indicators will be confined to the relevant indicators of economic integration.

The concept of economic integration has been widely used since the post-war years and integration as defined by international economists denotes a state of affairs or process which involves the amalgamation of separate economies into larger free trading areas. The key elements that are associated with economic integration relate to the deepening of intra-economic interdependence through intra-regional trade, foreign direct investment and harmonization of commercial regulations, standards and practices. Some division of labour is also necessary for economic integration.

While the international flows of goods and services and investment are the key parts of economic integration, the process of economic integration is accelerated by movements of labour, technology and information, especially in recent years of information and communication technology (ICT) and e-commerce. These forces put increasing pressure on economies towards commercial harmonization of standards such as customs standards and procedures. A combination of market forces and the push towards liberalization has enhanced economic integration in various parts of the globe. A major focus of this study will be on developing key indicators of trade and investment flows. Some qualitative indicators of ASEAN economic integration will also be presented.

3.2 Economic integration – Choice of definitions and stages

As noted above, a narrower definition of integration is the preferred choice for this study and the definition of integration will cover only the notion of economic integration and. will exclude the notions of political and social integration. Economic integration is seen as a means of securing access to wider markets and to promote economic growth and hence to raise welfare.

Economic integration for this study is, therefore, seen as a process towards union involving the amalgamation of economies, the removal of discrimination between the economic agents of the member countries, and the creation and implementation of common policies. Economic

[19] The term integration – horizontal and vertical integration – was first used in the context of industrial organizations, referring to combinations of firms.

integration involves the deepening and strengthening of economic linkages and relations. The deepening and strengthening of intra-ASEAN economic interdependence is to be achieved mainly through intra-regional trade and foreign direct investment flows. In addition, economic integration needs to be supported and promoted by the harmonization of policies and implementation in areas which facilitate trade and investment flows. Such areas include product standards, customs processes and procedures, transport and several others. There are various forms or types of economic arrangements that promote economic integration between developed countries and between developing countries. In recent years there have been more economic arrangements between developed and developing countries.

Economists using trade theory have also defined integration using the behaviour of prices. Integration following this approach prevails when the prices of similar goods and similar factors in two regions or countries are equalized. This definition sees economic integration as the realization of factor price equalization between two regions or two countries. The factor price equalization theory has argued that, given some assumptions about technology and tastes, free trade can ensure equal prices of goods across countries and equal prices for non-tradable factors as well. Studies on factor price equalization, however, have been ambiguous and the conclusion is that the factor prices convergence will depend on cross-country tastes, technology and endowment.

A distinction needs to be made between integration, openness and interdependence. An open economy is characterized by the existence of few barriers to international trade and to movements of factors of production. An open economy does not mean that it is an economy that is fully integrated with the international economic system. Openness, interdependence and integration tend to overlap.

The design of indicators of integration is essentially an attempt to measure economic integration and a search for the criteria for the assessment. There is a strong consensus that trade is the "quintessence of economic integration" and that the basic principle for assessing international economic integration, ignoring transportation costs, is the equality of prices for comparable goods and services in the integrated economies. The price of goods which are standardized is easier to compare than for differentiated goods. Consumption patterns will also have to be taken into account in explaining the differentials in prices for different markets and economies.

A distinction is sometimes made between negative and positive integration. Negative integration has been used to refer to the removal of trade impediments between participating countries or to the removal of restrictions on the process of the liberalization of trade. On the other hand, positive integration refers to the modifications of existing institutions and instruments and to the introduction of new ones to advance and facilitate the functioning of the integrated market.

An appreciation of the idea of integration is enhanced when the objectives of integration are given some attention. Economic growth is expected to be enhanced with the opportunities that are promised by a larger market size and increasing trade and investment brought about by integration. Growth is anticipated to be enhanced through trade creation, increased competition and efficiency in resource allocation and specialization. Trade creation is achieved when trade expands between countries who have joined in an integration arrangement. This is achieved when production is shifted from higher-cost non-member countries to lower-cost member countries and trade between participating countries increases.

Trade diversion takes place if the aggregate trade of the participating countries with the rest of the world is lowered. The level of external tariffs of member countries has a bearing on trade diversion: the higher the external tariffs, the greater the possibility of trade diversion.

Trade and investment are enhanced by the elimination of barriers through reductions in tariffs, quotas, and non-tariff barriers, the harmonization of regulation and regulatory regimes and the coordination of macroeconomic policies, especially monetary policies. Economic leverage in international negotiations is also expected to be enhanced with integration and the adoption of a common stand.

3.3 Types of integration

In considering integration and integration indicators it is helpful to make a distinction between the types of integration[20]. There are different forms of integration but the essence of the integration arrangement is the discriminatory removal of all trade obstacles between at least two participating nations and the promotion of some form of cooperation and coordination between the participating countries. The main types of integration schemes and their essential features are as follows and are summarized in Figure 3.1 on the next page.

3.3.1 Preferential trade arrangements

In preferential trade arrangements the participating countries maintain lower barriers on trade among the participating countries compared to trade with non-members There are various forms of preferential trade arrangements but they all incorporate reciprocity among the members. They include: association, partnership or framework agreements and trade preference associations. Established in 1932 by the United Kingdom and some of the members of the former British Empire, the British Commonwealth Preference Scheme is an example of a preferential trade arrangement.

3.3.2 Free trade areas

In free trade areas the member countries remove all trade impediments amongst themselves but each country retains the right to determine their policies in relation to non-participating countries. The agreement usually includes the elimination of tariffs and quantitative restrictions on trade. The "rules of origin" are the basis of the agreement. The rules of origin imply that only those commodities that originate from a member state are granted exemptions from tariff. The examples of free trade areas include the European Free Trade Association (EFTA), comprising of the UK, Austria, Denmark, Norway, Portugal, Sweden, Switzerland and Finland and the North American Free Trade Area (NAFTA) formed in 1993 by the United States, Canada and Mexico. AFTA most closely fits this category.

[20] For a useful source on the types of integration see El-Agraa (1997).

Figure 3.1: Main Types of International Economic Integration

Type / Policy Action	Free Trade Area	Customs Union	Common Market	Economic Union	Total Political Union
Removal of tariffs and quotas	☑	☑	☑	☑	☑
Common external tariff		☑	☑	☑	☑
Factor mobility			☑	☑	☑
Harmonization of economic policies				☑	☑
Total unification of economic policies					☑

3.3.3 Customs unions

In customs unions, member countries, as in free trade areas, remove all trade impediments amongst the participating countries. In addition, the member countries harmonize their trade policies and, in particular, have common external tariffs on imports from non-participating countries. The most well known customs union is the European Common Market formed in 1957 by West Germany, France, Italy, Belgium, the Netherlands and Luxembourg.

3.3.4 Common markets

Common markets are customs unions with the added feature that there is free mobility of factors of production i.e. labour, capital, enterprises and technology, across the participating countries. In 1992 the European Union (EU) achieved the status of a common market.

3.3.5 Economic unions

Economic unions are common markets where there is unification of monetary and fiscal polices. Monetary policy is managed by a central bank. The union will have a single currency, in the case of the European Union, the euro. There is a central authority to exercise control over these matters. This is considered to be the most advanced form of economic integration. The EU is moving this way now.

3.3.6 Total political unions

In a political union the participating countries become one nation. The central economic authority is supplemented by a common parliament and other institutions.

3.3.7 Sectoral integration

There are other notions of integration which are sometimes used. There can be sectoral integration which covers a specific area of the economy. The European Coal and Steel Community (ECSC), which was created in 1950, is an example of sectoral integration but is in essence a form of cooperation. Another example of sectoral integration is the European Union's Common Agricultural Policy (CAP) which covers the agricultural sector.

There is a tendency to see the types of integration listed above as phases and sequences beginning with preferential trading arrangements and leading to an economic union. There is no necessity for such a process to go through all the phases.

The types of integration also seem to be rising in complexity. In assessing integration arrangements there seems to be a connection with the suggested approach to the sequencing of liberalization and the opening up of economies i.e. opening up the trade account first and following later with the opening up of the capital account. The integration phasing usually begins with the lowering of trade barriers followed by the lowering of barriers to the movement of labour and capital and moving on to lifting the impediments originating from various regulatory measures. In the next stage will be the coordination and the integration of macroeconomic policy. This is the sequence followed for European economic integration but there is no iron law of integration.

3.4 ASEAN integration – From free trade area to an ASEAN economic community

In the ASEAN Vision 2020, the association has set its goal as "a stable, prosperous and highly competitive ASEAN economic region in which there is a free flow of goods, services and investment, and a freer flow of capital". The building blocks of ASEAN integration have been based on the integration programs of AFTA, the ASEAN Framework Agreement on Services and the ASEAN Investment Area. These central programs have been supplemented by a number of cooperation programs in various economic areas.

In November, 2002, at the ASEAN Leaders Summit meeting in Phnom Penh, Cambodia, the idea of striving for an ASEAN Economic Community (AEC) by 2020 was proposed for the first time. It was pointed out that building an AEC would be a "logical extension" of ASEAN's goal towards integration. The leaders agreed to explore the possibility of transforming ASEAN into AEC by 2020 with ASEAN's integration being deepened and accelerated through the AEC. In this sense the AEC can be viewed as the desired and "ultimate" form of integration. The idea of an AEC, however, is still at an early and formative stage and a much wider and deeper assessment of what it might imply is an appropriate area for further study. The experiences of other countries in forming and moving towards a community need to be given some attention.[21]

One possible type or form envisaged for the AEC would be a free trade agreement plus, (FTA-plus), that includes some elements of a common market, for instance the free movement of factors of production such as labour and capital.[22] Such an AEC would have zero tariffs under AFTA, would eliminate non-tariff barriers and harmonize customs and standards. It would also provide an institutional and legal infrastructure to facilitate the economic integration of ASEAN.

Another version of an ASEAN economic community that has been envisaged is of a "common market minus" arrangement. This proposal aims at the creation of a fully integrated market but has areas where members of ASEAN will reserve deeper integration for a later stage, beyond 2020[23].

This common market would have free flows of trade, and free mobility of labour and capital. It is envisaged that, by 2020, ASEAN members of APEC may have adopted zero most favoured nation (MFN) tariffs and ASEAN would have achieved intra-ASEAN liberalization in trade and investment. Other ASEAN members would also have brought their MFN tariffs near to zero. If these are on track, then ASEAN's external tariffs could be harmonized by 2020 and ASEAN could become a customs union. Subsets of ASEAN can form separate customs unions and later form a single customs union by 2020. Institutional strengthening and especially strengthening the ASEAN Secretariat will be required. Non-tariff barriers would have to be eliminated, harmonization of customs and standards established and a credible dispute settlement mechanism in place for the AEC to become reality.

[21] A possible model would be the European Economic Community (EE) of the 1950s with the signing of the Treaty of Rome in 1957. The treaty focused on the formation of a customs union.

[22] This is a proposal by the Institute of Southeast Asian Studies, Singapore. See Concept Paper on the ASEAN Economic Community, 26 February, 2003.

[23] This is the proposal from ASEAN ISIS Track Two Conveners, "Towards an ASEAN Economic Community", March, 2003.

This study has not been specifically tasked to examine in detail the concept of an AEC but to take note of the latest developments in ASEAN as far as they impinge on the study for integration indicators. A separate and more focused study on the AEC is called for. An issue which needs to be carefully examined has to do with the next stage of integration for ASEAN, i.e. whether ASEAN should now be striving for a customs union and a common market. The issue of moving towards a common external policy and maintaining a common external tariff needs to be addressed.

Additionally, the issue of the free mobility of labour needs to be considered. In drawing up the indicators of integration, attention will need be put on the relevance of the various forms of economic integration. The nature and goals of the integration arrangement will have an important bearing on the indicators to be suggested. Some indicators will not be relevant for some of the integration arrangements. For example, there is no real need to set up separate indicators for the free movements of labour in a free trade area as there would be for a common market area. Or in a customs union where there are common external tariffs, there is no necessity to have separate indicators for external tariffs for each country but external tariffs are relevant for a free trade area.

The free trade area form of integration is the central focus of this study. ASEAN exhibits a mixture of the economic integration arrangements ranging from a free trade area, (AFTA), to liberalizing investment flows through the ASEAN Investment Area (AIA), to sectoral integration in services such as in financial services, and in various cooperation programs. The choice of the integration indicators will have to reflect the eclecticness of ASEAN integration efforts. It is proposed that there will be three broad types of integration indicators – macro indicators, sectoral integration indicators and qualitative indicators.

In this study on integration indicators, the main focus will be on the current stage of ASEAN integration i.e. on progress towards the goals of AFTA, AIA and the liberalization of services. Integration through trade, foreign direct investment and the liberalization of trade in services will be given special attention. Other areas of the program for economic cooperation will also be included.

The broad approach to ASEAN economic integration can be characterised as two pronged and is based on the distinction made between economic integration and economic cooperation. Economic integration initiatives include the measures made to eliminate protection and liberalise trade by reducing and eventually removing tariffs and also include measures to encourage greater inflows of FDI, including intra-ASEAN FDI. Economic cooperation programmes include efforts to develop specific economic projects like ASEAN infrastructure and also include cooperation to develop, SMEs, e-ASEAN and cooperation to harmonise customs standards and procedures to facilitate intra-ASEAN trade. The cooperation programmes may or may not contribute directly towards economic integration. The harmonisation of customs standards and procedures, for example, can have a direct impact on trade flows by lowering transaction costs. Cooperation to build a highway network may not directly lead to an increase in intra-ASEAN trade and intra-ASEAN FDI flows.

In this study the distinction made between economic integration and cooperation will be retained. The proposals made for the integration indicators are based on this distinction. A useful way to approach the indicators is to see economic cooperation efforts generally as "processes" establishing the enabling background on which integration initiatives can be

based. The approach in this study is to begin with integration indicators and then to deal with the indicators than have been suggested for the cooperation programmes of ASEAN.

Chapter 4

The integration indicators

4.1 Introduction

The previous chapters have provided the background, methodology and approach for this study on integration indicators. The likely types of integration indicators and selection criteria have been identified and there has been discussion about the usefulness of indices. In this chapter the ways in which appropriate indicators are to be estimated are identified, whether or not relevant statistics are available at this time. Where data is available, the integration indicators are calculated.

4.2 Openness, liberalisation and integration

An appreciation of the notion of "openness" is useful additional background when considering integration indicators. A key premise of current discussions on economic growth has to do with the links between an open economy and its contribution to economic growth. It has become almost a truism that the more open an economy, the better the prospects for economic growth. Liberalising the economy as a means of opening it up is the agreed way to go and developing economies have been urged to open up their economies more and more. Openness is expected to promote integration. There is also, it has been argued, a positive link between an economy's long-run growth and the openness of its financial markets. Integration through trade and through financial market integration will be beneficial for growth.

There are different measures of the "openness" of economies. The most widely used measure, or indicator, of openness is the share of total trade to GDP i.e. the percentage share of exports plus imports to GDP. All groups of countries, according to the World Bank, appear to have increased their integration through trade: low income countries increased their share of trade in goods to GDP from 31.3 percent in 1987 to 52 percent in 1997, upper middle income countries from 59.4 percent to 81.2 percent, lower middle income countries from 47.8 percent to 78.9 percent, and high income countries from 72.5 percent to 78.7 percent over the same period.

Information on trade in services tends to be incomplete. A general idea of the importance of services, including financial services, and their contribution to the openness of an economy and, therefore, integration is provided by the growth of trade in services. In the OECD countries between 1980 and 1995, services trade increased at almost twice the rate of merchandise trade (WTO, 1999) and trade in services account for about 33 percent of world trade. With cheaper travel and lower costs of communications more and more services now are becoming tradable.

4.3 Ratification and implementation indicators

The success of a ASEAN country in meeting its AFTA, AIA, AFAS and other commitments in the time agreed is a good general process indicator of a Member Country's enthusiasm for economic integration. This could be monitored annually by country.

4.3.1 Scoreboard

The European Union has developed a scoreboard, whereby assessments are made of the performance of EU countries in meeting integration actions to which they have committed in the allotted time.

The scoreboard covers three areas; implementing the internal market's legal framework, completing the internal market, and technical barriers to trade and the functioning of the internal market. Countries which have not met their obligations on time are identified and published in a series of publicly available papers under the title Internal Market Scoreboard. The papers are also on the main EU website.

This 'name and shame approach'[24] is justified on the argument that laggard countries are denying other members benefits to which they are entitled, these latter members having met their commitments to opening up their own markets to other EU members, including the laggards.

This is an interesting initiative, although it may seem to be rather confrontational to an ASEAN where the emphasis is on consensus. Also, the EU has supranational characteristics and a legal structure which allow the European Commission to be critical of member states. Perhaps the ASEAN Secretariat could follow this idea with the proviso that name and shame comments would go to ASEAN Member Countries only and would not be made publicly available, at least not at this time.

4.4 Trade in goods

Ideally, indicators should be compared with time based targets for the parameter in question. For this study, the targets will be affected by the objectives, features and timelines of the ASEAN Economic Community, which are not defined in detail at this stage.

Many of the indicators suggested below can be measured by appropriately sorted export and other statistics that are already collected by Member States. The introduction, across all ASEAN countries, of the ASEAN Harmonized Tariff Nomenclature classification system (AHTN) for customs and trade will mean that valid comparisons can be made over time and between countries.

Measurement of some indicators may be restricted to some ASEAN members, typically the ASEAN 6, as relevant statistics are available only from them. Nonetheless, the indicators should be measured as they will show progress towards ASEAN economic integration as it applies to those Member States. Also this approach will focus the need for the other members to move towards gathering appropriate statistics or qualitative indicators for the same parameters.

4.4.1 Intra-ASEAN exports

A useful indicator of integration compares the value of intra-ASEAN exports to the total value of all goods exported from a country. This indicator, expressed as a percentage, can be

[24] See European Union (2001). The phrase was used by Internal Market Commissioner, Frits Bolkestein.

calculated annually for each ASEAN country and for ASEAN as a whole. This is an indicator of the relative importance of intra-ASEAN exports within the total export market of each ASEAN country. Total exports could be increasing but if the share of intra-ASEAN exports in the total remains small then integration is not increasing. A summary of the data is presented in table 4.1, with the complete data set in table 4.2 below.

Table 4.1 : Summary, intra-ASEAN exports as a percentage of all exports, by ASEAN country, 1996 and 2000, US$ million

Country	1996	2000
Brunei	18.7	29.5
Cambodia	12.9	5.6
Indonesia	17.2	17.5
Lao PDR	na	na
Malaysia	27.7	24.9
Myanmar	32.6	33.0
Philippines	14.4	15.7
Singapore	26.8	27.3
Thailand	21.5	27.3
Vietnam	22.9	18.3
ASEAN	23.6	23.8

Source:Table 4.2

Results were mixed with some countries increasing their intra-ASEAN exports as a percentage of all exports, while for others the percentage declined. For ASEAN as a whole the percentage increased marginally. In US dollar terms, total ASEAN exports increased from US$83.4 billion in 1996 to US$97.9 billion in 2000.

Exports as a percentage of GDP are often used as an indicator of the importance of exports to an economy and also as an indicator of the economy's international competitiveness.

This export based indicator of ASEAN integration involves measuring the value and percentage of intra-ASEAN goods exports and comparing these to the GDP of the exporting country. This could be done annually by country and would indicate the relative importance of exports to ASEAN within the economy, rather than within the exports, of the Member exporting country. Intra-ASEAN exports in this context will include exports that are eligible for CEPT treatment (for which 40 percent ASEAN value added and substantial transformation are required) as well as all other exports to ASEAN Member Countries from the Member in question. Thus products with less than 40 percent ASEAN content would be included. It is understood that electronics and electrical products, which make up approximately 40 percent of intra-ASEAN trade, typically have an ASEAN value added component of only 8-15 percent.

The data to support this indicator is presented below as table 4.3. It shows that for the year 2000, the intra-ASEAN export percentage of GDP ranged from a high of 40.8 percent in Singapore to a low of 2.3 percent in Cambodia. The table can also be used as an indicator within one country over time. Thus the Malaysian intra-ASEAN export percentage to GDP increased from 22.5 percent in 1996 to 27.2 percent in 2000. Intra-ASEAN exports had become relatively more important to Malaysia, even though Malaysian intra-ASEAN exports

increased only marginally in this period in US dollar terms due to depreciation of the ringgit following the 1997 Asian financial crisis. However, the Malaysian GDP actually declined in US dollar terms over the same period and so the intra-ASEAN exports to GDP percentage increased.

Results for Member States can also be compared with the percentage of intra-ASEAN exports to GDP for the whole of ASEAN for the same year to create an index that ranks countries by the importance of intra-ASEAN exports as a contributor to their GDP.

The intra-ASEAN exports to GDP percentage for the whole of ASEAN is itself an important indicator of intra-ASEAN integration over time and movements up or down in the ASEAN wide percentage need to be kept in mind when considering the results of the comparative index below. In 1996, the percentage was 11.7 percent and this increased to 17.0 percent in 2000. As with the percentage for Malaysia, the increase in percentage for ASEAN was a combination of a modest increase in intra-ASEAN exports over the period combined with a fall in the ASEAN GDP, both being expressed in US$ terms.

The index measures relative progress over the years by each country compared to the average percentage for ASEAN as a whole for the same years[25], whether or not the percentage for the whole of ASEAN is increasing or declining compared to GDP over time.

A result of less than one for a particular country in a particular year means that intra-ASEAN exports for that economy are relatively less important than they are for ASEAN economies taken as a whole in that year. The key here is relativity; if intra-ASEAN exports for the whole of ASEAN are increasing as a proportion of GDP over time, an individual Member Country will need to increase exports in the same proportion relative to its GDP just to maintain the previous score on the Intra-ASEAN Export Index. The absolute size of the GDP and absolute

[25] Alternatively, the percentage of intra-ASEAN exports for a country for a particular year could be compared with a target (rather than an actual) percentage for ASEAN as a whole for that year. It could also be compared to a specific percentage target for the country in question. In this latter case, the ranking would be based on the relative achievement of different targets for different countries. There would be no common denominator.

Table 4.2 : Value of intra-ASEAN exports as a percentage of all exports, by ASEAN country, 1996-2000, US$ million

	Brunei	Cambodia	Indonesia	Laos PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam	ASEAN
Intra-ASEAN Exports, 2000	639.5	76.2	10,883.7	na	24,408.6	393.5	5,982.6	37,784.0	15,099.7	2,613.0	97,880.8
Total Exports, 2000	2,169.1	1,368.6	62,124.0	na	98,154.5	1,193.9	38,078.2	138,352.5	55,237.2	14,308.0	410,986.0
Percentage 2000	29.5	5.6	17.5	na	24.9	33.0	15.7	27.3	27.3	18.3	23.8
Intra-ASEAN Exports, 1999	375.2	221.9	8,278.3	na	21,885.0	236.8	4,989.1	29,269.3	9,901.9	2,516.3	77,673.8
Total Exports, 1999	2,340.7	947.1	48,665.5	na	84,287.9	738.0	35,036.9	114,625.1	56,110.9	11,541.0	354,293.1
Percentage 1999	16.0	23.4	17.0	na	26.0	32.1	14.2	25.5	17.6	21.8	21.9
Intra-ASEAN Exports, 1998	220.8	na	9,346.7	na	21,611.4	na	3,821.0	25,998.2	8,314.7	2,373.4	71,686.2
Total Exports, 1998	1,923.7	na	48,847.6	na	77,098.6	na	29,496.4	109,802.9	49,481.6	9,361.0	326,011.8
Percentage 1998	11.5	na	19.1	na	28.0	na	13.0	23.7	16.8	25.4	22.0
Intra-ASEAN Exports, 1997	496.4	na	8,850.9	na	23,248.7	na	3,436.2	35,793.8	13,525.7	1,832.9	87,184.6
Total Exports, 1997	2,714.2	na	51,274.3	na	77,457.6	na	25,227.7	128,174.3	57,822.0	8,900.0	351,570.1
Percentage 1997	18.3	na	17.3	na	30.0	na	13.6	27.9	23.4	20.6	24.8
Intra-ASEAN Exports, 1996	446.4	na	8,310.1	na	22,694.0	na	2,970.3	34,441.4	12,111.5	2,431.5	83,405.2
Total Exports, 1996	2,493.3	na	53,844.3	na	74,246.5	na	19,533.0	117,349.4	55,894.7	7,255.9	330,617.1
Percentage 1996	17.9	na	15.4	na	30.6	na	15.2	29.3	21.7	33.5	25.2
Intra-ASEAN Exports, 1996-2000	2,178.3	298.1	45,669.7	na	113,847.7	630.3	21,199.2	163,286.7	58,953.5	11,767.1	417,830.6
Total Exports, 1996-2000	11,641.0	2,315.7	264,755.7	na	411,245.1	1,931.9	147,372.2	608,304.2	274,546.4	51,365.9	1,773,478.1
Percentage 1996-2000	18.7	12.9	17.2	na	27.7	32.6	14.4	26.8	21.5	22.9	23.6

Source: ASEAN Statistical Yearbook, 2001, Tables V1 & V4.

Table 4.3 : Value of intra-ASEAN exports as a percentage of Gross Domestic Product, by ASEAN country, 1996-2000, US$ million

Exports and GDP	Brunei	Cambodia	Indonesia	Laos PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam	ASEAN
Intra-ASEAN Exports, 2000	639.5	76.2	10,883.7	na	24,408.6	393.5	5,982.6	37,784.0	15,099.7	2,613.0	97,880.8
GDP, 2000	4,315.0	3,343.0	150,625.0	na	89,659.0	6,900.0	74,683.0	92,701.0	122,518.0	31,319.0	576,063.0
Percentage 2000	14.8	2.3	7.2	na	27.2	5.7	8.0	40.8	12.3	8.3	17.0
Intra-ASEAN Exports, 1999	375.2	221.9	8,278.3	na	21,885.0	236.8	4,989.1	29,269.3	9,901.9	2,516.3	77,673.8
GDP, 1999	4,190.0	3,289.0	141,638.0	na	79,037.0	6,500.0	76,076.0	82,671.0	122,577.0	28,677.0	544,655.0
Percentage 1999	9.0	6.7	5.8	na	27.7	3.6	6.6	35.4	8.1	8.8	14.3
Intra-ASEAN Exports, 1998	220.8	na	9,346.7	na	21,611.4	na	3,821.0	25,998.2	8,314.7	2,373.4	71,686.2
GDP, 1998	3,865.0	na	99,655.0	na	72,237.0	na	65,548.0	82,259.0	112,751.0	27,788.0	464,103.0
Percentage 1998	5.7	na	9.4	na	29.9	na	5.8	31.6	7.4	8.5	15.4
Intra-ASEAN Exports, 1997	496.4	na	8,850.9	na	23,248.7	na	3,436.2	35,793.8	13,525.7	1,832.9	87,184.6
GDP, 1997	5,102.0	na	219,066.0	na	100,213.0	na	82,764.0	94,495.0	155,965.0	26,843.0	684,448.0
Percentage 1997	9.7	na	4.0	na	23.2	na	4.2	37.9	8.7	6.8	12.7
Intra-ASEAN Exports, 1996	446.4	na	8,310.1	na	22,694.0	na	2,970.3	34,441.4	12,111.5	2,431.5	83,405.2
GDP, 1996	5,216.0	na	226,814.0	na	100,888.0	na	82,840.0	90,957.0	182,106.0	24,658.0	713,479.0
Percentage 1996	8.6	na	3.7	na	22.5	na	3.6	37.9	6.7	9.9	11.7
Intra-ASEAN Exports, 1996-2000	2,178.3	298.1	45,669.7	na	113,847.7	630.3	21,199.2	163,286.7	58,953.5	11,767.1	417,830.6
GDP, 1996-2000	22,688.0	6,632.0	837,798.0	na	442,034.0	13,400.0	381,911.0	443,083.0	695,917.0	139,285.0	2,982,748.0
Percentage 1996-2000	9.6	4.5	5.5	na	25.8	4.7	5.6	36.9	8.5	8.4	14.0

Source: ASEAN Statistical Yearbook 2001, Tables IV.4. & V.4.

Note: The GDP for Laos PDR is excluded from the ASEAN GDP total for all years, as are Cambodia (1996-98) and Myanmar (1996-98).
No intra-ASEAN export figures were available for those years for those countries.

Table 4.4 : Comparison of country percentages of intra-ASEAN exports to GDP with the percentage for ASEAN as a whole, 1996-2000

Exports and GDP	Brunei	Cambodia	Indonesia	Laos PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
Percentage, 2000	14.8	2.3	7.2	na	27.2	5.7	8.0	40.8	12.3	8.3
ASEAN percentage, 2000	17.0	17.0	17.0	na	17.0	17.0	17.0	17.0	17.0	17.0
Intra-ASEAN Export Index	0.87	0.14	0.42	na	1.60	0.34	0.47	2.40	0.72	0.49
Percentage, 1999	9.0	6.7	5.8	na	27.7	3.6	6.6	35.4	8.1	8.8
ASEAN percentage, 1999	14.3	14.3	14.3	na	14.3	14.3	14.3	14.3	14.3	14.3
Intra-ASEAN Export Index	0.63	0.47	0.41	na	1.94	0.25	0.46	2.48	0.57	0.62
Prcentage, 1998	5.7	na	9.4	na	29.9	na	5.8	31.6	7.4	8.5
ASEAN percentage, 1998	15.4	na	15.4	na	15.4	na	15.4	15.4	15.4	15.4
Intra-ASEAN Export Index	0.37	na	0.61	na	1.94	na	0.38	2.05	0.48	0.55
Percentage, 1997	9.7	na	4.0	na	23.2	na	4.2	37.9	8.7	6.8
ASEAN percentage, 1997	12.7	na	12.7	na	12.7	na	12.7	12.7	12.7	12.7
Intra-ASEAN Export Index	0.76	na	0.31	na	1.83	na	0.33	2.98	0.69	0.54
Percentage, 1996	8.6	na	3.7	na	22.5	na	3.6	37.9	6.7	9.9
ASEAN percentage, 1996	11.7	na	11.7	na	11.7	na	11.7	11.7	11.7	11.7
Intra-ASEAN Export Index	0.74	na	0.32	na	1.92	na	0.31	3.24	0.57	0.85
Percentage, 1996-2000	9.6	4.5	5.5	na	25.8	4.7	5.6	36.9	8.5	8.4
ASEAN percentage 1996-2000	14.0	14.0	14.0	na	14.0	14.0	14.0	14.0	14.0	14.0
Intra-ASEAN Export Index	0.69	0.32	0.39	na	1.84	0.34	0.40	2.64	0.61	0.60

Source: Table 4.3

Table 4.5 : Intra-ASEAN Export Index, 1996-2000

		Brunei	Cambodia	Indonesia	Laos PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
Intra-ASEAN Export Index											
	2000	0.87	0.14	0.42	na	1.60	0.34	0.47	2.40	0.72	0.49
	1999	0.63	0.47	0.41	na	1.94	0.25	0.46	2.48	0.57	0.62
	1998	0.37	na	0.61	na	1.94	na	0.38	2.05	0.48	0.55
	1997	0.76	na	0.31	na	1.83	na	0.33	2.98	0.69	0.54
	1996	0.74	na	0.32	na	1.92	na	0.31	3.24	0.57	0.85
	1996-2000	0.69	0.32	0.39	na	1.84	0.34	0.40	2.64	0.61	0.60
Ranking	2000	3	9	7	na	2	8	6	1	4	5
	1999	3	6	8	na	2	9	7	1	5	4
	1998	7	na	3	na	2	na	6	1	9	4
	1997	3	na	7	na	2	na	6	1	4	5
	1996	4	na	6	na	2	na	7	1	5	3
	1996-2000	3	na	7	na	2	8	6	1	4	5

Source: Table 4.4

value of intra-ASEAN exports are not relevant in this context and thus comparisons can be made between ASEAN countries at different stages of development

Table 4.4 presents the calculations for the index in tabular form. Table 4.5 is extracted from table 4.4 and presents the Intra-ASEAN Export Index and the rankings for each country and each year. Based on figures from 1996-2000, intra-ASEAN exports are most important to the economies of Singapore, Malaysia and Brunei and of least importance to Indonesia and The Philippines.

The formula for the index values for the Intra-ASEAN Export Index is as follows:

$$IAXGDP_{it} = \left(\frac{IAX_{it}}{GDP_{it}} \right) \Big/ \left(\frac{IAX_{at}}{GDP_{at}} \right) \qquad (1)$$

where IAX_{it} is the value of intra-ASEAN exports from country i in year t, GDP_{it} is the GDP for country *i* in year *t*, IAX_{at} is the value of intra-ASEAN exports for the whole of ASEAN in year *t*, and GDP_{at} is the value of GDP for ASEAN as a whole in year *t*.

The intra-ASEAN export value and percentage of intermediate goods - semi finished goods, components and parts - can be compared with the value of all intra-ASEAN exports from the same country in the same year to produce an indicator of the importance of integration between the manufacturing sector of that country and those of other ASEAN countries. This could be done annually by country and for ASEAN as a whole. The indicator would involve developing an agreed list of manufactured items which are deemed to be semi finished, components and parts. The list and the values hopefully would expand over time. The initial list could be used retrospectively to chart ASEAN integration progress in the past.

By comparing the percentage for each country with that for ASEAN as a whole, an index can be developed similar to the Intra-ASEAN Export Index above. The results should be considered in the context of whether the intermediate goods to GDP percentage for ASEAN as a whole is rising or falling over time.

The formula for the intermediate exports index is:

$$AXMED_{it} = \left(\frac{MX_{it}}{IAX_{it}} \right) \Big/ \left(\frac{MX_{at}}{IAX_{at}} \right) \qquad (2)$$

where MX_{it} is the value of intra-ASEAN exports of intermediate goods in country *i* in year *t*, IAX_{it} is the value of all intra-ASEAN exports for country *i* in year *t*, MX_{at} is the value of intra-ASEAN exports of intermediate goods from ASEAN as a whole in year *t*, and IAX_{at} is the value of all intra-ASEAN exports from the whole of ASEAN in year *t*.

ASEAN has recently announced the creation of the ASEAN Integrated System of Preferences (AISP). This allows duty free access for certain agreed products to ASEAN 6 markets by Cambodia, Laos, Myanmar and Viet Nam. Products to be included are suggested by the CLMV countries and the list is then reviewed by each of the ASEAN 6 countries. Indicators

of success would include the value of CLMV exports under the scheme, both in quantum and as a percentage of all CLMV exports to the rest of ASEAN. A comparison could also be made measuring the value of AISP exports as a percentage of CLMV exports to the world as a whole. This would indicate the importance of the AISP in the context of total exports from the CLMV countries. Indicators could be produced annually for each CLMV country.

4.4.2 Intra-ASEAN imports

This is the other side of the coin from intra-ASEAN goods exports as these indicators measure the importance of intra-ASEAN trade from the importing Member Country's point of view.

A useful indicator of integration compares the value of intra-ASEAN imports to the total value of all goods imported. This indicator, expressed as a percentage, can be calculated annually for each ASEAN country and for ASEAN as a whole. This is an indicator of the relative importance of intra-ASEAN imports within the total import market of each ASEAN country. Imports from ASEAN would include CEPT eligible and other imports sourced from ASEAN Member Countries. The data to support this indicator is presented below in table 4.6. In 2000, Brunei and Myanmar both imported over 50 percent of the value of their imports from other ASEAN countries. This compares with the Philippines at the low end with 15.8 percent of their imports sourced from ASEAN. For ASEAN as a whole, 21.7 percent of all goods imported were sourced from ASEAN Member Countries.

Similar to exports, intra-ASEAN imports can also be expressed as a percentage of GDP to indicate progress in the integration of ASEAN. Percentages from Member States can be compared with the average intra-ASEAN percentage for the whole of ASEAN for the same year to create an index that ranks countries by the importance of intra-ASEAN imports as a proportion of their GDP. The data to support this index is presented in table 4.7.

As with exports, the intra-ASEAN imports to GDP percentage for the whole of ASEAN is itself an important indicator of intra-ASEAN integration over time. Movements up or down in the ASEAN wide percentage need to be kept in mind when considering the results of the comparative index below.

The import index measures relative progress over the years by country compared to the average percentage for ASEAN as a whole for the years in question[26]. A result of less than one for a particular country in a particular year means that intra-ASEAN imports for that country are relatively less important in terms of integration than they are for ASEAN economies taken as a whole. If total intra-ASEAN imports are increasing as a proportion of GDP over time, an individual Member Country will need to increase imports in the same proportion relative to its GDP just to maintain the previous score on the Intra-ASEAN Import Index.

Table 4.8 presents the calculations for the index in tabular form. Table 4.9 is extracted from table 4.8 and presents the Intra-ASEAN Import Index and the rankings for each country and each year. Based on figures from 1996-2000, intra-ASEAN imports are most important

[26] As with exports the comparison could be made using a target percentage, either a common one for all ASEAN countries or individual ones for each country.

Table 4.6 : Value of intra-ASEAN imports as a percentage of all imports, by ASEAN country, 1996-2000, US$ million

Imports	Brunei	Cambodia	Indonesia	Laos PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam	ASEAN
Intra-ASEAN Imports, 2000	534.4	554.4	6,781.2	na	15,934.8	1,113.3	4,955.4	33,291.3	10,475.9	4,519.4	78,160.1
Total Imports, 2000	1,067.6	1,417.8	33,514.8	na	79,647.5	2,219.4	31,387.4	134,680.1	61,905.8	14,308.0	360,148.4
Percentage 2000	50.1	39.1	20.2	na	20.0	50.2	15.8	24.7	16.9	31.6	21.7
Intra-ASEAN Imports, 1999	895.6	485.3	4,783.6	na	12,412.8	1,038.6	4,461.0	26,241.0	7,987.4	3,290.0	61,595.3
Total Imports, 1999	1,720.4	1,245.3	24,003.3	na	63,677.8	1,883.0	30,742.5	110,998.0	48,318.0	11,541.0	294,129.3
Percentage 1999	52.1	39.0	19.9	na	19.5	55.2	14.5	23.6	16.5	28.5	20.9
Intra-ASEAN Imports, 1998	591.1	na	4,559.2	na	12,940.0	na	4,428.9	23,647.6	5,438.1	3,750.8	55,355.7
Total Imports, 1998	1,276.3	na	27,336.9	na	60,976.5	na	29,659.9	101,495.9	38,711.6	9,361.0	268,818.1
Percentage 1998	46.3	na	16.7	na	21.2	na	14.9	23.3	14.0	40.1	20.6
Intra-ASEAN Imports, 1997	976.8	na	5,413.0	na	14,840.1	na	4,872.8	30,396.9	8,121.6	2,730.7	67,351.9
Total Imports, 1997	2,310.7	na	41,679.8	na	76,988.3	na	35,932.5	135,972.7	63,087.8	8,900.0	364,871.8
Percentage 1997	42.3	na	13.0	na	19.3	na	13.6	22.4	12.9	30.7	18.5
Intra-ASEAN Imports, 1996	2,848.6	na	5,549.0	na	14,682.3	na	4,011.8	27,362.2	9,757.2	3,191.1	67,402.2
Total Imports, 1996	4,434.8	na	46,618.5	na	75,303.1	na	28,392.6	123,411.6	72,445.6	7,255.9	357,862.1
Percentage 1996	64.2	na	11.9	na	19.5	na	14.1	22.2	13.5	44.0	18.8
Intra-ASEAN Imports, 1996-2000	5,846.5	1,039.7	27,086.0	na	70,810.0	2,151.9	22,729.9	140,939.0	41,780.2	17,482.0	329,865.2
Total Imports, 1996-2000	10,809.8	2,663.1	173,153.3	na	356,593.2	4,102.4	156,114.9	606,558.3	284,468.8	51,365.9	1,645,829.7
Percentage 1996-2000	54.1	39.0	15.6	na	19.9	52.5	14.6	23.2	14.7	34.0	20.0

Source: ASEAN Statistical Yearbook, 2001, Tables V.2. & V.6.

Table 4.7 : Value of Intra-ASEAN Imports as a Percentage of Gross Domestic Product, by ASEAN Country, 1996-2000, US$ million

Imports and GDP	Brunei	Cambodia	Indonesia	Laos PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam	ASEAN
Intra-ASEAN Imports, 2000	534.4	554.4	6,781.2	na	15,934.8	1,113.3	4,955.4	33,291.3	10,475.9	4,519.4	78,160.1
GDP, 2000	4,315.0	3,343.0	150,625.0	na	89,659.0	6,900.0	74,683.0	92,701.0	122,518.0	31,319.0	576,063.0
Percentage 2000	12.4	16.6	4.5	na	17.8	16.1	6.6	35.9	8.6	14.4	13.6
Intra-ASEAN Imports, 1999	895.6	485.3	4,783.6	na	12,412.8	1,038.6	4,461.0	26,241.0	7,987.4	3,290.0	61,595.3
GDP, 1999	4,190.0	3,289.0	141,638.0	na	79,037.0	6,500.0	76,076.0	82,671.0	122,577.0	28,677.0	544,655.0
Percentage 1999	21.4	14.8	3.4	na	15.7	16.0	5.9	31.7	6.5	11.5	11.3
Intra-ASEAN Imports, 1998	591.1	na	4,559.2	na	12,940.0	na	4,428.9	23,647.6	5,438.1	3,750.8	55,355.7
GDP, 1998	3,865.0	na	99,655.0	na	72,237.0	na	65,548.0	82,259.0	112,751.0	27,788.0	464,103.0
Percentage 1998	15.3	na	4.6	na	17.9	na	6.8	28.7	4.8	13.5	11.9
Intra-ASEAN Imports, 1997	976.8	na	5,413.0	na	14,840.1	na	4,872.8	30,396.9	8,121.6	2,730.7	67,351.9
GDP, 1997	5,102.0	na	219,066.0	na	100,213.0	na	82,764.0	94,495.0	155,965.0	26,843.0	684,448.0
Percentage 1997	19.1	na	2.5	na	14.8	na	5.9	32.2	5.2	10.2	9.8
Intra-ASEAN Imports, 1996	2,848.6	na	5,549.0	na	14,682.3	na	4,011.8	27,362.2	9,757.2	3,191.1	67,402.2
GDP, 1996	5,216.0	na	226,814.0	na	100,888.0	na	82,840.0	90,957.0	182,106.0	24,658.0	713,479.0
Percentage 1996	54.6	na	2.4	na	14.6	na	4.8	30.1	5.4	12.9	9.4
Intra-ASEAN Imports, 1996-2000	3,019.9	1,061.7	21,559.0	na	56,149.7	2,173.9	18,740.1	113,598.8	32,045.0	14,312.9	262,485.0
GDP, 1996-2000	22,688.0	6,632.0	837,798.0	na	442,034.0	13,400.0	381,911.0	443,083.0	695,917.0	139,285.0	2,982,748.0
Percentage 1996-2000	13.3	16.0	2.6	na	12.7	16.2	4.9	25.6	4.6	10.3	8.8

Source: ASEAN Statistical Yearbook, Tables IV.4. & V.6.

Note: The GDP for Laos PDR is excluded from the ASEAN GDP total for all years, as are those for Cambodia (1996-98) and Myanmar (1996-98).

No intra-ASEAN import figures were available for those years for those countries.

Table 4.8 : Comparison of country percentage of intra-ASEAN imports to GDP with the percentage for ASEAN as a whole, 1996-2000

	Brunei	Cambodia	Indonesia	Laos PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
Percentage, 2000	12.4	16.6	4.5	na	17.8	16.1	6.6	35.9	8.6	14.4
ASEAN percentage, 2000	13.6	13.6	13.6	na	13.6	13.6	13.6	13.6	13.6	13.6
Intra-ASEAN Import Index	0.91	1.22	0.33	na	1.31	1.18	0.49	2.64	0.63	1.06
Percentage, 1999	21.4	14.8	3.4	na	15.7	16.0	5.9	31.7	6.5	11.5
ASEAN percentage, 1999	11.3	11.3	11.3	na	11.3	11.3	11.3	11.3	11.3	11.3
Intra-ASEAN Import Index	1.89	1.31	0.30	na	1.39	1.42	0.52	2.81	0.58	1.02
Prcentage, 1998	15.3	na	4.6	na	17.9	na	6.8	28.7	4.8	13.5
ASEAN percentage, 1998	11.9	na	11.9	na	11.9	na	11.9	11.9	11.9	11.9
Intra-ASEAN Import Index	1.29	na	0.39	na	1.50	na	0.57	2.41	0.40	1.13
Percentage, 1997	19.1	na	2.5	na	14.8	na	5.9	32.2	5.2	10.2
ASEAN percentage, 1997	9.8	na	9.8	na	9.8	na	9.8	9.8	9.8	9.8
Intra-ASEAN Import Index	1.95	na	0.26	na	1.51	na	0.60	3.29	0.53	1.04
Percentage, 1996	54.6	na	2.4	na	14.6	na	4.8	30.1	5.4	12.9
ASEAN percentage, 1996	9.4	na	9.4	na	9.4	na	9.4	9.4	9.4	9.4
Intra-ASEAN Import Index	5.81	na	0.26	na	1.55	na	0.51	3.20	0.57	1.37
Percentage, 1996-2000	13.3	16.0	2.6	na	12.7	16.2	4.9	25.6	4.6	10.3
ASEAN percentage 1996-2000	8.8	8.8	8.8	na	8.8	8.8	8.8	8.8	8.8	8.8
Intra-ASEAN Import Index	1.51	1.82	0.30	na	1.44	1.84	0.56	2.91	0.52	1.17

Source: Table 4.7

Table 4.9 : Intra-ASEAN Import Index, 1996-2000

		Brunei	Cambodia	Indonesia	Laos PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
Intra-ASEAN Trade											
Index	2000	0.91	1.22	0.33	na	1.31	1.18	0.49	2.64	0.63	1.06
	1999	1.89	1.31	0.30	na	1.39	1.42	0.52	2.81	0.58	1.02
	1998	1.29	na	0.39	na	1.50	na	0.57	2.41	0.40	1.13
	1997	1.95	na	0.26	na	1.51	na	0.60	3.29	0.53	1.04
	1996	5.81	na	0.26	na	1.55	na	0.51	3.20	0.57	1.37
	1996-2000	1.51	1.82	0.30	na	1.44	1.84	0.56	2.91	0.52	1.17
Ranking	2000	6	3	9	na	2	4	8	1	7	5
	1999	2	5	9	na	4	3	8	1	7	6
	1998	3	na	7	na	2	na	5	1	6	4
	1997	2	na	7	na	3	na	5	1	6	4
	1996	1	na	7	na	3	na	6	2	5	4
	1996-2000	4	3	9	na	5	2	7	1	8	6

Source: Table 4.8

within the import markets of Singapore, Malaysia and Brunei and of least importance to Indonesia and the Philippines.

The formula for the import index is as follows:

$$IAMGDP_{it} = \left(\frac{IAM_{it}}{GDP_{it}} \right) \Big/ \left(\frac{IAM_{at}}{GDP_{at}} \right) \qquad (3)$$

where IAM_{it} is the value of intra-ASEAN imports by country ***i*** in year ***t***, GDP_{it} is the GDP for country ***i*** in year ***t***, GDP_{it} is the value of intra-ASEAN imports for ASEAN as a whole in year ***t***, and GDP_{at} is the value of GDP for ASEAN as a whole in year ***t***.

As with the intermediate exports index, the percentage of the value of imports of semi finished goods, components and parts sourced from other ASEAN countries can also be compared with the percentage of the value of all imports of the same items. This can be done annually for each country and for ASEAN as a whole. The same list of semi finished goods, components and parts as mentioned above in the context of intra-ASEAN exports would be used. The initial list could be used retrospectively to chart ASEAN integration progress in the past in each ASEAN country. These statistics would indicate the importance of ASEAN sourced intermediate goods from the importing ASEAN country's point of view.

The index should be viewed within the context of whether the value of imports of intermediate goods to GDP percentage for ASEAN as a whole is rising or falling over time.

The formula for the index is:

$$IMPT_{it} = \left(\frac{IM_{it}}{WM_{it}} \right) \Big/ \left(\frac{IM_{at}}{WM_{at}} \right) \qquad (4)$$

where IM_{it} is the value of intra-ASEAN imports of intermediate goods in country ***i*** in year ***t***, WM_{it} is the value of all intra-ASEAN imports by country ***i*** in year ***t***, IM_{at} is the value of intra-ASEAN imports of intermediate goods from ASEAN as a whole in year ***t***, and WM_{at} is the value of all imports by the whole of ASEAN in year ***t***.

Comparing the average intra-ASEAN tariff with the average tariff for ASEAN imports from the rest of the world would be a good input indicator of openness to ASEAN imports by Member Countries. This could be based on simple average calculations. Both averages could be expected to decline from current levels, consistent with commitments to ASEAN and to the World Trade Organization.

Results for Member States can also be compared with the average ASEAN import tariff percentage for the whole of ASEAN for the same year.

4.4.3 Intra-ASEAN trade

Combining export and import data can generate a useful indicator of integration which compares the value of intra-ASEAN trade (exports plus imports) to the total value of all goods traded by a country. This indicator, expressed as a percentage, can be calculated annually for each ASEAN country and for ASEAN as a whole. This is an indicator of the relative importance of intra-ASEAN trade within the total trade markets of each ASEAN country. The data to support this indicator is presented in table 4.11, with a summary in table 4.10 below.

Table 4.10 : Summary, intra-ASEAN trade as a percentage of all trade, by ASEAN country, 1996 and 2000, US$ million, summary

Country	1996	2000
Brunei	47.6	36.3
Cambodia	na	22.6
Indonesia	13.8	18.5
Lao PDR	na	na
Malaysia	25.0	22.7
Myanmar	na	44.1
Philippines	14.6	15.7
Singapore	25.7	26.0
Thailand	17.0	21.8
Vietnam	30.6	23.8
ASEAN	21.8	22.8

Source:Table 4.11

The results from the table are mixed with the percentages dropping in some Member Countries and rising in some others. Indonesia had the biggest increase with intra-ASEAN trade as a proportion of total trade expanding from 13.8 percent in 1996 to 18.5 percent in 2000. Brunei had the largest decline over the period.

A widely used outcome index for a country's exposure to trade is to express the sum of the country's exports plus imports as a percentage of GDP. In the context of ASEAN economic integration, the index is based on the total of intra-ASEAN exports plus intra-ASEAN imports as a percentage of the GDP of the country in question. The data to support this index is presented in table 4.12.

The index is probably the most important indicator of ASEAN integration in the context of trade in goods.

The Intra-ASEAN Trade By Country Index is a composite of the Intra-ASEAN Export and Intra-ASEAN Import Indices outlined above and measures relative progress over the years by country compared to the average percentage for ASEAN as a whole for the same years[27]. A result of less than one for a particular country in a particular year means that intra-ASEAN trade for that economy is relatively less important than it is for ASEAN economies taken as a whole for the same year. As with the intra-ASEAN export and import indices, the focus is on

[1] Or compared to ASEAN or individual country targets.

relativity. If intra-ASEAN trade for ASEAN as a whole is increasing as a proportion of GDP over time, an individual Member Country will need to increase trade in the same proportion relative to its GDP just to maintain the previous score on the Intra-ASEAN Trade By Country Index.

For example, Malaysia increased its trade as a percentage of GDP from 43.4 percent in 1999 to 45.0 per cent in 2000 (see table 4.12). But this increase was not as fast as for the same percentage for ASEAN as a whole (25.7 percent in 1999 to 30.6 percent in 2000) and the Malaysian result on the index fell from 1.69 in 1999 to 1.47 in 2000 – still well above the ASEAN average for that year, however (see table 4.13).

Table 4.13 presents the calculations for the index in tabular form. Table 4.14 is extracted from table 4.13 and presents the Intra-ASEAN Trade By Country Index and the rankings for each country and each year. Based on figures from 1996-2000, intra-ASEAN trade is most important to the economies of Singapore and Malaysia and of least importance to Indonesia and the Philippines.

The formula for the index is:

$$IATGDP_{it} = \left(\frac{IAX_{it} + IAM_{it}}{GDP_{it}} \right) \Big/ \left(\frac{IAX_{at} + IAM_{at}}{GDP_{at}} \right) \quad (5)$$

where IAX_{it} is the value of intra-ASEAN exports from country *i* in year *t*, IAM_{it} is the value of intra-ASEAN imports by the same country and year, GDP_{it} is the GDP for country *i* in year *t*, IAX_{at} is the value of intra-ASEAN exports for ASEAN as a whole in year *t*, and IAM_{at} is the value of intra-ASEAN imports by ASEAN as a whole in year *t*, and GDP_{at} is the GDP for ASEAN as a whole in year *t*.

Table 4.11 : Value of intra-ASEAN trade as a percentage of all trade, by ASEAN country, 1996-2000, US$ million

	Brunei	Cambodia	Indonesia	Laos PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam	ASEAN
Intra-ASEAN Exports, 2000	639.5	76.2	10,883.7	na	24,408.6	393.5	5,982.6	37,784.0	15,099.7	2,613.0	97,880.8
Intra-ASEAN Imports, 2000	534.4	554.4	6,781.2	na	15,934.8	1,113.3	4,955.4	33,291.3	10,475.9	4,519.4	78,160.1
Intra-ASEAN Trade, 2000	1,173.9	630.6	17,664.9	na	40,343.4	1,506.8	10,938.0	71,075.3	25,575.6	7,132.4	176,040.9
All Trade, 2000	3,236.7	2,786.4	95,638.8	na	177,802.0	3,413.3	69,465.6	273,032.6	117,143.0	29,943.0	772,461.4
Percentage 2000	36.3	22.6	18.5	na	22.7	44.1	15.7	26.0	21.8	23.8	22.8
Intra-ASEAN Exports, 1999	375.2	221.9	8,278.3	na	21,885.0	236.8	4,989.1	29,269.3	9,901.9	2,516.3	77,673.8
Intra-ASEAN Imports, 1999	895.6	485.3	4,783.6	na	12,412.8	1,038.6	4,461.0	26,241.0	7,987.4	3,290.0	61,595.3
Intra-ASEAN Trade, 1999	1,270.8	707.2	13,061.9	na	34,297.8	1,275.4	9,450.1	55,510.3	17,889.3	5,806.3	139,269.1
All Trade,1999	4,061.1	2,192.4	72,668.8	na	147,965.7	2,621.0	65,779.4	225,623.1	104,428.9	23,283.0	648,623.4
Percentage 1999	31.3	32.3	18.0		23.2	48.7	14.4	24.6	17.1	24.9	21.5
Intra-ASEAN Exports, 1998	220.8	na	9,346.7	na	21,611.4	na	3,821.0	25,998.2	8,314.7	2,373.4	71,686.2
Intra-ASEAN Imports, 1998	591.1	na	4,559.2	na	12,940.0	na	4,428.9	23,647.6	5,438.1	3,750.8	55,355.7
Intra-ASEAN Trade, 1998	811.9	na	13,905.9	na	34,551.4	na	8,249.9	49,645.8	13,752.8	6,124.2	127,041.9
All Trade, 1998	3,200.0	na	76,184.5	na	138,075.1	na	59,156.3	211,298.8	88,193.2	20,854.8	596,962.7
Percentage 1998	25.4	na	18.3	na	25.0	na	13.9	23.5	15.6	29.4	21.3
Intra-ASEAN Exports, 1997	496.4	na	8,850.9	na	23,248.7	na	3,436.2	35,793.8	13,525.7	1,832.9	87,184.6
Intra-ASEAN Imports, 1997	976.8	na	5,413.0	na	14,840.1	na	4,872.8	30,396.9	8,121.6	2,730.7	67,351.9
Intra-ASEAN Trade, 1997	1,473.2	na	14,263.9	na	38,088.8	na	8,309.0	66,190.7	21,647.3	4,563.6	154,536.5
All Trade, 1997	5,024.9	na	92,954.1	na	154,445.9	na	61,160.2	264,147.0	120,909.8	19,640.6	718,282.5
Percentage 1997	29.3	na	15.3	na	24.7	na	13.6	25.1	17.9	23.2	21.5

Table 4.11 (continued) : Value of intra-ASEAN trade as a percentage of all trade, by ASEAN country, 1996-2000, US$ million

	Brunei	Cambodia	Indonesia	Laos PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam	ASEAN
Intra-ASEAN Exports, 1996	446.4	na	8,310.1	na	22,694.0	na	2,970.3	34,441.4	12,111.5	2,431.5	83,405.2
Intra-ASEAN Imports, 1996	2,848.6	na	5,549.0	na	14,682.3	na	4,011.8	27,362.2	9,757.2	3,191.1	67,402.2
Intra-ASEAN Trade, 1996	3,295.0	na	13,859.1	na	37,376.3	na	6,982.1	61,803.6	21,868.7	5,622.6	150,807.4
All Trade, 1996	6,928.1	na	100,462.8	na	149,549.6	na	47,925.6	240,761.0	128,340.3	18,399.6	692,367.0
Percentage 1996	47.6	na	13.8	na	25.0	na	14.6	25.7	17.0	30.6	21.8
Intra-ASEAN Exports, 1996-2000	2,178.3	298.1	45,669.7	na	113,848	630.3	21,199.2	163,287	58,953.5	11,767.1	417,831
Intra-ASEAN Imports, 1996-2000	5,846.5	1,039.7	27,086.0	na	70,810.0	2,151.9	22,729.9	140,939	41,780.2	17,482.0	329,865
Intra-ASEAN Trade, 1996 1996-2000	8,024.8	1,337.8	72,755.7	na	184,657.7	2,782.2	43,929.1	304,225.7	100,733.7	29,249.1	747,696
AllTrade, 1996-2000	22,450.8	4,978.8	437,909.0	na	767,838.3	6,034.3	303,487.1	1,214,162.5	559,015.2	112,121.0	3,428,697.0
Percentage 1996-2000	35.74	26.87	16.61	na	24.05	46.11	14.47	25.04	18.02	26.09	21.81

Source: ASEAN Statistical Yearbook, Tables IV.4., V.4., V.5 & V.6.

Note: The GDP for Laos PDR is excluded from the ASEAN GDP total for all years, as are the GDPs of Cambodia (1996-98) and Myanmar (1996-98).
No intra-ASEAN export or import figures were available for those years for those countries.

Table 4.12 : Value of intra-ASEAN trade as a percentage of Gross Domestic Product, by ASEAN country, 1996-2000, US$ million

	Brunei	Cambodia	Indonesia	Laos PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam	ASEAN
Intra-ASEAN Exports, 2000	639.5	76.2	10,883.7	na	24,408.6	393.5	5,982.6	37,784.0	15,099.7	2,613.0	97,880.8
Intra-ASEAN Imports, 2000	534.4	554.4	6,781.2	na	15,934.8	1,113.3	4,955.4	33,291.3	10,475.9	4,519.4	78,160.1
Intra-ASEAN Trade, 2000	1,173.9	630.6	17,664.9	na	40,343.4	1,506.8	10,938.0	71,075.3	25,575.6	7,132.4	176,040.9
GDP, 2000	4,315.0	3,343.0	150,625.0	na	89,659.0	6,900.0	74,683.0	92,701.0	122,518.0	31,319.0	576,063.0
Percentage 2000	27.2	18.9	11.7	na	45.0	21.8	14.6	76.7	20.9	22.8	30.6
Intra-ASEAN Exports, 1999	375.2	221.9	8,278.3	na	21,885.0	236.8	4,989.1	29,269.3	9,901.9	2,516.3	77,673.8
Intra-ASEAN Imports, 1999	895.6	485.3	4,783.6	na	12,412.8	1,038.6	4,461.0	26,241.0	7,987.4	3,290.0	61,595.3
Intra-ASEAN Trade, 1999	1,270.8	707.2	13,061.9	na	34,297.8	1,275.4	9,450.1	55,510.3	17,889.3	5,806.3	139,269.1
GDP, 1999	2,166.4	3,289.0	141,638.0	na	79,037.0	6,500.0	76,076.0	82,671.0	122,577.0	28,677.0	542,631.4
Percentage 1999	58.7	21.5	9.2		43.4	19.6	12.4	67.1	14.6	20.2	25.7
Intra-ASEAN Exports, 1998	220.8	na	9,346.7	na	21,611.4	na	3,821.0	25,998.2	8,314.7	2,373.4	71,686.2
Intra-ASEAN Imports, 1998	591.1	na	4,559.2	na	12,940.0	na	4,428.9	23,647.6	5,438.1	3,750.8	55,355.7
Intra-ASEAN Trade, 1998	811.9	na	13,905.9	na	34,551.4	na	8,249.9	49,645.8	13,752.8	6,124.2	127,041.9
GDP, 1998	3,865.0	na	99,655.0	na	72,237.0	na	65,548.0	82,259.0	112,751.0	27,788.0	464,103.0
Percentage 1998	21.0	na	14.0	na	47.8	na	12.6	60.4	12.2	22.0	27.4
Intra-ASEAN Exports, 1997	496.4	na	8,850.9	na	23,248.7	na	3,436.2	35,793.8	13,525.7	1,832.9	87,184.6
Intra-ASEAN Imports, 1997	976.8	na	5,413.0	na	14,840.1	na	4,872.8	30,396.9	8,121.6	2,730.7	67,351.9
Intra-ASEAN Trade, 1997	1,473.2	na	14,263.9	na	38,088.8	na	8,309.0	66,190.7	21,647.3	4,563.6	154,536.5
GDP, 1997	5,102.0	na	219,066.0	na	100,213.0	na	82,764.0	94,495.0	155,965.0	26,843.0	684,448.0
Percentage 1997	28.9	na	6.5	na	38.0	na	10.0	70.0	13.9	17.0	22.6

Table 4.12 (continued) : Value of intra-ASEAN Trade as a percentage of Gross Domestic Product, by ASEAN Country, 1996-2000, US$ million

	Brunei	Cambodia	Indonesia	Laos PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam	ASEAN
Intra-ASEAN Exports, 1996	446.4	na	8,310.1	na	22,694.0	na	2,970.3	34,441.4	12,111.5	2,431.5	83,405.2
Intra-ASEAN Imports, 1996	2,848.6	na	5,549.0	na	14,682.3	na	4,011.8	27,362.2	9,757.2	3,191.1	67,402.2
Intra-ASEAN Trade, 1996	3,295.0	na	13,859.1	na	37,376.3	na	6,982.1	61,803.6	21,868.7	5,622.6	150,807.4
GDP, 1996	6,143.6	na	226,814.0	na	100,888.0	na	82,840.0	90,957.0	182,106.0	24,658.0	714,406.6
Percentage 1996	53.6	na	6.1	na	37.0	na	8.4	67.9	12.0	22.8	21.1
Intra-ASEAN Exports, 1996-2000	2,178.3	298.1	45,669.7	na	113,848	630.3	21,199.2	163,287	58,953.5	11,767.1	417,831
Intra-ASEAN Imports, 1996-2000	5,846.5	1,039.7	27,086.0	na	70,810.0	2,151.9	22,729.9	140,939	41,780.2	17,482.0	329,865
Intra-ASEAN Trade, 1996 1996-2000	8,024.8	1,337.8	72,755.7	na	184,657.7	2,782.2	43,929.1	304,225.7	100,733.7	29,249.1	747,696
GDP, 1996-2000	21,592.0	6,632.0	837,798.0	na	442,034.0	13,400.0	381,911.0	443,083.0	695,917.0	139,285.0	2,981,652.0
Percentage 1996-2000	37.17	20.17	8.68	na	41.77	20.76	11.50	68.66	14.47	21.00	25.08

Source: ASEAN Statistical Yearbook, Tables IV.4., V.4. & V.6.

Note: The GDP for Laos PDR is excluded from the ASEAN GDP total for all years, as are the GDPs of Cambodia (1996-98) and Myanmar (1996-98).
No intra-ASEAN export or import figures were available for those years for those countries.

Table 4.13 : Comparison of country percentage of intra-ASEAN trade to GDP with the same percentage for ASEAN as a whole, 1996-2000

	Brunei	Cambodia	Indonesia	Laos PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
Percentage 2000	27.2	18.9	11.7	na	45.0	21.8	14.6	76.7	20.9	22.8
ASEAN percentage 2000	30.6	30.6	30.6	na	30.6	30.6	30.6	30.6	30.6	30.6
Intra-ASEAN Trade Index	0.89	0.62	0.38	na	1.47	0.71	0.48	2.51	0.68	0.75
Percentage 1999	58.7	21.5	9.2	na	43.4	19.6	12.4	67.1	14.6	20.2
ASEAN percentage 1999	25.7	25.7	25.7	na	25.7	25.7	25.7	25.7	25.7	25.7
Intra-ASEAN Trade Index	2.28	0.84	0.36	na	1.69	0.76	0.48	2.61	0.57	0.79
Percentage 1998	21.0	na	14.0	na	47.8	na	12.6	60.4	12.2	22.0
ASEAN percentage 1998	27.4	na	27.4	na	27.4	na	27.4	27.4	27.4	27.4
Intra-ASEAN Trade Index	0.77	na	0.51	na	1.74	na	0.46	2.20	0.45	0.80
Percentage 1997	28.9	na	6.5	na	38.0	na	10.0	70.0	13.9	17.0
ASEAN percentage 1997	22.6	na	22.6	na	22.6	na	22.6	22.6	22.6	22.6
Intra-ASEAN Trade Index	1.28	na	0.29	na	1.68	na	0.44	3.10	0.62	0.75
Percentage 1996	53.6	na	6.1	na	37.0	na	8.4	67.9	12.0	22.8
ASEAN percentage 1996	21.1	na	21.1	na	21.1	na	21.1	21.1	21.1	21.1
Intra-ASEAN Trade Index	2.54	na	0.29	na	1.75	na	0.40	3.22	0.57	1.08

Table 4.13 (cont) : Comparison of country percentage of intra-ASEAN trade to GDP with the same percentage for ASEAN as a whole, 1996-2000

	Brunei	Cambodia	Indonesia	Laos PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
Percentage 1996-2000	37.2	20.2	8.7	na	41.8	20.8	11.5	68.7	14.5	21.0
ASEAN percentage 1996-2000	25.1	25.1	25.1	na	25.1	25.1	25.1	25.1	25.1	25.1
Intra-ASEAN Trade Index	1.48	0.80	0.35	na	1.67	0.83	0.46	2.74	0.58	0.84

Source: Table 4.12

Table 4.14 : Intra-ASEAN Trade by Country Index, 1996-2000

		Brunei	Cambodia	Indonesia	Laos PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
Intra-ASEAN Trade											
Index	2000	0.89	0.62	0.38	na	1.47	0.71	0.48	2.51	0.68	0.75
	1999	2.28	0.84	0.36	na	1.69	0.76	0.48	2.61	0.57	0.79
	1998	0.77	na	0.51	na	1.74	na	0.46	2.20	0.45	0.80
	1997	1.28	na	0.29	na	1.68	na	0.44	3.10	0.62	0.75
	1996	2.54	na	0.29	na	1.75	na	0.40	3.22	0.57	1.08
	1996-2000	1.48	0.80	0.35	na	1.67	0.83	0.46	2.74	0.58	0.84
Ranking	2000	3	7	9	na	2	5	8	1	6	4
	1999	2	4	9	na	3	6	8	1	7	5
	1998	4	na	5	na	2	na	6	1	7	3
	1997	3	na	7	na	2	na	6	1	5	4
	1996	2	na	7	na	3	na	6	1	5	4
	1996-2000	3	6	9	na	2	5	8	1	7	4

Source: Table 4.13

Increases in the trade/GDP percentage over time for ASEAN as a whole is itself an important overall indicators of success of ASEAN economic integration with regards to trade in goods. The percentage of intra-ASEAN trade for ASEAN as a whole has increased from 19.3 percent of ASEAN GDP in 1995 (when intra-ASEAN trade was valued at US$125.9 billion) to 30.6 percent in 2000 (when the value was US$176.0 billion). 1995-2000 included a period in which currency devaluations contributed largely to an ASEAN GDP decline in US dollar terms from US$651.7 billion in 1995 to US$576.1 billion in 2000. The increase in the intra-ASEAN trade/GDP percentage was thus impacted both by an increase in intra-ASEAN trade and also by a decline in ASEAN GDP expressed in US dollars.

The formula for the Intra-ASEAN Trade (all ASEAN, time based) Index is as follows:

$$TRADEA_{at+1} = \left(\frac{ATRADE_{at+1}}{GDP_{at+1}} \right) \Big/ \left(\frac{ATRADE_{at0}}{GDP_{at0}} \right) \times 100 \qquad (6)$$

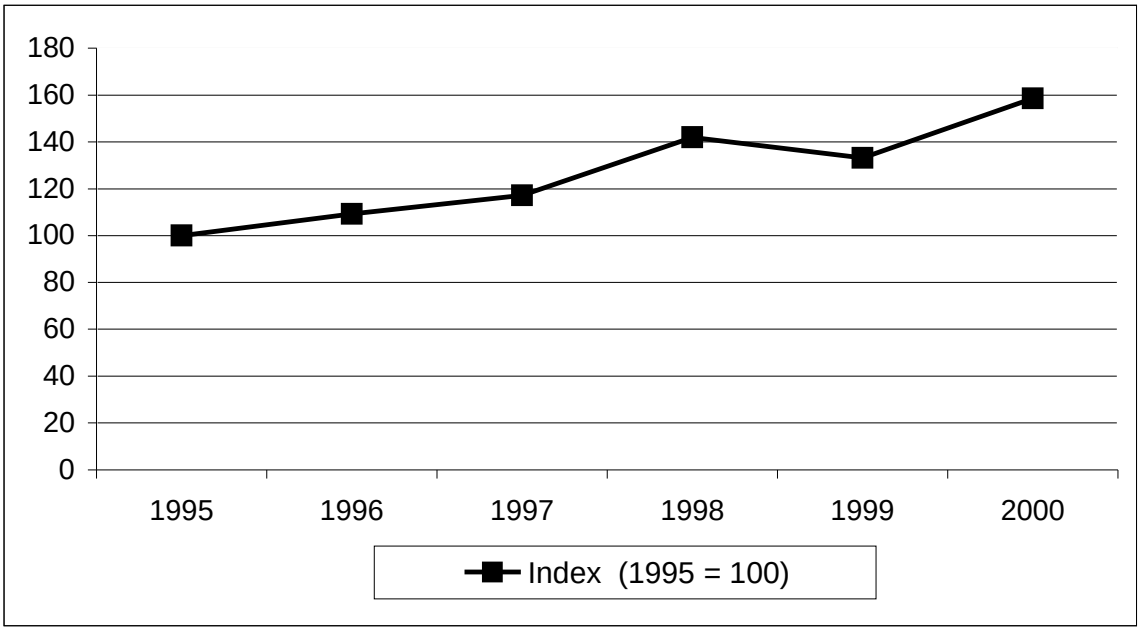
where $ATRADE_{at+1}$ is intra-ASEAN trade for ASEAN as a whole in year $t+1$ and GDP_{at+1} is ASEAN GDP for the same year. Similarly, $ATRADE_{at0}$ and GDP_{at0} refer to the base year percentage (1995) which is expressed as 100. The estimates for TRADEA are shown below and are presented graphically in figure 4.1.

Table 4.15 : Intra-ASEAN trade (all ASEAN, time based) index, 1995-2000

Year	Trade (US$ million)	GDP (US$ million)	Percentage	Index (1995 = 100)
1995	125,941.6	651,713.0	19.3	100
1996	150,807.4	714,406.6	21.1	109.3
1997	154,536.5	684,448.0	22.6	117.1
1998	127,041.9	464,103.0	27.4	142.0
1999	139,269.1	542,631.4	25.7	133.2
2000	176,040.9	576,063.0	30.6	158.5

Source: ASEAN Statistical Yearbook, 2001, Tables IV.4., V.4. &V6.

Figure 4.1 : Intra-ASEAN trade (all ASEAN, time based) index, 1995-2000



Another useful trade index is to measure the increase of total trade within ASEAN over time using the first year as a base of 100. The formula is based on raw numbers without any reference to GDP. The formula for this index is:

$$ATIND_{at} = \left(\frac{ATRN_{at+1}}{ATRN_{at0}} \right) \times 100 \qquad (7)$$

where $ATRN_{at+1}$ is intra-ASEAN trade for the whole of ASEAN in year $t+1$ and $ATRN_{at0}$ is intra-ASEAN trade in year 0 (1995).

Table 4.16 : Trade within ASEAN index, 1995-2000

Year	Trade within ASEAN (US$ m)	Index (1995 = 100)
1995	125,941.6	100.0
1996	150,807.4	119.7
1997	154,536.5	122.7
1998	127,041.9	100.9
1999	139,269.1	110.6
2000	176,040.9	140.0

Source: Table 4.11.

The indicators in this study are generally at a macroeconomic level. But much integration activity takes place at an industry level, particularly in relation to the global and regional production networks of multinational corporations, where increased intra industry trade can often be associated with increased FDI, reflecting the link between trade and investment.

The intra-industry trade index (IIT) measures the value of trade within an industry using the following formula:

$$IIT_{jk} = 1 - \left(\text{sum}_i \; X_{ijk} - M_{ijk} \; / (X_{ijk} + M_{ijk}) \right) \tag{8}$$

where X_{ijk} and M_{ijk} represent exports and imports of products from industry i in country j to and from country k (either another ASEAN country or the rest of ASEAN taken collectively).

The IIT index ranges from zero to one, with increasing values meaning that there is a greater level of trade between companies in the same industry. This indicates an increase in specialization and a deepening of integration, reflecting an increase in the division of labour in combination with a reduction in transaction costs facing the industry. The index may be expected to vary across industries such that those contributing most to integration can be identified.

IIT indices are generally calculated for manufactured goods defined at the three digit level of the Standard Industrial Trade Classification (SITC)[28].

4.4.4 Common effective preferential tariff

Several indicators of the effectiveness of the Common Effective Preferential Tariff scheme (CEPT) are already gathered and published by the ASEAN Secretariat. Broadly, the CEPT agreement allows intra-ASEAN imports to face lower tariffs than imports from the rest of the world. It also requires Member Countries to lower their tariffs on intra-ASEAN imports over time.

Member Countries place items into several lists – inclusion, temporary exclusion, general exclusion and sensitive. Items on the last three of these are not subject to CEPT commitments. Progress towards 100 percent of tariff lines in the inclusive list is a good input indicator of a country's commitment to ASEAN integration.

The number and percentage of items in the temporary exclusion list, the general exclusion list and the sensitive list are already published. So also is the number and percentage of items in the CEPT inclusion list (IL) for each ASEAN country. To be an ASEAN product for the purposes of CEPT, 40 per cent ASEAN value added is required as well as substantial transformation.

Table 4.17 from the ASEAN Secretariat shows the relevant percentages likely at the conclusion of the 2003 CEPT Package. For the ASEAN 6, nearly 99 percent of the tariff lines are to be in the IL and the percentage is similar for Viet Nam. For Cambodia, Lao PDR and Myanmar the percentages are rather lower.

[28] See Hoekman, Mattoo and English, 2002, p586

Table 4.17 : Number of Tariff Lines in the Tentative 2003 CEPT Package

	Number of tariff Lines					Percentage				
Country	**IL**	**TEL**	**GEL**	**SL**	**Total**	**IL**	**TEL**	**GEL**	**SL**	**Total**
Brunei	6,337	-	155	-	6,492	97.61	-	2.39	-	100
Indonesia	7,206	-	68	11	7,285	98.92	-	0.93	0.15	100
Malaysia	10,116	218	53	8	10,395	97.32	2.1	0.51	0.08	100
Philippines	5,632	-	16	10	5,658	99.54	-	0.28	0.18	100
Singapore	5,859	-	-	-	5,859	100	-	-	-	100
Thailand	9,211	-	-	-	9,211	100	-	-	-	100
ASEAN 6	**44,361**	**218**	**292**	**29**	**44,900**	**98.80**	**0.49**	**0.65**	**0.06**	**100**
Cambodia	3,115	3,523	134	50	6,822	45.66	51.64	1.96	0.73	100
Lao PDR	2,533	856	74	88	3,551	71.33	24.11	2.08	2.48	100
Myanmar	4,182	1,224	48	18	5,472	76.43	22.37	0.88	0.33	100
Viet Nam	6,296	-	139	51	6,486	97.07	-	2.14	0.79	100
CLMV	**16,126**	**5,603**	**395**	**207**	**22,331**	**72.21**	**25.09**	**1.77**	**0.93**	**100**
Total ASEAN	**60,487**	**5,821**	**687**	**236**	**67,231**	**89.97**	**8.66**	**1.02**	**0.35**	**100**

Source: Bureau of Economic Cooperation, ASEAN Secretariat
Data as at 28th February, 2003.

Inclusion percentages for each of the Member States can be divided by the average percentage for ASEAN as a whole for the same year to create an index that ranks countries by their level of achievement in terms of items on the inclusion lists. Member Countries whose result is more than 1 (i.e. above the ASEAN average) would be said to be among the leaders in setting the stage for intra-ASEAN market openness.

The formula for this index is:

$$CEPTI_{it} = \left(\frac{CEPN_{it}}{TTL_{it}} \Big/ \frac{CEPN_{at}}{TTL_{at}} \right) \qquad (9)$$

where $CEPN_{it}$ is the number of items on the CEPT IL for country *i* at the end of year *t*, TTL_{it} is the total tariff lines for country *i* in year *t*, $CEPTN_{at}$ is the number of items on CEPT ILs for ASEAN as a whole at the end of year *t*, and TTL_{at} is the total tariff lines for ASEAN as a whole in year *t*.

This index could also be expressed in value terms where the value of CEPT eligible intra-ASEAN imports is compared with the value of all intra-ASEAN imports for the same country for the year in question. This would indicate how potentially important the CEPT concessions could be in value terms.

The formula for this index is:

$$CEPTE_{it} = \left(\frac{CEPM_{it}}{IAM_{it}}\right) \Big/ \left(\frac{CEPM_{at}}{IAM_{at}}\right) \qquad (10)$$

where $CEPM_{it}$ is the value of intra-ASEAN imports of items on the CEPT inclusion list for country *i* at the end of year *t*, IAM_{it} is the value of all intra-ASEAN imports to country *i* in year *t*, $CEPM_{at}$ the value of intra-ASEAN imports of items on the CEPT inclusion list for ASEAN as a whole at the end of year *t*, and IAM_{at} is the value of all intra-ASEAN imports for ASEAN as a whole in year *t*.

Another indicator of progress towards a single ASEAN market for goods is the number and percentages of items with 0% tariff for CEPT consistent intra-ASEAN trade only. These could be calculated annually by country and for ASEAN as a whole. Percentages for Member Countries can be compared with the average ASEAN percentage for the same year to create an index that ranks countries by their achievement level in reducing intra-ASEAN tariffs to zero.

The formula for the index for a given year is:

$$CEPTO_{it} = \left(\frac{CEPO_{it}}{ILT_{it}}\right) \Big/ \left(\frac{CEPO_{at}}{ILT_{at}}\right) \qquad (11)$$

where $CEPO_{it}$ is the number of items on the CEPT IL with 0% tariffs for country *i* at the end of year *t*, ILT_{it} is the total tariff lines for country *i* in year *t*, $CEPO_{at}$ is the number of items on the CEPT IL with 0% tariffs for ASEAN as a whole at the end of year *t*, and ILT_{at} is the total tariff lines for ASEAN as a whole in year *t*.

An index could also be developed in value terms where the key variable is the value of a country's imports of CEPT eligible goods with a 0% import tariff. This would give a good indication of the importance of the value of the goods within the context of all intra-ASEAN imports by the country in question.

In this case the formula would be:

$$CEPTV_{it} = \left(\frac{CEPV_{it}}{IAM_{it}}\right) \Big/ \left(\frac{CEPV_{at}}{IAM_{at}}\right) \qquad (12)$$

where $CEPV_{it}$ is the value of CEPT 0% eligible imports by country *i* in year *t*, IAM_{it} is the value of all intra-ASEAN imports to country *i* in year *t*, $CEPV_{at}$ is the value of CEPT 0% eligible imports for ASEAN as a whole in year *t*, and IAM_{at} is the value of all intra-ASEAN imports for the whole of ASEAN in year *t*.

The CEPT indices above have focused on items that are eligible for reduced tariffs under CEPT. But it is understood that private sector firms do not use the CEPT arrangements as much as they might. There are compliance costs in terms of the paperwork, time and effort needed to satisfy Certificate of Origin requirements for CEPT. For many products, Most Favoured Nation (MFN) tariff rates are not much higher than those of CEPT and this further

reduces CEPT attractiveness. The recent spate of bilateral free trade agreements between individual ASEAN Member Countries and countries outside ASEAN has further clouded the picture with regards to usage of CEPT.

To measure the usage of CEPT, the value and percentage of intra-ASEAN imports actually traded under CEPT arrangements can be compared with the value of intra-ASEAN imports of items eligible for CEPT treatment and can also be compared with all intra-ASEAN imports. This could be done annually by country as well as for ASEAN as a whole. These calculations could be done retrospectively as well as into the future. The comparisons are not, strictly speaking, indicators themselves, but rather measures of the importance and effectiveness of CEPT in encouraging ASEAN economic integration.

The formula for the index measuring CEPT usage compared with the value of actual intra-ASEAN imports of eligible products is:

$$\text{CEPTU}_{it} = \left(\frac{\text{CEPU}_{it}}{\text{CEPM}_{it}} \right) \Big/ \left(\frac{\text{CEPU}_{at}}{\text{CEPM}_{at}} \right) \qquad (13)$$

where CEPU_{it} is the value of intra-ASEAN imports traded under CEPT to country *i* in year *t*, CEPM_{it} is the value of intra-ASEAN imports eligible for CEPT treatment in country *i* in year *t*, CEPU_{at} is the value of intra-ASEAN imports traded under CEPT for the whole of ASEAN in year *t*, and CEPM_{at} is the value of intra-ASEAN imports eligible for CEPT treatment from the whole of ASEAN in year *t*.

The formula for the index measuring CEPT usage compared with the value of all intra-ASEAN imports is:

$$\text{CEPTCA}_{it} = \left(\frac{\text{CEPU}_{it}}{\text{IAM}_{it}} \right) \Big/ \left(\frac{\text{CEPU}_{at}}{\text{IAM}_{at}} \right) \qquad (14)$$

where CEPU_{it} is the value of intra-ASEAN imports traded under CEPT to country *i* in year *t*, IAM_{it} is the value of all intra-ASEAN imports from country *i* in year *t*, CEPU_{at} is the value of intra-ASEAN imports traded under CEPT from the whole of ASEAN in year *t*, and IAM_{at} is the value of all intra-ASEAN imports in year *t*.

4.4.5 Non tariff barriers to trade in goods

Under CEPT, Member Countries are committed to reducing the number of non tariff barriers (NTBs) that they impose. However, as intra-ASEAN import tariffs come down, there is temptation to turn to NTBs to protect domestic production. To address this issue, the ASEAN Secretariat has prepared lists of NTBs for Member Countries for monitoring purposes. The lists have been drawn from various sources for differing years between 1999 and 2002 and they are not currently comparable across ASEAN countries[29]. No listing is available for Cambodia or Myanmar.

[29] Source for Brunei, Malaysia, the Philippines and Singapore: APEC, Individual Action Plans.
Source for Indonesia: Website of the Indonesian Ministry of Trade and Development.
Source for Laos PDR: UNCTAD TRAINS Country Notes.
Source for Thailand: United States Trade Representative, 2001 National Trade Estimate Report on Foreign Trade.
Source for Viet Nam: UNDP projects on Viet Nam integration with ASEAN, Survey of NTMs affecting trade.

The data for some countries include, under a single heading, NTBs which apply to all the goods in whole chapters of the AHTN, variously at 2 and 4 digit levels. Thus there could be hundreds of goods subject to NTBs under a single line item in the NTB list. On the other hand, the listing from Viet Nam is based on tariff lines at the 2 digit level of the AHTN. Each 2 digit group of products which is subject to a particular NTB has its own line on the list. If the 2 digit group is subject to more than one NTB, then each NTB is listed as a separate line item. Thus the impression is given that Viet Nam has many more NTBs than other ASEAN countries. This is not necessarily the case.

Consistent definitions and a standardized monitoring form need to be developed. It is suggested that the work done by the UNDP for the project on Viet Nam integration with ASEAN could be used as a starting point. The project included a survey of non tariff measures affecting trade. It listed 1,218 NTBs in Viet Nam for 1999. By way of contrast, Indonesia has only 8 line items in its listing of NTBs for 2002, which appears on the website of the Indonesian Ministry of Industry and Trade. One item, textile and textile products, covered 80 groups of products at the 4 digit level. Another, electronics and parts, covered 20 product groups.

4.5 Integration indicators for foreign direct investment

Investment is a crucial input for economic growth. As investment is capital formation and involves financing, investment indicators for ASEAN can be linked to the indicators for financial integration. Capital flows link investment with financial services. This section of this report complements the section on financial services and should be read closely in connection with it.

Capital flows comprise two types of capital: (a) foreign direct investment and (b) portfolio capital (bonds and equities). A clearer distinction between the two types of intra-ASEAN investors is required for an assessment of ASEAN integration. There are two primary forces that have driven investors to developing countries: (a) the search for higher returns and (b) opportunities for the diversification of risks.[30] Also the financial deregulation in the industrial and developing countries, as well as advances in technology and new financial instruments, have contributed to the acceleration in capital flows. The major features of recent capital flows are as follows:

- Net private capital flows to developing countries had reached more than US$240 billion by the mid-1990s (1996).
- Private capital flows are much more important than official flows.
- Developing countries share of FDI flows have reached 40 percent compared to 15 percent in 1990. Global portfolio equity flows have reached almost 30 percent compared to 2 percent over the same period.
- FDI flows are the most important component of private capital flows, exceeding commercial bank lending.

Financial markets that are channelling the capital flows are becoming much more integrated. About a dozen of the developing countries, accounting for about 80 percent of the net private

[30] For an account of private capital flows up to the mid-1990s see World Bank (1999).

flows, are rapidly integrating with international financial markets. Portfolio investment flows to developing countries have been most striking, growing from a very negligible base at the beginning of the 1990s. Portfolio investment flows have become an important channel for financial integration.

Institutional investors have played an important role in the growth of portfolio flows to developing countries and will continue to play an important role. The mutual funds were the key players in the surge of portfolio capital. Emerging markets attracted a sizable share of the international investment by mutual funds and over the 1990 – 1994 period, for example, more than 30 percent of the new international investments by US mutual funds were channelled to emerging markets. Pension funds, investing through mutual funds, or directly on their own, have also been increasing their portfolio investment to the emerging markets. A large proportion of their investments are in portfolio equities.

The main focus of investment should be on intra-ASEAN investment. A distinction should be made between the two broad sources, or types, of intra-ASEAN investment i.e. (a) intra-ASEAN investment by "ASEAN/nationals" and (b) intra-ASEAN investment by non-ASEAN nationals. The sources of the forces of integration through investment should be identified. Table 4.18 shows the share of FDI of each ASEAN country, while figures 4.2 and 4.3 show the yearly growth rates of FDI.

Table 4.18 : FDI (percentage share of total ASEAN) in ASEAN by Host Country, 1995-2000

Host Country	1995	1996	1997	1998	1999	2000	1995-2000
Brunei	2.8	2.5	2.6	2.9	3.6	5.8	3.1
Cambodia	0.7	1.1	0.6	0.6	0.9	1.2	0.8
Indonesia	20.6	23.6	17.1	-1.8	-16.5	-43.7	6.2
Lao PDR	0.4	0.5	0.3	0.2	0.3	0.3	0.4
Malaysia	14.3	14.1	10.8	8.5	11.9	12.6	12.1
Myanmar	1.5	2.2	3.2	3.5	1.8	2.0	2.5
Philippines	7.5	6.2	4.7	9.2	10.2	16.6	8.0
Singapore	34.2	34.2	37.9	29.8	41.9	61.4	37.7
Thailand	9.5	8.7	13.3	38.2	37.0	31.5	20.5
Vietnam	8.5	6.9	9.5	8.7	8.9	12.4	8.8
ASEAN	100.0	100.0	100.0	100.0	100.0	100.0	100.0
ASEAN 5	86.1	86.8	83.8	83.9	84.5	78.4	84.5
BCLMV	13.9	13.2	16.2	16.1	15.5	21.6	15.5

Source: ASEAN Statistical Yearbook, 2001, Table VI.1.

Figure 4.2 : FDI (percentage annual change) in ASEAN 5 by Host Country, 1996-2000

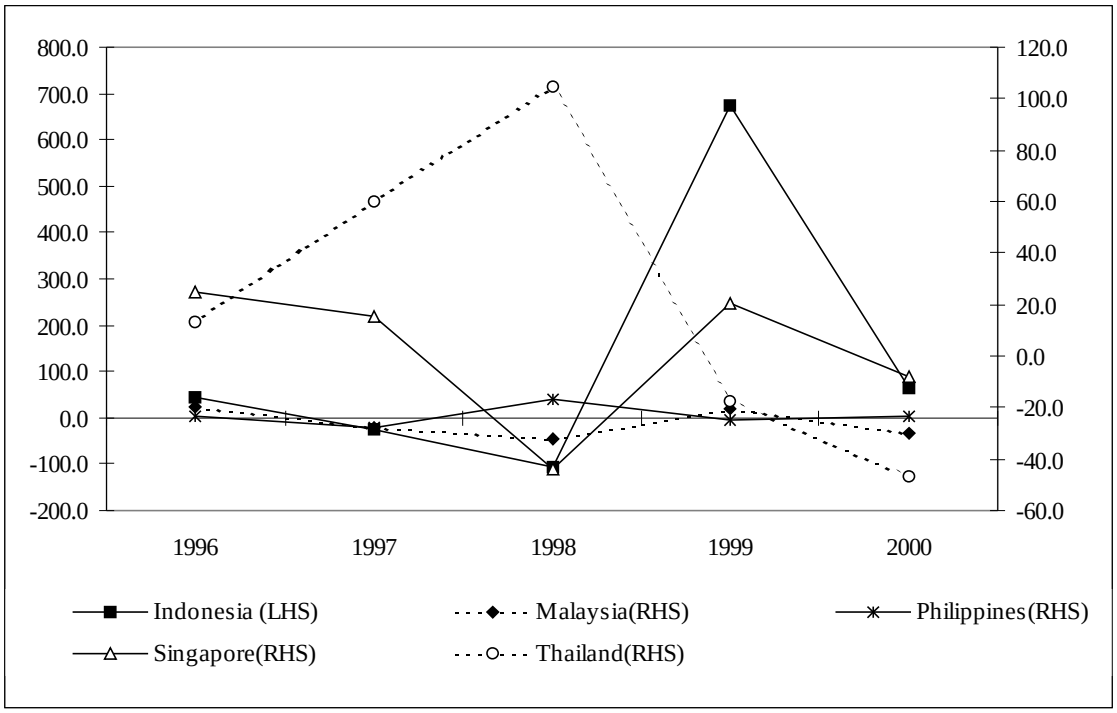
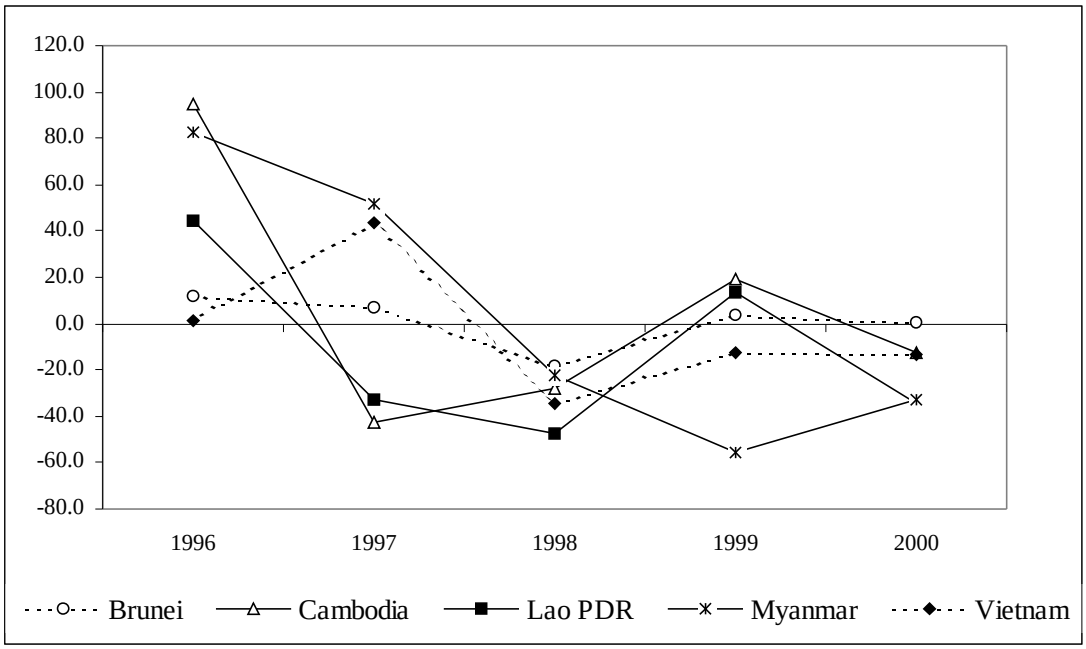


Figure 4.3 : FDI (percentage annual change) in BCLMV by Host Country, 1996-2000



Cross country capital flows, long and short term, play an important role in providing the much needed financial resources for growth and development. Prior to the Asian financial crisis in 1997, ASEAN as a group attracted considerable amounts of capital flows. Foreign direct investment was especially attracted to Singapore, Malaysia and Thailand. ASEAN FDI accounted for a sizeable proportion of the global FDI flows into less developed countries (LDCs). But well before the crisis FDI flows into ASEAN showed signs of slowing down. Since the Asian financial crisis, however, FDI flows into ASEAN have slowed down even more. China has managed to attract a sizeable share of the FDI flows, even as overall FDI flows into LDCs were slowing down.

Intra-ASEAN investment refers to investment by ASEAN investors in ASEAN countries other than their own. While the share of intra-ASEAN investment is small and starting from a low base, it is anticipated that it will grow as ASEAN develops into a single market and as the ASEAN Investment Area (AIA) becomes a reality[31]. At the Fourth AIA Meeting it was agreed to shorten the ending date of 2020 for the opening up of industries and the granting of national treatment to all countries. For the ASEAN 6 the time frame will be shortened by ten years to 2010, while for the CLMV countries it will be shortened by five years to 2015.

Formulating a set of indicators of investment flows within ASEAN would assist in the assessment of the progress towards economic integration. The indicators proposed below are for long-term capital flows or direct investment as distinct from short-term or portfolio capital flows.

The investment indicators will cover the following:

Inflows
Outflows
Net flows
Stock of investment

The indicators proposed cover long-term capital flows, foreign direct investment (FDI), and short-term capital or portfolio capital flows. Insights into financial integration and the trends in financial integration can be gleaned from an approach incorporating a "growth in world assets" trade which can complement the growth in world trade. There is a link between the growth of trade in goods and trade in assets. They can also provide or suggest possible indicators of investment integration.

As has been stressed, FDI indicators should be constructed for intra-ASEAN FDI investment and total ASEAN investment i.e. FDI which originates or is under the ownership and control of ASEAN nationals and FDI in ASEAN which is under the ownership and control of non-ASEAN nationals. The distinction in intra-ASEAN investment will allow a better understanding and appreciation of the relative role of FDI by ASEAN and non-ASEAN nationals. Non-ASEAN owned and controlled enterprises residing in ASEAN countries play a far more important role in generating intra-ASEAN investment and, therefore, in integrating the economies of ASEAN.

[31] However, in the years 1997 to 2000, intra-ASEAN investment declined quite markedly, as did FDI into ASEAN from other investors. See tables 4.19 and 4.22.

There are normative values i.e. judgement on the "goodness" and "badness" of the indicators and indices. These issues will not be addressed by the study on indicators for FDI. The purpose of the indicators and indices, at this juncture, is simply to provide a means of assessing the nature and trends in economic integration in ASEAN. Some normative judgement could be formed in relation to some prior and agreed targets or objectives of economic integration i.e. a movement forward towards the agreed targets and objectives can be judged as desirable and making good progress, while a moving away from the target and objective is taken as a regression from the desired targets and objectives. Besides the quantum and trends, the *volatility* of the capital inflows could be treated critically. The massive outflows and sharp volatility of short-term capital movements during the Asian financial crisis were clearly undesirable and hurt the Asian economies. Sharp falls in capital flows and oscillations of flows, if they are captured early by indicators, will continue to generate concern by the governments of ASEAN.

Benchmarks for FDI flows or stocks can be assessed and established but this is beyond the scope of the study. Generally, benchmarks can either be based on the performance of a leading economy or a group of economies that appear to be successful or in the forefront in attracting FDI flows, or by benchmarking against the agreed objectives of ASEAN itself. In this second sense, the broad targets of the AIA can be taken as the benchmark for ASEAN integration through FDI.

It is recommended that ASEAN place some priority to assembling stock statistics on FDI.[32] FDI stock figures, it has been noted, are less susceptible to short-term fluctuations in FDI flows and would, therefore, serve as more reliable FDI indicators for integration. The relevant indicators should be expressed as a percentage of GDP. Supplementary indicators should be prepared on the basis of the total stock of FDI as well as flows of FDI. The construction of stock measures for FDI and equity can be derived from flow data that are adjusted for the effects of changes in market prices and exchange rates.[33]

4.5.1 Foreign direct investment index (FDIIA)

A simple aggregative index of foreign direct investment in ASEAN shows the changes in total foreign direct investment in ASEAN. The base year chosen is 1995. The ratio for the change in FDI for subsequent years is expressed as a percentage of the base year. The simple formula is derived as follows:

$$FDIIA_{at} = \left(\frac{FDIA_{at+1}}{FDIA_{at\,0}} \right) \times 100 \qquad (15)$$

[32] Obstfeld and Taylor (2002), in their historical analysis of capital flows, use changes in the stocks of foreign capital covering a period of over a century or more.

[33] Lane and Milesi-Ferretti (2002) have constructed stock measures of equity and FDI for a number of developing countries and have related the growth of these to the growth of the stocks to GDP. For developing countries they find that output per capita is positively correlated with the net external position and greater trade openness is associated with larger gross stocks of FDI and equity. Valuation of assets can be problematic and four methods have been cited: using historical costs, book value, replacement cost and market valuation.

where $FDIA_{at+1}$ is the foreign direct investment in ASEAN in year *t+1* and $FDIA_{at0}$ is foreign direct investment in ASEAN in year *0* (1995). The FDI index is then expressed on a 100 basis.

Table 4.19: Foreign direct investment to ASEAN index, 1995-2000

Year	FDI (US$ Million)	Index 1995 = 100
1995	21,062.8	100.0
1996	26,328.0	124.6
1997	27,301.4	129.6
1998	19,438.9	92.3
1999	16,641.8	79.0
2000	10,408.3	49.4

Source: ASEAN Statistical Yearbook, 2001, table VI.2.

The table shows that there was a fairly steep decline in total FDI flows to ASEAN from 1997 to 2000.

One of the shortcomings of the simple aggregative index is that it takes no account of the importance, or dominance, of the components of the index. The overall FDIIA could be dominated by FDI from one or two countries.

4.5.2 Share of intra-ASEAN FDI

Another indicator that could be tracked is the share of intra-ASEAN FDI in each country. The simple formula is derived as follows:

$$INTFDS_{it} = \frac{(INTFD_{it})}{(FDIA_{it})} \text{ X } 100 \qquad (16)$$

Where $INTFDS_{it}$ is the share of FDI from ASEAN in country *i* in year *t*, $INTFD_{it}$ is FDI from ASEAN in country *i* in year *t* and $FDIA_{it}$ is the total FDI (from all sources) in country *i* in year *t*.

Table 4.20 : Intra-ASEAN FDI as a percentage of total FDI by host country, 1995-2000

Host Country	1995	1996	1997	1998	1999	2000	1995-2000
Brunei	53.4	54.0	54.9	43.1	46.2	36.2	48.3
Cambodia	na	na	na	na	na	na	na
Indonesia	14.0	3.1	5.8	-11.7	-15.6	-5.1	5.0
Lao PDR	7.4	80.2	74.6	62.5	62.9	41.0	57.2
Malaysia	30.2	19.8	41.2	15.4	11.4	4.6	23.3
Myanmar	30.4	39.4	36.8	22.5	13.5	35.4	30.8
Philippines	13.0	4.5	10.8	6.1	6.7	5.1	7.5
Singapore	7.0	3.8	20.6	2.4	4.1	2.5	7.8
Thailand	8.0	13.6	8.2	7.7	9.3	11.9	9.3
Vietnam	21.8	18.2	21.1	23.5	19.5	15.7	20.2
ASEAN	15.2	10.2	19.8	9.6	8.5	9.4	12.9

Source: ASEAN Statistical Yearbook, 2001, tables VI.1 and VI.3.

4.5.3 Intra-ASEAN investment – Total

The total value of intra-ASEAN investment is an overall indicator of the extent of economic integration through long term capital flows. The distribution of intra-ASEAN FDI by country is shown in table A2 in Appendix 3. The long term capital flows show the extent of the foreign direct investment that is generated by ASEAN members and placed in other ASEAN states.

Table 4.21 : FDI (percentage share of total ASEAN) in ASEAN from ASEAN by Source Country, 1995-2000

Source Country	1995	1996	1997	1998	1999	2000	1995-2000
Brunei	9.8	13.3	7.2	13.3	19.6	22.4	11.6
Cambodia	-	-	-	-	-	-	-
Indonesia	19.1	7.3	5.1	-2.0	-30.5	-24.0	2.4
Lao PDR	0.2	3.9	1.2	1.5	2.3	1.4	1.6
Malaysia	28.5	27.6	22.6	13.7	16.2	6.2	22.0
Myanmar	3.0	8.6	6.0	8.3	2.9	7.4	5.9
Philippines	6.4	2.8	2.6	5.9	8.1	9.1	4.7
Singapore	15.8	12.6	39.6	7.3	20.2	16.3	22.9
Thailand	5.0	11.6	5.5	30.6	40.5	40.1	14.8
Vietnam	12.1	12.4	10.2	21.4	20.6	20.9	13.9
ASEAN	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: ASEAN Statistical Yearbook, 2001, table VI.3.

Statistics from national sources and from the ASEAN Secretariat can be utilised for deriving this indicator. The indicator should be, as far as possible, internationally comparable. It is suggested that the indicator should be prepared on a bi-annual basis i.e. twice a year.

Apart from FDIIA, an index on intra-ASEAN FDI should also be estimated. This index would track over time the trends in ASEAN FDI instead of total FDI in ASEAN. Such an

index could provide a useful indicator of the importance of FDI from other ASEAN member countries. The index should take into account the relative size of the GDP of ASEAN. The formula for intra-ASEAN FDI index values can be derived as follows:

$$FDIINT_{it+1} = \left(\frac{INTFD_{it+1}}{GDP_{it+1}} \Big/ \frac{INTFD_{it0}}{GDP_{it0}} \right) \times 100 \qquad (17)$$

where $INTFD_{it+1}$ is the FDI from ASEAN member country *i* in year *t+1* and GDP_{it+1} is country GDP for the same year. Similarly, $INTFD_{it0}$ and GDP_{it0} refer to the base year values. The estimates for FDIINT are shown in table 4.22 below and presented graphically in figure 4.4.

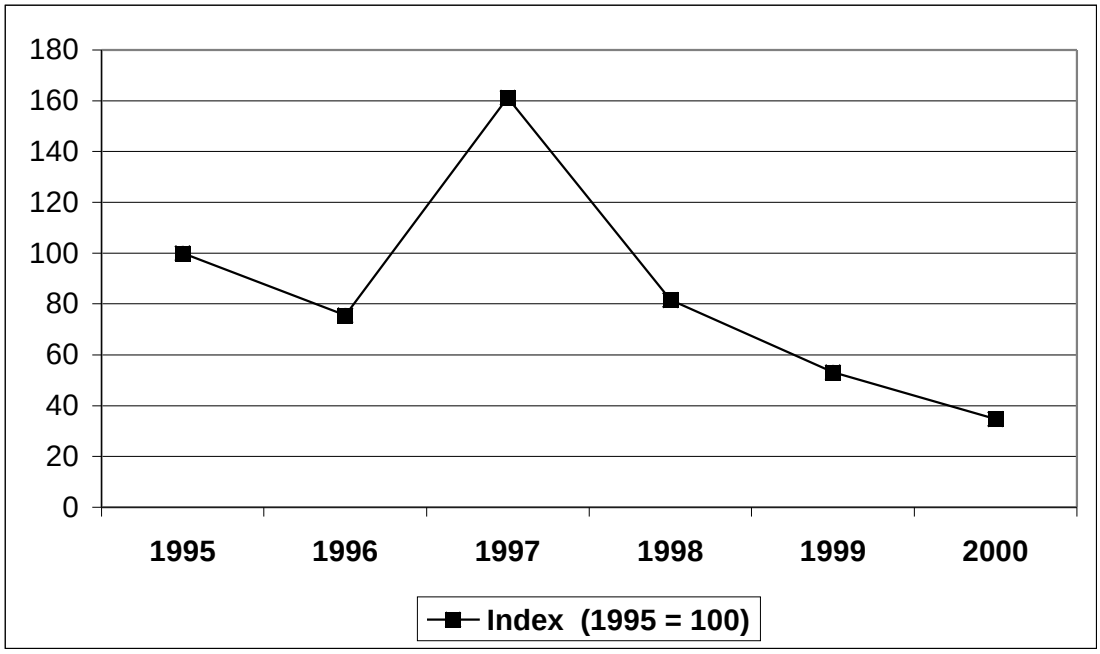
The intra-ASEAN FDI index for 2000 was 34.7. The index dropped sharply in the years following the financial crisis in 1997, reflecting a sharp decline in the amounts of intra-ASEAN FDI.

Table 4.22 : Intra-ASEAN foreign direct investment index, 1995-2000

Year	Investment (US$ million)	GDP (US$ million)	Percentage	Index (1995 = 100)
1995	3,187.7	651,713.0	0.49	100
1996	2,651.7	713,479.0	0.37	75.5
1997	5,377.9	684,448.0	0.79	161.2
1998	1,861.9	464,103.0	0.40	81.6
1999	1,404.5	544,655.0	0.26	53.1
2000	969.1	576,063.0	0.17	34.7

Source: ASEAN Statistical Yearbook, 2001, table IV.4. and table 4.1 above.

Figure 4.4: Intra-ASEAN foreign direct investment index, 1995-2000



Total (ASEAN and all other) FDI flows into ASEAN also declined sharply over the same period as we have seen in table 4.19 above. The share of FDI contributed by ASEAN declined even as total FDI was falling over the 1995-2000 period.

Table 4.23 : Intra-ASEAN FDI as a percentage of total FDI into ASEAN, 1995-2000, US$ Million

Year	Intra-ASEAN FDI	Total FDI to ASEAN	Percentage
1995	3,187.7	21,062.8	15.1
1996	2,651.7	26,328.0	10.1
1997	5,377.9	27,301.4	19.7
1998	1,861.9	19,438.9	9.6
1999	1,404.5	16,641.8	8.4
2000	969.1	10,408.3	9.3

Sources: Tables 4.19 and 4.22

4.5.4 Intra-ASEAN investment by sectors

The investment by sectors indicator highlights the direction of intra-ASEAN FDI. With the exception of the manufacturing sector, there is currently no sectoral information on intra-ASEAN investment. It is proposed that the indicator on intra-ASEAN investment should be disaggregated at least to the following sectors: Agriculture, Manufacturing, Construction and Services. The breakdown for the manufacturing and services sectors should be disaggregated further.

4.5.5 Intra-ASEAN investment by source country

The investment indicator by source country identifies the source of intra-ASEAN investment. Different countries in ASEAN will contribute to different levels of investment. This indicator will provide information as to which countries are contributing more to the investment flows within ASEAN.

4.5.6 Intra-ASEAN investment by value of investment and source country

The investment indicator by size or scale shows the distribution and the changes in the size of the investment flows within ASEAN. This indicator can provide information as to whether the scale of intra-ASEAN investment by countries is increasing or declining.

The above indicators are for intra-ASEAN investment by ASEAN nationals and the companies that they own. Investment by foreign residents of ASEAN and foreign-owned ASEAN resident companies are to be excluded. A separate list of indicators as above should be drawn up for non-ASEAN investment i.e. investment by non-ASEAN investors.

4.5.7 Foreign direct investment by leading ASEAN transnational corporations in ASEAN

Large corporations, especially TNCs, tend to account for a large share of FDI flows. Much of the trade and capital flows are flows which are internal to the corporations. To assess the

contribution of ASEAN transnational corporations to intra-ASEAN investment there should be an indicator of investment by ASEAN TNCs. A list of ASEAN TNCs will have to be drawn up.

ASEAN transnationality index

While FDI plays a crucial role in the growth of ASEAN, international production by transnational corporations has been increasing over the years. Indicators and indices of the importance of the TNCs to ASEAN would provide useful information on the trends of TNCs in ASEAN.

UNCTAD has recently formulated a transnationality index to compare the transnationality of countries.[34] The index takes into account the production potential of inward FDI and the outcome of the investment. Two FDI variables (indicators) and two variables measuring the foreign firms operations in the host country are used for the computation of the index.[35]

It is proposed that two transnationality indices should be formulated for ASEAN: (a) an overall ASEAN transnationality index and (b) an intra-ASEAN transnationality index. The intra-ASEAN transnationality index should include only the ASEAN transnationals whereas the overall ASEAN transnationality index will include the non-ASEAN transnationals.

Following UNCTAD, ASEANs transnationality index (TNLTYA) should be based on the following variables:

- FDI inflows as a percentage of gross capital formation
- FDI inward stock as a percentage of GDP
- Value added by foreign affiliates as a percentage of GDP
- Employment by foreign affiliates as a percentage of total employment.

The simple formula is the average of the four shares and is derived as follows:

$$TNLTYA = \left[\frac{FDIIN}{GK}\right] + \left[\frac{FDISTK}{GDP}\right] + \left[\frac{FAFVA}{GDP}\right] + \left[\frac{FAFEMP}{EMPT}\right] \qquad (18)$$

where FDIIN are FDI inflows, FDISTK is the inward stock, FAFVA is value added by foreign affiliates, FAFEMP is employment by foreign affiliates, GK is gross capital formation, GDP is gross domestic product and EMPT is total employment.

[34] UNCTAD *World Investment Report Transnational Corporations and Export Competitiveness* New York and Geneva, 2002.

[35] In the World Investment Report 2002 the transnationality index for five of the ASEAN economies are as follows: Singapore 40.1, Malaysia 30.3, Indonesia 17.3, Thailand 13.2 and Philippines 9.5.

4.5.8 Investment–savings correlations, capital mobility and integration

It has been argued by Feldstein and Horioka that with perfect capital mobility there should be no correlation between domestic saving and domestic investment and that saving should be allocated globally independently of its source. This suggests that if national saving and investment are positively correlated capital is not perfectly mobile. To arrive at this indicator for ASEAN, regress the ratio of gross capital formation to GDP to the ratio of gross saving to GDP. The slope coefficient is an indicator of capital mobility and the steeper the slope the lower the capital mobility and a low and decreasing R squared denotes increasing financial integration through investment flows. The regressions should be run annually. Individual regressions should also be run for each country in ASEAN.

4.5.9 ASEAN Investment Area (AIA) indicator – Temporary exclusion list

The overall aim of the AIA is to liberalise investment. Exceptions, however, can be granted to industries that are included in the temporary exclusion list (TEL). Various conditions, such as local equity, foreign equity and local sourcing, are imposed on investment in the industries covered by the TEL. Indicators on the number of products/industries removed from the TEL and the removal of conditions to investment, would be useful to show the speed and extent of liberalisation under the AIA.

ASEAN Investment Area (AIA) indicator – Sensitive list

Exceptions can also be granted to industries/products that are included in the sensitive list (SL). Indicators on the number of products/industries removed from the SL should also be drawn up.

ASEAN Investment Area (AIA) indicator – Most favoured nation

Under the AIA, ASEAN investors can enjoy the status of most favoured nation (MFN). The MFN is granted to investors and investments from other ASEAN countries. The number of investors, investment value and the product/industry, would be additional liberalisation indicators under the AIA.

4.6 Integration Indicators for Financial Services

4.6.1 Financial Openness

The impact of financial integration can be gauged from the benefits that are expected to be brought about by financial integration. Growth is supposed to be raised. Risk sharing is facilitated, enhancing production specialization, capital accumulation and economic growth. Output and growth are expected to be enhanced when financial integration channels capital flows to capital scarce economies. The functioning of the domestic financial system is expected to be enhanced with financial integration raising competition and hence growth.

There are various ways to measuring financial openness. Essentially, openness measures the degree and extent of restrictions on cross-border transactions. A broad range of price and quantity controls are usually imposed on financial transactions, impacting on international capital flows.

There are, as it has been observed, two broad approaches in measuring financial openness. Essentially, these are the measures of capital account openness. First, the use of proxies for government restrictions on capital flows. Second, are measures of actual international capital flows. The most widely used government proxy-measure is the IMF restriction measure on restrictions to international financial transactions.[36] The IMF measure classifies countries on the basis of either a presence or absence of restrictions. Measures of actual capital flows are another proxy for international financial openness. The basic assumption is that there is a positive association between capital flows as a share of GDP and greater international financial integration. But other factors can influence capital flows. In measuring financial openness, attention needs to be focused not only on countries receiving foreign capital but also in terms of domestic residents having the ability to diversify their investments abroad. Total capital flows, inflows plus outflows, therefore, would capture financial openness better than just measures or indicators using only capital inflows.

4.6.2 Financial services

Financial services form a key part of the services sector. An efficient and competitive financial market can bring benefits to the non-financial sectors of the economy through three channels. First, savings can be channelled to the highest-yielding forms of investment with the removal of regulations and price distortions. Second, the costs of financial intermediation can be reduced with increased competition. Third, a well functioning financial market can generate a range of financial products and services. Also, an efficient and competitive financial market can improve the ability of financial institutions to cope and manage risks.

More specifically, an innovative and competitive domestic financial market can be beneficial for the price, diversification and quality of financial assets in the following ways[37]:

- Intermediation margins are narrowed, the costs of funds to borrowers are lower and returns to lenders are higher.

- Deeper markets and the availability of a wider range of instruments for hedging and spreading risks can lead to higher quality financial assets.

- Liberalization of capital movements can lead to improvements in the regulatory framework of the domestic financial systems.

External forces are impinging on the financial markets of developing countries.[38] Advances in communication and new developments in finance have accelerated the integration of the world's financial markets. Increasing capital flows to developing countries in the 1990s have contributed to the financial integration of developing countries into the global financial markets. The two key forces that are pushing capital flows to developing countries are: (a) a search for higher returns and (b) opportunities for risk diversification. The internal and external deregulation of the financial services sector in both the developed and developing countries has accelerated the momentum of capital flows to developing countries.

[36] See Edison, Levine, Ricci and Slok (2002).
[37] See for example Fischer (1993)

[38] See for example World Bank (1997)

Two major direct benefits have been cited for financial integration: (a) countries can tap the pool of global capital to raise investment (production side) and (b) countries can diversify risks and growth, consumption and investment (consumption side). The indirect benefits of financial integration can include knowledge spillover effects, improved resource allocation and the strengthening of domestic financial markets. All these lead to the expectation that financial integration promotes economic growth.

There are risks and downsides to financial integration. The Mexican peso crisis and the Asian financial crisis are two recent examples of the costs associated with relying on capital flows and being financially integrated. Weaknesses of capital markets in developing countries, including weak banking systems, poor macro-economic fundamentals and institutional weaknesses, can increase the effects of the distortions and weaknesses and raise the costs of policy mistakes.

Many, if not most, developing economies have been characterized from the financial viewpoint as "repressed economies". A repressed economy is characterized as having negative real deposit and lending rates. Credit usually is rationed by using non-price criteria, the creation of financial instruments is usually discouraged, and entry into the financial market tends to be restricted. Financial liberalization and deregulation, by removing or reducing financial repression, can improve economic performance of financial markets.

In assessing and formulating indicators of financial integration two aspects can be highlighted. First, is the outcome of financial integration which also measures, or tracks, the impact of financial integration. Second, is the process of financial integration, which attempts to organize and assess the progress in implementing the commitments made to financial liberalization and the overall promotion of trade in services. Most of the suggestions made in the section on financial integration indicators are applicable to the impact, or outcome, arising from the development and liberalization of financial services.

In assessing the process of financial liberalization special attention should be given to the package of commitments for the liberalization of services. The commitments made for financial services following the completion of the third package of commitments should be assessed from the viewpoint of the progress that has been made towards the objective of the liberalization of financial services. Each of the ASEAN Member countries' commitments need to be assessed and measured. Especially important will be the commitments and the implementation of the commitments under Article III on Liberalisation of the ASEAN Framework Agreement on Services (AFAS). Special attention must focus on measuring the progress made in the elimination of existing discriminatory measures and market access limitations amongst Member States for financial services. Other areas in the AFAS for financial services that need to be assessed will cover the following:

Article II – Areas of Cooperation
Article IV – Negotiations of Specific Commitments
Article V – Mutual Recognition

The development of financial services forms an important part of the overall services sector and is important for the growth of the real economy. Financial services provide important inputs for real economic activities. As a part of ASEAN wide development, financial services have been given attention and there have been a number of co-operative efforts since

the Asian financial crisis to promote and coordinate the development of these services. These initiatives are intended to promote the integration of the financial services sector.

Conceptually, financial markets are integrated when the law of one price holds. The law of one price states that there would be similar returns for assets that generate 'identical cash flows', regardless of the domicile of the issuer and the asset holder. Generally, financial market integration can be measured by comparing the returns of assets that are issued in different countries and generate identical cash flows. If identical assets generate different returns one can be led to conclude that financial markets are not that integrated.

The first task in coming up with financial indicators is to select financial assets with similar cash flows. If there are no such assets then the available assets can be used but they must be controlled for differences in the risks associated with their cash flows. If this cannot be done then one may be led to conclude that financial markets are segmented when in fact they are integrated.

On the basis of a review of the literature of financial integration, it has been suggested that the financial services market can be sub-divided into 3 sub-markets (Adam et al 2002):

- Credit market
- Bond market
- Stock market

Apart from the three identified sub-markets, there are studies which have also assessed the effects of financial integration on households and corporations and companies. These studies provide leads into the impact of financial integration on the choices of households and the behaviour of companies. Another strand of studies has examined the impact of financial integration on the characteristics of the financial markets. These indicators of market characteristics include measures of size of equity, bond, bank markets and the cross border activities of commercial banks and other financial institutions.

4.6.3 Financial integration – Foreign assets and liabilities indicator

A useful indicator of international financial integration, as suggested, is provided when the stocks of foreign assets and liabilities of countries are taken into consideration.[39] Stocks of foreign assets and liabilities represent a key global linkage. The revaluation of assets and liabilities and wealth effects can transmit shocks cross country.

Following the IMF Methodology of the Balance of Payments Manual 5, external liabilities are divided into the following five types:

- Foreign direct investment
- Portfolio equity investment
- Portfolio debt investment
- Other investment
- Derivatives

[39] An account of this measure and indicator and the estimates of foreign assets and liabilities are provided by Lane and Milesi-Ferretti (2003) and Lane, Milesi-Ferretti and Borensztein (1999). For a historical approach, also using measures of stocks of foreign capital, see Obstfeld and Taylor (2002).

Assets are divided into the following six categories:

- Foreign direct investment
- Portfolio equity investment
- Portfolio debt investment
- Other investment
- Derivatives
- Official reserves

A country's net external position is the sum of net claims of domestic residents on non-residents. It has been argued that different types of capital flows have different characteristics such as their inherent risks, liquidity, "lumpiness", tradability, reversibility, expropriability and tax treatments.[40] The volume (stock) based measure of international financial integration can be derived as follows:

$$IFIGDP_{it} = \frac{(FA_{it} + FL_{it})}{GDP_{it}} \quad (19)$$

where FA and FL are the stocks of aggregate foreign assets and liabilities respectively. GDP is the Gross Domestic product.

A supplementary indicator to take into account portfolio equity and FDI assets is derived as follows:

$$GEQGDP_{it} = \frac{(PEQA_{it} + FDIA_{it} + PEQL_{it} + FDIL_{it})}{GDP_{it}} \quad (20)$$

where PEQA (L) and FDIA (L) are the stocks of portfolio equity and FDI assets (liabilities). This is an indicator of the level of equity (portfolio and FDI) cross-holdings[41]. For a sample of developed countries, the growth of this indicator has been more rapid than that for the IFIGDP indicator[42](Lane and Milesi-Ferretti, 2003).

As the indicators are based on the IMF Balance of Payments Manual 5, ASEAN Member countries will need to utilise the IMF approach in working on the suggested indicators. As part of the approach a distinction needs to be made between intra-ASEAN and extra-ASEAN

[40] For a theoretical assessment on the structure of capital flows see Lane and Milesi-Ferretti (2000).

[41] The growth of GEQGDP has been more rapid than the growth of IFIGDP and Lane, and Milesi-Ferretti attribute this to the growth of international trade. The increase in financial openness has been far more than the increase in the trade in goods. In their econometric analysis of the determinants of international financial integration, IFIGDP is used as the dependent variable with a set of country and time-varying independent variables.

[42] The countries include: US, UK, Austria, Belgium, Germany, Italy, Netherlands, Norway, Sweden, Switzerland, Canada, Japan, Finland and Spain.

foreign assets and liabilities. The focus of attention should be on the intra-ASEAN stock of foreign assets and liabilities. Part of the ASEAN statistical foreign direct investment data base is sourced from the balance of payments approach which is usually managed by the national central bank and/or central statistical office.

4.6.4 Credit and Bond Market Indicators

Interest rate differentials: differentials in interest rates are widely used as a measure of financial integration in the credit market. The difference in the interest rates charged in ASEAN to borrowers in the same risk class and for the same maturity can be used to show the degree of credit market integration. Comparisons can be made for the differentials in interest rates on public debt, mortgage debt and consumer credit.

The following interest rates could be used to assess the differentials in interest rates between ASEAN economies: - inter-bank 3-months rate, 10-years government bond benchmark yield, mortgage rate and corporate loan rate. The selection of the interest rates will depend on their availability and comparability. The average spreads of the individual interest rates, measured in basis points, over a period will have to be estimated and the benchmark could be the ASEAN-wide rate. A fall in the spreads and convergence to the average ASEAN rate can be taken as a move towards greater financial integration. Comparisons and correlation in interest rates can be made between countries in ASEAN.

Price differentials for banking services: the differences in the charges imposed on different products are useful indicators of integration. Comparisons of charges in ASEAN can be made for credit cards, loan and deposit rates, corporate loan rates, and current accounts. Cross-border or cross-ASEAN bank transfer charges can be compared with the costs for within country bank transfers. These comparisons provide a clue as to whether the law of one price prevails.

Share of assets of ASEAN banks: information on the number of ASEAN banks in each country and the share of the total banking assets that they hold would be useful indicators of integration. The share of loans extended by banks from other ASEAN countries in each ASEAN country can also be taken as an indicator of financial integration in the credit market. Indicators of the share of the foreign assets and liabilities held by the national banks in each country should also be included. The liabilities indicator shows the extent of the borrowing from ASEAN financial sources by the national banking institutions.

4.6.5 Stock market indicators

Returns on stock market equity: the integration of stock markets can affect the prices of equity that are listed on the stock exchanges and also stock market returns. There is the expectation, using the capital asset pricing model (CAPM), of cross-country correlations in asset returns. In an integrated capital market the expected return is lower. As the capital market moves from a segmented to a more integrated market, prices should rise and the expected returns should fall. This approach, however, requires the specification and estimation of sophisticated asset pricing models.

Correlation in stock market returns in ASEAN: this indicator shows the degree of the links, the correlation, between the movements of the returns to stock market integration. Countries

in ASEAN with similar industrial structures are expected to have more highly correlated stock market returns.

Equity funds in ASEAN: assessing the composition of equity funds invested by individual ASEAN countries would provide some indication of integration within ASEAN. One indicator would be to use the share of equities invested by each country in ASEAN equities compared to total international funds as an indicator of integration.

4.6.6 Savings-investment indicator

A widely used test of financial market integration is based on the relationship between savings and investment as the correlation between savings and investment could indicate the extent of regional capital segmentation (Feldstein and Horioka, 1980). With perfect capital mobility the association between domestic savings and domestic investment should be very weak. A large correlation between savings and investment indicates that segmentation is strong and integration is weak. The ratio of ASEAN gross capital formation to ASEAN GDP can be regressed on the ratio of ASEAN gross saving to GDP. The slope coefficient can be taken as an indicator of capital mobility with a steep slope indicating low mobility of capital. The regression can be estimated manually.

4.6.7 Mergers and acquisitions of financial institutions

Cross-border mergers and acquisitions of banks, securities and other financial institutions can be used as indicators of financial integration. These indicators can be drawn up either for all mergers and acquisitions of banks and financial institutions or to cover transactions above a certain limit in value of assets in ASEAN - involving only ASEAN owned banks and financial institutions. Mergers and acquisitions involving non-ASEAN owned banks and financial institutions can be documented for comparisons.

4.6.8 Cross-border corporate financing

Financial market integration can have an effect on the nature of corporate financing. Corporations will no longer be restricted to domestic sources of financing and can rely on international instruments, such as international notes and bonds. Indicators on the type and value of international financial instruments that are available e.g. interbank loans and corporate bonds that are issued by ASEAN countries for ASEAN owned corporations should be drawn up.

4.7 Trade in non financial services

The overall objective for trade in services is to achieve free flow within ASEAN by 2020.

4.7.1 Modes of service delivery

Four modes of service delivery have been identified and included in the ASEAN Framework Agreement on Services (AFAS), which was signed during the Fifth Summit on December 15th, 1995. The definitions are consistent with those of the World Trade Organization (WTO) under the General Agreement of Trade in Services (GATS).

The different modes of supply that countries commit to for the various sectors reflect different levels of potential integration in the provision of services.

> Supply mode 1 – cross border supply - allows for services produced in another ASEAN country to be supplied to the home country. An example of supply mode 1 would be where a Singaporean client firm engages a Filipino company, operating in Manila, to supply computer based back office services for the Singapore based company. The ASEAN objective for services provided under this mode is short term liberalization by the removal of all restrictions.
>
> Supply mode 2 – consumption abroad – allows ASEAN nationals from the home country to purchase services in other ASEAN countries. An example would be where a Thai client company engages a Malaysian market research firm to conduct research in Malaysia to assess whether there is potential for the products of the Thai company to enter the Malaysian market. Short term liberalization is also sought for this mode of supply.
>
> Supply mode 3 – commercial presence – this makes allowance for service providers from other ASEAN countries to establish and operate a commercial presence in the home country. This mode has more potential in terms of services integration as a physical presence usually means that the company has greater access to market intelligence about the domestic market in the host country. A local commercial presence may also be a requirement for inclusion on bidding lists, especially for government service supply projects, and for privatisation initiatives. It is intended that services under this mode of supply will be progressively liberalized.
>
> Supply mode 4 – presence of a natural person – builds on supply mode 3 and allows the company to bring in persons from other ASEAN countries, on a temporary basis (until suitable national staff are trained and available) to the host country to supply the services offered. The temporary basis aspect is consistent with GATS and no timelines have been defined. Progressive liberalization will also apply to this mode.

A supply mode indicator which could indicate progress towards establishing the foundation for integration in the supply of services could include the total number of offers made by each country after the end of each round of negotiations; i.e. all offers made in the past two negotiations plus the ones made in the current round. This total can be compared to the ASEAN average to develop a supply mode index. Offers at mode 3 and 4 level could be more heavily weighted to reflect their higher potential in terms of the integration of services[43]. The index could be calculated at the end of negotiations by country and for ASEAN as a whole. Country performance would be expressed relative to the ASEAN average for all Member Countries. A result of more than 1 for a country means that the country is more advanced in terms of commitment to services liberalization than the ASEAN average.

[43] A further weighting could be applied to reflect the importance to the host country of the service being liberalized. Thus the liberalization of construction services could be considered to be of greater significance and represent a higher level of commitment to services integration by the host country than the liberalization of dental services. The weighting could be based on the contribution of the sector to GDP in the host country or on the numbers employed in the sector in the host country.

The formula for index values for the mode of supply index is

$$SMODE_{it} = \left(\Sigma \text{ Mode 1- 4 }_{it} \Big/ \frac{\Sigma \text{ MODE 1-4 }_{at}}{10} \right) \qquad (21)$$

Where Σ MODE 1-4 $_{it}$ is the sum of offers for all modes of supply, weighted or unweighted, of services from country ***i*** by year ***t***, and Σ MODE 1-4 $_{at}$ is the sum of offers for all modes of supply, also weighted or unweighted, for ASEAN as a whole by year ***t***. This is divided by 10 to get an ASEAN average.

An implementation index of these offers could also be developed along similar lines to the supply mode index.

4.7.2 Commitments in seven service sectors

AFAS aims to enhance ASEAN cooperation in the services sector by removing intra-ASEAN restrictions on trade in services. Since 1995, the AFAS has completed two rounds of negotiations, completing three packages of commitments in seven service sectors, which are listed below. Indicators for the integration of financial services were discussed in section 4.6 above.

Air transport
Business services
Construction
Financial services
Maritime transport
Telecommunications
Tourism

The third round of negotiations was commenced on 1st January, 2002 and is scheduled to be completed in 2004. This third round is meant to go beyond the commitments made in the first two rounds and cover all service sectors and all four modes of supply.

With a view to accelerating progressive liberalization under this third round, the ASEAN Economic Ministers have decided that Member Countries should adopt the ASEAN-X formula. Under this formula, two or more Member Countries may conduct negotiations and agree to liberalize trade in services between them for specific sectors or sub-sectors, while other ASEAN countries may join at a later stage, whenever they are ready.

The commitments to expand the depth and scope of liberalization of services among ASEAN countries must go beyond the terms that a Member State has agreed under GATS. AFAS is meant to be GATS plus. Member States who are WTO Members have agreed to extend their specific commitments under GATS to ASEAN Member States that are not WTO Members.

Air transport

The ASEAN objective for air transport is to advance the development of a more liberal air services policy in ASEAN, which may be a gradual step towards an open sky policy. It is believed that such a policy would lead to greater market access and flexibility. This would enhance consumer choice and support economic growth in ASEAN.

Progress has been difficult in this area, particularly as regards to the liberalization of scheduled passenger services, and it has been decided that the ASEAN-X principle should apply to air services agreements.

Regarding air freight services, a Memorandum of Understanding on Air Freight has been signed and a review of implementation is planned for 2004. Amendment to the MoU is planned for 2005 to enable full 5th freedom traffic rights to all intermediate and beyond points within ASEAN. Under the amended MoU there would be no restrictions in capacity, frequency and aircraft type for freighter services to at least two designated points, including the capital city, in each ASEAN country.

Process and outcome indicators which would measure progress towards liberalization of ASEAN air freight services could include:

- Implementation of the existing MoU. By ASEAN country of destination, annually.
- Implementation of the amended MoU regarding 5th freedom rights. By ASEAN country of destination, annually from 2005.
- Value and percentage of intra-ASEAN air freight carried by ASEAN carriers compared to that carried by all airlines. By ASEAN country of destination and for ASEAN as a whole, annually.
- Volume and percentage of intra-ASEAN air freight carried by ASEAN airlines compared to that carried by all airlines. By ASEAN country of destination and for ASEAN as a whole, annually.

The formula for index values for the ASEAN air freight value index is

$$\text{FRGTA}_{it} = \left(\frac{\text{IAFR}_{it}}{\text{TFR}_{it}}\right) \Big/ \left(\frac{\text{IAFR}_{at}}{\text{TFR}_{at}}\right) \qquad (22)$$

Where IAFR_{it} is the value of intra-ASEAN air freight carried by ASEAN airlines to country *i* in year *t*, TFR_{it} is the value of intra-ASEAN air freight carried by all airlines to country *i* in year *t*, IAFR_{at} is the value of intra-ASEAN air freight carried by ASEAN airlines for ASEAN as a whole in year *t*, and TFR_{at} is the value of intra-ASEAN air freight carried by all airlines for ASEAN as a whole in year *t*.

A result of more than 1 for a country on this index means that ASEAN airlines carrying air freight have a larger market share of air freight to that country than they do for ASEAN as a whole. Differences in absolute value do not have an impact on the calculation and a country is ranked by market share alone, irrespective of total values. This approach allows for comparison of achievement levels between smaller and larger economies in the same year. Such comparisons should be conducted bearing in mind overall movements over time in the value of intra-ASEAN air freight for ASEAN as a whole and in the percentage of that which is carried by ASEAN airlines.

A similar index could be developed to measure the market share of ASEAN carriers in the volume of intra-ASEAN air freight.

The liberalization of scheduled passenger services within ASEAN is a more contentious area and there is currently no indicative timeframe for implementation of the three steps towards an open sky regime.

The first step relates to liberalization within the ASEAN sub regions (such as the Greater Mekong Subregion, the Brunei-Indonesia-Malaysia-Philippines East Asia Growth Area initiative (BIMP-EAGA), and other cross border arrangements). For these areas, full 3rd and 4th freedoms are sought for all designated points in the sub region and full 5th freedoms to all intermediate and beyond points within the sub region.

The second step calls for the same initiatives between the sub regions, and the third step calls for the same initiatives throughout ASEAN.

Indicators could include:

- Agreement on the indicative timeframe for the three steps above. This is a process indicator which could be measured annually by country.
- Ratification, enactment of appropriate legislation and implementation of air services agreements agreed to. Another process indicator which could be measured annually by country.
- The number of intra-ASEAN passengers carried under the liberalized system by ASEAN airlines. By country of destination. Outcome indicator.

As with airfreight, an index can be developed which compares the percentage of intra-ASEAN passengers carried by ASEAN airlines to a particular country with the percentage of intra-ASEAN passengers carried by ASEAN airlines for ASEAN as a whole in the same year.

The formula to calculate the index values is

$$PGRSA_{it} = \left(\frac{PIA_{it}}{TPS_{it}}\right) \Big/ \left(\frac{PIA_{at}}{TPS_{at}}\right) \qquad (23)$$

Where PIA_{it} is the number of intra-ASEAN passengers carried by ASEAN airlines to country ***i*** in year ***t***, TPS_{it} is the number of intra-ASEAN passengers carried by all airlines to country ***i*** in year ***t***, PIA_{at} is the number of intra-ASEAN passengers carried by ASEAN airlines for the whole of ASEAN in year ***t***, and TPS_{at} is the number of intra-ASEAN passengers carried by all airlines in year ***t***.

The index should be read bearing in mind overall movements over time in the number of intra-ASEAN passengers for ASEAN as a whole and in the percentage of those which are carried by ASEAN airlines.

Business services

Indicators which would measure progress towards the liberalization of business services could include the following:

- The number of signed Mutual Recognition Agreements (MRAs) in business services. By number of specific service, per round of services negotiation.

- Implementation of the MRAs. By country, annually.

In the third package of commitments for the liberalization of services, several commitments were made on ICT related services, such as e-commerce, with a view to facilitating the implementation of the e-ASEAN initiative. Progress towards e-ASEAN is addressed as a topic in a separate section on indicators of integration.

Construction

ASEAN construction firms seeking to establish operations in another ASEAN country generally face the same equity conditions as non ASEAN foreign construction firms. Further, the equity conditions placed on foreign service providers vary between ASEAN countries, with maximum allowable equity ranging from 40 to 100 per cent.

To begin the harmonization process and give ASEAN firms a degree of preference, agreement has been reached that the maximum permissible equity levels for ASEAN construction firms from other ASEAN countries should be raised to 49 per cent in ASEAN countries where they do not already exceed this limit. Progress towards this target can be measured by the enactment of appropriate legislation and/or regulations to change the maximum permissible limit. It should be noted that many ASEAN countries already exceed it. Cambodia, Lao PDR, Singapore and Vietnam allow 100 per cent equity to foreign construction service providers.

It has also been proposed by the Construction Sectoral Working Group that there be mutual recognition of licensing and registration of construction companies incorporated and 100 per cent owned by nationals of the ASEAN country of origin. As a necessary step towards further consideration of this idea, information regarding ASEAN country requirements and criteria for licensing and registration is being exchanged. A process indicator towards progress in this area would be to indicate which countries have provided the relevant information by the deadline proposed. The development of further indicators would depend in part on the targets that are decided once this information has been reviewed.

ASEAN construction firms are already active in other ASEAN countries and the outcome extent of their success can be measured by the percentage of the market that they have secured on projects valued at over a certain minimum amount (say US$5 million or equivalent). This percentage could be expected to increase over time as more favourable treatment becomes available to ASEAN construction firms operating in other ASEAN countries. The percentage would be calculated annually by ASEAN host country and for ASEAN as a whole. The percentage for ASEAN as a whole could be compared to the equivalent percentage for non host ASEAN construction companies operating in ASEAN markets. The resulting index could used as a general indicator of the competitiveness of the ASEAN construction sector within ASEAN.

The formula for the index values is

$$\text{CONTA}_{it} = \left(\frac{\text{CIA}_{it}}{\text{TCO}_{it}} \right) \Big/ \left(\frac{\text{CIA}_{at}}{\text{TCO}_{at}} \right) \qquad (24)$$

Where CIA_{it} is the value of projects, each valued in excess of US$5 million, won by non host ASEAN construction firms in country i in year t, TCO_{it} is the value of all projects in excess

of US$5 million in country *i* in year *t*, CIA $_{at}$ is the value of all projects in excess of US$5 million won by non host ASEAN construction firms in ASEAN as a whole in year *t*, and TCO $_{at}$ is the value of all projects in excess of US$5 million in year *t*.

A similar index could be prepared which shows results for non ASEAN construction firms. The two could then be compared to get a feel for ASEAN competitiveness compared to foreign construction firms. In host ASEAN countries with liberal equity rules it might be expected that foreign firms would do better than in countries where the rules are more restrictive and favour ASEAN construction companies.

Statistics needed to build these indices could be available from government agencies with responsibilities for construction and/or from private sector construction industry associations.

Maritime transport

The Roadmap for the Integration of ASEAN, November, 2002, indicates that Japanese funding has been obtained for the ASEAN Maritime Transport Sector Development Study. The report has been completed and is under active review within the Secretariat.

Recommendations for appropriate indicators of integration for this area can be made following review of the report and its endorsement within ASEAN. Initially most of the indicators will be process indicators relating to the reaching of agreement and timetables.

Even while this process is ongoing, outcome indicators measuring progress towards the integration of ASEAN maritime transport services can be developed by calculating the value shares of intra-ASEAN cargo that is carried by ASEAN shippers from the ASEAN originating country and also by those of other ASEAN countries. The total of these can be compared to value of the intra-ASEAN freight shipped by all carriers as a general indicator of ASEAN success within the intra-ASEAN maritime transport market.

The formula for the index values is

$$\text{MARTA}_{it} = \left(\frac{\text{MTA}_{it}}{\text{TMT}_{it}}\right) \Big/ \left(\frac{\text{MTA}_{at}}{\text{TMT}_{at}}\right) \qquad (25)$$

Where MTA $_{it}$ is the value of intra-ASEAN cargo carried by ASEAN shippers from country *i* in year *t*, TMT $_{it}$ is the value of all intra-ASEAN cargo carried by all shippers from country *i* in year *t*, MTA $_{at}$ is the value of all intra-ASEAN cargo carried by ASEAN shippers for the whole of ASEAN in year *t*, and TMT $_{at}$ is the value of all intra-ASEAN cargo carried by all shippers for the whole of ASEAN in year *t*.

A similar index could be developed in volume terms.

Telecommunications

The feasibility study for the ASEAN Information Infrastructure (AII) addressed issues of standardisation, interconnection and interoperability of information and communication technology systems among ASEAN countries. The study was completed in November, 1999, by the Working Group on ASEAN Information Infrastructure.

In September, 1999, the ASEAN Economic Ministers decided to expand the AII into a more holistic version called e-ASEAN and ASEAN telecommunications are now being addressed in the context of the e-ASEAN Framework Agreement with the e-ASEAN Working Group and the e-ASEAN Task Force being the bodies responsible.

As the AFAS and AFTA extend their coverage and intra-ASEAN services trade and trade in goods become freer, it could be expected that the ASEAN telecommunication market would grow in terms of traffic both between and within ASEAN countries. ASEAN service providers will be active in ASEAN countries other than their own and the share of the market that they secure in value terms will be good indicators of progress towards the integration of ASEAN telecommunication services. These indicators could be gathered for each host ASEAN country annually and also for ASEAN as a whole.

A comparative index can be developed where the percentage of the value of telecommunication services in and from a particular ASEAN country carried by non host ASEAN service providers in a given year can be compared with the same percentage for ASEAN as a whole for the same year.

The formula for index values is

$$TELCO_{it} = \left(\frac{TSA_{it}}{WTS_{it}}\right) \Big/ \left(\frac{TSA_{at}}{WTS_{at}}\right) \qquad (26)$$

Where TSA_{it} is the value of telecommunication services provided by non host ASEAN service providers in country i in year t, WTS_{it} is the value of telecommunication services provided by all service providers in country i in year t, TSA_{at} is the value of telecommunication services provided by non host ASEAN service providers for ASEAN as a whole in year t, and WTS_{at} is the value of telecommunication services carried by all providers for ASEAN as a whole in year t.

Intra-ASEAN visitors

Earlier in this section, there has been brief discussion relating to the intra-ASEAN integration of business services. Tourism is another sector which is to be covered in this integration study.

The ASEAN Statistical Yearbook, 2001, provides extensive data about 'visitors', a category which includes people providing business services, tourists and other categories.

Indicators can be developed for visitors which, while not specific to business services or tourism, would give a good overview of the progress of ASEAN integration in terms of intra-ASEAN human contact.

Indicators could include:

- The growth rate of intra-ASEAN visitor arrivals compared with that for all visitor arrivals.
- The number of intra-ASEAN visitors as a percentage of all visitor arrivals.

Table 4.24 below provides information for both these indicators for ASEAN as a whole. The number of intra-ASEAN visitors grew at 5.21 percent per annum between 1995 and 2000, only slightly in excess of average annual visitor growth from the rest of the world at 4.81 percent for the same period. This resulted in the intra-ASEAN share of arrivals increasing over the period from 39.75 percent to 40.20 per cent. Overall, it can be said that the intra-ASEAN presence in other ASEAN countries is increasing only marginally relative to the presence from elsewhere. As ASEAN moves towards a single market, it might be expected that the intra-ASEAN share will increase as ASEAN businessmen take advantage of opportunities in ASEAN countries other than their own. Also, intra-ASEAN tourism should increase its share as ASEAN tourists become aware and take advantage of competitively priced holidays within the region.

For individual ASEAN countries, an index can be developed which measures the relative intensity of the intra-ASEAN visitor presence in a country, compared to the average percentage for intra-ASEAN visitors as a whole for the same year. The percentages to support this index appear in table 4.25.

A score of less than one for a particular country in a particular year means that the percentage of intra-ASEAN visitors for that year is less than the average for ASEAN as a whole. This may indicate that there is some untapped potential to encourage more tourists and other visitors.

The formula for index values is

$$\text{VISITA}_{it} = \left(\frac{\text{VIA}_{it}}{\text{WVA}_{it}}\right) \Big/ \left(\frac{\text{VIA}_{at}}{\text{WVA}_{at}}\right) \qquad (27)$$

Where VIA_{it} is the number of ASEAN visitors to country *i* in year *t*, WVA_{it} is the total number of visitors from all sources to country *i* in year *t*, VIA_{at} is the number of ASEAN visitors to ASEAN as a whole in year *t*, and WVA_{at} is the total number of visitors from all sources to ASEAN as a whole in year *t*.

Tables 4.25 and 4.26 present the calculations for the Intra-ASEAN Visitors Index and the rankings for each country and each year. Brunei is ranked number 1 for each year for which information is available, largely because of visitors from the neighbouring Malaysian states of Sabah and Sarawak. Laos PDR also ranks highly but its result is based on limited numbers of visitors in total. Among the larger ASEAN economies, Malaysia fares best.

At the other end of the scale, the Philippines scores lowly, perhaps indicating some upside potential.

Table 4.24 : Visitor Arrivals to ASEAN ('000s), 1995-2000

	1995	1996	1997	1998	1999	2000	1995-2000	Percentage Growth P A
ASEAN	11,793.7	11,627.3	11,967.3	11,039.4	13,796.0	15,200.8	75,424.5	5.21%
Rest of the World	17,875.3	19,566.0	19,372.9	18,693.6	20,419.2	22,612.7	118,539.7	4.81%
Total	29,669.0	31,193.3	31,340.2	29,733.0	34,215.2	37,813.5	193,964.2	4.97%
% ASEAN Arrivals	39.8	37.3	38.2	37.1	40.3	40.2	38.9	

Source: ASEAN Statistical Yearbook, 2001, Tables VIII.28. – VIII.33.

Table 4.25 : Comparison of country percentage of intra-ASEAN visitors to all visitors with the same percentage for ASEAN as a whole, 1995-2000

	Brunei	Cambodia	Indonesia	Laos PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
Percentage 2000	89.0	11.9	40.6	na	69.9	16.7	6.9	31.6	23.1	12.3
ASEAN Percentage, 2000	40.2	40.2	40.2	na	40.2	40.2	40.2	40.2	40.2	40.2
Intra-ASEAN Visitor Index	2.21	0.30	1.01	na	1.74	0.42	0.17	0.79	0.57	0.31
Percentage 1999	89.2	18.6	38.9	71.5	75.0	21.4	7.2	31.9	23.7	9.4
ASEAN Percentage, 1999	40.3	40.3	40.3	40.3	40.3	40.3	40.3	40.3	40.3	40.3
Intra-ASEAN Visitor Index	2.21	0.46	0.97	1.77	1.86	0.53	0.18	0.79	0.59	0.23
Percentage 1998	89.6	21.6	45.6	73.0	69.3	19.1	6.4	30.2	22.5	na
ASEAN Percentage, 1998	37.1	37.1	37.1	37.1	37.1	37.1	37.1	37.1	37.1	na
Intra-ASEAN Visitor Index	2.42	0.58	1.23	1.97	1.87	0.51	0.17	0.81	0.61	na
Percentage 1997	88.7	25.6	37.9	76.3	71.5	17.4	7.0	32.6	25.1	12.9
ASEAN Percentage, 1997	38.2	38.2	38.2	38.2	38.2	38.2	38.2	38.2	38.2	38.2
Intra-ASEAN Visitor Index	2.32	0.67	0.99	2.00	1.87	0.46	0.18	0.85	0.66	0.34
Percentage 1996	na	24.2	35.7	74.8	73.0	10.7	6.8	31.4	24.7	1.2
ASEAN Percentage, 1996	na	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3
Intra-ASEAN Visitor Index	na	0.65	0.96	2.01	1.96	0.29	0.18	0.84	0.66	0.03
Percentage 1995	na	17.1	39.4	82.3	74.2	10.6	5.3	31.2	26.9	1.7
ASEAN Percentage, 1995	na	39.8	39.8	39.8	39.8	39.8	39.8	39.8	39.8	39.8
Intra-ASEAN Visitor Index	na	0.43	0.99	2.07	1.86	0.27	0.13	0.78	0.68	0.04
Percentage 1995-2000	89.1	18.7	39.6	74.9	72.2	16.6	6.6	31.5	24.2	6.9
ASEAN Percentage, 95-00	38.9	38.9	38.9	38.9	38.9	38.9	38.9	38.9	38.9	38.9
Intra-ASEAN Visitor Index	2.29	0.48	1.02	1.93	1.86	0.43	0.17	0.81	0.62	0.18

Source: ASEAN Statistical Yearbook, Table VIII.7.

Table 4.26 : Intra-ASEAN Visitor Index, 1995-2000

		Brunei	Cambodia	Indonesia	Laos PDR	Malaysia	Myanmar	Philippines	Singapore	Thailand	Viet Nam
Intra-ASEAN Visitor Index											
	2000	2.21	0.30	1.01	na	1.74	0.42	0.17	0.79	0.57	0.31
	1999	2.21	0.46	0.97	1.77	1.86	0.53	0.18	0.79	0.59	0.23
	1998	2.42	0.58	1.23	1.97	1.87	0.51	0.17	0.81	0.61	na
	1997	2.32	0.67	0.99	2.00	1.87	0.46	0.18	0.85	0.66	0.34
	1996	na	0.65	0.96	2.01	1.96	0.29	0.18	0.84	0.66	0.03
	1995	na	0.43	0.99	2.07	1.86	0.27	0.13	0.78	0.68	0.04
	1995-2000	2.29	0.48	1.02	1.93	1.86	0.43	0.17	0.81	0.62	0.18
Ranking	2000	1	8	3	na	2	6	9	4	5	7
	1999	1	8	4	3	2	7	10	5	6	9
	1998	1	7	4	2	3	8	9	5	6	na
	1997	1	6	4	2	3	8	10	5	7	9
	1996	na	6	3	1	2	7	8	4	5	9
	1995	na	6	3	1	2	7	8	4	5	9
	1995-2000	1	7	4	2	3	8	10	5	6	9

Source: Table 4.25

Tourism

Indicators of integration in the ASEAN tourism market could include:

- The number of intra-ASEAN travellers who tick 'tourist' or 'visiting friends and relations' on their arrival cards at airports and border crossings. This could be monitored annually by country of origin.
- How long do the ASEAN tourists stay in the destination country. This would be an indicator of the intensity of their visit. Annually by country of origin
- What proportion of all tourists to ASEAN countries is made up of intra-ASEAN tourists. Monitored annually.
- What is the proportion of total tourism receipts that comes from intra-ASEAN tourists. Monitored annually. This would require information about the average amount that intra-ASEAN tourists spend per day in each of the ASEAN countries compared to tourists from elsewhere.

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Intra-ASEAN Tourism Indices could be developed based on the number of tourists and/or on tourism receipts using the same methodology as suggested for the Intra-ASEAN Visitors Index above. This would measure the relative intensity of intra-ASEAN tourism in a particular Member Country compared to the ASEAN average for the same year. A score of less than one for a particular country means that the percentage of intra-ASEAN tourists (or intra-ASEAN tourist receipts) for that year is less than for ASEAN as a whole. This could mean that the tourist industry is under performing in terms of intra-ASEAN tourists in that country and that there may be scope to attract more ASEAN tourists through appropriate marketing and other initiatives.

Business visits

Indicators can also be developed to reflect the general level of human contact amongst businessmen and women from ASEAN Member Countries. These could include:

- The number of intra-ASEAN travellers who tick 'business' or 'businessman' on their arrival cards at airports and border crossings. This could be expressed as a percentage of the total number of business arrivals from all countries for the same ASEAN destination for the same year. Measurement would be made annually for each ASEAN country and compared to the ASEAN average for the same year and the index calculated using the same methodology as presented for the Intra-ASEAN Visitors Index above. It should be noted that the category 'business' includes other categories beyond the providers of business services. As an example, many intra-ASEAN business arrivals will be marketing the products of their home countries.
- How long do the intra-ASEAN businessmen stay in the destination country, compared to businessmen from the rest of the world. This would be an indicator of the intensity of their visit. Annually by ASEAN country of destination. An index could be developed using the same methodology as for the Intra-ASEAN Visitors Index except that the unit of comparison would be person days in the destination country rather than arrivals. Statistics on time spent in the country could be gathered from the departure card collected by the immigration authorities in each ASEAN country.

4.8 Infrastructure

The Ha Noi Plan of Action, 1998, calls for ASEAN involvement in developing regional infrastructure. This is to be effected through 'intensify(ing) cooperation in the development of highly efficient and quality infrastructure, and in the promotion and progressive liberalization' of selected services sectors. These services sectors included transport, telecommunication, energy and water resources supply and management.

Promoting best practice in construction and management of cross border projects is part of the ASEAN role.

4.8.1 Projects designated as ASEAN projects

Some very large cross border infrastructure projects are specifically designated to be ASEAN projects These include the Singapore-Kunming Railway and the ASEAN Highway Network, both of which are part of the Trans ASEAN Transportation Network, which also includes ASEAN wide networks of 46 ports and 51 airports. The Trans ASEAN Transportation Network is envisaged to be the trunkline or main corridor for the movements of goods and people in ASEAN. It consists of interstate highway and rail networks, principal ports and sea lanes for maritime traffic, inland waterway transport and major civil aviation links. The ultimate aim of the Transportation Network is the creation of an integrated, seamless transportation system throughout ASEAN.

Other ASEAN projects include the ASEAN Power Grid, the Trans ASEAN Gas Pipeline and the proposed Trans ASEAN Land and Submarine Water Pipeline. These have been identified as projects involving two or more Member States and as being of such nature and importance that an ASEAN involvement is appropriate.

ASEAN infrastructure projects contribute to economic integration by enabling new markets to be reached in neighbouring ASEAN countries, often providing the project with sufficient economies of scale to make it feasible. For the new markets, project outputs should cost less than existing sources of supply and/or should overcome supply shortfalls.

Importantly, the projects also raise the profile of ASEAN as a working concept promoting development in the Member States.

But what does the involvement of ASEAN in these projects mean in practical terms? Some areas of possible involvement: project conception, project development, construction, management of operations, the funding and/or coordination of all or some of these areas.

For the Singapore-Kunming Railway, indicators could include:

- Progress towards the completion of the full feasibility studies. The studies are expected to be completed over the 2003-2005 period.
- Progress towards development of the implementation programs and the securing of finance. This is scheduled for the 2005-2007 period.
- Progress on the construction of the 48km Poipet-Sisophon missing section. This is scheduled for 2004. This could be monitored using the indicators listed below.
- Overall construction cost – input indicator of the importance of the project.

- ASEAN contribution towards the construction cost – input indicator of ASEAN's exposure and commitment to the project
- Money spent per year – input indicator of progress towards implementation of the project. Construction is expected to commence in 2008/9.
- Kilometres of track laid – output indicator of progress. Annually during the construction period.
- Passenger kilometres travelled and revenue earned – outcome indicator. Annually.
- Volume and value of freight carried – outcome indicator. Annually.

The route of the railway has been agreed. Seven ASEAN countries and China are each to incorporate in its national development plan the missing railway links and spur lines in its territory and to lead in the mobilization of resources for them. Some 1,200 kilometres of missing railway and spur lines are to be constructed in total.

Indicators relating to the achievement of the targets for each country could be developed. They would be process indicators relating to ratification and implementation which would point to likely bottlenecks in completing the project as a whole.

For the ASEAN Highway Network, the indicators could include:

- Progress towards the completion of the project preparation studies. These are scheduled to be completed in 2004.
- Overall construction cost – input indicator of the importance of the project. Broad estimates may be available now but detailed estimates will only become available when the full feasibility study is complete, scheduled for 2006.
- ASEAN contribution towards the construction cost – input indicator of ASEAN's exposure and commitment to the project
- Money spent per year – input indicator of progress towards implementation of the project. Construction is scheduled to commence in 2008/9.
- Kilometres of highway completed – output indicator of progress. Annually during the construction period.
- Kilometres of highway open and in use – output indicator. Annually.
- Estimations of passenger movements and freight carried on the highway network – outcome indicator. Annually.

When complete, the ASEAN Highway Network will consist of 28 designated highways measuring 8,300 kilometres.

For the ASEAN Power Grid, the indicators could include:

- Progress towards the completion of the ASEAN Interconnection Masterplan study. This is scheduled for 2003.
- Progress towards developing ASEAN common policy for power interconnection and electricity trade. This is scheduled for 2003.
- Progress towards concluding an ASEAN cooperation agreement on interconnection policy and implementation.
- Overall construction cost
- ASEAN contribution towards construction cost
- Money spent per year

- Estimate of the percentage of the power grid that is completed. Annually during the construction period
- Number of connections to households and industry made possible by the grid
- Additional power available to areas covered by the grid. Indicator of unused potential.

The Trans ASEAN Gas Pipeline Project currently consists of seven gas interconnection projects for implementation. For each of these and the total indicators could include:

- Overall construction cost
- ASEAN contribution towards construction cost
- Money spent per year
- Estimate of the percentage of the pipeline that is completed. Annually.
- The value of production of new/expanded industries that have been made possible by the pipeline. Annually.
- Amount of gas available to areas covered by the pipeline and its interconnections. Indicator of unused potential. Annually.

For the proposed Trans ASEAN Land and Submarine Water Pipeline, indicators could include:

- Overall construction cost
- ASEAN contribution towards construction cost
- Money spent per year
- Estimate of the percentage of the pipeline that is completed. Annually.
- The amount of water made available to households and industry by the pipeline.
- Additional water that could be made available. Indicator of unused potential. Annually.

Overall indicators for designated ASEAN projects

To measure the pace of development and commitment of the ASEAN infrastructure program, two overall input indicators could be used.

- Number and value of new projects handled by the ASEAN Infrastructure Section. Annually.
- Number and value of all current projects handled by the ASEAN Infrastructure Section. Annually.

4.8.2 Cost reduction

The discussion above relates to physical indicators of progress in cross border projects that have been designated as ASEAN infrastructure projects.

However, most infrastructure is within national boundaries and is funded by national governments or private investors with national considerations in mind. In the context of moves towards a single ASEAN market, this infrastructure is also ASEAN infrastructure as it affects the ease of movement of goods, services and people within ASEAN.

How to assess the effectiveness of broadly defined ASEAN infrastructure in terms of facilitating the economic integration of ASEAN? As a general approach, the average cost for each ASEAN country of using the various infrastructure services (primarily air, land and sea transport; telecommunications and energy) can be compared with those for ASEAN as a whole in the same year. Indices can be developed using a single base year to show changes in relativities for each ASEAN country for each year.

Costs should be expressed in current US dollars to provide a basis for international comparison.

Where average costs (per kilometre, tonne, kilowatt hour, minute etc) are reducing relative to the ASEAN average, it indicates that the infrastructure for that country is providing competitive services. If average costs in ASEAN as a whole are increasing, then the reasons behind the increase need to be examined and addressed, possibly at both ASEAN and national levels. It should be noted that currency fluctuations can affect the relativities (and the indices) – average costs expressed in US dollars can fall or rise while the averages in national currencies remain the same.

4.9 Customs

ASEAN Customs Administrations have been very active in identifying key areas for cooperation and harmonization of policies and procedures. Implementation targets have been agreed, as have appropriate timetables. The overall aim, consistent with the ASEAN Customs Vision 2020, is to facilitate intra-ASEAN trade and investment by ensuring the smooth flow of goods and services in the region.

In the context of intra ASEAN economic integration, the most important areas of cooperation are the following:

- Harmonization of the tariff nomenclature.
- Harmonization of Custom's procedures and formalities.
- Development of the ASEAN Customs Valuation Guidelines.
- Development of a consistent post clearance audit system.
- Harmonization of Custom's automation.

These initiatives and their timing were examined in more detail in the section on the harmonization of ASEAN institutions and policies.

Custom's indicators of economic integration will be process indicators, measuring progress towards these administrative and procedural goals. Thus indicators could include the percentage of the Customs Valuation Guidelines that have been agreed at a given time and an assessment of progress towards the goal of harmonization of Custom's automation in terms of achievements of defined goals by Member Countries. Such indicators could be measured annually for each country.

4.10 Standards, mutual recognition agreements and conformity assessment

These three areas are interrelated with the objective being to remove standards related barriers to trade in goods within ASEAN and thus promote intra (and extra) ASEAN trade.

Since 1999, product specific Mutual Recognition Agreements have been developed for priority products that offer scope for intra ASEAN trade. The MRAs provide the basis for product standards, which are aligned to international product standards, to be developed and adopted by ASEAN countries.

Once product standards are in place there is then the need to ensure that products actually being traded conform to the appropriate standard. The aim is to get ASEAN wide recognition of the testing and certification in the country of origin or in another ASEAN country. Institutions that wish to conduct conformity assessments must demonstrate their technical competence.

Indicators in this context could include the following:

- The number of sectors identified for development of MRAs.
- The number of ASEAN harmonized standards.
- The number of harmonized standards that have been introduced by country.
- The number of institutions and testing facilities that are authorised to test and certify products according to ASEAN MRAs.
- The number of sectors/sub sectors for which technical regulations or requirements are harmonized.

These indicators could be measured annually.

The value of intra-ASEAN trade in products subject to ASEAN standards could be measured by country and for ASEAN as a whole and an index developed to show the relative importance of the trade in products with ASEAN standards.

The formula for index values is

$$\text{STANDA}_{it} = \left(\frac{\text{ASP}_{it}}{\text{IAT}_{it}}\right) \Big/ \left(\frac{\text{ASP}_{at}}{\text{IAT}_{at}}\right) \qquad (28)$$

Where ASP_{it} is the value of intra-ASEAN trade for products with ASEAN standards for country i in year t, IAT_{it} is the value of all intra-ASEAN trade for country i in year t, ASP_{at} is the value of intra-ASEAN trade for products with ASEAN standards for ASEAN as a whole in year t, and IAT_{at} is the value of all intra-ASEAN trade for the whole of ASEAN in year t.

MRAs also have relevance in the context of professional services, whereby recognition is given to qualifications and experience gained in other jurisdictions. National professional bodies often make licensing requirements that involve local experience or local education, thus inhibiting the involvement of professional staff from other countries, including ASEAN countries.

There has been limited progress in this area, although the RIA goal is for free flow of ASEAN professional services by 2020.

Indicators in this context could include the following:

- The number of MRAs for professional services that have been negotiated.
- Implementation of the MRAs, by country.
- The number of ASEAN professionals working in ASEAN countries that are not their own. This could be broken down by profession and by country.

These indicators could be measured annually.

4.11 Small and medium enterprises

Currently the definition of what constitutes an SME varies widely among the ASEAN Member States. This is not unusual as the definition varies widely among non ASEAN countries also.

For ASEAN (and probably for the non ASEAN countries as well), this is a situation that is unlikely to change, with each country's definition having been developed over time to reflect its own conditions and policy goals for involvement in the economy by smaller companies. The definitions may be amended in each country as social and economic conditions and policies change but there seems no reason to expect that definitions for the various ASEAN countries will become more similar over time.

So current definitions need to be used in any exercise which seeks to indicate progress in the contribution of small and medium enterprises towards ASEAN economic integration as ASEAN moves towards a single market.

Contributions can be made in the context of intra-ASEAN investment and also in relation to intra-ASEAN trade in goods and services.

Iindicators that could be useful are listed below.

- The value of SME intra-ASEAN investment as a percentage of total intra-ASEAN investment. This could be done annually for the whole economy of each receiving ASEAN country and/or for selected sub sectors of special interest.
- The value and number of joint ventures that SMEs establish with partners residing in other ASEAN countries.
- Value of SME intra-ASEAN manufacturing exports by country and sub sector. Comparison with total intra-ASEAN manufacturing exports from the same country and sub sector.
- The proportion of SME production that is exported to other ASEAN countries. This could be measured annually for each country in total and/or for selected sub sectors. This indicator will give an indication of how important exports are to each country's SMEs.
- The proportion of manufacturing imports that are sourced from SMEs in other ASEAN countries. In comparison with all manufactured imports into the ASEAN country concerned and/or by selected sub sectors.

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Unfortunately data availability is a problem for all these suggested indicators, as it is with many areas of interest with respect to SMEs. With other sectors in this study, the intention is to measure the progress of integration within the sector in the context of ASEAN economic integration as a whole. However SMEs form part of the manufacturing, services and investment sectors and the intention in this case is to measure the progress of integration both between SMEs and (small or large) companies in the same sector in other ASEAN countries and also between SMEs and small or large companies in other sectors in other ASEAN countries.

Analysis of these aspects would involve a great deal of disaggregated data which is not currently available and would be expensive to gather by survey.

A possible alternative, at least for assessing the contributions of SMEs to intra-ASEAN trade in manufacturing, is to make use of exporters' paperwork.

According to a 1998 paper by Dr Chris Hall, Pacific Economic Cooperation Council Network Leader[44], many of these data problems could be overcome relatively easily and inexpensively. Most APEC economies already have, or are moving towards, a business register. This means that each company can have a unique identifier and it should not be necessary to supply demographic data on government forms anywhere in APEC. For example, instead of having to fill in a mass of detail on customs forms, a company would be able to supply its identifier number. Register information (name, registered address, number of employees, other requirements to meet the definition of an SME in the exporting country, perhaps other economic information) could be updated once a year. To implement this system would require agreement on codes and reciprocal access to databases. Some data may be considered as confidential and appropriate security would be needed to restrict access to these areas. It is understood that implementation of this proposal in terms of data collection has been slow among APEC developing countries and that ASEAN has some reservations regarding practical aspects of Dr Hall's proposal. Nonetheless, it does hold the potential to generate some much needed data on SMEs.

If customs data is linked to business registration data, it becomes possible to monitor exports and their destination by size of firm, product exported and manufacturing sub sector.

There are some input indicators of economic integration in terms of the number and value of projects that have been implemented under the ASEAN Industrial Cooperation scheme (AICO)[45] and other matchmaking exercises for SMEs. If the proposed regional export financing and credit guarantee schemes were implemented under ASEAN, then the amount disbursed annually and the amount covered by credit guarantee could also be used as indicators, with comparisons being made year on year. The size in value terms of these schemes (i.e. how much was made available) are also input indicators as they measure the commitment of the ASEAN Members (and their dialogue partners) to promoting SMEs in the context of economic integration, irrespective of the amount actually drawn down.

[44] Hall, 2002

[45] Import tariff rates for AICO projects were previously 0-5% and have now been reduced to 0%. As ASEAN tariff rates decline for imports from non ASEAN countries, involvement in the AICO process becomes relatively less attractive.

SMEs are also active in the provision of services, and some market their skills internationally. Consultants of various types are an example – consulting engineers, economic researchers, management consultants etc. The value of their contribution to exports and integration is very hard to calculate as an unknown amount of the export revenue that they receive comes from work that they do in their country of residence but for foreign clients – service supply mode 2. Foreign exchange is generated but the work is done, and payment received, at home. It is difficult to measure without fairly extensive surveys.

The value for services that are provided overseas by ASEAN service providers is also hard to measure as payment goes directly to the service provider concerned (or his bank) and is not subject to examination or assessment by government authorities. Bank records of foreign payments received could be useful raw data sources if they were appropriately formatted but this approach would be subject to confidentiality concerns.

4.12 Intellectual Property

The creation, absorption and diffusion of knowledge are vital if an economy is to sustain growth. R&D is a key requirement for the creation of knowledge and ideas. Some protection of intellectual property, however, is required to encourage investment in R&D and enable investors to recoup their investment. There are a number of ASEAN intellectual property (IP) programs to strengthen the protection of IP through the setting up of a regional trademark and patent system. The key programs include the ASEAN Regional Trademark and Filing System, the ASEAN Patent Filing System and the simplification of the IP administration system. These programs are intended to harmonize ASEAN IP legislation and procedures, with the objective being to create an ASEAN regional identity in intellectual property matters.

4.12.1 Number of patents registered in ASEAN

As a start there is a need for an indicator of the number of patents that are registered by ASEAN nationals in ASEAN. The indicator should also identify the nature and sector of the patent.

4.12.2 R&D expenditure by ASEAN interests in ASEAN

The value of R&D expenditure and as a percentage of GDP as an indicator can show the extent of investment by ASEAN corporations and research institutions in the creation of knowledge within ASEAN and the potential for intra-ASEAN diffusion of knowledge.

4.13 e-ASEAN

Technology can make an important contribution to economic growth and the integration of ASEAN. e-ASEAN has been promoted through the e-ASEAN Framework Agreement, which was signed in Singapore in November, 2002. The Agreement is an important component of the ASEAN push towards using technology for enhancing cooperation and integration. e-ASEAN uses information and communication technology (ICT) as an enabler that is now recognized to be a powerful factor in, among others, raising growth, enhancing the emergence of a more networked economy, influencing how businesses are conducted and

manufacturing processes are managed and how investment decisions are made in relation to supply chains. There are various programs and projects under e-ASEAN which include the use of the internet, promoting the ASEAN traffic network of internet exchanges, promoting technical standards, and e-commerce.

4.13.1 ASEAN e-commerce

Estimates of global e-commerce involving the transactions of goods, services and information show a rising trend. The value of e-commerce transactions in 2002 was forecast to have reached US$320 billion for business-to-business (B2B) and US$105 billion for business-to-consumer (B2C). Estimates of the amount of ASEAN commerce transacted through e-commerce, B2B and B2C, will provide an indication of the contribution of e-commerce to total commercial transactions in ASEAN. This indicator should be estimated for each economy in ASEAN.

4.13.2 ASEAN internet usage

The number of ASEAN internet service providers (ISPs) is one indicator of the growth in the use of access to the internet. Estimates should be made of the number of ASEAN residents (individuals, households and corporations) that subscribe to ASEAN ISPs. This indicator should be estimated for each economy in ASEAN.

4.14 ASEAN economic integration index

The indicators that have been proposed in this study measure or indicate various aspects of integration of ASEAN. They attempt to capture the key points or features of economic integration either from a macro or sectoral perspective. The indicators and indices, therefore, are not comprehensive.

A consolidated index of ASEAN economic integration would be a useful yardstick to assess and track the progress that has and will be made in economic integration. It is proposed that the composite index of integration should initially incorporate the two key indices of trade and foreign direct investment integration. What is the rationale/basis for using trade and FDI integration indices?

First, trade and investment elsewhere and in ASEAN, are the channels for integration between economies. Trade and FDI will continue to be the important channels and forces for economic integration especially as economies develop and incomes increase.

Second, an overall index using two key indices would be more manageable and easier to estimate and to update compared to an overall indicator which utilizes a greater number of sub-indices in its estimation.

Third, there are links between trade and foreign direct investment which makes it a sensible approach to combine the two factors to arrive at a single integration index. FDI in many economies contributes substantially to exports. Also much of international trade is accounted for by inter-affiliate trade i.e. trade between related companies in the same group. As has been noted earlier, trade in goods can be linked to trade in assets. Trade in goods will usually require trade credit and insurance. In some situations the decisions made for trade in goods

and the financing of trade are made at the same time. There are links between trade openness and the degree of liberalization and capital flows. A more open economy could be seen by the market as offering opportunities for more borrowing in the financial market and better credit risk. Openness on the other hand can lead to more vulnerability to external shocks and therefore an increase in savings and foreign assets to provide some protection against these shocks.

The movements of the overall integration index will therefore be influenced by the movements of the separate indices for trade and FDI. The relative strength or weakness of each index will determine the movements of the overall joint integration index. When the index for trade and the index for FDI move together in the same direction, though they may not be growing at the same pace, it indicates that trade is increasing and that intra-ASEAN investment flows are also rising in ASEAN. When the index for trade and the index for FDI move in opposite directions, say the index for trade is rising, indicating an expansion in trade, while the index for FDI is falling, indicating that intra-ASEAN FDI is falling, the outcome for overall integration as indicated by the overall integration index will depend on the relative importance of the rise in trade and of the fall in FDI respectively.

An overall ASEAN economic integration index combining trade and foreign direct investment integration indices as set out in table 4.15 and table 4.22 (which both have common GDP denominators and are calculated in the same fashion) can be derived as follows.

$$INTEGA_{at} = \frac{(TRADEA_{at} + FDIINT_{at})}{2} \qquad (29)$$

where $TRADEA_{at}$ refers to the index value of intra-ASEAN trade for the whole of ASEAN as a percentage of ASEAN GDP for the same year and $FDIINT_{at}$ is the index value of intra-ASEAN FDI for the whole of ASEAN as a percentage of ASEAN GDP for the same year. The higher the index value for INTEGA, the higher the level of ASEAN overall economic integration.

INTEGA has been calculated for ASEAN as a whole for the period 1995 – 2000, with 1995 as the base year (100). The results are shown in table 4.27. The statistics for TRADEA and FDIINT are derived from the ASEAN Statistical Yearbook 2001. The index shows that ASEAN economic integration has declined slightly from 100 in 1995 to 96.6 in 2000 and has fallen in every year since 1997, due mainly to significant falls in the intra-ASEAN FDI index in the same period. The Asian financial crisis had a large and adverse impact on economic integration especially on ASEAN FDI flows into ASEAN.

There may be a concern over the terminology of the overall index. Does INTEGA merit being described as an "integration index"? The study suggests that the term integration should be retained for this overall index. Intra-ASEAN trade and intra-ASEAN foreign direct investment are two key forces of ASEAN integration. Trade flows and FDI flows are powerful forces of economic integration and the term integration, therefore, is appropriate. Using a term like "linkage" could add confusion into the concept of integration.

The overall index for ASEAN economic integration incorporates two major indices, those for trade and foreign direct investment. The trade index component of the overall index is an

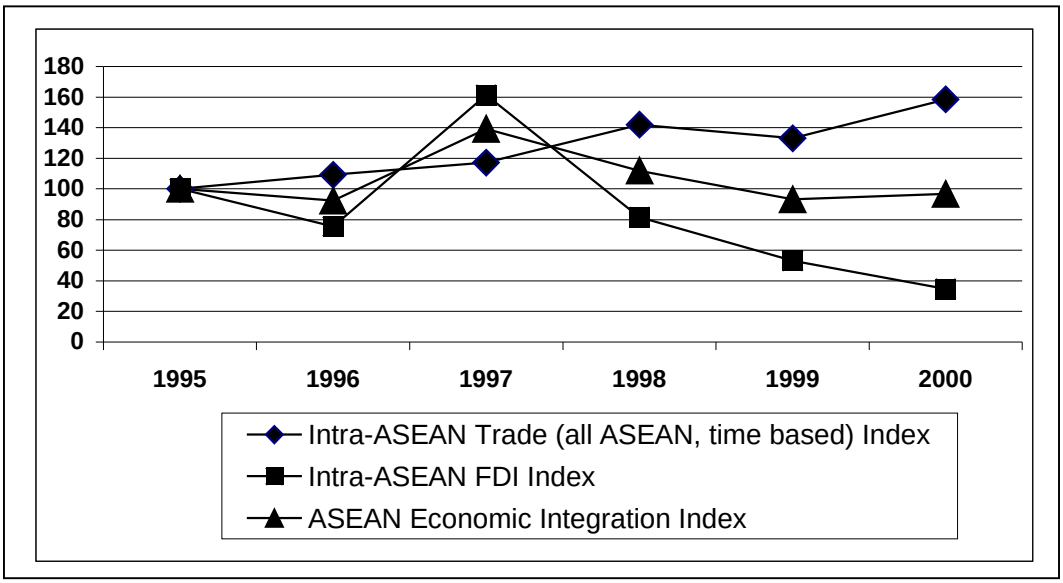
index of merchandise trade in goods. It would be useful to also take into account trade in services together with merchandise trade in refining the integration index. Estimating a separate trade in services index, however, will be dependent on the availability of statistics on intra-ASEAN trade in services. A separate services account for intra-ASEAN transactions in services will be required for this purpose. A recommendation to develop a separate ASEAN balance of payments which will include a separate services account has been made in this study.

Table 4.27 : ASEAN Economic Integration Index, 1995 – 2000

	1995	1996	1997	1998	1999	2000
Intra-ASEAN Trade (all ASEAN, time based) Index	100	109.3	117.1	142.0	133.2	158.5
Intra-ASEAN FDI Index	100	75.5	161.2	81.6	53.1	34.7
ASEAN Economic Integration Index	100	92.4	139.2	111.8	93.2	96.6

Source: Tables 4.15 and 4.22.

Figure 4.5: ASEAN Economic Integration Index, 1995 – 2000



4.15 ASEAN integration indicators and ASEAN balance of payments

In formulating the indicators and indices for ASEAN integration, reliance will be put on statistics and information that will be sourced from the balance of payments. Several of the indicators and indices have been derived from the balance of payments. There are, however, still some gaps in the balance of payments that need to be overcome if progress is to be made in formulating the indicators for integration. The statistics on intra-ASEAN trade and intra-ASEAN investment appear to be the better ones but further improvements also need to be made to these statistics. There are more serious gaps on the trade in services, especially in financial services.

Efforts need to be channelled and focused on developing an ASEAN balance of payments as it can provide a stronger framework for assessing ASEAN economic integration.

The key objective in designing the balance of payments is to provide a comprehensive, consistent and clear picture of international transactions involving all ASEAN member countries. All ASEAN countries calculate the balance of payments according to the IMF Balance of Payments Manual 5. The improvements should be based on this foundation.

The current statistics that are available and compiled in the ASEAN Statistical Yearbook 2001, for example, do not include the entire balance of payments for ASEAN. The statistics available include the following:

- Current account balance as percentage of GDP
- Current account balance
- Exports of ASEAN countries
- Imports of ASEAN countries
- Service balance of ASEAN countries

Other statistics that are published are on merchandise balance, based on the ASEAN Trade Statistics Database, and statistics on FDI, based on balance of payments data.

The balance of payments has three key accounts: (a) trade (b) services and (c) capital (financial account). The trade balance between exports and imports is derived from the trade account. Payments for transportation, travel and other services are reported in the services account. All transactions involving direct investment abroad and within the country (FDI), portfolio investment and other investment are recorded in the capital account. The overall balance and the international reserves complete the balance of payments.

The basic approach is to make a distinction between an ASEAN balance of payments that *covers all international transactions* and an ASEAN balance of payments that *only includes international transactions involving ASEAN member countries*. If this is done then there will be two separate ASEAN balance of payments and integration indicators which can be based on these two ASEAN balance of payments. Some key questions that will need to be raised and on which the ASEAN balance of payments can provide some likely answers are: has ASEAN been integrating more with other ASEAN member countries compared to integration with the rest of the world? Which countries within ASEAN have been integrating more within ASEAN and with the rest of the world? Which parts of the economies of ASEAN have been contributing to ASEAN integration?

The following selected examples illustrate briefly the usefulness of having an ASEAN balance of payments:

- *Trade account*. Maintain the intra-ASEAN trade overall balance and the intra-ASEAN balances of each ASEAN member country. Assess the trade deficits or/and trade surpluses of intra-ASEAN trade and identify the sources of the trade balances and deficits.

- *Services account*. A great deal more work needs to be done on the intra-ASEAN services account. The essential need is to maintain good and consistent statistics on intra-ASEAN trade in services. A breakdown of the services trade account between

members of ASEAN would be an essential requirement for monitoring the integration through trade in services. This would complement the information on the trade in goods. Some economies (e.g. Malaysia) run persistent deficits in the services account while others have a track record of running surplus services accounts (e.g. Singapore). The composition of the deficit or surplus on the services account will differ from country to country showing the relative importance of flows of freight and insurance, tourism, education and transactions involving consultancies. The availability of these statistics will contribute to a better understanding on the trends and structure of ASEAN integration.

- *Income account*. Investment income flows form a sizable part of the income account. The flows for profits and dividends accruing to foreign companies and national residents are the major components of the income account. These transactions and statistics complement the information on the financial account. A breakdown of the size and sources of the intra-ASEAN flows for the income account would enhance the understanding on integration.

- *Current account*. This is a key indicator that could be utilized with an ASEAN balance of payments. It is the reverse side of the savings-investment (S-I) gap after incorporating the flows on the goods, services and income accounts of the balance of payments. A persistent deficit on the current account and hence an excess of national investment over savings usually implies a weakness in economic fundamentals. Monitoring the intra-ASEAN current account positions, expressed as percentage of GNP, would complement the other indicators on economic integration.

- *Capital and financial account.* The capital and financial account provides the source for computing the FDI financial services, indicators and indices. Essentially, the flows and stocks reported in this account comprise of direct investment abroad, direct investment within the country (i.e. FDI) and portfolio investment (private and official sectors). These flows and transactions will have to be divided between those that involve intra-ASEAN transactions and those that are extra-ASEAN transactions.

The sample of the "surveillance template" for specific country balance of payments provides the basis for preparing an ASEAN balance of payments. Separate balance of payments statistics for inflows and outflows can be maintained as the template records payments and receipts for each ASEAN member country.

4.16 Labour market integration

Cross border movements of labour tend to be a universally contentious issue. Cross border movements of labour in Southeast Asia have long historical roots, attesting to the porosity of legal borders and the traditional linkages of labour markets in the region. In ASEAN, the demand for cheap labour under colonial rule led to the importation of immigrant labour from as far as China and India. Immigrant workers were initially recruited, for example, for rubber plantations and tin mines. Subsequently there was an influx of non-plantation labour from non-indigenous sources as ASEAN developed. Generally, immigration policies, because they have implications regarding residence requirements and on employment opportunities available for the indigenous population, tend to raise sensitive issues.

The present trends in labour movements within ASEAN attest to the still strong historical links between the countries and reflect the pace of economic growth and increasing economic integration in the region. The faster growing economies like Singapore and Malaysia tend to attract greater numbers of immigrant labour from ASEAN.

Labour market segmentation, the other side of labour market integration, can be due to various factors. Physical barriers can cause or increase the inaccessibility of areas and will limit the movement of labour. Distance can raise the costs of transport and reduce the mobility of labour. Restrictive immigration policies, such as the imposition of quotas, limited rights of residence, and employment restrictions, will deter and limit the inflows of labour from other countries. Restrictive practices of trade unions in host countries also add to labour market segmentation.

Employers can also contribute to or perpetuate labour market segmentation. If employers have a "taste for discrimination " then the employment opportunities of certain groups in the labour market will be circumscribed.

What are the likely indicators of labour market integration? Intra-ASEAN labour market integration, overall, would be enhanced when more ASEAN nationals are employed in the labour markets of other ASEAN member countries. There are two likely specific indicators of labour market integration: (a) wage rates of ASEAN labour in individual ASEAN member countries and (b) the number of ASEAN workers employed in individual ASEAN member countries as a percentage of total labour employed. The numbers of the employed from ASEAN should be disaggregated by skill level and by occupation. At the minimum, separate indicators should be estimated for skilled and unskilled production workers and also for non-production workers where the breakdown would include managerial, professional and technical workers.

The price of labour, the wage rate, for a specific category of labour that is paid to the worker in the ASEAN host country can be compared to the wage rate for the same category of worker in the other member countries in ASEAN. The deviations of the wage rates from the ASEAN average and from one country to another can be used as a basis for assessing the degree of labour market integration. The labour market for that category of labour would be integrated if the same wage rate is paid irrespective of the country of employment. After taking into account labour market conditions, and assuming that the worker has the same educational attainments, work experience and productivity, the worker should be paid the same wage rate throughout ASEAN.

The quantity of ASEAN labour indicator takes into account the size and the share of labour that is sourced from labour markets elsewhere in ASEAN. A clear distinction needs to be made, wherever possible, between legal and illegal immigrant labour as illegal immigrant labour can be very sizable. It is proposed that the focus and priority should be on the official numbers recorded for immigrant labour. This indicator should estimate the number of ASEAN workers employed in the various sectors and for the whole economy and their share, as percentages, of the total number employed in the economy and by key sectors. The growth rate of ASEAN labour in the economy could also be measured.

4.17 Price indicators and integration

Factor price equalisation can be the basis for assessing integration using prices. Integration is presumed to prevail when prices of similar goods and similar factors of production in two countries are equalised. Factor price equalisation, it has been argued, can be realised as free trade can ensure equal prices of goods across countries and equal prices for non-tradables as well. However, factor price equalisation is based on some restrictive assumptions regarding technology and tastes and the convergence of prices will depend, in part, on cross-country taste, technology and endowment.

Market structure can also have a bearing on the level and trends in prices. A more monopolistic or oligopolistic market structure will mean that a few sellers will have a dominant position in the markets and be in a position to set higher prices compared to more competitive markets. Entry barriers can also be higher in highly concentrated markets.

While taking into account of the limitations of factor price equalisation being fully realised, the level and behaviour of prices in ASEAN member countries can be used as indicators of integration. But the limitations imposed by the assumptions and other factors will need to be taken into account. The prices of a selected number of goods and services can be collected in ASEAN and comparisons made between member countries. The basic approach is to compare prices of identical goods and services in each ASEAN member country and to assess how far the prices of common goods and services deviate or converge with each other. Initially, it is suggested that the prices of a selected number of consumer goods and a few services should be assembled. The selected services could include professional services, medical and health services and airline services.

In initiating the work on price comparisons, the consumer price index (CPI) of each ASEAN member country could be used as a basis for comparing the level and trends in prices. Inflation and inflationary pressures will differ between one country and another and will need to be taken into account in making comparisons of prices within ASEAN.

4.18 Policy harmonization and economic integration

Efforts towards economic integration can include moves towards the harmonisation of economic policies. Economic policies can be divided into two broad types: (a) macroeconomic and (b) sectoral. Macroeconomic policies would include monetary, fiscal, exchange rate, trade and investment policies. These are more comprehensive in nature and they cut across the various sectors of the economy. Sectoral policies cover, or intend to cover, the specific sectors under consideration and these can include manufacturing, agriculture, services and construction. In this study the indicators that have been formulated cover the outcome of the policies and some of the processes in policy making, including the implementation of the policies. The indices and indicators cover some of the outcome from the macro-type and sectoral-type policies.

In the later stages of economic integration more emphasis appears to be given to monetary, fiscal and exchange rate policies. In the EU, for example, a great deal of effort has been given to arriving at the harmonisation of macroeconomic policies and moving towards economic convergence. The EU has set five criteria for membership and these involve some key macroeconomic aspects: (a) price stability – inflation rate not to exceed 1.5 percent of the

average for the three EU nations with the lowest rates; (b) interest rates – a long-term rate within 2 percentage points of the average for the lowest three in the EU; (c) budget deficit – a deficit of not more than 3 percent of the member nation's GDP; (d) public debt – a ratio not exceeding 60 percent of the member nation's GDP and (e) currency stability – member nation's currency not to have been devalued in the previous two years and to have been maintained within the 2.25 percent margin of fluctuation allowed when the ERM was initiated.

There are some broad indicators of macroeconomic policies that can be considered as possible yardsticks for policy harmonisation. These policies can be characterised as being either expansionary or contractionary. If ASEAN economic growth is falling then there should be a commitment towards expansionary macroeconomic policies. The capabilities of different countries to adopt expansionary policies of course will differ but the broad policy thrust should be expansionary. The growth forecast or expectation of each member economy in ASEAN can be compiled and assessed and the contribution of each country's economic growth in GDP to the overall ASEAN GDP growth can be computed. Economies which are in a position to be expansionary and contribute to the growth of ASEAN's GDP can be considered to have more harmonised macroeconomic policies.

Other macroeconomic indicators that could be considered would be the degree of looseness of monetary policy, the size and nature of the fiscal stimulus, and the current account of the balance of payments of each ASEAN member country. For an expansionary policy, monetary policy should be loosened and the lowering of the rate of interest would be the relevant indicators. An indicator for a fiscal stimulus would be the size of the public investment for the budget or fiscal year and the size of the fiscal deficit or surplus of each ASEAN member country. Generally, the preference should be to manage the economy in such a way that the fiscal position of the government does not put an excessive strain on the revenue available to the economy. The current account of the balance of payments should also not be in deficit for a long period as market sentiments tend to be adverse for economies that run large and persistent current account deficits. In macroeconomic terms, the S-I (savings-investment) gap reflects the current account position i.e. a current account deficit implies that investment exceeds national savings.

Assessing the impact of ASEAN-wide macroeconomic policies would be facilitated if there is a separate ASEAN balance of payments. One of the uses of such a balance of payments is that it will enable a better understanding and assessment of intra-ASEAN trade and capital flows and transactions compared to extra-ASEAN transactions. A separate recommendation is made for work on an ASEAN balance of payments in this study.

Chapter 5

Policy implications and recommendations

5.1 Policy recommendations on integration indicators

Since the inception of ASEAN there has been little systematic effort made to assess progress that has been achieved in the economic integration of ASEAN. As ASEAN has made progress in various economic areas, and with an increasing number of cooperation programs, questions have been raised as to the impact of economic growth and the co-operation programs on ASEAN integration. There has been growing interest in these issues with the expansion in the membership of ASEAN to include the CLMV countries. An assessment of ASEAN economic integration would provide a useful means and framework for assessing the trends and progress (or its lack) in integration. A series of indicators of integration are required to arrive at an objective assessment of ASEAN integration. A recommendation is made that as a matter of policy ASEAN should adopt a number of integration indicators to monitor and assess the trend and progress in economic integration.

In Chapter 4, a number of integration indicators have been suggested for consideration, adoption and implementation. It is recommended that initially a limited number of key or core integration indicators should be selected. The core indicators will be selected from the list that has been submitted for trade, foreign direct investment and services, especially financial services. These indicators should be widely used when assessing the trends in ASEAN integration. Serious consideration should be given to using the indices for trade, foreign direct investment and overall ASEAN integration.

Based on the research carried out for this project, it is recommended that the following indicators should be seriously considered for initial inclusion in the list of key integration indicators:

- Intra-ASEAN export index (IAXGDP)
- Intra-ASEAN import index (IAMGDP)
- Intra-ASEAN trade index (IATGDP)
- Intra-industry trade index (IIT)
- CEPT usage index (CEPTU)
- ASEAN foreign direct investment index (FDIIA).
- Intra-ASEAN foreign direct investment index (FDIINT)
- ASEAN transnationality index (TNLTYA)
- Foreign assets and liabilities indicator (IFIGDP)
- Portfolio equity and foreign direct investment indicator (GEQGDP)
- ASEAN economic integration index (INTEGA)

These indicators and indexes have been selected as they provide insight into important aspects of economic integration on which policy formulations can be based. The indicators/indices are relatively simple to understand and are broad in coverage.

Unfortunately, appropriate databases are not available for all of them and, where this is the case, it is suggested that the development of suitable databases for these particular indicators and indices should be given priority as personnel and financial resources permit.

Other indicators suggested in this study can be considered for inclusion over time. In addition, new indicators might need to be developed as the concept of the ASEAN Economic Community develops beyond a free trade area and moves more towards a single market. Indicators relating to common external tariffs and free movement of labour, capital, enterprises and technology will be required should the AEC take the form of a customs union or common market.

While it is recommended that priority should be given to the core of leading indicators or indices of economic integration, resources should also be channelled to the formulation of indicators in the areas relevant to trade facilitation. Although many of these process indicators may not be amenable to quantitative measurement at this time, nevertheless they will provide an important supplement and understanding to the trends and progress in ASEAN integration.

5.2 Appropriate database for economic integration indicators

Availability of a consistent and timely set of statistics is a key prerequisite for work on integration indicators. There are still gaps in the statistics that will need to be overcome if some of the suggested indicators in Chapter 4 are to be quantified. It is recommended that ASEAN should have an appropriate database for economic integration indicators. The database should be such that a clear distinction can be made between information that relates only to ASEAN and that which is non-ASEAN i.e. intra-ASEAN and extra-ASEAN statistics. Currently, statistics on an intra-ASEAN and extra-ASEAN basis can be made available for merchandise trade and foreign direct investment. More needs to be done to expand the scope and coverage of intra-ASEAN and extra-ASEAN statistics.

A recommendation is also made for working towards developing an ASEAN balance of payments. Statistics that will be derived from an ASEAN balance of payments can provide a reliable framework for the work on integration indicators. The aim of the ASEAN balance of payments is to track the intra-ASEAN transactions of ASEAN member countries. The statistics on the trade, services, capital and financial accounts will provide a better understanding of the nature and trends of intra-ASEAN transactions and of economic integration.

5.3 Measurement and review regime for economic integration

There are commendable ongoing efforts to improve, widen and refine the collection of statistics within ASEAN. Regular meetings and consultations at the senior level involving statisticians have been part of the current arrangement within ASEAN. New issues will demand new and additional statistics and require an ASEAN statistical system or regime sufficiently staffed to meet the growing demands for statistics.

It is recommended that the collection and dissemination of statistics on economic integration should be part of the statistical system of ASEAN.

The first part of the process is to decide on the key and other indicators of ASEAN economic integration that are to be monitored[46]. Some guidance on the key trade and investment indicators is provided in section 5.1 above. It is suggested that the overall list should be discussed and agreed by all ASEAN Member Countries so that there is public commitment to the idea of economic integration indicators. The data that would need to be gathered could also be discussed at this point and agreement reached on the timing of surveys that may be required.

Who is to collect the data? Where new collections are required (and agreed), it seems logical that the responsibility should lie with the statistical agencies in the various ASEAN countries, using definitions, classifications, questionnaire content and layout, and reporting formats that have been agreed with the Secretariat. The timing of the data submission to the Secretariat should also be agreed. The Secretariat would be responsible for combining the data from the countries, analysis, and distribution of the results, with brief comment on what they mean.

Many of the indicators suggested in this study can be measured using data that are already collected by Member Countries for other purposes and made available to the Secretariat. For these, the Secretariat should be responsible for measurement, analysis and distribution of findings.

5.4 Areas for further study

In this chapter recommendations have been made about selecting a limited number of core indicators for analysis in the first instance and also about developing an ASEAN balance of payments as an appropriate basis of analysis of economic integration. In addition, it has been suggested that statistics relating to economic integration should be a part of the ASEAN statistical system with clearly defined responsibilities for Member Countries and for the ASEAN Secretariat.

Other areas which would benefit from further study include:

- An examination of effective tariff rates within ASEAN rather than a focus on nominal tariff rates. The key thrust of liberalising trade is through the CEPT – Common Effective Preferential Tariff scheme. The use and retention of the term "effective" in the scheme shows that the notion of effective protection is central to tariff protection in ASEAN. The imports of raw materials may enter an economy duty free or at a lower tariff rate than that levied on the final product produced with the imported input. The rate of effective protection which can be estimated on the basis of the domestic value added, or processing, that takes place in the importing economy, can exceed the nominal tariff which is calculated on the value of the final product. The effective tariff rate shows to producers the extent of protection enjoyed by domestic producers of the imported product. Such a study on effective protection can be a useful input in understanding the nature and trends in effective protection in ASEAN and, wherever relevant, in refining its trade policies.

[46] Ideally, the indicator selection process should also be guided by the structure, features and goals of the proposed ASEAN Economic Community. However these are not clear at this time and there may need to be amendments and additions/deletions to the indicators selected as the AEC evolves over time.

- How many of the tariff lines in the IL and other lists cover intra-ASEAN imports of intermediate goods – a sign of closer economic integration. The indicator would involve the development of an agreed list of manufactured items which are deemed to be semi finished, components and parts. An expanding list and intra-ASEAN values would indicate closer integration among manufacturers in different ASEAN countries.
- An examination of the arguments to make non compliance with commitments made to ASEAN by Member Countries a legal process rather than a political one as is currently the case. This would facilitate regular review of the success of Member Countries in meeting their economic integration commitments. The results could be communicated in a scoreboard to other Member Countries or, more broadly, made publicly available.
- Further research to identify what needs to be done to smooth the way for the CLMV countries to more fully integrate with the rest of ASEAN in an agreed timetable. As their intra-ASEAN tariffs come down, CLMV producers may well be faced by increased competition from more developed Member Countries, without the compensation of expanding their own intra-ASEAN or other exports. The cost and funding of structural adjustment will need to be addressed.
- Development of the concept of the ASEAN Economic Community and its goals, features and implementation timetables. Stages that it might go through to reach its goals include customs union, common market and economic union.
- Development of consistent definitions of the various non tariff barriers to trade and the creation of a standardized monitoring form.
- The assembling of stock statistics for FDI in ASEAN.
- Consideration of the role of weighting of variables in the calculations of indices. Also consideration of the possibility of using purchasing power parity GDP in calculations of the indices, rather than non PPP GDP. It is suggested that the Secretariat raise these issues with the Statisticians of Member Countries so that agreed positions can be reached and potential future disagreements over interpretation of the indices can be avoided.

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Appendix 1

AADCP Regional Economic Policy Support Facility
Abridged Terms of Reference
Research Project 02/001.

I. Title

Developing Indicators of ASEAN Integration – A Preliminary Survey for a Roadmap.

II. Background and Significance

As articulated in Vision 2020, ASEAN aims to create a stable, prosperous and highly competitive ASEAN Economic Region in which there is a free flow of goods, services and investments, a freer flow of capital, equitable economic development and reduced poverty and socio-economic disparities. Steps to realize Vision 2020 are outlined in the Hanoi Plan of Action (HPA) that identifies specific courses of action for implementation within a six year time frame covering the period from 1999 to 2004.

Three years into the implementation of the HPA, the Leaders agreed at the 7th ASEAN Summit (November 2001) to develop a Roadmap for Integration of ASEAN (RIA). As envisaged, the RIA shall set milestones and identify specific steps and timetables in fulfillment of Vision 2020.

The RIA is built on three pillars, namely: 1) bridging the development gap, which aims to help the newer ASEAN member integrate with ASEAN-6; 2) deepening economic co-operation, which includes collaboration in areas like energy, tourism, transport and telecommunications, the ASEAN Mekong Basin Development Cooperation (AMBDC) and the sub-regional growth areas; and 3) improving economic integration, which involves market integration initiatives such as AFTA, AIA, AFAS, eASEAN, AICO, etc. As agreed in the Senior Economic Officials Meeting (SEOM) Retreat held in Jan 2002, the 1st pillar would be under the purview of the ASEAN Senior Officials Meeting (SOM), the 2nd pillar would be coordinated by the SEOM Chairman, and the 3rd pillar would be supervised by SEOM with the support of the economic working groups and coordinating committees.

The ASEAN Secretariat through its Bureau of Economic Cooperation (BEC) and its Bureau of Finance and Surveillance (BFS) is now tasked to assist in formulating the 3rd pillar of RIA. SEOM 1/33 had requested the sectoral working groups to take stock of existing programs, identify gaps in their implementation, and to propose targets and milestones to expedite the realization of the programs. The role of the BEC and BFS is to assist the various working groups in the assessment process and later,in the monitoring of the RIAs targets and milestones.

Although the directive of SEOM 1/33 to the various sectoral working groups provides a good starting point, it is clear that a correct formulation of the RIA and its subsequent review will require a coherent set of parameters to guide in the analysis of gaps or duplications as well as provide direction for identifying new initiatives. Such parameters must be based on the principal objective of attaining regional economic integration as envisaged in Vision 2020.

III Research Objectives/Research Problems:

To guide ASEAN bodies in the monitoring and subsequent updating of the Roadmap for Integration of ASEAN, the study must:

1. Discuss the requirements of an ASEAN Economic Community as an end goal for the Roadmap for the Integration of ASEAN and Vision 2020, and analyze its implication for ASEAN.)

2. Based on the discussion in number 1,

    a. Examine the extent to which barriers to economic integration have been eliminated.

    b. Examine the extent to which institutions and policies have converged or have been harmonized.

3. Provide an exhaustive list of outcome-based indicators of economic integration – overall (e.g., intra-regional trade, direct investment, labor migration, etc.) and sectoral (e.g., intra-regional tourism, transport and telecoms traffic, etc).The formula and data requirements for each indicator must also be presented. Where data are available, time-series estimates of key overall and sectoral indicators should be presented and analyzed.

4. Recommend concrete next steps to monitor the progress of ASEAN economic integration. Crucial policy and outcome-based indicators must be identified along with the mechanisms for regular investigation and monitoring, identifying areas for further study as necessary

IV. Scope of Study

This study will focus on the 3rd pillar of the RIA, which deals with economic integration initiatives of ASEAN. As such, only the agreements and activities under the purview of the Bureau of Economic Cooperation and the Bureau of Finance and Surveillance will be covered.

The study should review ASEAN goals and timetables for integration both to identify performance indicators or milestones and as a prelude to setting quantitative and time-related benchmarks for integration. Tradeoffs between moves to enhance integration and moves to promote competitiveness should be canvassed as should different approaches, expectations, and timetables for the original six and newer four members of ASEAN.

Appendix 2

Brief description of Econsult Sdn Bhd and the authors

The company

Econsult Sdn Bhd is a Malaysian management consultancy with wide expertise in economic policy studies and advice for government and international agencies. It was founded in Kuala Lumpur in 1985 and is a member of the Econsult Group with other offices in Melbourne, Sydney, London, Papua New Guinea, Singapore and Hong Kong.

The company has extensive experience in conducting research across a wide range of economic sectors and has solid credentials in economic analysis, economic development planning and strategy development.

From Econsult's Kuala Lumpur office, consultancy assignments have been carried out in Malaysia (East and West), Indonesia, Singapore, Brunei, Cambodia, Laos, Vietnam, Australia, China, Nepal and Papua New Guinea.

The authors

The Team Leader for this project is Mr David Dennis, an Australian economist who has lived in Kuala Lumpur since 1985, when he founded Econsult Sdn Bhd.

Mr Dennis has a Masters Degree in Economics and has consulted in seven different countries in the region. His clients have included the World Bank, the Asian Development Bank, other international agencies, governments and private sector companies, large and small. He has a very diverse research and policy advice background, specializing in economic development and sector studies, industry and business development, and human resource development. Most recently he has been involved in trade and development studies in Malaysia. Projects have covered resource-based industries (wood products, palm oil products and rubber products); export of professional services; and, increasing domestic production of capital and intermediate goods.

Datuk Dr Zainal Aznam Yusof, ASEAN Policy Specialist, is the second member of the team. He is a Malaysian economist with a PhD in economics from Oxford University. Among his academic achievements, he has served as a Visiting Scholar at Harvard University (Fulbright Scholar).

Dr Zainal has had a distinguished career in government in Malaysia, focusing on economic policy development. He has served in senior positions at the Economic Planning Unit, Prime Minister's Department, as Deputy Director with the Malaysian Institute for Economic Research and as Adviser to Bank Negara Malaysia (the Central Bank).

His most recent posting was at the Institute of Strategic and International Studies (ISIS) where he was Deputy Director General. Dr Zainal has also written and spoken extensively, in Malaysia and elsewhere, on economic development topics of relevance to the region.

Dr Zainal is currently a member of Malaysia's National Economic Action Committee.

Appendix 3

Some additional FDI statistical tables and figures

Data sourced from the ASEAN Statistical Yearbook, 2001

Tables **Page**

Figures

Table A1 : All FDI in ASEAN by Host Country, 1995-2000 (US$ Million)

Host Country	1995	1996	1997	1998	1999	2000	1995-2000
Brunei	582.8	653.6	701.7	573.3	596.0	600.2	3,707.6
Cambodia	150.7	293.7	168.1	120.7	143.6	125.7	1,002.5
Indonesia	4,346.0	6,194.0	4,677.7	-355.2	-2,745.1	-4,550.0	7,567.4
Lao PDR	88.4	128.0	86.3	45.3	51.5	33.9	433.4
Malaysia	3,007.0	3,698.3	2,956.0	1,656.4	1,988.5	1,309.7	14,615.9
Myanmar	317.6	580.7	878.8	683.6	304.2	203.4	2,968.3
Philippines	1,578.0	1,632.0	1,285.0	1,790.0	1,701.0	1,726.0	9,712.0
Singapore	7,208.3	8,984.1	10,334.0	5,791.2	6,968.4	6,390.2	45,676.2
Thailand	2,004.0	2,270.6	3,626.8	7,433.6	6,149.8	3,280.2	24,765.0
Vietnam	1,780.0	1,803.0	2,587.0	1,700.0	1,483.9	1,289.0	10,642.9
ASEAN	21,062.8	26,238.0	27,301.4	19,438.9	16,641.8	10,408.3	121,091.2
ASEAN 5	18,143.3	22,779.0	22,879.5	16,316.0	14,062.6	8,156.1	102,336.5
BCLMV	2,919.5	3,459.0	4,421.9	3,122.9	2,579.2	2,252.2	18,754.7

Table A2 : FDI in ASEAN from ASEAN by Source Country, 1995-2000 (US$ Million)

Source Country	1995	1996	1997	1998	1999	2000	1995-2000
Brunei	311.3	353.1	384.9	247.2	275.1	217.5	1,789.1
Cambodia	-	-	-	-	-	-	-
Indonesia	608.9	193.3	272.2	-37.1	-427.8	-232.6	376.9
Lao PDR	6.5	102.6	64.4	28.3	32.4	13.9	248.1
Malaysia	908.4	730.6	1,217.7	254.9	227.0	60.5	3,399.1
Myanmar	96.7	228.6	323.3	153.9	41.2	72.0	915.7
Philippines	204.8	73.9	139.4	109.9	114.2	88.5	730.7
Singapore	503.2	332.9	2,131.3	136.5	283.7	157.8	3,545.4
Thailand	160.6	308.1	297.5	569.6	569.5	389.0	2,294.3
Vietnam	387.3	328.7	547.2	398.7	289.3	202.4	2,153.6
ASEAN	3,187.7	2,651.8	5,377.9	1,861.9	1,404.6	969.0	15,452.9

Table A3 : FDI in Brunei by Source Region, 1995-2000 (US$ million)

Source Region	1995	1996	1997	1998	1999	2000	1995-2000
ASEAN	311.3	353.1	384.9	247.2	275.1	217.5	1,789.1
Rest of the World	271.4	300.5	316.8	326.1	320.9	382.7	1,918.4
Total	582.7	653.6	701.7	573.3	596.0	600.2	3,707.5

Table A4 : FDI (% annual change) in Brunei by Source Region, 1996-2000

Source Region	1996	1997	1998	1999	2000	1996-2000
ASEAN	13.4	9.0	-35.8	11.3	-20.9	-4.6
Rest of the World	10.7	5.4	2.9	-1.6	19.3	7.3
Total	12.2	7.4	-18.3	4.0	0.7	1.2

Table A5 : FDI in Brunei by Source Region (% share of Brunei's GDP), 1996-2001

Source Region	1996	1997	1998	1999	2000	2001
ASEAN	6.8	7.5	6.4	6.6	5.0	42.1
Rest of the World	5.8	6.2	8.4	7.7	8.9	45.1
Total	12.5	13.8	14.8	14.2	13.9	87.2

Table A6 : FDI in Indonesia by Source Region, 1995-2000 (US$ million)

Source Region	1995	1996	1997	1998	1999	2000	1995-2000
ASEAN	608.9	193.3	272.2	-37.1	-427.8	-232.6	376.9
Rest of the World	3,737.1	6,000.7	4,405.5	-318.1	-2,317.2	-4,317.4	7,190.6
Total	4,346.0	6,194.0	4,677.7	-355.2	-2,745.0	-4,550.0	7,567.5

Table A7 : FDI (% annual change) in Indonesia by Source Region, 1996-2000

Source Region	1996	1997	1998	1999	2000	1995-2000
ASEAN	-68.3	40.8	-113.6	1,053.1	-45.6	173.3
Rest of the World	60.6	-26.6	-107.2	628.5	86.3	128.3
Total	42.5	-24.5	-107.6	672.8	65.8	129.8

Table A8 : FDI in Indonesia by Source Region (% share of Indonesia's GDP), 1996-2000

Source Region	1996	1997	1998	1999	2000	1995-2000
ASEAN	0.1	0.1	0.0	-0.3	-0.2	-0.1
Rest of the World	2.6	2.0	-0.3	-1.6	-2.9	0.0
Total	2.7	2.1	-0.4	-1.9	-3.0	-0.1

Table A9 : FDI in Lao PDR by Source Region, 1995-2000 (US$ million)

Source Region	1995	1996	1997	1998	1999	2000	1995-2000
ASEAN	6.5	102.6	64.4	28.3	32.4	13.9	248.1
Rest of the World	81.9	25.4	21.9	17.0	19.1	20.0	185.3
Total	88.4	128.0	86.3	45.3	51.5	33.9	433.4

Table A10 : FDI (% annual change) in Lao PDR by Source Region, 1996-2000

Source Region	1996	1997	1998	1999	2000	1996-2000
ASEAN	1,478.5	-37.2	-56.1	14.5	-57.1	268.5
Rest of the World	-69.0	-13.8	-22.4	12.4	4.7	-17.6
Total	44.8	-32.6	-47.5	13.7	-34.2	-11.2

Table A11 : FDI in Lao PDR by Source Region (% share of Lao PDR's GDP), 1996-2000

Source Region	1996	1997	1998	1999	2000	1996-2000
ASEAN	5.5	4.0	2.3	2.3	0.8	3.0
Rest of the World	1.4	1.3	1.4	1.3	1.2	1.3
Total	6.9	5.3	3.7	3.6	2.0	4.3

Table A12 : FDI in Malaysia by Source Region, 1995-2000 (US$ million)

Source Region	1995	1996	1997	1998	1999	2000	1995-2000
ASEAN	908.4	730.6	1,217.7	254.9	227	60.5	3,399.1
Rest of the World	2,098.6	2,967.0	1,738.3	1,401.5	1,761.5	1,249.3	11,216.2
Total	3,007.0	3,697.6	2,956.0	1,656.4	1,988.5	1,309.8	14,615.3

Table A13 : FDI (% annual change) in Malaysia by Source Region, 1996-2000

Source Region	1996	1997	1998	1999	2000	1996-2000
ASEAN	-19.6	66.7	-79.1	-10.9	-73.3	-23.3
Rest of the World	41.4	-41.4	-19.4	25.7	-29.1	-4.6
Total	23.0	-20.1	-44.0	20.0	-34.1	-11.0

Table A14 : FDI in Malaysia by Source Region (% share of Malaysia's GDP), 1996-2000

Source Region	1996	1997	1998	1999	2000	1996-2000
ASEAN	0.7	1.2	0.4	0.3	0.1	0.5
Rest of the World	2.9	1.7	1.9	2.2	1.4	2.0
Total	3.7	2.9	2.3	2.5	1.5	2.6

Table A15 : FDI in Myanmar by Source Region, 1995-2000 (US$ million)

Source Region	1995	1996	1997	1998	1999	2000	1995-2000
ASEAN	96.7	228.6	323.3	153.9	41.2	72.0	915.7
Rest of the World	220.9	352.1	555.5	529.7	263.0	131.4	2,052.6
Total	317.6	580.7	878.8	683.6	304.2	203.4	2,968.3

Table A16 : FDI (% annual change) in Myanmar by Source Region, 1996-2000

Source Region	1996	1997	1998	1999	2000	1996-2000
ASEAN	136.4	41.4	-52.4	-73.2	74.8	25.4
Rest of the World	59.4	57.8	-4.6	-50.3	-50.0	2.4
Total	82.8	51.3	-22.2	-55.5	-33.1	4.7

Table A17 : FDI in Myanmar by Source Region (% share of Myanmar's GDP), 1996-2000

Source Region	1996	1997	1998	1999	2000	1996-2000
ASEAN	4.6	6.9	3.1	0.8	1.0	3.3
Rest of the World	7.1	11.9	10.8	4.8	1.9	7.3
Total	11.7	18.9	13.9	5.6	2.9	10.6

Table A18 : FDI in The Philippines by Source Region, 1995-2000 (US$ million)

Source Region	1995	1996	1997	1998	1999	2000	1995-2000
ASEAN	204.8	73.9	139.4	109.9	114.2	88.5	730.7
Rest of the World	1,373.2	1,558.1	1,145.6	1,680.2	1,586.8	1,637.5	8,981.4
Total	1,578.0	1,632.0	1,285.0	1,790.1	1,701.0	1,726.0	9,712.1

Table A19 : FDI (% annual change) in The Philippines by Source Region, 1996-2000

Source Region	1996	1997	1998	1999	2000	1996-2000
ASEAN	-63.9	88.6	-21.2	3.9	-22.5	-3.0
Rest of the World	13.5	-26.5	46.7	-5.6	3.2	6.3
Total	3.4	-21.3	39.3	-5.0	1.5	3.6

Table A20 : FDI in The Philippines by Source Country (% share of The Philippines's GDP), 1996-2000

Source Region	1996	1997	1998	1999	2000	1995-2000
ASEAN	0.1	0.2	0.2	0.2	0.1	0.1
Rest of the World	1.9	1.4	2.6	2.1	2.2	2.0
Total	2.0	1.6	2.7	2.2	2.3	2.2

Table A21 : FDI in Singapore by Source Region, 1995-2000 (US$ million)

Source Region	1995	1996	1997	1998	1999	2000	1995-2000
ASEAN	503.2	332.9	2,131.3	136.5	283.7	157.8	3,545.4
Rest of the World	6,705.1	8,651.2	8,202.7	5,654.7	6,684.7	6,232.4	42,130.8
Total	7,208.3	8,984.1	10,334.0	5,791.2	6,968.4	6,390.2	45,676.2

Table A22 : FDI (% annual change) in Singapore by Source Region, 1996-2000

Source Region	1996	1997	1998	1999	2000	1996-2000
ASEAN	-33.8	540.2	-93.6	107.8	-44.4	95.2
Rest of the World	29.0	-5.2	-31.1	18.2	-6.8	0.8
Total	24.6	15.0	-44.0	20.3	-8.3	1.5

Table A23 : FDI in Singapore by Source Region (% share of Singapore's GDP), 1996-2000

Source Region	1996	1997	1998	1999	2000	1996-2000
ASEAN	0.4	2.3	0.2	0.3	0.2	0.7
Rest of the World	9.5	8.7	6.9	8.1	6.7	8.0
Total	9.9	10.9	7.0	8.4	6.9	8.6

Table A24 : FDI in Thailand by Source Region, 1995-2000 (US$ million)

Source Region	1995	1996	1997	1998	1999	2000	1995-2000
ASEAN	160.6	308.1	297.5	569.6	569.5	389.0	2,294.3
Rest of the World	1,843.4	1,962.5	3,329.3	6,864.0	5,580.3	2,891.2	22,470.7
Total	2,004.0	2,270.6	3,626.8	7,433.6	6,149.8	3,280.2	24,765.0

Table A25 : FDI (% annual change) in Thailand by Source Region, 1996-2000

Source Region	1996	1997	1998	1999	2000	1996-2000
ASEAN	91.8	-3.4	91.5	0.0	-31.7	29.6
Rest of the World	6.5	69.6	106.2	-18.7	-48.2	23.1
Total	13.3	59.7	105.0	-17.3	-46.7	22.8

Table A26 : FDI in Thailand by Source Region (% share of Thailand's GDP), 1996-2000

Source Region	1996	1997	1998	1999	2000	1996-2000
ASEAN	0.2	0.2	0.5	0.5	0.3	0.3
Rest of the World	1.1	2.1	6.1	4.5	2.4	3.2
Total	1.2	2.3	6.6	5.0	2.7	3.6

Table A27 : FDI in Vietnam by Source Region, 1995-2000 (US$ million)

Source Region	1995	1996	1997	1998	1999	2000	1995-2000
ASEAN	387.3	328.7	547.2	398.7	289.3	202.4	2,153.6
Rest of the World	1,392.8	1,474.3	2,039.8	1,301.3	1,194.7	1,086.6	8,489.5
Total	1,780.1	1,803.0	2,587.0	1,700.0	1,484.0	1,289.0	10,643.1

Table A28 : FDI (% annual change) in Vietnam by Source Region, 1996-2000

Source Region	1996	1997	1998	1999	2000	1996-2000
ASEAN	-15.1	66.5	-27.1	-27.4	-30.0	-6.7
Rest of the World	5.9	38.4	-36.2	-8.2	-9.0	-1.8
Total	1.3	43.5	-34.3	-12.7	-13.1	-3.1

Table A29 : FDI in Vietnam by Source Region (% share of Vietnam's GDP), 1996-2000

Source Region	1996	1997	1998	1999	2000	1995-2000
ASEAN	1.3	2.0	1.5	1.0	0.6	1.3
Rest of the World	6.0	7.6	4.8	4.2	3.5	5.2
Total	7.3	9.6	6.2	5.2	4.1	6.5

Table A30 : ASEAN Member Countries' Share in Intra-ASEAN FDI by Year, 1995-2000

Source Country	1995	1996	1997	1998	1999	2000	1995-2000
Brunei	9.8	13.3	7.2	13.3	19.6	22.4	11.6
Cambodia	-	-	-	-	-	-	-
Indonesia	19.1	7.3	5.1	-2.0	-30.5	-24.0	2.4
Lao PDR	0.2	3.9	1.2	1.5	2.3	1.4	1.6
Malaysia	28.5	27.6	22.6	13.7	16.2	6.2	22.0
Myanmar	3.0	8.6	6.0	8.3	2.9	7.4	5.9
Philippines	6.4	2.8	2.6	5.9	8.1	9.1	4.7
Singapore	15.8	12.6	39.6	7.3	20.2	16.3	22.9
Thailand	5.0	11.6	5.5	30.6	40.6	40.1	14.9
Vietnam	12.2	12.4	10.2	21.4	20.6	20.9	13.9
ASEAN	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table A31 : FDI in ASEAN by Region of Source, 1995-2000 (US$ Million)

Source Region	1995	1996	1997	1998	1999	2000
ASEAN	3,187.7	2,651.7	5,377.9	1,861.9	1404.5	969.1
Rest of the World	17,724.4	23,292.5	21,755.5	17,456.3	15,093.8	9,313.6
Asian NIEs	2,385.2	2,382.4	3,035.0	2,407.0	1,363.8	1,592.7
EU-15	3,648.9	6,215.8	4,370.3	4,316.8	4,564.8	2,905.8
USA	3,262.1	3,989.5	2,685.9	2,759.2	2,977.7	2,320.4
All Others	2,598.4	2,371.2	2,923.5	4,348.0	4,584.4	1,973.0

Table A32 : FDI in ASEAN by Country of Source, 1995-2000 (US$ Million)

Source Country	1995	1996	1997	1998	1999	2000	1995-2000
ASEAN	3,187.7	2,651.7	5,377.9	1,861.9	1404.5	969.1	15,452.8
Rest of the World	17,724.4	23,292.5	21,755.5	17,456.3	15,093.8	9,313.6	104,636.1
Asian NIEs	2,385.2	2,382.4	3,035.0	2,407.0	1,363.8	1,592.7	13,166.1
Hong Kong	1,037.3	1,147.2	1,406.3	918.4	489.5	610.6	5,609.3
South Korea	627.9	554.7	624.9	646.6	467.4	179.7	3,101.2
Taiwan	720.0	680.5	1,003.8	842.0	406.9	802.4	4,455.6
China	113.7	100.7	-3.7	275.3	89.6	57.1	632.7
India	-10.6	22.0	35.1	33.9	6.2	-5.4	81.2
Japan	4,238.0	5,426.3	6,002.8	2,832.8	769.3	-55.5	19,213.7
EU-15	3,648.9	6,215.8	4,370.3	4,316.8	4,564.8	2,905.8	26,022.4
Switzerland	1,150.8	1,752.7	1,930.3	286.3	231.6	160.9	5,512.6
Russia	12.0	21.0	2.2	0.0	20.0	184.7	239.9
Canada	139.2	179.1	251.3	160.1	489.5	72.2	1,291.4
USA	3,262.1	3,989.5	2,685.9	2,759.2	2,977.7	2,320.4	17,994.8
Australia	236.8	797.0	496.3	22.4	-41.1	80.9	1,592.3
New Zealand	-50.1	34.9	26.5	14.3	38.0	26.9	90.5
All Others	2,598.4	2,371.2	2,923.5	4,348.0	4,584.4	1,973.0	18,798.5
Total	20,912.1	25,944.2	27,133.4	19,318.2	16,498.3	10,282.7	120,088.9
Total Incl. Cambodia	21,068.8	26,238.0	27,301.5	19,438.9	16,641.9	10,408.4	121,097.5

Table A33 : FDI in ASEAN by Country of Source (% share of ASEAN FDI), 1995-2000

Source Country	1995	1996	1997	1998	1999	2000	1995-2000
ASEAN	15.1	10.1	19.7	9.6	8.4	9.3	12.9
Rest of the World	84.1	88.8	79.7	89.8	90.7	89.5	87.1
Asian NIEs	11.3	9.1	11.1	12.4	8.2	15.3	11.0
Hong Kong	4.9	4.4	5.2	4.7	2.9	5.9	4.7
South Korea	3.0	2.1	2.3	3.3	2.8	1.7	2.6
Taiwan	3.4	2.6	3.7	4.3	2.4	7.7	3.7
China	0.5	0.4	0.0	1.4	0.5	0.5	0.5
India	-0.1	0.1	0.1	0.2	0.0	-0.1	0.1
Japan	20.1	20.7	22.0	14.6	4.6	-0.5	16.0
EU-15	17.3	23.7	16.0	22.2	27.4	27.9	21.7
Switzerland	5.5	6.7	7.1	1.5	1.4	1.5	4.6
Russia	0.1	0.1	0.0	0.0	0.1	1.8	0.2
Canada	0.7	0.7	0.9	0.8	2.9	0.7	1.1
USA	15.5	15.2	9.8	14.2	17.9	22.3	15.0
Australia	1.1	3.0	1.8	0.1	-0.2	0.8	1.3
New Zealand	-0.2	0.1	0.1	0.1	0.2	0.3	0.1
All Others	12.3	9.0	10.7	22.4	27.5	19.0	15.7

Figure A1 : FDI (% share of total ASEAN) in BCMLV by Host Country, 1995-2000

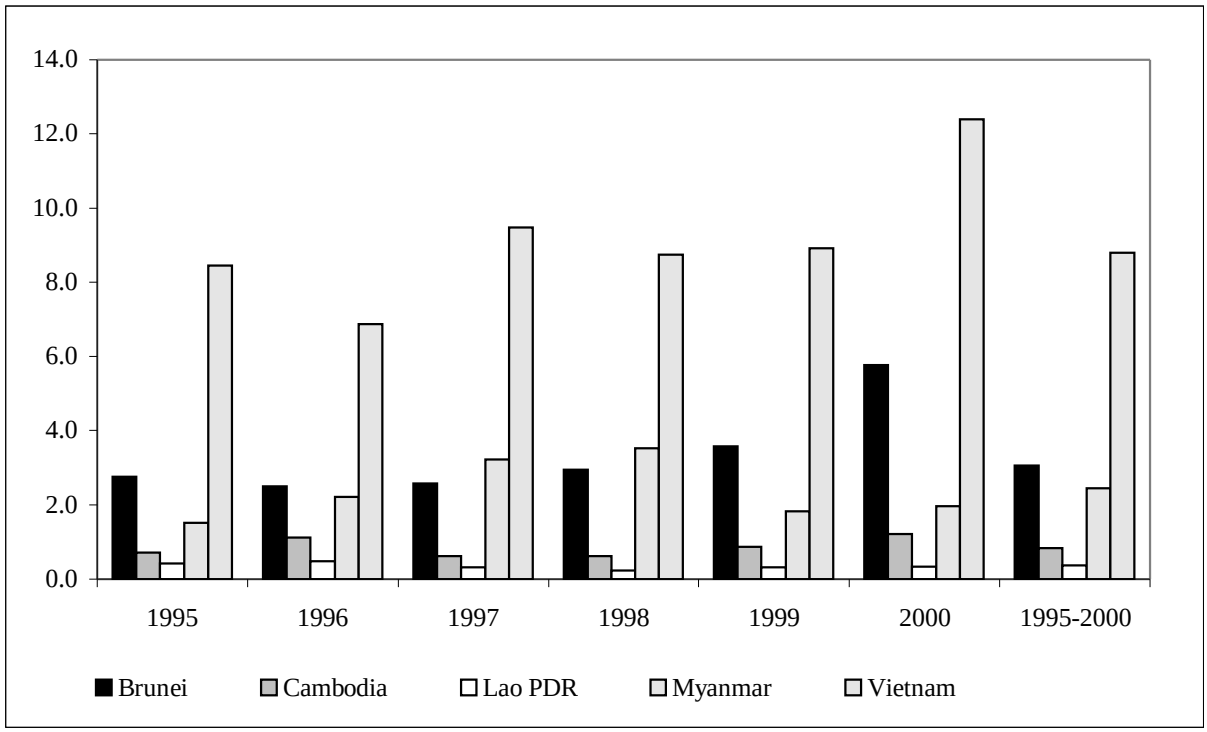


Figure A2 : FDI (% share of total ASEAN) in ASEAN 5 by Host Country, 1995-2000

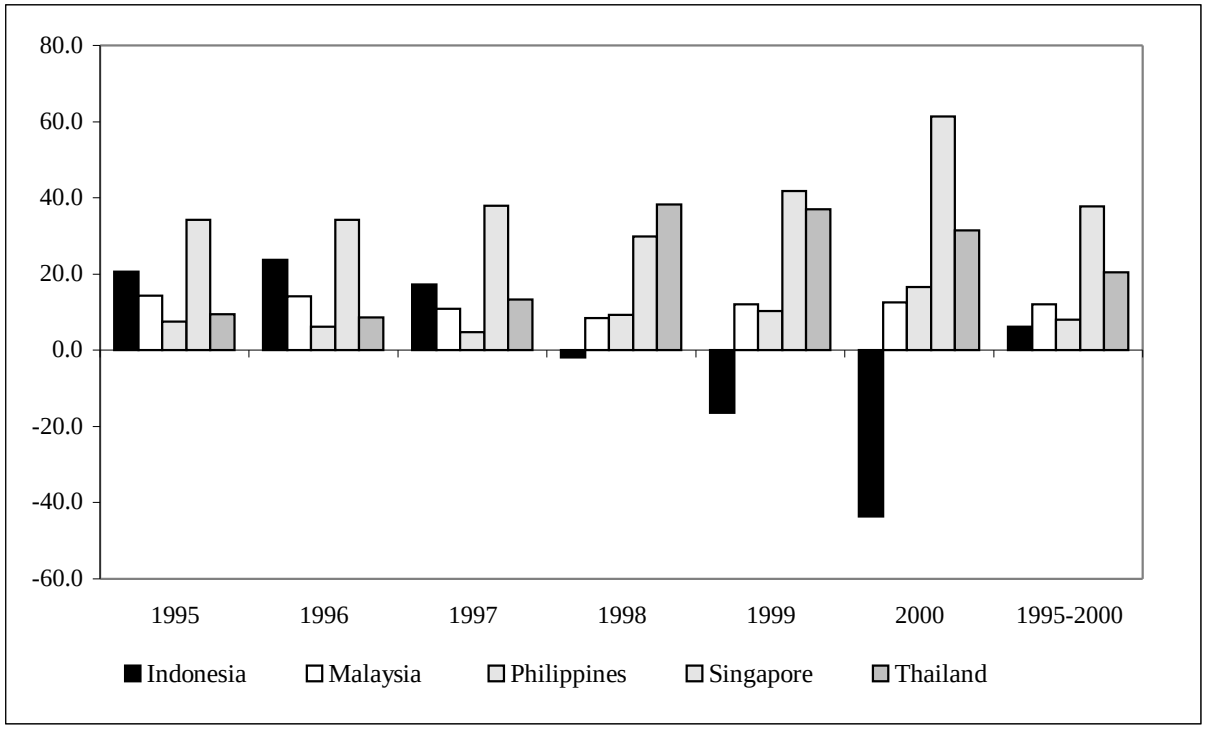


Figure A3 : FDI (% share of total ASEAN) in ASEAN 5 from ASEAN by Source Country, 1995-2000

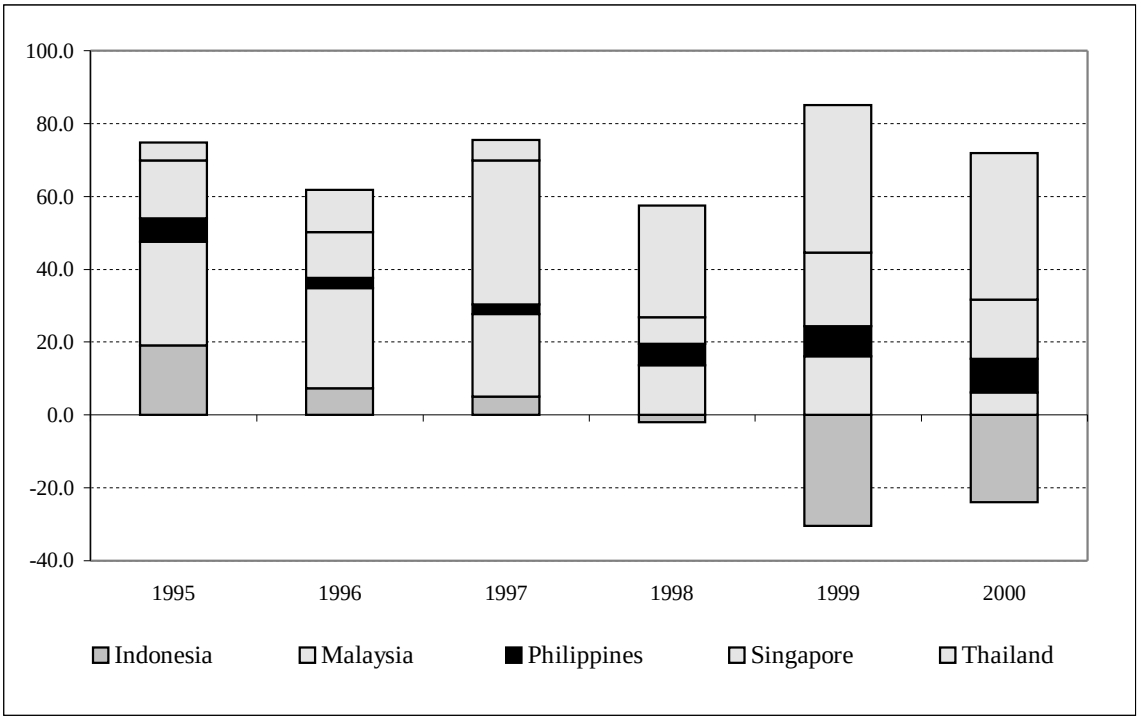
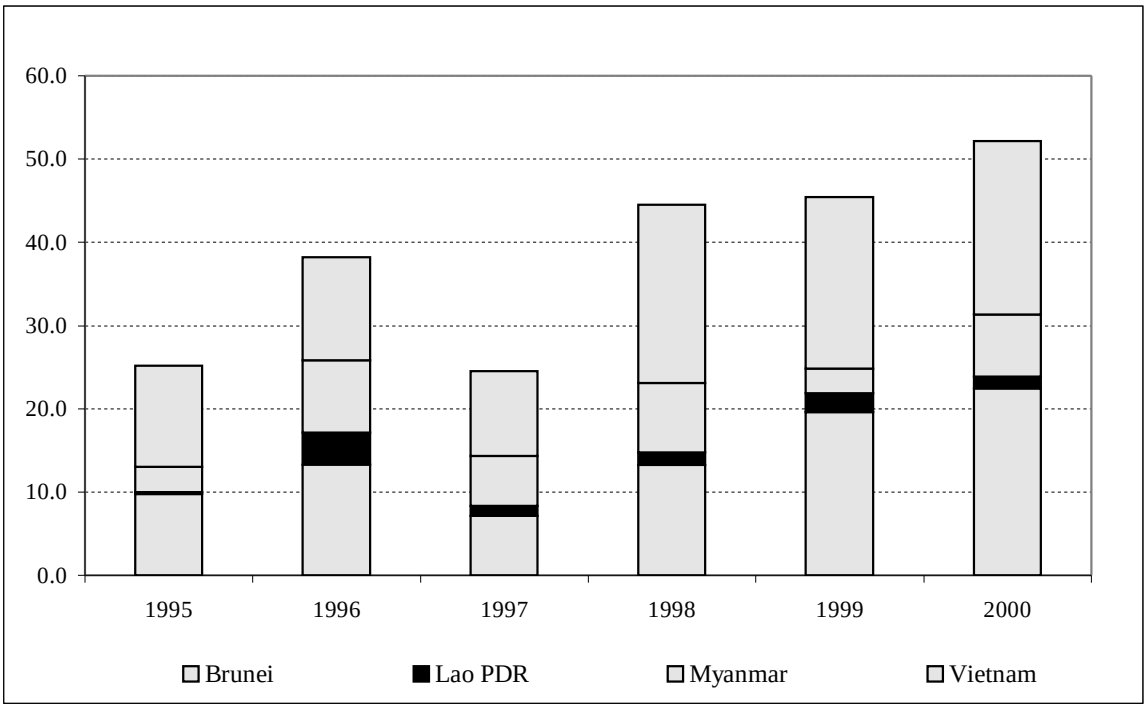


Figure A4 : FDI (% share of total ASEAN) in BLMV from ASEAN by Source Country,1995-2000



Appendix 4

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Appendix 6

Glossary of index definitions and availability of statistics

Key:

1 Statistics published by the ASEAN Secretariat (in the Statistical Yearbook and other documents and publications).

2 Statistics available in the ASEAN Secretariat but not publicly available

3 Statistics available in all Member Countries but not consolidated by the Secretariat

4 Statistics currently unavailable in the Secretariat or in Member Countries

Abbreviation	Index name, description and equation number	Page	1	2	3	4
ATIND *at*	Trade within ASEAN index. Value of intra-ASEAN trade in ASEAN in year t, compared to base year 1995. Equation 7.	57	V			
AXMED *it*	Intra-ASEAN intermediate exports index. Value of intra-ASEAN exports of intermediate goods as a percentage of all intra-ASEAN exports from country i, year t, compared to the same percentage for ASEAN as a whole in year t. Equation 2.	39		V		
CEPTCA *it*	CEPT import value index. Value of intra-ASEAN imports traded under CEPT as a percentage of the value of all intra-ASEAN imports to country i in year t, compared to the same percentage for ASEAN as a whole in year t. Equation 14.	61		V		

		Page	1	2	3	4
CEPTE *it*	CEPT eligible index. Value of CEPT eligible intra-ASEAN imports as a percentage of all intra-ASEAN imports by country i, year t, compared to the same percentage for ASEAN as a whole in year t. Equation 10.	60			V	
CEPTI *it*	CEPT IL index. Number of items on the CEPT inclusion list for country i, year t, as a proportion of the average for ASEAN countries taken together in year t. Equation 9.	59		V		
CEPTO *it*	CEPT zero tariff index. Number of items on the CEPT general inclusion list with 0% tariffs in country i, year t, as a proportion of the average for ASEAN countries taken together in year t. Equation 11.	60		V		
CEPTU *it*	CEPT usage index. Value of intra-ASEAN imports traded under CEPT as a percentage of the value of actual intra-ASEAN imports of CEPT eligible products by country i in year t, compared to the same percentage for ASEAN as a whole in year t. Equation 13.	61			V	
CEPTV *it*	CEPT zero percent index. Value of intra-ASEAN imports of items on the CEPT general inclusion list with 0% tariffs as a percentage of all intra-ASEAN imports to country i, year t, compared with the same percentage for ASEAN as a whole in year t. Equation 12.	60		V		
CONTA *it*	ASEAN construction index. Value of construction projects (over US$5 million) won by non host ASEAN companies as a percentage of the total value of projects won in ASEAN country i, year t, compared to the same percentage for ASEAN as a whole in year t. Equation 24.	83				V

		Page	1	2	3	4
$FDIIA_{at}$	Foreign direct investment index. Value of foreign direct investment in ASEAN in year t compared to base year 1995. Equation 15.	66	V			
$FDIINT_{it}$	Intra-ASEAN foreign direct investment index. Value of intra-ASEAN foreign direct investment as a percentage of GDP in country i, year t compared to base year 1995. Equation 17.	69	V			
$FRGTA_{it}$	Intra-ASEAN airfreight value index. Value of intra-ASEAN air freight carried by ASEAN airlines as a percentage of the value of all intra-ASEAN air freight carried to country i in year t, compared to the same percentage for ASEAN as a whole in year t. Equation 22.	81				V
$GEQGDP_{it}$	Portfolio and FDI index. Value of portfolio and FDI assets and liabilities compared to GDP in country i, year t. Equation 20.	76				V
$IAMGDP_{it}$	Intra-ASEAN import index. Value of intra-ASEAN imports as a percentage of GDP in country i, year t, compared to the same percentage for ASEAN as a whole in year t. Equation 3.	46	V			
$IATGDP_{it}$	Intra-ASEAN trade by country index. Value of intra-ASEAN trade as a percentage of GDP in country i, year t, compared to the same percentage for ASEAN as a whole in year t. Equation 5.	48	V			
$IAXGDP_{it}$	Intra-ASEAN export index. Value of intra-ASEAN exports as a percentage of GDP in country i, year t, compared to the same percentage for ASEAN as a whole in year t. Equation 1.	39	V			

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IFIGDP *it*	Foreign assets and liabilities index. Value of stock of aggregate foreign assets and liabilities compared to GDP in country i, year t. Equation 19.	76				V
IIT *ijk*	Intra-industry trade index. Value of exports and imports from industry i in country j to and from country k. Equation 8.	58	V			
IMPT *it*	Intra-ASEAN intermediate imports index. Value of intra-ASEAN imports of intermediate goods over GDP in country i, year t, compared to the same percentage for ASEAN as a whole in year t. Equation 4.	46		V		
INTEGA *at*	ASEAN economic integration index. The combination of the intra-ASEAN trade over time index and the intra-ASEAN foreign direct investment index in year t. Equation 29.	100	V			
INTFDS *it*	Share of intra-ASEAN FDI index. Share of intra-ASEAN FDI compared to total FDI in country I, year t. Equation 16.	67	V			
MARTA *it*	Intra-ASEAN cargo index. Value of intra-ASEAN cargo carried by ASEAN shippers as a percentage of the value of intra-ASEAN cargo carried by all shippers to country i in year t, compared to the same percentage for ASEAN as a whole in year t. Equation 25.	84				V
PGRSA *it*	Intra-ASEAN air passengers index. Number of intra-ASEAN passengers carried by ASEAN airlines as a percentage of the number of intra-ASEAN passengers carried by all airlines to country i in year t, compared to the same percentage for ASEAN as a whole in year t. Equation 23.	82				V

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SMODE *it*	Mode of supply index. Number of offers to liberalize services by country i, up to year t compared to the average for all ASEAN countries taken together up to year t. Equation 21.	80				V
STANDA *it*	Intra-ASEAN approved products index. Value of intra-ASEAN trade for products with ASEAN standards as a percentage of all intra-ASEAN trade for country i in year t compared to the same percentage for ASEAN as a whole in year t. Equation 28.	95				V
TELCO *it*	ASEAN telco index. Value of telecommunication services provided by non host ASEAN companies as a percentage of the value of telecommunication services provided by all companies in country i, year t, compared to the same percentage for ASEAN as a whole in year t. Equation 26.	85				V
TNLTYA *it*	ASEAN transnationality index for country i in year t. Equation 18.	71				V
TRADEA*at*	Intra-ASEAN trade (all ASEAN, time based) index. Value of intra-ASEAN trade for ASEAN as a whole as a percentage of ASEAN GDP in year t compared to base year 1995. Equation 6.	56	V			
VISITA *it*	Intra-ASEAN visitor index. Number of intra-ASEAN visitors as a percentage of all visitors to country i in year t, compared to the average for the same percentage for ASEAN as a whole in year t. Equation 27.	86	V			