



**POLICY OPTIONS AND CHALLENGES
FOR DEVELOPING ASIA—
PERSPECTIVES FROM THE IMF AND ASIA**
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DETERMINANTS OF GROWTH IN LOW-INCOME ASIA

ARI AISEN
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Definitions

In this Regional Economic Outlook Supplement for Low Income and Small Countries, the following groupings are employed:

South Asia low income and small countries comprises Bangladesh, Bhutan, Maldives, Myanmar, Nepal, Sri Lanka.

East Asia low income and small countries includes Brunei, Darussalam, Cambodia, Lao P.D.R., Mongolia, Papua New Guinea, Timor-Leste.

The Pacific Island Countries (PICs) low income and small countries comprise Fiji, Kiribati, Marshall Islands, Federated States of Micronesia, Palau, Samoa, Solomon Islands, Tonga, Vanuatu.

Emerging Asia refers to China, India, Hong Kong SAR, Korea, Singapore, Taiwan Province of China, Indonesia, Malaysia, the Philippines, Thailand and Vietnam.

Executive Summary

Growth rose to an average 6.5 percent in the low income and small countries (LISCs) in the Asia and Pacific region in 2006, boosted by robust foreign demand. Real GDP growth was particularly strong in South and East Asia LISCs, while the Pacific countries' performance was considerably weaker. The near-term outlook is for an easing in growth as global demand moderates. Raising and sustaining growth at higher levels is the key challenge for the LISCs. Inflation remains in the single digits for most of the region, reflecting relatively prudent fiscal and monetary policies, although price pressures are emerging in some countries. External positions strengthened for the LISCs in South and East Asia in 2006, reflecting the strong foreign demand and high commodity prices, but are expected to moderate in the near term. The Pacific region LISCs suffered from high oil import prices and weak export growth.

Although financial markets remain underdeveloped, the recent rapid expansion of credit for the most part has been welcome, reflecting increased confidence in the macroeconomic environment and bank intermediation. While backward-looking indicators suggest that financial sectors remain sound, authorities should continue to strengthen their efforts to mitigate the possible risks inherent in rapid credit growth for both macroeconomic stability and credit quality.

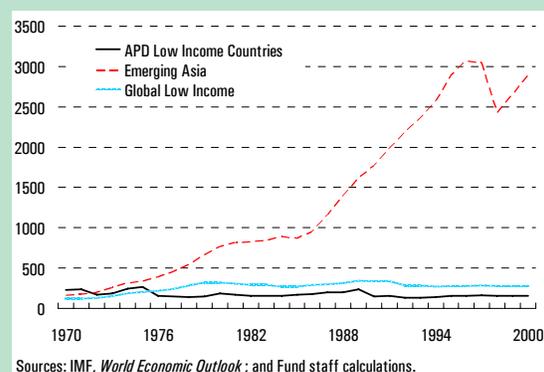
The risks to the outlook on balance are tilted to the downside. Any weakening in global growth prospects would have a negative impact on export and output performance across the region, as would a greater-than-expected easing in commodity prices. Conversely, stronger global growth would have a more positive impact. Although inflation generally remains under control, the accommodative monetary stance in many countries is now under review, as the risks of price pressures emerging from rapid credit growth and projected fiscal stimuli are growing. Nonetheless, well targeted fiscal expansion would be welcome in many countries to help meet pressing infrastructure and development needs, subject to absorptive capacity and available financing. Continued improvements in revenue performance may also be required to ensure fiscal sustainability, while structural reforms are needed across the region to remove many of the impediments faced by the private sector. Finally, political and security developments in several countries raise additional uncertainties.

II. What Holds Back Faster Growth in Low-Income Asia?

During 1970–2000, low-income countries in Asia experienced lower real per capita GDP growth rates than other countries in the region, especially those that developed into the emerging Asia economies (Figure 2.1).¹⁰ This chapter seeks to explore the underlying reasons for this growth performance. It presents preliminary work comparing growth and its determinants in low-income Asia with those in emerging Asia. The growth performance of emerging Asia in the past three decades offers a compelling example of the opportunities lying ahead for low-income countries in Asia.

Figure 2.1 Per Capita GDP, 1970 - 2000

(In US\$, PPP GDP weighted averages)



Note: The author of this chapter is Ari Aisen.

¹⁰ In this paper, low income countries include Bangladesh, Bhutan, Cambodia, Lao P.D.R., Mongolia, Myanmar, Nepal, Sri Lanka, and Vietnam. Emerging Asia countries are Indonesia, Korea, Malaysia, Philippines, Singapore, Thailand, India, and China.

The analysis aims to identify the policies that low-income Asia could implement that seem to have been effective in emerging Asia (Table 2.1 highlights data on selected policy variables for low-income and emerging countries in Asia). Estimates from growth regressions using a panel dataset of 146 developing countries from 1970–2000 show that investment, rule of law, and openness are the main variables explaining the underperformance of growth in low-income Asia relative to emerging Asia (Box 2.1). This chapter looks in turn at the potential importance of each of these variables in explaining growth. It concludes by providing some summary remarks regarding prospective policy recommendations.

Table 2.1. Policy Variables, 1970 - 2000

(Annual averages)

	Per Capita Real Growth Rate	Investment/GDP	Openness	Primary School Enrolment (Gross)	Rule of Law ^{2/}
Average low-income Asia	2.7	21.3	43.5	100.0	-0.6
Bangladesh	1.0	17.1	19.3	77.1	-0.7
Bhutan	4.2	36.4	51.1	...	-0.5
Cambodia	4.2	11.1	85.6	110.2	-0.8
Lao P.D.R.	2.9	14.0	23.7	104.0	-1.1
Mongolia	0.5	37.7	73.5	94.1	0.1
Myanmar	...	16.2	27.8	104.8	-1.3
Nepal	1.6	21.1	28.3	96.8	-0.4
Sri Lanka	3.1	21.6	53.7	104.4	-0.3
Vietnam	4.3	16.1	28.6	108.8	-0.8
Average emerging Asia ^{1/}	4.3	27.5	76.4	103.2	0.2
Indonesia	4.1	22.7	41.3	108.2	-1.0
Korea	5.8	31.1	51.7	100.8	0.5
Malaysia	4.2	31.5	108.6	97.8	0.4
Philippines	1.0	22.2	46.6	111.4	-0.6
Singapore	5.5	36.6	276.3	102.4	1.9
Thailand	4.4	28.1	53.1	92.5	0.3
India	2.6	19.7	13.9	95.3	0.2
China	6.7	27.8	19.7	117.2	-0.4
Average emerging Asia, excluding China and India	4.2	28.7	96.3	102.2	0.3

Sources: World Bank, *World Development Indicators*; and World Bank, *Governance Indicators*.

^{1/} Emerging Asia includes China, India, Indonesia, Korea, Malaysia, Philippines, Singapore, and

^{2/} Rule of law index ranges

Box 2.1. Data and Econometric Analysis

The dataset for the econometric analysis was composed of annual data on economic, political, and institutional variables for 146 developing countries for the years 1970–2000. In line with Barro and Sala-i-Martin, standard growth regressions were used to estimate the effects of the most important explanatory variables on real per capita GDP growth.

Table 2.2. Marginal Effects on Growth¹¹

	Investment (1)	Government Expenditure (2)	Openness (3)	Primary School (Gross) Enrolment (4)	Rule of Law (5)
Low-income Asia	0.19	-0.18	0.04	0.04	2.60
Emerging Asia	0.51	-0.51	0.04	0.04	2.60
Emerging Asia, excluding India and China	0.43	-0.18	0.04	0.04	2.66
Rest of developing countries	0.19	-0.17	0.04	0.04	2.60

¹¹These estimates are calculated based on the growth regressions.

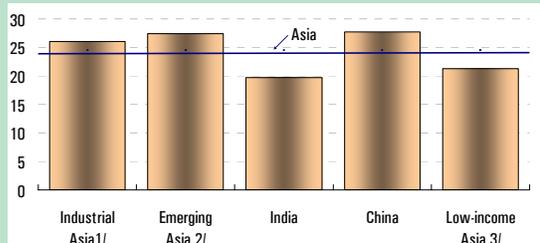
Investment

The importance of capital formation for economic growth is illustrated in the case of emerging Asia where high growth rates have been associated with high investment levels.¹¹ The difference of investment levels between low-income and emerging Asia is large at about 6 percentage points of GDP. Raising investment in low-income Asia to the levels in emerging Asia would alone increase GDP growth by over 1 percentage point each year (Figure 2.2). However, investment in emerging Asia is also more efficient in raising GDP growth than in low-income Asia. The impact of investment on growth in emerging Asia is almost three times as large as in low-income Asia, notwithstanding the much

¹¹ Higher investment levels should be consistent with sustainable financing conditions, which, if not in place, could hinder long-term growth.

smaller stock of capital in the latter region (Table 2.2. Box 1).¹² These results have important policy implications, namely that countries in low-income Asia should not only increase investment to raise growth but, in addition, should implement policies that raise

Figure 2.2. Investment Ratio, 1970 – 2000
(In percent of GDP, average)



Sources: IMF, *World Economic Outlook*; World Bank, *World Development Indicators*.
¹¹Industrial Asia: Australia, Japan, and New Zealand.
²Emerging Asia: Indonesia, Korea, Malaysia, Philippines, Singapore, and Thailand.
³Low Income Asia: Bangladesh, Bhutan, Cambodia, Lao PDR, Mongolia, Myanmar, Nepal, Sri Lanka, and Vietnam.

¹² Excluding China and India from emerging Asia does not significantly change the results.

the impact of investment on growth by increasing the productivity of capital. Raising the productivity of the labor force through education and training and eliminating barriers for the free transfer of foreign technologies are good examples of such policies. In addition, improving the business climate by reducing the costs of doing business (which, as shown in Table 2.3, are significantly higher in low-income Asia than in emerging Asia), could also spur growth.

Lastly, deepening the financial sector can improve financial intermediation and capital allocation so that the investment projects with highest return are funded. Given the relatively low levels of credit to GDP in low-income Asia, which is an indicator of financial development, there is significant scope for financial deepening (Table 2.4).

Table 2.4. Private Credit by Deposit Money Banks and Other Financial Institutions ^{1/}

(In percent of GDP)

Average low-income Asia	22.4
Bangladesh	27.4
Bhutan	17.1
Cambodia	8.1
Lao P.D.R.	5.9
Mongolia	29.5
Myanmar	6.5
Nepal	27.7
Sri Lanka	28.5
Vietnam	51.1
Average emerging Asia	78.9
Indonesia	21.0
Korea	125.4
Malaysia	121.6
Philippines	33.5
Singapore	122.7
Thailand	95.2
India	32.8
China, People's Republic of	...
Average emerging Asia, excluding China and India	86.6

Source: IMF, *International Financial Statistics*.

^{1/}As of 2004, with the exception of Nepal (2000) and Myanmar (2003).

Table 2.3 Doing Business Ranking, 2006

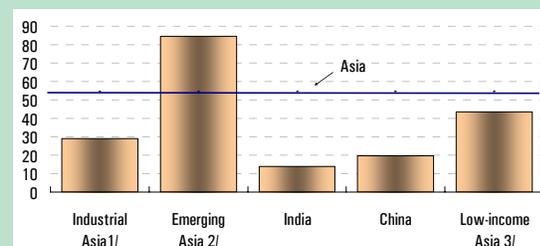
Country	Ease of Doing Business	Starting a Business	Dealing with Licenses	Employing Workers	Registering Property	Getting Credit	Protecting Investors	Paying Taxes	Trading Across Borders	Enforcing Contracts	Closing a Business
Average low-income Asia	108.3	78.0	94.8	99.9	82.1	113.0	84.0	76.6	128.9	103.0	116.4
Bangladesh	88	68	67	75	167	48	15	72	134	174	93
Bhutan	138	79	145	116	41	159	118	68	150	56	151
Cambodia	143	159	159	124	100	174	60	16	114	118	151
Lao P.D.R.	159	73	130	71	148	173	170	36	161	146	151
Mongolia	45	55	34	61	17	65	19	56	162	41	115
Myanmar	...	...	...	...	...	...	...	...	...	...	...
Nepal	100	49	127	150	25	101	60	88	136	105	95
Sri Lanka	89	44	71	98	125	101	60	157	99	90	59
Vietnam	104	97	25	104	34	83	170	120	75	94	116
Average emerging Asia	69.4	88.9	91.0	80.6	64.0	51.8	53.3	90.9	60.1	75.6	74.1
Indonesia	135	161	131	140	120	83	60	133	60	145	136
Korea	23	116	28	110	67	21	60	48	28	17	11
Malaysia	25	71	137	38	66	3	4	49	46	81	51
Philippines	126	108	113	118	98	101	151	106	63	59	147
Singapore	1	11	8	3	12	7	2	8	4	23	2
Thailand	18	28	3	46	18	33	33	57	103	44	38
India	134	88	155	112	110	65	33	158	139	173	133
China, People's Republic of	93	128	153	78	21	101	83	168	38	63	75
Average emerging Asia, excluding China and India	54.7	82.5	70.0	75.8	63.5	41.3	51.7	66.8	50.7	61.5	64.2

Source: World Bank, *Doing Business Rankings*.

Openness

Openness to trade has a positive impact on growth in both low-income and emerging Asia, a result which is expected given the benefits of increased technology transfers and improved resource allocation. However, there is a significant difference in openness between the two regional sub-groups, measured as imports plus exports as a share of GDP: 76 percent on average in emerging Asia versus 44 percent in low-income Asia (Figure 2.3). If the latter region would have the same level of openness of the former, growth would be higher by 1.3 percentage points per year. Low-income countries in Asia could thus benefit substantially from a further opening of their economies to trade flows. This could be achieved, for example, by stimulating exports through the elimination of export taxes and improving infrastructure to reduce transportation costs or encouraging higher imports by reducing tariffs, which are higher in low-income Asian than in emerging Asia (Table 2.5).

Figure 2.3. Openness, 1970–2000
(In percent of GDP, average)



Sources: IMF, *World Economic Outlook*; World Bank, *World Development Indicators*.

¹Industrial Asia: Australia, Japan, and New Zealand.

²Emerging Asia: Indonesia, Korea, Malaysia, Philippines, Singapore, and Thailand.

³Low Income Asia: Bangladesh, Bhutan, Cambodia, Lao PDR, Mongolia, Myanmar, Nepal, Sri Lanka, and Vietnam.

Table 2.5. Average Tariff Rates

Country	Year	Tariff Rate
Average low-income Asia	...	12.9
Vietnam	2005	16.7
Sri Lanka	2006	10.8
Nepal	2005	13.9
Myanmar	2005	5.3
Mongolia	2005	4.3
Lao PDR	2005	9.5
Cambodia	2003	16.9
Bhutan	2005	23.0
Bangladesh	2006	16.0
Average emerging Asia	...	9.0
Indonesia	2005	7.0
Korea	2004	11.7
Malaysia	2005	7.4
Philippines	2005	6.3
Singapore	2005	0.0
Thailand	2005	12.0
China, People's Republic of	2005	9.8
India	2005	17.8
Average emerging Asia, excluding China and India	...	7.4

Source: World Bank, *World Integrated Trade Solutions (WITS)*.

Primary School Enrolment

Primary school enrolment also has a positive impact on growth for both low-income and Emerging Asia, given increased productivity resulting from a better-educated work force. Although the difference in primary school enrolment between the two regions is very small on average (Figure 2.4), the gain to those low-income countries which fare worse in this indicator would still be significant.^{13,14} The impact could be further increased by supplementing primary education with other policies that encourage human capital

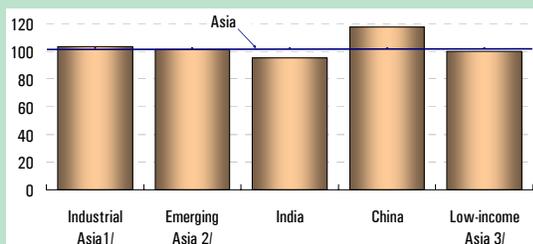
¹³ Primary school enrolment is measured as the number of students enrolled in primary school as a share of children of primary school age.

¹⁴ These data are not adjusted for differences in education quality or for the drop-out ratio.

accumulation, such as spending on research and development.

contract enforcement, and strengthening the enforcement mechanism, would all contribute to higher growth.

Figure 2.4. Primary School Enrollment, 1970–2000 (In percent of GDP, average)



Sources: IMF, *World Economic Outlook*; World Bank, *World Development Indicators*.

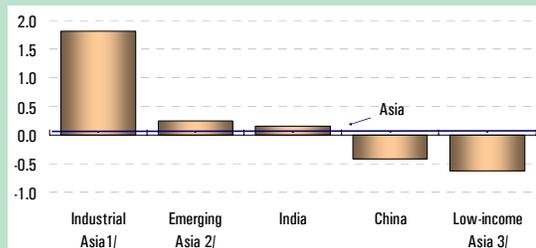
¹Industrial Asia: Australia, Japan, and New Zealand.

²Emerging Asia: Indonesia, Korea, Malaysia, Philippines, Singapore, and Thailand.

³Low Income Asia: Bangladesh, Bhutan, Cambodia, Lao PDR, Mongolia, Myanmar, Nepal, Sri Lanka, and Vietnam.

Figure 2.5. Rule of Law, 1970–2000

(Scale of -2 to 2.5, with 2.5 being highest, average)



Sources: IMF, *World Economic Outlook*; World Bank, *World Development Indicators*.

¹Industrial Asia: Australia, Japan, and New Zealand.

²Emerging Asia: Indonesia, Korea, Malaysia, Philippines, Singapore, and Thailand.

³Low Income Asia: Bangladesh, Bhutan, Cambodia, Lao PDR, Mongolia, Myanmar, Nepal, Sri Lanka, and Vietnam.

Rule of Law

Consistent with theory that argues that the more economic agents have confidence in and abide by the rules of society, the higher growth will be, the empirical analysis shows that a strong rule of law has a positive impact on growth in both regional sub-groups.¹⁵ The level of rule of law in emerging Asia is significantly higher than in low-income Asia (Figure 2.5); if low-income Asia would have the same level of rule of law as emerging Asia, growth would be an estimated 2 percentage points higher each year. Every additional point in the rule of law index for low-income Asia would increase growth by about 2.5 percentage points each year. Thus, reforming the judicial system, improving

¹⁵ As measured by World Bank Governance Indicators (ranges from -2.5 to 2.5, with higher number indicating stronger governance, in particular, a strong rule of law refers to effective contract enforcement, police and court system, and the absence or minimization of crime and violence.

Policy Options

This chapter analyzed the determinants of growth in low-income countries in Asia relative to those in emerging Asia. It finds that investment, openness, education, and rule of law are the policy variables with the highest potential impact on growth. These challenges facing low-income countries in Asia are structural in nature, will take time to resolve, and there is no “one-size fits all” recipe for success.

Nevertheless, it seems clear that low-income Asia would benefit in the long run from pursuing policies that increase the productivity of capital, such as removing barriers to free flow of technology, raising human capital through education and training, improving the business climate, and deepening the financial sector. As to openness, the removal of barriers to trade such as the reduction of import tariffs would help achieve a more efficient allocation of resources and technology transfer that could

contribute to higher growth. Finally, low-income countries could benefit significantly from improving the judicial system, including strengthened contract enforcement, policing, and the functioning of the courts. These, in turn, could reduce the likelihood of crime and violence, reducing uncertainty and contributing to higher long-term growth.

Recent developments in low-income Asia indicate that policies in several countries seem to be heading in the right direction. In Vietnam, for example, strong growth in the last five years has been supported by significant financial deepening and trade openness. Credit has increased from under 40 percent of GDP in 2001 to over 65 percent of GDP in 2005, and exports plus imports over GDP have grown from 112 percent of GDP in 2001 to over 145 percent of GDP in 2005. In Bhutan, improvements in the rule of law are significant and its rating on this category in 2005 is three times higher than in 2001. In Lao P.D.R., the ratio of investment over GDP increased from 21 to 32 percent over the same period. Finally, primary schooling has also increased significantly in Cambodia and Myanmar. Although economic policies seem to be geared in the right direction in the short term, it remains to be seen if governments can sustain the positive performance over the longer term. Their steady efforts, well-targeted to the key growth determinants, will make a big difference.