Appendix A
AEC Components

In November 2002, the ASEAN Heads of Government meeting in Phnom Penh proposed that the region consider establishing an ASEAN Economic Community (AEC) by 2020. The ASEAN leaders agreed at the Bali ASEAN Summit in October 2003 to create a region in which goods, services, and skilled labor would flow freely, and capital would enjoy freer movement. In the 2007 Cebu Declaration the ASEAN leaders pushed the AEC deadline forward to 2015. In November 2007, the region approved the AEC Blueprint, which puts flesh to the bones of the commitment to create a unified market. The Blueprint was accompanied by a strategic schedule for implementing various measures. As part of this process, ASEAN developed the ASEAN Charter, which will significantly enhance the formal nature of ASEAN integration by making it an international legal entity. The Charter was signed on November 20, 2007 and went into effect after being ratified by all ASEAN Member States on December 15, 2008.

The AEC Blueprint has four parts:

1. **Single Market and Production Base**
   - *Free flow of goods*, including the elimination of tariffs and nontariff barriers (NTBs), rules of origin harmonization and rationalization, trade facilitation, customs integration (including the ASEAN Single Window), and standards and technical barriers to trade (including mutual-recognition arrangements, or MRAs). Trade in goods receives the most attention, in part because it includes areas relevant to the entire AEC project (such as customs and other areas of trade facilitation).
   - *Free flow of services* through a progressive increase in sectoral coverage, a commitment to advance mutual recognition of professional qualifications and services, and financial services liberalization through an ASEAN-X formula (i.e., an allowance for more advanced countries to proceed first).
   - *Free flow of investment*, particularly FDI, building on the process initiated by the ASEAN Investment Area (AIA). The AEC will integrate several agreements pertinent to FDI, such as

investment protection, and emphasize the cornerstones of the AIA (i.e., national treatment, investment facilitation and cooperation, and promotion). This will be done under the ASEAN Comprehensive Agreement on Investment (ACIA), which was approved by the ASEAN Economic Ministers in August 2008.

- *Freer flow of capital*, as a means to strengthen ASEAN capital-market development and harmonize capital market standards and practices in order to facilitate cross-border transactions. It also envisions greater capital mobility and liberalization, though with an emphasis on orderly processes and guarantees of safeguards to maintain stability.
- *Free flow of skilled labor*, especially to facilitate FDI and trade in services, through MRAs and concordance of skills and qualifications.
- *More rapid liberalization of the 12 priority integration sectors*, namely, wood-based products, automotives, rubber-based products, textiles and apparels, electronics, agro-based products, fisheries, e-ASEAN, healthcare, air travel, tourism and logistics.

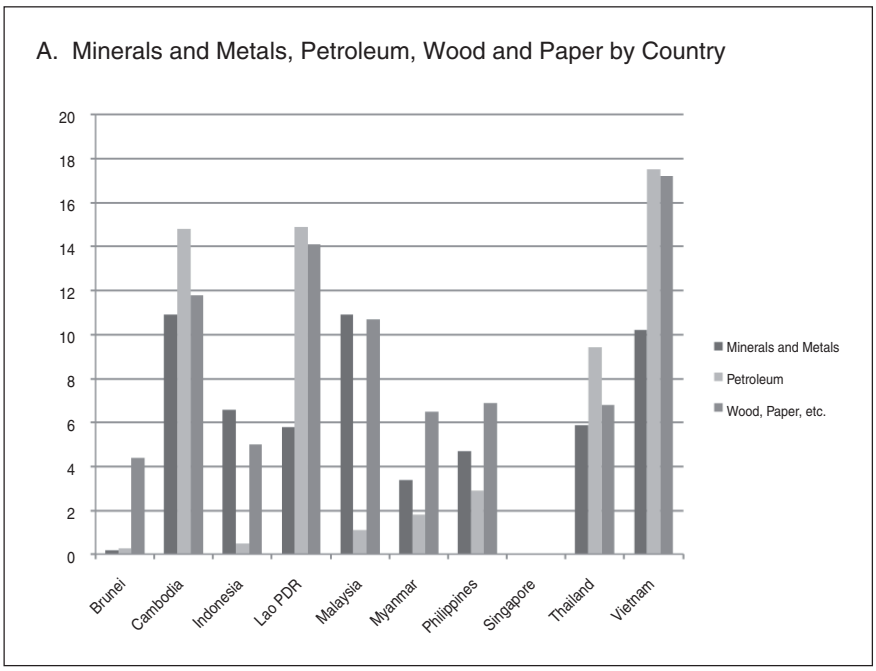
2. **Competitive Economic Region**
   - Establishment of a *clear competition policy*, to ensure a level playing field in the integrated ASEAN market.
   - *Consumer protection*, including the creation of an ASEAN Coordinating Committee on Consumer Protection.
   - Regional commitments in *intellectual property rights protection*, based on the ASEAN IPR Action Plan (2004–2010) and accession to the Madrid Protocol.
   - *Infrastructure development* to improve transport links, narrow development gaps, and enhance regional information infrastructure.
   - *Sectoral cooperation in energy and mining*, to create stable supplies and enhance efficiency.
   - *Taxation rationalization*, featuring a bilateral network that would avoid double taxation.
   - Approaches to *e-commerce*, to be implemented through the e-ASEAN Framework Agreement.

3. **Equitable Economic Development**
   - *Fostering SME development* in ASEAN, with an emphasis on taking advantage of ASEAN's diversity.
   - *Enhancing the goals of the Initiative for ASEAN Integration* launched in 2000, to narrow development gaps between the older ASEAN-6 members and the newer ASEAN members (CLMV countries).

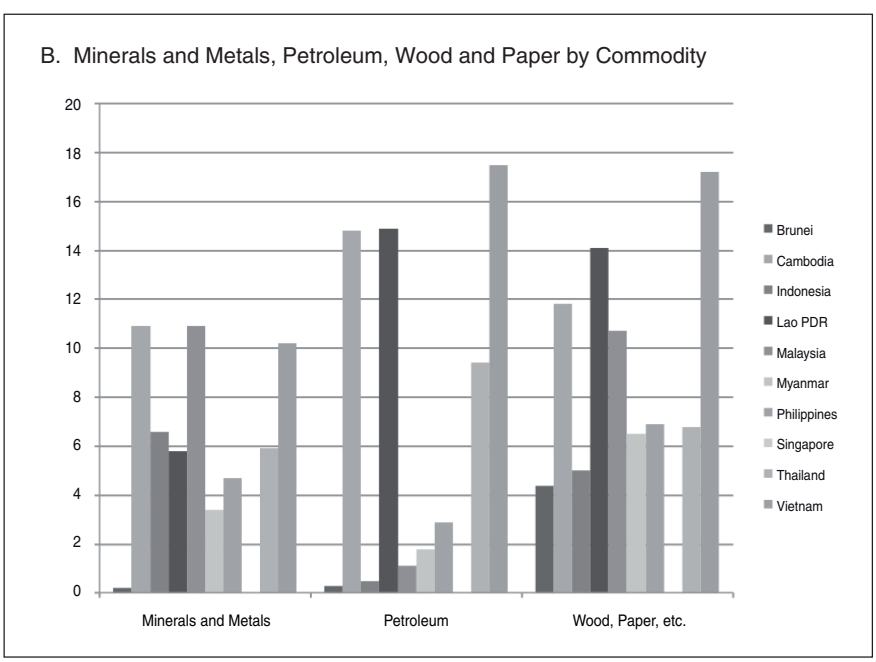
4. **Integration into the Global Economy**
   - ASEAN is to work toward "*ASEAN Centrality*" in external foreign economic relations (including in the area of free-trade areas and other preferential arrangements with non-partners).
   - *Enhanced participation in global supply networks*, with a strong dedication to the adoption of best international practices and standards.

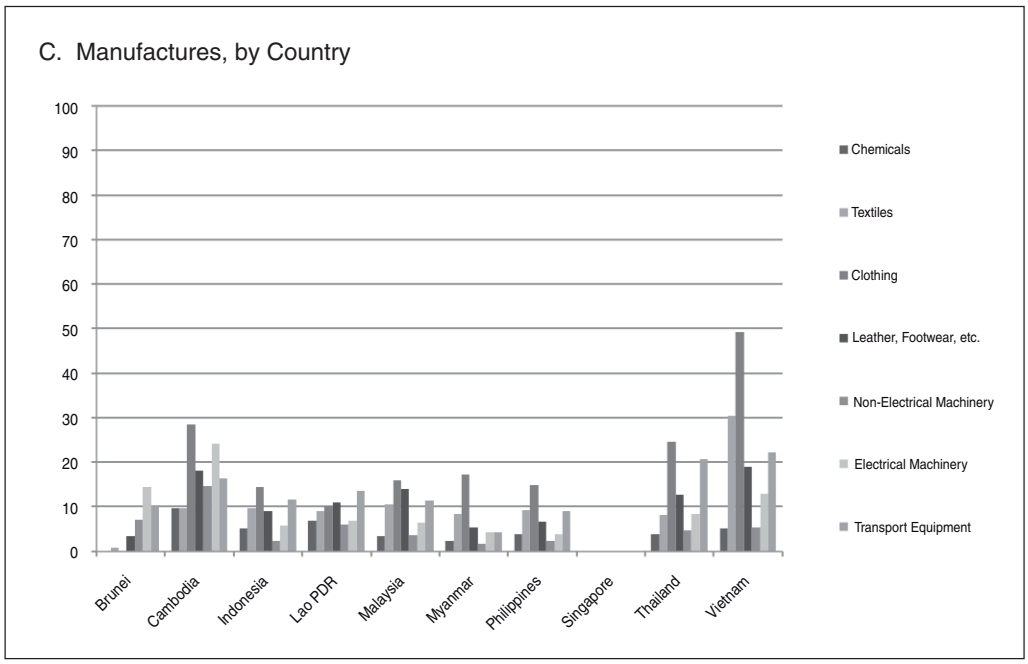
The AEC embraces a wide range of deep integration policies and measures, many of which overlap or are mutually reinforcing. The specifics of many of the proposals will be developed over time, but the AEC Blueprint outlines an ambitious project. We argue that the framework bodes well for the establishment of a substantially unified and competitive marketplace.

Figure A-1
Applied Tariffs in Selected Product Categories



Note: Tariffs are average applied MFN rates, 2007.
Source: WTO Tariff Profiles 2008.





Note: Tariffs are average applied MFN rates, 2007.
Source: WTO Tariff Profiles 2008.

Table A-1
Comparative Trade Regimes (2007/2008)

Applied Duties	*Brunei*	*Cambodia*	*Indonesia*	*Lao PDR*	*Malaysia*	*Myanmar*	*Philippines*	*Singapore*	*Thailand*	*Vietnam*
AVERAGE MFN APPLIED DUTIES										
Animal Products	0	27.8	4.4	24.9	0.5	10.7	21.3	0	28.1	20.1
Dairy Products	0	25.8	5.5	8.5	3.4	3.4	3.9	0	15.8	21.9
Fruit, Vegetables, Plants	0	14	5.9	30.3	4.2	11.5	9.4	0	27.6	30.6
Coffee, Tea	1.5	26.7	8.3	24.2	9	14.0	15.8	0	23.1	37.9
Cereals & Preparations	0.1	19.8	6.3	9.2	5.1	8.7	10.9	0	19.4	27.4
Oilseeds, fats & oils	0	9.1	4	12	1.7	1.7	5.6	0	19.1	13.4
Sugars & Confectionery	0	7	10.4	12.5	2.8	5.4	16	0	32.2	17.7
Beverages & Tobacco	138.1	33.1	51.8	31.3	136.6	23.2	8.2	2.1	33.4	66.6
Cotton	0	7	4	8	0	0.8	2.6	0	0	6
Other Agricultural Products	0	15.5	4.3	9.8	0.6	3.1	3.4	0	10.3	7.8
Fish & Fish Products	0	18.9	5.8	12.7	2.2	8.2	8.0	0	14.5	31.3
Minerals & Metals	0.2	10.9	6.6	5.8	10.9	3.4	4.7	0	5.9	10.2
Petroleum	0.3	14.8	0.5	14.9	1.1	1.8	2.9	0	9.4	17.5
Chemicals	0.4	9.6	5.2	6.8	3.3	2.3	3.8	0	3.8	5.2
Wood, Paper, etc.	4.4	11.8	5	14.1	10.7	6.5	6.9	0	6.8	17.2
Textiles	0.9	9.6	9.3	8.9	10.5	8.4	9.3	0	8.1	30.4
Clothing	0	28.5	14.4	10	16	17.2	14.9	0	24.5	49.3
Leather, Footwear, etc.	3.4	18	9	11	13.9	5.3	6.7	0	12.7	19
Non-Electrical Machinery	7	14.6	2.3	6	3.6	1.7	2.3	0	4.7	5.4
Electrical Machinery	14.4	24.2	5.8	6.8	6.5	4.3	3.8	0	8.3	12.8
Transport Equipment	10	16.3	11.6	13.5	11.4	4.2	9.0	0	20.7	22.2
Manufactures	5	14.6	6.9	10.3	4.9	6.5	4.8	0	11	15.2
MAXIMUM MFN APPLIED DUTIES										
Animal Products	0	35	25	30	20	15.0	45.0	0	50	50
Dairy Products	0	35	10	20	24	5.0	7.0	0	30	30
Fruit, Vegetables, Plants	0	35	25	40	82	15.0	40.0	0	123	50
Coffee, Tea	6	35	15	40	25	20.0	45.0	0	40	50
Cereals & Preparations	20	35	150	30	40	15.0	50.0	0	62	50
Oilseeds, fats & oils	0	35	15	30	20	15.0	15.0	0	40	50
Sugars & Confectionery	0	7	31	30	15	20.0	65.0	0	65	50
Beverages & Tobacco	>1000	35	150	40	>1000	40.0	15.0	112	215	100
Cotton	0	7	5	20	0	1.0	3.0	0	0	10
Other Agricultural Products	0	35	15	30	25	15.0	35.0	0	30	40
Fish & Fish Products	0	35	15	30	20	15.0	15.0	0	154	50
Minerals & Metals	20	35	30	20	60	30.0	20.0	0	30	60

continued on next page

Table A-1 — *cont'd*

Applied Duties	*Brunei*	*Cambodia*	*Indonesia*	*Lao PDR*	*Malaysia*	*Myanmar*	*Philippines*	*Singapore*	*Thailand*	*Vietnam*
MAXIMUM MFN APPLIED DUTIES										
Petroleum	4	35	10	20	5	3.0	3.0	0	20	30
Chemicals	30	35	30	40	50	20.0	30.0	0	30	50
Wood, Paper, etc.	20	35	15	40	40	15.0	30.0	0	138	50
Textiles	10	35	25	30	30	20.0	30.0	0	30	100
Clothing	0	35	15	10	20	20.0	15.0	0	60	50
Leather, Footwear, etc.	20	35	25	30	40	20.0	20.0	0	30	50
Non-Electrical Machinery	20	35	15	40	35	10.0	30.0	0	30	100
Electrical Machinery	20	35	15	20	50	20.0	30.0	0	30	50
Transport Equipment	20	35	60	40	60	40.0	30.0	0	80	150
Manufactures	20	35	20	40	50	30.0	15.0	0	141	60
DUTY-FREE MFN APPLIED RATES (%)										
Animal Products	100	9.3	16.2	0	97.2	24.7	0.0	100	13.8	7.2
Dairy Products	100	0	0	0	52.6	0.0	0.0	100	0	0
Fruit, Vegetables, Plants	100	4.5	6.2	0	63.9	7.8	0.0	100	1.1	8.8
Coffee, Tea	54.2	0	4.2	0	29.2	0.0	0.0	100	0	0
Cereals & Preparations	99.7	3.8	6.8	0	58.6	16.5	0.6	100	0.6	3.2
Oilseeds, fats & oils	100	1.9	38.2	0	69.2	0.6	0.0	100	0	15.6
Sugars & Confectionery	100	0	0	0	81.3	0.0	0.0	100	0	12.5
Beverages & Tobacco	48.6	0	1.1	0	10.9	0.0	0.0	96.9	2.2	0
Cotton	100	0	20	0	100	20.0	0.0	100	100	40
Other Agricultural Products	100	9.7	22.3	0	93.3	0.4	0.0	100	3.2	33.9
Fish & Fish Products	100	0.9	4.9	0	77.6	8.6	0.0	100	0	1.3
Minerals & Metals	96.3	6.1	19.7	0	49.9	6.0	0.9	100	28.9	38.1
Petroleum	81.9	0	95	0	77.9	0.0	0.0	100	24	0
Chemicals	94.4	11.6	21.6	0	82.4	1.2	0.8	100	43.4	62.4
Wood, Paper, etc.	71.1	1.5	27.6	0	42.7	4.9	2.8	100	23.4	12.4
Textiles	85.8	0.3	1	0	23.8	0.2	0.3	100	0	8
Clothing	100	0	0	0	17.3	0.0	0.0	100	0	0
Leather, Footwear, etc.	67.2	1.2	13	0	40.2	0.0	1.2	100	9.7	3.6
Non-Electrical Machinery	57.1	3.6	70.7	0	74.5	6.5	5.6	100	15.5	65.7
Electrical Machinery	10.2	0	32.6	0	56.4	0.0	21.0	100	23.2	33.1
Transport Equipment	49.9	8.6	39.2	0	41.4	3.0	0.6	100	5.7	38.5
Manufactures	54.2	12.9	18.5	0	66.7	0.2	7.8	100	14.2	35.2

Appendix B
The CGE Model

In this appendix, we provide details regarding the CGE model used in Chapter 2.

PRODUCTION AND TRADE

Agriculture, mining, and government services sectors are assumed to exhibit perfect competition. In each of these sectors, there is a representative firm operated under constant returns to scale technology. Trade is modeled using the Armington assumption for import demand. The manufacturing and private services sectors are characterized by monopolistic competition, and their structure of production and trade follows Melitz (2003). Each sector with monopolistic competition consists of a continuum of firms that are differentiated by the varieties they produce and their productivity. Firms face fixed production costs, resulting in increasing returns to scale. There is also a fixed cost and a variable cost associated with the exporting activities. On the demand side, the agents are assumed to have Dixit-Stiglitz preference over the continuum of varieties. As each firm is a monopolist for the variety it produces, it sets the price of its product at a constant markup over its marginal cost. A firm enters domestic or export markets if and only if the net profit generated from its domestic sales or exports in a given country is sufficient to cover the fixed cost. This zero cutoff profit condition defines the productivity thresholds for firms entering domestic and exports markets, and in turn determines the equilibrium distribution of non-exporting firms and exporting firms, as well as their average productivities. Usually, the combination of a fixed export cost and a variable (iceberg) export cost ensures that the exporting productivity threshold is higher than that for production for domestic market (i.e., only a small fraction of firms with high productivity are in export markets). These firms supply both domestic and export markets. We assume there is no entry or exit of firms in these monopolistic sectors (i.e., the number of firms is fixed).

Production technology in each sector is modeled using nested constant elasticity of substitution (CES) functions. At the top level, the output is produced as a combination of aggregate intermediate

demand and value added. At the second level, aggregate intermediate demand is split into each commodity according to Leontief technology. Value added is produced by a capital-land bundle and aggregate labor. Finally, at the bottom level, aggregate labor is decomposed into unskilled and skilled labor, and the capital-land bundle is decomposed into capital and land (for the agriculture sector) or natural resources (for the mining sector). At each level of production is a unit cost function that is dual to the CES aggregator function and demand functions for corresponding inputs. The top-level unit cost function defines the marginal cost of sectoral output.

INCOME DISTRIBUTION, DEMAND AND FACTOR MARKETS

Incomes generated from production accrue to a single representative household in each region. A household maximizes utility using Extended Linear Expenditure System (ELES), which is derived from maximizing the Stone-Geary utility function. The consumption/savings decision is completely static. Savings enter the utility function as a "good" and its price is set as equal to the average price of consumer goods. Investment demand and government consumption are specified as a Leontief function. In each sector a composite good defined by the Dixit-Stiglitz aggregator over domestic and imported varieties is used for final and intermediate demand.

All commodity and factor markets are assumed to clear through price adjustment. There are five primary factors of production. Capital, agricultural land, and two types of labor (skilled and unskilled) are fully mobile across sectors within a region. In natural resource sectors of forestry, fishing, and mining, a sector-specific factor is introduced into the production function to reflect resource constraints. For all primary factors, their stocks are fixed.

MACRO CLOSURE

There are three macro closures in the model: the net government balance, the trade balance, and the investment and savings balance. We assume that government consumption and saving are exogenous in real terms. Any changes in the government budget are automatically compensated for by changes in income tax rates on households.

The second closure concerns the current account balance. In each region, the foreign savings are set exogenously. With the price index of OECD manufacturing exports being chosen as the numéraire of the model, the equilibrium of the foreign account is achieved by changing the relative price across regions (i.e., the real exchange rate).

Domestic investment is the endogenous sum of household savings, government savings, and foreign savings. As government and foreign savings are exogenous, changes in investment are determined by changes in the levels of household saving. This closure rule corresponds to the "neoclassical" macroeconomic closure in the CGE literature.

Appendix C
Developments in Logistics and Aviation

LOGISTICS SECTOR DEVELOPMENT IN ASEAN

Logistics is an important aspect of economic integration. An effective logistics system results from efficient coordination of infrastructure development across a region. A key issue is multimodal transportation. De Souza et al. (2007) note that the literature on this topic outlines the need for intermodal transport networks, benchmarking of intermodal freight transport, and evaluation of the cost and time benefits of using intermodal transport.

Several methods have been used to study multimodal transport. Case study research focusing on cost and time shows the cost and efficiency advantages of different combinations of routes and modes for freight transportation in ASEAN (Banomyong 2000, 2004). Studies on regional issues related to multimodal transport have been conducted in the EU (Lewis et al. 2001), APEC (Goetz et al. 2002), etc. The focus of these studies ranges from the benchmarking of costs and analysis of issues related to intermodal transport to theoretical studies of these transport networks (Stank and Roath 1998).

Furthermore, Arnold and Villareal (2002) examine the logistics of selected commodities produced in the Philippines for export. They assess the effects of logistics impediments on the total supply chain, market price, and household budgets. Arnold (2003) has also studied logistics development and trade facilitation in the Lao PDR. He identifies a number of problems in the transport network connected to the Lao PDR as well as in financial institutions, customs procedures and duties, and trade and transit agreements) and suggests improvements to facilitate trade. Related to this, Goh and Ang (2000) examine logistics development in the Greater Mekong Sub-region.

Carana (2004) examines the impact of transport and logistics on Indonesia's trade competitiveness. It investigates constraints on transport modes, intermodal networks, infrastructure, customs practices and procedures, trade-related banking and financial practices, transport intermediaries as well as the overall development of Indonesia's transport and logistics system. ALMEC (2002) analyzes the development of the maritime transport system in ASEAN, including the liberalization of shipping, port systems, and logistics development. It also employs a case study to investigate the access to maritime

transport in the Lao PDR. REPSF (2005) identifies the measures of the efficiency and competitiveness of shipping services between ASEAN ports. It analyzes the status quo of intra-ASEAN shipping and proposes changes needed to improve system performance. None of these reports, however, quantify the benefits of regional cooperation. They suggest only that closer integration will bring about the full potential benefits of the maritime system.

De Sauza et al. (2007) identify barriers to service logistics development, including customs, foreign investment, and mode-specific constraints and show that "logistics friendliness" varies across member states: Singapore — very good; Brunei and Thailand — good; Philippines, Cambodia, Vietnam, Myanmar, Lao PDR and Malaysia — average; and Indonesia — weak.

AVIATION SECTOR

Policy and Policy Objectives

In their survey of ASEAN Member States' aviation policies, Forsyth et al. (2004) find that the more developed countries have clear policy objectives and well-developed policies for the sector. For example, policy in Singapore focuses on promoting Singapore as an aviation hub. To become a hub, Singapore has to adopt liberal policies that attract airlines. Thus, it has been willing to grant market access liberally to foreign carriers. In a world of bilateral aviation agreements, Singapore has been able to obtain market access for its own carrier. Thailand also has several broad objectives for aviation: support Thailand's aviation network; promote Thailand as a regional aviation hub and national economic and tourism development center; expand and upgrade facilities at regional airports in support of regional economic expansion and tourism and encourage their optimum use; expedite construction of Bangkok's new airport (Surarnabhumi Airport); and implement intermodal linkages between the aviation, road, rail and maritime sectors.

Malaysia too has adopted a liberal approach to aviation development in order to support growth drivers such as tourism. Policy was liberalized starting in 1993: new entrants were then allowed to compete with Malaysia Airlines, liberal traffic rights were granted to carriers from countries willing to offer reciprocal rights, and the government aggressively developed physical infrastructure (notably KLIA) and supported human resource development.

In contrast, aviation policies in Myanmar, Lao PDR, and Cambodia are just now being developed. Myanmar in fact does not have a clearly enunciated aviation policy, preferring to deal with each situation as it arises. In general, these countries are more concerned with subregional agreements than with the development of policies across ASEAN or between ASEAN and the wider world.

Liberalization Benefits

However, the benefits of a liberalized aviation sector are significant. In 1993, the EU formed a single aviation market. CAPA Consulting (2004) finds that the number of airline routes in the EU increased by 170 percent since then and the number of airlines operating in the EU-15 rose by 20 percent (as compared to 1990). More cities and remote regions are now being served by air transport, with passengers enjoying greater choice of destinations and more direct flights. CAPA Consulting also suggests that carrier competition has increased. Between 1992 and 2006, the number of routes with more than two competitors rose by 300 percent, with a corresponding drop in ticket prices. In countries that acceded to the EU in 2004[1] air traffic more than doubled in just two years (to 2006).

Overall, much of the growth is due to low-cost carriers, whose share of seat capacity grew from 1 percent in 1993 to 28 percent in 2006. In response, traditional network carriers have developed more consumer-friendly pricing and services. Apart from liberalizing the air transport industry, the European single aviation market has established common rules to secure a level playing field for market players.

Market integration has not compromised competition or standards for safety, security, or the environment. The EU now has plans to streamline regulations and rules into a single regulation on the internal aviation market, with a view to creating a full-fledged European Civil Aviation Code. The key principle here would be further regulatory convergence for the European aviation industry. In addition, the EU is increasingly behaving as a unified entity in negotiating aviation agreements with third states. This gives it more clout on the aero-political stage. It has strongly influenced the reform of the international framework for aviation, particularly in relation to rules on market access, cross-border mergers, and international competition.

EU carriers now stand to benefit from liberalized access to third states, as well as the ability to consolidate and merge and to draw greater equity injections across boundaries. Without doubt the single aviation market made possible the Air France–KLM and Lufthansa–Swiss mergers, when such consolidation would have been unthinkable two decades ago. With other EU carriers such as Alitalia and Iberia being potential merger candidates as well, the stage is set for a massive consolidation of the European aviation industry into several well-defined and highly competitive mega-carriers or groups of carriers, even if some nationalist tendencies persist (e.g., in the case of Alitalia in 2008). Overall, the lessons from the European single aviation market are clear: carriers benefit from increased market access and consolidation opportunities, while consumers get more choices and lower prices.

CAPA consulting (2004) also assessed the benefit of the single aviation market in Australia and New Zealand. As neighbors, Australia and New Zealand are very significant trading partners, aided by the "Closer Economic Relations" (CER) pact; a common labor market; and travel between the two countries has assumed domestic characteristics, though each has firm quarantine and related restrictions. They are also both far from their other trading partners and tourists and travelers tend to visit both countries. All these factors stoked the desire to form a single aviation market, though it took a decade to achieve one. CAPA Consulting (2007) suggests that the single aviation market opened up opportunities for airlines and related industries on both sides of the Tasman Sea. Although not all opportunities have been fully or successfully taken up, trade and travel have undoubtedly benefited, each contributing to the economic and social well-being of both countries.

Australia and New Zealand still maintain sovereignty over their bilateral rights, operate their own aviation safety systems and procedures, and have independent air navigation system providers. Rather than seeking full regulatory harmonization, the two countries have settled, at least for the time being, on mutual recognition. The differences in the areas to which their respective competition laws applied, together with the market prominence of the two major national carriers, Qantas and Air New Zealand, have precluded regulatory approval for their consolidation.

Aviation Infrastructure

Forsyth et al. (2004) note that lack of or inadequate airport infrastructure constrains the development of air transport, especially where air traffic is growing rapidly, as it is in several of the ASEAN Member States. The use of preferred airports may have to be rationed, and air transport policies often seek to divert traffic to less busy airports.

Some countries in ASEAN have good aviation infrastructure. For instance, Singapore is noted for the quality of its infrastructure. While Changi Airport has adequate capacity at the moment, further expansion is planned. A new terminal is being built and there are plans to build a new runway within the next decade. Similarly, there are no significant physical or economic infrastructure constraints in Malaysia, although the government aims to improve the efficiency of Kuala Lumpur International Airport (KLIA) in a bid to enhance its claims for hub status.

In other ASEAN Member States, inadequate infrastructure constrains the development of air services. For example, some Indonesian regional airports are unable to accommodate aircraft types operated by foreign airlines (e.g. Pontianak) while others have inadequate terminal facilities (e.g. Medan). Similarly, the Ninoy Aquino International Airport in Manila lacks facilities for transit and transfer passengers, in part due to delays in opening the recently constructed Terminal 3. Investment is required at secondary gateways such as Clark and Laoag. Inadequate runway length and/or width may also constrain air services. Yangon's international airport is limited to B763/AB6 short haul operations. While this is not a serious constraint at present, were the Myanmar economy to be opened up to tourism, runway limitations could pose a serious constraint on growth. Runway width limitations at Phnom Penh prevent landings by B777 and A320 aircraft.

Airline growth may be constrained by a scarcity of risk finance (Forsyth et al. 2004). Privately owned airlines need finance, and given the profit records of many airlines lenders may not be willing to lend or, when they do, demand a high risk premium. Airlines that have experienced low profitability recently or that are relatively new and have not had an opportunity to establish a sound record, may find it difficult to obtain risk finance for expansion.

Airline viability may be an issue: it is normally handled by the designating state. It is difficult for a state to refuse a designation by another state on the grounds of lack of financial viability. Many countries have imposed bonding requirements on charter operators, but in a liberalized environment the distinction between scheduled and charter operators is blurred, as the issues are linked. It may be that ASEAN Member States could agree among themselves on a bonding scheme for new entrant carriers in order to provide the desired level of consumer protection if it is felt that there is an unacceptable level of risk of financial failure resulting in financial loss to consumers. There are of course other regulatory issues. Some, such as air safety and licensing, are specific to the aviation sector while others, such as environmental protection, have broad application.

Forsyth et al. (2004) suggest that liberalization of the aviation sector in ASEAN will bring about benefits through two channels. First, passengers will gain from lower fares and better services and airlines will gain from access to new markets and overall lower costs (even though fares are lower). Second, countries gain from tourism expenditure as lower fares and better services stimulate inbound tourism. Outbound tourism will also increase for some countries, and some countries may lose from this effect. Forsyth et al. also note other impacts, such as on government revenue, foreign exchange, employment, and business communications within ASEAN.

NOTE

1. That is, Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia.

Table C-1
Sensitivity Analysis Results for All Countries (Dependent variable: in GDP per capita)

Variable	*Coefficient*		*S.E.*	*Obs.*	*Groups*	*Z-variables*	*EBA test*
		COMPETITION POLICY					
Openness	High:	0.0002	0.0004	220	38	GOV,INF,GDC	
	Base:	–0.0003	0.0004	287	46		Fragile
	Low:	–0.0002	0.0004	287	46	GOV	
Legal and regulatory	High:	0.0083	0.0077	177	34	INF,GDC	
	Base:	0.0015	0.0079	246	45		Fragile
	Low:	–0.0023	0.0099	177	34	GDC	
Protectionism	High:	0.0128 *	0.0066	247	45	GOV,INF	
	Base:	0.0127	0.0080	247	45		Fragile
	Low:	0.0022	0.0094	178	34	GOV,GDC	
Public sector contracts	High:	0.0243 **	0.0105	247	45	GOV	
	Base:	0.0244 **	0.0100	247	45		Fragile
	Low:	0.0158	0.0126	178	34	GOV,GDC	
International transactions	High:	0.0111	0.0102	247	45	GOV	
	Base:	0.0118	0.0105	247	45		Fragile
	Low:	0.0002	0.0080	178	34	GOV,INF,GDC	
Foreign investors	High:	0.0463 ***	0.0095	247	45	GOV	
	Base:	0.0467 ***	0.0096	247	45		Robust
	Low:	0.0385 ***	0.0091	178	34	INF,GDC	
Subsidies	High:	0.0213	0.0180	73	30	GDC	
	Base:	0.0203	0.0148	103	42		Fragile
	Low:	0.0103	0.0171	73	30	GOV,INF,GDC	
Competition legislation	High:	0.0288 ***	0.0075	247	45	GOV	
	Base:	0.0293 ***	0.0078	247	45		Fragile
	Low:	0.0120	0.0074	178	34	INF,GDC	
Product legislation	High:	0.0197 **	0.0090	247	45	GOV	
	Base:	0.0196 **	0.0092	247	45		Fragile
	Low:	0.0084	0.0102	178	34	GOV,GDC	
Value system	High:	0.0182 **	0.0090	247	45	GOV	
	Base:	0.0174 **	0.0087	247	45		Fragile
	Low:	–0.0045	0.0093	178	34	GOV,INF,GDC	
Capital markets	High:	0.0294	0.0194	66	35	GOV	
	Base:	0.0311	0.0194	66	35		Fragile
	Low:	0.0193	0.0233	45	24	INF,GDC	
Immigration laws	High:	0.0155 *	0.0080	178	34	GOV,INF,GDC	
	Base:	0.0148 **	0.0066	247	45		Fragile
	Low:	0.0105	0.0089	178	34	GOV,GDC	
Bureaucracy	High:	0.0188 **	0.0086	247	45	GOV	
	Base:	0.0189 **	0.0086	247	45		Fragile
	Low:	0.0142 *	0.0077	247	45	GOV,INF	
Transparency	High:	0.0103 *	0.0053	247	45	GOV	
	Base:	0.0103 *	0.0053	247	45		Fragile
	Low:	0.0002	0.0064	178	34	GOV,INF,GDC	
Price controls	High:	0.0209 **	0.0091	178	34	GDC	
	Base:	0.0203 **	0.0083	247	45		Robust
	Low:	0.0151 **	0.0065	247	45	INF	

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Table C-1 — *cont'd*

Variable	*Coefficient*			*S.E.*	*Obs.*	*Groups*	*Z-variables*	*EBA test*
INTELLECTUAL PROPERTY RIGHTS								
Patents granted to residents	High:	6.69E-07		1.59E-06	240	44	GOV	
	Base:	6.79E-07		1.94E-06	240	44		Fragile
	Low:	1.62E-08		1.57E-06	183	36	GOV,INF,GDC	
Securing patents abroad	High:	4.50E-06	***	1.11E-06	58	33	GDC	
	Base:	3.53E-06	**	1.88E-06	79	39		Fragile
	Low:	1.17E-06		1.23E-06	79	39	INF	
Intellectual property rights	High:	0.0367	***	0.0088	247	45	GOV	
	Base:	0.0372	***	0.0090	247	45		Robust
	Low:	0.0239	***	0.0063	178	34	GOV,INF,GDC	
Number of patents in force	High:	1.33E-04	***	4.28E-05	157	38	INF	
	Base:	1.35E-04	***	4.20E-05	157	38		Fragile
	Low:	–3.26E-05		1.38E-04	122	30	GOV,GDC	
Patent productivity	High:	0.0007		0.0006	198	42	INF	
	Base:	0.0008		0.0006	198	42		Fragile
	Low:	–0.0001		0.0006	147	34	GOV,INF,GDC	
INFRASTRUCTURES								
General								
Customs' authorities	High:	0.0255	***	0.0066	247	45	GOV	
	Base:	0.0257	***	0.0068	247	45		Robust
	Low:	0.0153	**	0.0063	178	34	INF,GDC	
Distribution infrastructure	High:	0.0224	***	0.0069	247	45	GOV	
	Base:	0.0224	***	0.0070	247	45		Robust
	Low:	0.0137	**	0.0064	178	34	INF,GDC	
Roads	High:	0.4045	***	0.0818	185	39	GDC	
	Base:	0.2137	***	0.0574	235	47		Robust
	Low:	0.1968	***	0.0556	235	47	GOV,INF	
Air transportation	High:	6.04E-07	*	3.28E-07	263	46	GOV	
	Base:	6.00E-07	*	3.29E-07	263	46		Fragile
	Low:	4.08E-07		3.25E-07	196	38	INF,GDC	
Technology								
Technological cooperation	High:	0.0167	**	0.0075	247	45	GOV	
	Base:	0.0166	**	0.0075	247	45		Fragile
	Low:	0.0031		0.0071	178	34	INF,GDC	
Energy								
Energy infrastructure	High:	0.0219	**	0.0100	101	31	GDC	
	Base:	0.0256	***	0.0094	142	43		Fragile
	Low:	0.0135		0.0091	101	31	GOV,INF,GDC	

Note: ***, **, * denote 1%, 5%, 10% significance levels respectively.

Table C-2
Sensitivity Analysis Results for Developing Countries (Dependent variable: in GDP per capita)

Variable	*Coefficient*		*S.E.*	*Obs.*	*Groups*	*Z-variables*	*EBA test*
		COMPETITION POLICY					
Openness	High:	0.0008 ***	0.0002	103	17	GDC	
	Base:	0.0003	0.0002	170	25		Fragile
	Low:	0.0002	0.0002	170	25	GOV,INF	
Legal and regulatory	High:	0.0206 ***	0.0067	79	14	GDC	
	Base:	0.0146 ***	0.0039	148	25		Robust
	Low:	0.0108 ***	0.0039	148	25	GOV,INF	
Protectionism	High:	0.0266 ***	0.0090	80	14	GOV,GDC	
	Base:	0.0182 **	0.0079	149	25		Robust
	Low:	0.0166 **	0.0080	149	25	INF	
Public sector contracts	High:	0.0185 *	0.0104	149	25	GOV	
	Base:	0.0145	0.0106	149	25		Fragile
	Low:	0.0143	0.0135	80	14	GOV,INF,GDC	
International transactions	High:	0.0274 **	0.0124	149	25	GOV	
	Base:	0.0268 **	0.0133	149	25		Fragile
	Low:	0.0159	0.0151	80.00	14	GOV,INF,GDC	
Foreign investors	High:	0.0388 ***	0.0141	80	14	INF,GDC	
	Base:	0.0332 ***	0.0115	149	25		Robust
	Low:	0.0321 ***	0.0111	149	25	GOV	
Subsidies	High:	–0.0067	0.0071	64	24	GOV,INF	
	Base:	–0.0075	0.0079	64	24		Fragile
	Low:	–0.0178 **	0.0085	34	12	INF,GDC	
Competition legislation	High:	0.0362 ***	0.0096	80	14	GOV,INF,GDC	
	Base:	0.0271 ***	0.0099	149	25		Fragile
	Low:	0.0222 *	0.0121	80	14	GDC	
Product legislation	High:	0.0223 **	0.0090	149	25	INF	
	Base:	0.0225 **	0.0091	149	25		Fragile
	Low:	0.0088	0.0117	80	14	GOV,GDC	
Value system	High:	0.0240 ***	0.0071	149	25	INF	
	Base:	0.0251 ***	0.0070	149	25		Fragile
	Low:	–0.0027	0.0103	80	14	GOV,GDC	
Capital markets	High:	0.0629 ***	0.0206	22	11	INF,GDC	
	Base:	0.0168	0.0144	43	22		Fragile
	Low:	0.0163	0.0142	43	22	GOV	
Immigration laws	High:	0.0097 *	0.0055	149	25	INF	
	Base:	0.0098 *	0.0056	149	25		Fragile
	Low:	0.0069	0.0078	80	14	GOV,INF,GDC	
Bureaucracy	High:	0.0185 **	0.0085	80	14	GDC	
	Base:	0.0179 ***	0.0069	149	25		Robust
	Low:	0.0151 **	0.0068	149	25	GOV,INF	
Transparency	High:	0.0027	0.0052	149	25	INF	
	Base:	0.0012	0.0052	149	25		Fragile
	Low:	–0.0055	0.0081	80	14	GOV,GDC	
Price controls	High:	0.0776 ***	0.0099	80	14	INF,GDC	
	Base:	0.0248 **	0.0120	149	25		Fragile
	Low:	0.0198	0.0121	149	25	GOV,INF	

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Table C-2 — *cont'd*

Variable	*Coefficient*			*S.E.*	*Obs.*	*Groups*	*Z-variables*	*EBA test*
INTELLECTUAL PROPERTY RIGHTS								
Patents granted to residents	High:	–5.16E-08		6.75E-07	145	25	INF	
	Base:	8.77E-09		6.69E-07	145	25		Fragile
	Low:	–3.09E-07		6.77E-07	145	25	GOV	
Securing patents abroad	High:	2.07E-06	***	6.36E-07	31	17	GOV,GDC	
	Base:	3.59E-07		6.62E-07	52	23		Fragile
	Low:	–1.15E-09		7.94E-07	52	23	GOV,INF	
Intellectual property rights	High:	0.0328	***	0.0091	149	25	INF	
	Base:	0.0329	***	0.0088	149	25		Fragile
	Low:	0.0198		0.0129	80	14	GOV,GDC	
Number of patents in force	High:	7.32E-05		7.54E-05	57	14	GDC	
	Base:	2.38E-05		2.46E-05	92	22		Fragile
	Low:	2.43E-05		2.48E-05	92	22	INF	
Patent productivity	High:	0.0004		0.0004	122	24	INF	
	Base:	0.0003		0.0004	122	24		Fragile
	Low:	0.0001		0.0004	71	16	GOV,GDC	
INFRASTRUCTURES								
General								
Customs' authorities	High:	0.0252	**	0.0120	80	14	GOV,GDC	
	Base:	0.0183	**	0.0080	149	25		Robust
	Low:	0.0178	**	0.0082	149	25	INF	
Distribution infrastructure	High:	0.0180	***	0.0069	149	25	GOV,INF	
	Base:	0.0135	**	0.0069	149	25		Robust
	Low:	0.0149	**	0.0069	149	25	GOV	
Roads	High:	0.0233		0.0220	87	17	GDC	
	Base:	0.0205		0.0134	137	25		Fragile
	Low:	–0.0020		0.0178	87	17	GOV,INF,GDC	
Air transportation	High:	1.33E-07		1.86E-07	90	17	GDC	
	Base:	1.61E-07		1.54E-07	157	25		Fragile
	Low:	9.81E-08		1.79E-07	90	17	GOV,INF,GDC	
Technology								
Technological cooperation	High:	0.0162	**	0.0079	149	25	GOV,INF	
	Base:	0.0145	*	0.0084	149	25		Fragile
	Low:	0.0021		0.0119	80	14	INF,GDC	
Energy								
Energy infrastructure	High:	0.0213	***	0.0066	86	24	INF	
	Base:	0.0216	***	0.0069	86	24		Fragile
	Low:	0.0107		0.0086	45	12	GOV,INF,GDC	

Note: ***, **, * denote 1%, 5%, 10% significant levels respectively.

Table C-3
Sensitivity Analysis Results for All Countries (Dependent variable: share of FDI in GDP)

Variable	*Coefficient*		*S.E.*	*Obs.*	*Groups*	*Z-variables*	*EBA test*
		COMPETITION POLICY					
Openness	High:	6.97E-11 ***	1.79E-11	2936	145	INF,GDC	
	Base:	1.08E-11	6.73E-12	3183	147		Fragile
	Low:	1.12E-10 ***	3.19E-11	2839	141	GOV,GDC	
Legal and regulatory	High:	1.8343 *	1.0755	346	47	INF	
	Base:	1.7602 *	1.0309	346	47		Fragile
	Low:	0.5641 ***	0.2090	255	36	GDC	
Protectionism	High:	2.2012 *	1.2196	341	47	GOV,INF	
	Base:	2.0719 *	1.1731	347	47		Fragile
	Low:	0.7335 ***	0.2691	256	36	INF,GDC	
Public sector contracts	High:	2.1130 *	1.1165	341	47	GOV,INF	
	Base:	1.7105 *	0.9894	347	47		Fragile
	Low:	0.7101 ***	0.2713	256	36	INF,GDC	
International transactions	High:	1.9938	1.7446	341	47	GOV	
	Base:	1.7621	1.6689	347	47		Fragile
	Low:	0.3213	0.3293	256	36	INF,GDC	
Foreign investors	High:	2.8700 *	1.5642	341	47	GOV,INF	
	Base:	2.5661 *	1.4765	347	47		Fragile
	Low:	1.0064 ***	0.2548	256	36	INF,GDC	
Subsidies	High:	0.6839	0.4546	131	35	INF,GDC	
	Base:	–0.4435	0.9724	182	47		Fragile
	Low:	–0.4849	0.9814	182	47	INF	
Competition legislation	High:	4.2099	3.1105	341	47	GOV,INF	
	Base:	3.8946	3.0102	347	27		Fragile
	Low:	0.0142	0.3189	256	36	INF,GDC	
Product legislation	High:	3.1267	1.9511	347	47	INF	
	Base:	3.1209	1.9463	347	47		Fragile
	Low:	0.7990 ***	0.2741	256	36	INF,GDC	
Value system	High:	3.5419	2.5622	347	47	INF	
	Base:	3.5421	2.5610	347	47		Fragile
	Low:	0.5218 *	0.2958	256	36	INF,GDC	
Capital markets	High:	2.5217 **	1.0175	136	46	INF	
	Base:	2.4719 **	1.0075	136	46		Fragile
	Low:	0.5379	0.3920	92	33	GOV,GDC	
Immigration laws	High:	1.0433	0.9861	341	47	GOV,INF	
	Base:	0.8483	0.9487	347	36		Fragile
	Low:	0.2462	0.5010	251	36	GOV,GDC	
Bureaucracy	High:	5.6260	4.0421	347	47	GOV	
	Base:	5.6267	4.0419	347	47		Fragile
	Low:	0.5774	0.3650	256	36	INF,GDC	
Transparency	High:	1.0260	0.9673	347	47	INF	
	Base:	1.0230	0.9616	347	47		Fragile
	Low:	–0.1024	0.2422	251	36	GOV,INF,GDC	
Price controls	High:	1.4118 ***	0.4014	341	47	GOV	
	Base:	1.2022 ***	0.3697	347	47		Robust
	Low:	0.5623 **	0.2490	256	36	INF,GDC	

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Table C-3 — *cont'd*

Variable	*Coefficient*			*S.E.*	*Obs.*	*Groups*	*Z-variables*	*EBA test*
INTELLECTUAL PROPERTY RIGHTS								
Patents granted to residents	High:	–1.73E-05	***	5.13E-06	300	45	INF,GDC	
	Base:	–2.00E-05		2.05E-05	374	48		Fragile
	Low:	–2.36E-05		2.40E-05	369	48	GOV,INF	
Securing patents abroad	High:	–1.59E-05		1.29E-05	133	48	INF	
	Base:	–2.15E-05		1.36E-05	133	48		Fragile
	Low:	–3.42E-05	**	1.39E-05	107	46	GDC	
Intellectual property rights	High:	2.0559		1.3166	341	47	GOV,INF	
	Base:	1.8039		1.2299	347	47		Fragile
	Low:	0.2230		0.2408	256	36	INF,GDC	
Number of patents in force	High:	0.0232	**	0.0092	240	42	GOV,INF	
	Base:	0.0162	*	0.0085	244	42		Fragile
	Low:	0.0003		0.0012	194	39	INF,GDC	
Patent productivity	High:	0.0091		0.0101	291	43	GOV,INF	
	Base:	0.0034		0.0082	291	43		Fragile
	Low:	–0.0017		0.0036	226	39	GDC	
INFRASTRUCTURES								
General								
Customs' authorities	High:	1.5761		1.5426	341	47	GOV	
	Base:	1.4460		1.5107	347	47		Fragile
	Low:	0.1886		0.2417	246	36	INF,GDC	
Distribution infrastructure	High:	0.1636		0.2422	251	36	GOV,GDC	
	Base:	–0.6903		0.4923	347	47		Fragile
	Low:	–0.7468		0.5333	341	47	GOV,INF	
Roads	High:	3.2220		3.8934	356	49	INF	
	Base:	3.1595		3.8126	356	49		Fragile
	Low:	0.6669		0.4300	300	46	INF,GDC	
Air transportation	High:	–1.95E-06		1.48E-06	308	46	GDC	
	Base:	–2.86E-05		2.31E-05	389	48		Fragile
	Low:	–2.84E-05		2.31E-05	389	48	INF	
Technology								
Technological cooperation	High:	–0.4244		0.8215	341	47	GOV	
	Base:	–0.5413		0.7952	347	47		Fragile
	Low:	–1.0354	***	0.3674	251	36	GOV,INF,GDC	
Energy								
Energy infrastructure	High:	1.8028		1.8834	219	47	GOV	
	Base:	1.5271		1.7065	225	47		Fragile
	Low:	–0.1765		0.2453	157	35	GOV,GDC	

Note: ***, **, * denote 1%, 5%, 10% significant levels respectively.

Table C-4
Sensitivity Analysis Results for Developing Countries (Dependent variable: share of FDI in GDP)

Variable	*Coefficient*		*S.E.*	*Obs.*	*Groups*	*Z-variables*	*EBA test*
		COMPETITION POLICY					
Openness	High:	0.0008	0.0061	740	33	INF	
	Base:	0.0015	0.0062	743	33		Fragile
	Low:	–0.0266 **	0.0110	590	30	GOV,INF,GDC	
Legal and regulatory	High:	2.3100	1.4105	193	25	INF	
	Base:	2.3800 *	1.3142	193	25		Fragile
	Low:	0.9772 ***	0.2824	102	14	INF,GDC	
Protectionism	High:	4.8953 *	2.9262	194	25	INF	
	Base:	4.9879 *	2.7850	194	25		Fragile
	Low:	1.4866 ***	0.4123	103	14	INF,GDC	
Public sector contracts	High:	4.1317	3.0606	194	25	INF	
	Base:	4.3321	2.9195	194	25		Fragile
	Low:	0.8638 ***	0.3253	103	14	GDC	
International transactions	High:	8.0400	6.3255	194	25	INF	
	Base:	8.0084	6.3472	194	25		Fragile
	Low:	1.3853 **	0.6062	103	24	INF,GDC	
Foreign investors	High:	7.0126 *	4.0507	194	25	INF	
	Base:	6.9045 *	4.0754	194	25		Fragile
	Low:	1.6598 ***	0.3282	103	14	INF,GDC	
Subsidies	High:	0.3656	1.2075	44	13	GOV,GDC	
	Base:	–1.5346	1.7941	100	25		Fragile
	Low:	–2.9479	1.9848	94	25	GOV,INF	
Competition legislation	High:	6.5419	5.5302	188	25	GOV	
	Base:	6.6393	5.6005	194	25		Fragile
	Low:	–0.0810	0.5869	103	14	GDC	
Product legislation	High:	7.1052	4.9956	194	25	INF	
	Base:	7.1540	4.9741	194	25		Fragile
	Low:	0.8103	0.5641	103	14	INF,GDC	
Value system	High:	6.2015	4.8324	194	25	INF	
	Base:	6.1654	4.3665	194	25		Fragile
	Low:	0.8725 *	0.4795	103	14	INF,GDC	
Capital markets	High:	2.2166 ***	0.7268	36	12	GDC	
	Base:	3.6439	2.4919	75	25		Fragile
	Low:	0.6678	2.5903	69	25	GOV,INF	
Immigration laws	High:	1.4791	1.3533	188	25	GOV	
	Base:	1.2788	1.3395	194	25		Fragile
	Low:	0.5386	0.6955	103	14	GDC	
Bureaucracy	High:	8.5446	6.2176	194	25	INF	
	Base:	8.5762	6.0654	194	25		Fragile
	Low:	0.6516 *	0.3508	103	14	INF,GDC	
Transparency	High:	1.9619	1.8252	194	25	INF	
	Base:	1.8453	1.8453	194	25		Fragile
	Low:	–0.4604	0.4620	98	14	GOV,GDC	
Price controls	High:	4.4613 ***	1.2921	194	25	INF	
	Base:	4.4757 ***	1.3205	194	25		Robust
	Low:	2.2416 ***	0.5777	103	14	INF,GDC	

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Table C-4 — *cont'd*

Variable	*Coefficient*			*S.E.*	*Obs.*	*Groups*	*Z-variables*	*EBA test*
INTELLECTUAL PROPERTY RIGHTS								
Patents granted to residents	High:	–1.26E-05		7.69E-06	134	22	INF,GDC	
	Base:	–2.08E-05		2.38E-05	208	25		Fragile
	Low:	–7.68E-05		5.89E-05	203	25	GOV,INF	
Securing patents abroad	High:	7.44E-06		1.35E-05	44	23	GOV,GDC	
	Base:	–5.75E-06		2.21E-05	70	25		Fragile
	Low:	–7.30E-06		2.60E-05	70	25	GOV	
Intellectual property rights	High:	3.8148		2.3841	194	25	INF	
	Base:	3.9604	*	2.2918	194	25		Fragile
	Low:	0.2220		0.5354	103	24	INF,GDC	
Number of patents in force	High:	0.0284	***	0.0103	139	23	GOV,INF	
	Base:	0.0220	**	0.0103	143	23		Fragile
	Low:	0.0004		0.0026	89	20	GOV,INF,GDC	
Patent productivity	High:	0.0123		0.0409	169	24	INF	
	Base:	0.0105		0.0403	169	24		Fragile
	Low:	–0.0160	**	0.0067	104	24	GOV,INF,GDC	
INFRASTRUCTURES								
General								
Customs' authorities	High:	3.5582		3.2422	188	25	GOV	
	Base:	2.4543		2.8379	194	25		Fragile
	Low:	0.7004		0.5444	103	14	INF,GDC	
Distribution infrastructure	High:	0.6072	*	0.3563	98	14	GOV,GDC	
	Base:	–2.0970		1.9211	194	25		Fragile
	Low:	–1.9087		2.0917	194	25	INF	
Roads	High:	2.1496		3.3155	175	25	GOV	
	Base:	1.8433		3.3179	175	25		Fragile
	Low:	–0.3300		0.5126	119	22	GOV,INF,GDC	
Air transportation	High:	1.63E-06		1.17E-06	125	23	GOV,INF,GDC	
	Base:	–4.41E-05		3.61E-05	206	25		Fragile
	Low:	–4.52E-05		3.58E-05	206	25	INF	
Technology								
Technological cooperation	High:	0.6713		2.3816	188	25	GOV	
	Base:	–0.8853		1.6540	194	25		Fragile
	Low:	–1.1632		0.7124	98	14	GOV,GDC	
Energy								
Energy infrastructure	High:	3.0215		3.1691	124	25	INF	
	Base:	2.9103		3.2013	124	25		Fragile
	Low:	–0.1120		0.5438	61	13	GDC	

Note: ***, **, * denote 1%, 5%, 10% significant levels respectively.

Appendix D
AEC Blueprint Excerpt

D. INTEGRATION INTO THE GLOBAL ECONOMY

64. ASEAN operates in an increasingly global environment, with interdependent markets and globalised industries. In order to enable ASEAN businesses to compete internationally, to make ASEAN a more dynamic and stronger segment of the global supply chain and to ensure that the internal market remains attractive for foreign investment, it is crucial for ASEAN to look beyond the borders of AEC. External rules and regulations must increasingly be taken into account when developing policies related to AEC.

D1. COHERENT APPROACH TOWARDS EXTERNAL ECONOMIC RELATIONS

65. ASEAN shall work towards maintaining "ASEAN Centrality" in its external economic relations, including, but not limited to, its negotiations for free trade (FTAs) and comprehensive economic partnership (CEPs) agreements. This shall be done by:

Actions:

i. Review FTA/CEP commitments *vis-à-vis* ASEAN's internal integration commitments; and
ii. Establish a system for enhanced coordination, and possibly arriving at common approaches and/or positions in ASEAN's external economic relations and in regional and multilateral fora.

D2. ENHANCED PARTICIPATION IN GLOBAL SUPPLY NETWORKS

66. ASEAN shall also enhance participation in global supply networks by:

Actions:

i. Continuing the adoption of international best practices and standards in production and distribution, where possible; and
ii. Developing a comprehensive package of technical assistance for the less developed ASEAN Member States to upgrade their industrial capability and productivity to enhance their participation in regional and global integration initiatives.

Appendix E
ASEAN Free Trade Agreements

As of September 2008

Partner	*Status*	*Description*
China	Framework established in 2002, goods, services, dispute resolution now complete; no agreement yet on investment	ASEAN-China Comprehensive Economic Cooperation Agreement A framework agreement for the FTA plan was signed in 2002. The FTA is targeted to take full effect in 2010 for the six original ASEAN members and in 2015 for the other four. An early harvest program covering trade in goods came into force in July 2005. Negotiations on a dispute settlement were finalized in 2004 and in services in January 2007. The investment agreement is under development.
Japan	Signed 04/2008; implementation planned for 2008	ASEAN-Japan Comprehensive Economic Partnership Japan and ASEAN signed a general framework for a bilateral free trade agreement in October 2003 and agreed to initiate negotiations in November 2004. The Japan-ASEAN FTA Economic Partnership was signed in April 2008 and will have wide coverage, including goods, services, investments, rules of origin, dispute settlement, sanitary and phyto-sanitary regulations, technical barriers to trade, economic cooperation and, on Japan's request, intellectual property rights.
Korea	Implemented (ex. Thailand) 06/2007; agreement reached with Thailand 01/2008	ASEAN-Korea Comprehensive Economic Cooperation Agreement The initial agreement, except for Thailand (due to concerns about agriculture), took effect in June 2007. Thailand

		concluded its agreement in January 2008, receiving more flexibility in cutting and/or waiving tariffs in areas such as steel, cosmetics, and leather.
Australia, New Zealand	Agreement on an FTA reached in 08/2008	ASEAN-Australia and New Zealand Free Trade Agreement Negotiation on a comprehensive FTA in started in 2004 and was agreed on 8 August 2008 and is expected to be signed later in the year.
India	Framework signed, 07/2004, agreement on FTA reached in 08/2008	ASEAN-India Regional Trade and Investment Area FTA agreement was concluded in August 2008 and is expected to be signed later in the year.
United States	N/A	The US is focusing on FTAs with individual ASEAN countries rather than ASEAN as a group. Several negotiations have been launched.
European Union	Under negotiation	ASEAN-European Union Free Trade Agreement The negotiations started on 4 May 2007. The FTA is expected to deepen privatization and deregulation, with the goal of improving business opportunities for European TNCs in the region. The EU will likely push reforms in investment, services and intellectual property. ASEAN will be looking for improved market access to the EU.

Source: ADB Asian Regional Integration Center online data.

Appendix F
ASEAN Member States' Free Trade Agreements

As of July 2008

	Signed	*Negotiation*	*Study*	*Name of Agreement*
Brunei				
Japan	x			Brunei Darussalam-Japan Free Trade Agreement
Pakistan			x	Pakistan-Brunei Darussalam Free Trade Agreement
US			x	Brunei Darussalam-United States Free Trade Agreement
Cambodia				No bilateral FTAs
Indonesia				
Australia			x	Indonesia-Australia Free Trade Agreement
EU			x	Indonesia-European Free Trade Association Free Trade Agreement
India			x	India-Indonesia Comprehensive Economic Cooperation and Partnership Agreement
Japan	x			Indonesia-Japan Economic Partnership Agreement
Pakistan	FA	x		Pakistan-Indonesia Free Trade Agreement
US			x	Indonesia-United States Free Trade Agreement
Lao PDR				
Thailand	x			Lao PDR-Thailand Preferential Trading Arrangement
Malaysia				
Australia		x		Malaysia-Australia Free Trade Agreement
Chile		x		Malaysia-Chile Free Trade Agreement
India			x	India-Malaysia Comprehensive Economic Cooperation Agreement
Japan	x			Japan-Malaysia Economic Partnership Agreement
Korea			x	Korea-Malaysia Free Trade Agreement
NZ		x		Malaysia-New Zealand Free Trade Agreement
Pakistan	x			Malaysia-Pakistan Closer Economic Partnership Agreement
US		x		United States-Malaysia Free Trade Agreement

Myanmar				No bilateral FTAs
Philippines				
Japan	x			Japan-Philippines Economic Partnership Agreement
Pakistan			x	Pakistan-Philippines Free Trade Agreement
US			x	Philippines-United States Free Trade Agreement
Singapore				
Australia	x			Singapore-Australia Free Trade Agreement
Bahrain			x	Singapore-Bahrain Free Trade Agreement
Egypt		x		Singapore-Egypt Comprehensive Economic Cooperation Agreement
EU	x			Singapore-European Free Trade Association
India	x			India-Singapore Comprehensive Economic Cooperation Agreement
Japan	x			Japan-Singapore Economic Agreement for a New-Age Partnership
Jordan	x			Singapore-Jordan Free Trade Agreement
Korea	x			Korea-Singapore Free Trade Agreement
Kuwait		x		Singapore-Kuwait Free Trade Agreement
Mexico		x		Singapore-Mexico Free Trade Agreement
NZ	x			Singapore-New Zealand Closer Economic Partnership
Pakistan		x		Pakistan-Singapore Free Trade Agreement
Panama	x			Singapore-Panama Free Trade Agreement
PRC		x		People's Republic of China-Singapore Free Trade Agreement
Peru	x			Singapore-Peru Free Trade Agreement
Qatar		x		Singapore-Qatar Free Trade Agreement
Ukraine		x		Singapore-Ukraine Free Trade Agreement
UAE			x	Singapore-United Arab Emirates Free Trade Agreement
US	x			Singapore-United States Free Trade Agreement
Thailand				
Australia	x			Thailand-Australia Free Trade Agreement
Bahrain	FA	x		Thailand-Bahrain Free Trade Agreement
Chile			x	Thailand-Chile Free Trade Agreement
EU		x		Thailand-European Free Trade Association Free Trade Agreement
India		x		India-Thailand Free Trade Area
Japan	x			Japan-Thailand Economic Partnership Agreement
Korea			x	Korea-Thailand Free Trade Agreement
Lao PDR	x			Lao PDR-Thailand Preferential Trading Arrangement
Pakistan			x	Pakistan-Thailand Free Trade Agreement
PRC	x			People's Republic of China-Thailand Free Trade Agreement
Peru	FA	x		Thailand-Peru Free Trade Agreement
NZ	x			Thailand-New Zealand Closer Economic Partnership Agreement
US		x		Thailand-United States Free Trade Agreement
Vietnam				
Chile		x		Chile-Vietnam Free Trade Agreement
Japan		x		Japan-Vietnam Economic Partnership Agreement

Note: FA = Framework Agreement.
Source: Asian Development Bank, Asian Regional Integration Center database.

Appendix G
ASEAN Imports and Exports, 2000 and 2006

Imports (US$ million)

	ASEAN	*CER*	*China*	*Japan*	*Korea HK+TWN*		*India*	*US*	*EU*	*World*
					2000					
ASEAN	82,930	9,067	18,653	70,409	17,657	27,742	3,362	51,609	40,896	368,983
Brunei	823	31	17	67	16	75	4	154	225	1,427
Cambodia	554	7	113	58	77	451	9	33	94	1,424
Indonesia	6,487	1,922	2,022	5,397	2,083	2,076	525	3,393	4,216	33,515
Lao PDR	536	6	38	24	5	11	6	5	45	690
Malaysia	19,744	1,893	3,237	17,331	3,663	5,875	725	13,668	9,071	82,204
Myanmar	1,377	19	546	216	318	297	53	19	120	3,039
Philippines	5,364	989	786	6,511	2,754	4,278	167	6,413	3,161	34,491
Singapore	33,278	2,490	7,116	23,189	4,822	8,971	1,076	20,270	16,102	134,633
Thailand	10,319	1,356	3,377	15,315	2,165	3,446	620	7,291	6,489	61,924
Vietnam	4,449	355	1,401	2,301	1,754	2,262	178	364	1,373	15,637
China	22,181	5,737	—	41,520	23,208	13,649	1,350	22,376	30,847	225,175
India	4,382	1,151	1,449	2,016	989	1,561	—	3,152	10,731	50,336
World	435,093	82,702	397,311	512,406	175,382	211,124	47,319	847,988	2,333,280	6,591,170
					2006					
ASEAN	187,719	17,392	83,828	85,252	33,408	47,003	10,454	68,405	69,247	705,806
Brunei	1,170	97	110	107	79	46	43	53	291	2,047
Cambodia	2,164	31	767	83	112	1,071	10	82	188	4,235
Indonesia	37,994	4,058	10,403	7,971	3,542	4,073	1,299	3,386	6,928	89,697

Lao PDR	1,269	21	186	23	18	18	6	7	39	1,633
Malaysia	32,035	2,764	15,887	17,338	7,068	8,394	1,333	16,424	14,946	130,477
Myanmar	1,776	31	1,328	106	155	112	143	8	112	3,910
Philippines	12,494	1,156	6,050	9,372	2,662	7,247	408	8,209	4,971	59,221
Singapore	62,343	4,091	27,242	19,927	10,477	13,382	4,884	30,352	27,253	238,790
Thailand	23,713	3,759	13,641	25,845	5,071	6,132	1,625	8,673	11,241	128,634
Vietnam	12,762	1,385	8,215	4,481	4,224	6,531	703	1,210	3,278	47,162
China	89,549	20,509	—	115,811	89,819	62,603	10,469	59,326	90,677	791,793
India	20,601	7,373	16,047	4,747	4,851	4,724	—	11,100	33,605	184,290
World	812,774	154,172	1,206,450	705,742	353,031	323,286	130,444	1,084,790	4,426,750	12,426,300

Source: ADB, based on UN data.

Exports (US$ million)

	ASEAN	*CER*	*China*	*Japan*	*Korea*	*HK+TAI*	*India*	*US*	*EU*	*World*
					2000					
ASEAN	98,060	11,593	16,377	57,364	15,687	42,801	6,787	80,955	63,952	426,633
Brunei	732	165	56	1,286	407	1	0	378	115	3,161
Cambodia	76	2	24	11	0	15	0	740	232	1,123
Indonesia	10,884	1,626	2,768	14,415	4,318	4,569	1,151	8,489	8,950	62,118
Lao PDR	167	1	6	11	1	3	0	9	103	391
Malaysia	26,068	2,782	3,028	12,780	3,235	9,765	1,925	20,162	13,751	98,154
Myanmar	422	10	113	108	21	64	163	443	331	1,979
Philippines	5,983	328	663	5,609	1,173	5,501	64	11,406	6,919	38,216
Singapore	37,769	3,591	5,377	10,404	4,916	15,855	2,871	23,891	19,325	138,046
Thailand	13,340	1,797	2,806	10,164	1,265	6,242	566	14,706	11,241	68,963
Vietnam	2,619	1,291	1,536	2,575	353	785	47	733	2,986	14,483
China	17,341	3,845	—	41,654	11,293	50,743	1,561	52,162	41,056	249,208
India	2,749	469	758	1,767	457	3,122	—	9,083	10,393	42,626
World	367,458	78,182	211,844	340,085	145,509	323,010	45,056	1,181,050	2,454,500	6,386,460
					2006					
ASEAN	197,919	30,633	76,093	82,292	29,363	73,053	18,978	110,662	99,515	791,733
Brunei	1,731	949	196	2,070	839	3	1	523	199	6,555
Cambodia	175	6	32	103	1	15	0	2,117	743	3,345
Indonesia	23,853	3,559	8,746	21,972	8,908	6,956	3,619	13,038	13,833	113,209
Lao PDR	602	27	45	11	2	40	0	8	116	1,055
Malaysia	41,876	5,227	11,646	14,241	5,806	13,999	5,129	30,191	20,539	160,664
Myanmar	2,378	16	230	223	60	98	527	0	325	4,361
Philippines	10,255	613	14,620	7,318	1,619	7,314	97	9,067	7,259	59,510
Singapore	83,925	11,579	26,513	14,854	8,736	32,675	7,673	27,621	30,638	272,049
Thailand	27,256	4,915	11,806	16,571	2,652	10,536	1,818	19,674	18,099	130,783
Vietnam	5,869	3,744	2,260	4,927	740	1,416	115	8,423	7,766	40,203
China	71,328	15,246	—	91,773	44,558	180,218	14,588	203,898	189,926	969,284
India	10,312	1,094	9,518	3,660	1,906	5,557	—	20,903	25,802	118,995
World	662,780	152,240	769,310	529,306	281,776	547,054	123,794	1,776,390	4,654,940	11,967,300

Source: ADB, based on UN data.