

文藝復興

An East Asian Renaissance Ideas for Economic Growth

Indermit Gill and Homi Kharas

with

Deepak Bhattasali, Milan Brahmbhatt, Gaurav Datt, Mona Haddad,
Edward Mountfield, Radu Tatucu, Ekaterina Vostroknutova, and others

**Office of the Chief Economist
East Asia & Pacific Region, The World Bank**

[Outline

- **Motivation**

- Middle income economy challenge

- **Approach**

- Economies of scale
- Distribution of economic rents

- **East Asia's achievements and challenges**

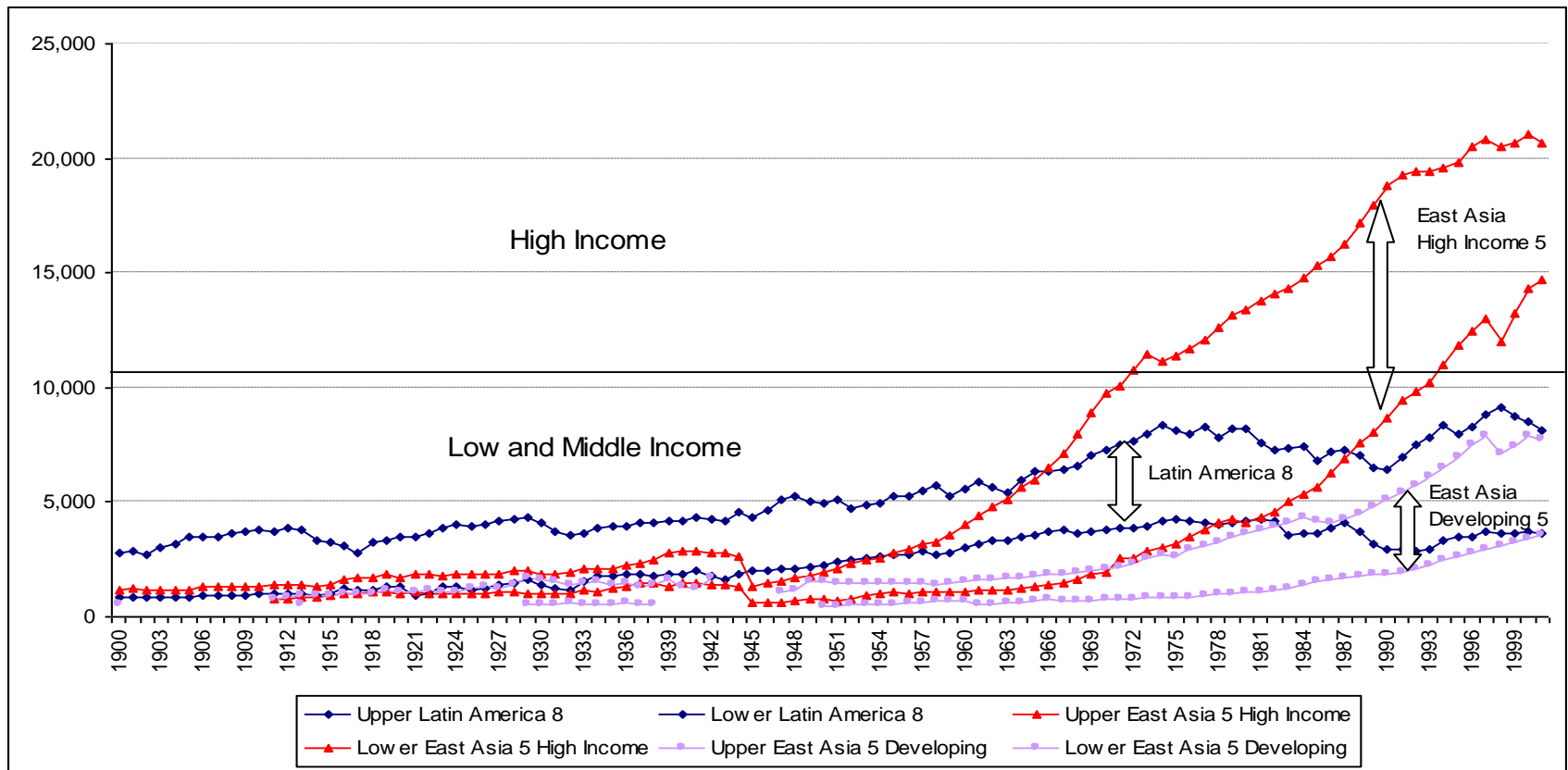
- Achievements: Global and regional integration
- Challenges: Domestic integration

- **Lessons**

- Economic theory and practice shows that good policies can matter a lot

Middle-income countries: the stars of this show

**A second group of East Asian economies has caught up with Latin America
(Per capita income growth in East Asia and Latin America, 1900-2000)**



[Main messages]

- **Middle income countries are squeezed between low-wage manufacturers and high-skilled innovators**
 - What gets countries to per capita incomes of \$1,000 are not necessarily the same things that get countries to \$10,000.
- **Economies of Scale offer a way forward**
 - The key is international integration and specialization in production.
- **This path can create inequalities which must be addressed by public policy**
 - Rural/urban, skilled/unskilled and public/private divides must be managed

[Why this report now]

- **A World Bank report every four years**
 - The East Asian Miracle (1993)
 - Lessons from East Asia (1997)
 - Rethinking the East Asian Miracle (2001)
- **Developments during the 1990s**
 - Rise of China: biggest development story
 - Asian financial crisis: the biggest economic event
 - New growth economics: perhaps the most important advance
- **An East Asian Renaissance**
 - Utilizes new insights in development economics
 - Analyses how region is being transformed
 - Discusses the challenges ahead
- **East Asian Visions**
 - Essays by 18 prominent East Asians

[New analytical insights]

- **Four waves of economic thought**
 - New industrial organization: imperfect competition
 - New international trade: intra-industry trade
 - New economic geography: importance of cities
 - New economic growth: centrality of ideas
- **The centrality of scale economies**
 - Market size: international integration to exploit economies
 - New ideas: international integration to generate economies
 - Uneven distribution: domestic integration to facilitate scale-centered growth
- **The importance of efficient distribution**
 - Ideas and imperfect competition imply rents
 - Scale economies imply policy decisions can have big effects
 - All this implies more important role for governments

Importance of scale economies

Table 1.8
Recognizing the importance of scale economies: recent advances

Subdiscipline	Decade	Key publications	Main insights
Industrial organization	1970s	Spence (1976), Dixit & Stiglitz (1977)	Formal models of increasing returns to scale and imperfect competition
International trade	1980s	Krugman (1980, 1981), Ethier (1982), Helpman & Krugman (1985), Grossman and Helpman (1995)	Increasing returns and imperfect competition explain intra-industry trade between countries with similar endowments; initial endowments can, through trade and specialization, influence the long-run rate of growth; trade unleashes forces of both convergence and divergence
Economic geography	1990s	Krugman (1991), Fujita, Krugman, & Venables (1999)	Increasing returns to scale activities are characterized by agglomeration and imperfect competition, while constant returns to scale sectors remain dispersed and competitive, helping to explain the spatial distribution of economic activity and the growth of cities.
Endogenous growth	1980s	Romer (1986), Lucas (1988)	Perfect competition and knowledge- or human capital-related externalities imply aggregate increasing returns and explain why growth rates may not fall over time and why wealth levels across countries do not converge
	1990s	Romer (1990), Grossman & Helpman (1991), Aghion & Howitt (1992)	Imperfect competition explains why the incentive to spend on R&D does not fall and knowledge spillovers explain why R&D costs fall over time, resulting in more and/or better products that fuel growth
	2000s	Aghion and Howitt (2005)	Imperfect competition and Schumpeterian entry and exit of firms, with entrants bringing new technologies, explain how a country's growth and optimal policies will vary with distance to the technology frontier

Source: Gill, Hariharan and Kharas (2006).

Importance of efficient distribution

Table 1.9

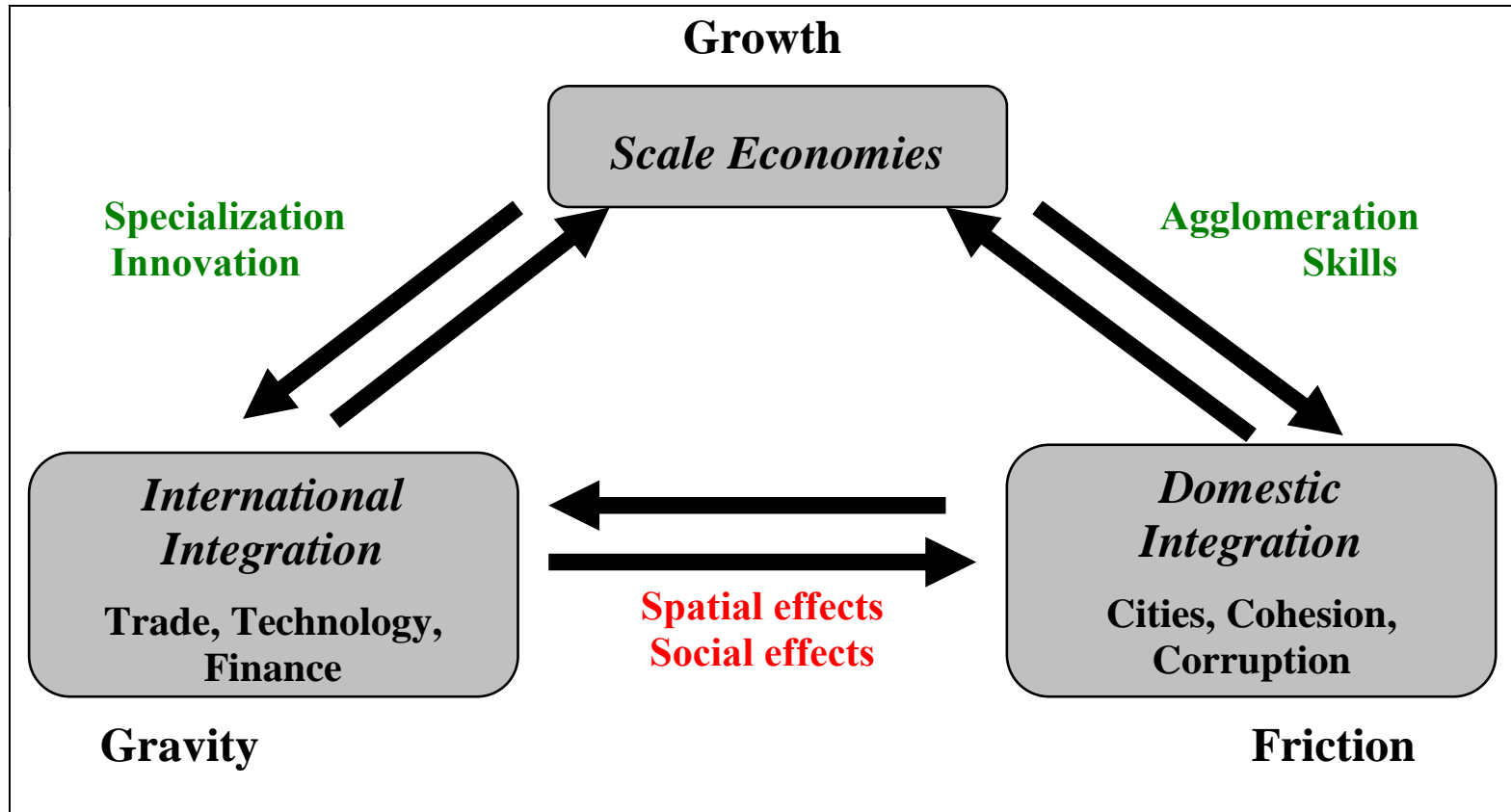
Economic growth and distribution: Recent advances

Subdiscipline	Channels	Key publications	Main insights
<i>Correlation between growth and distribution</i>			
International trade	Skill premia	Ethier (1982); Helpman & Krugman (1985); Feenstra and Hanson (1996)	Trade in final goods takes place on Heckscher-Ohlin terms and reduces skilled-unskilled wage premia in middle-income countries. Trade in intermediate goods can increase these gaps.
Industrial organization	Skill premia	Acemoglu (1996)	Moves towards flatter organizations and team-based work within firms and growing segregation of firms by skill levels across sectors, likely reduces within-firm wage dispersion and raises across-firm wage gaps.
Endogenous growth	Skill premia	Aghion and Howitt (1998) Garcia-Penalosa and Turnovsky (2006)	General purpose technologies such as engines, laser, and computers generate structural shifts that favor the more educated Higher saving or productivity leads to higher growth and inequality if initial distribution of capital is less uniform than that of labor.
Economic geography	Rural-urban differentials	Krugman (1991), Fujita, Krugman, & Venables (1999)	Increasing returns to scale activities are characterized by rents and agglomerate in urban areas, while constant returns to scale activities remain competitive and dispersed leading to large and persistent urban-rural differentials
<i>Effects of distribution on growth</i>			
Industrial organization	Investment	Loury (1981); Perotti (1992); Aghion & Bolton (1997);	Capital market imperfections imply that poor but talented individuals cannot take advantage due to inability to borrow and invest.
Political economy	Incentives	Alesina and Rodrik (1994); Persson and Tabellini (1996);	Higher inequality leads to a pressure for more redistribution, higher taxes, and lower growth
	Insecurity	Benabou (1996)	Inequality leads to sociopolitical conflict and hence less secure property rights that reduce investment

Source: Gill, Hariharan and Kharas (2006.)

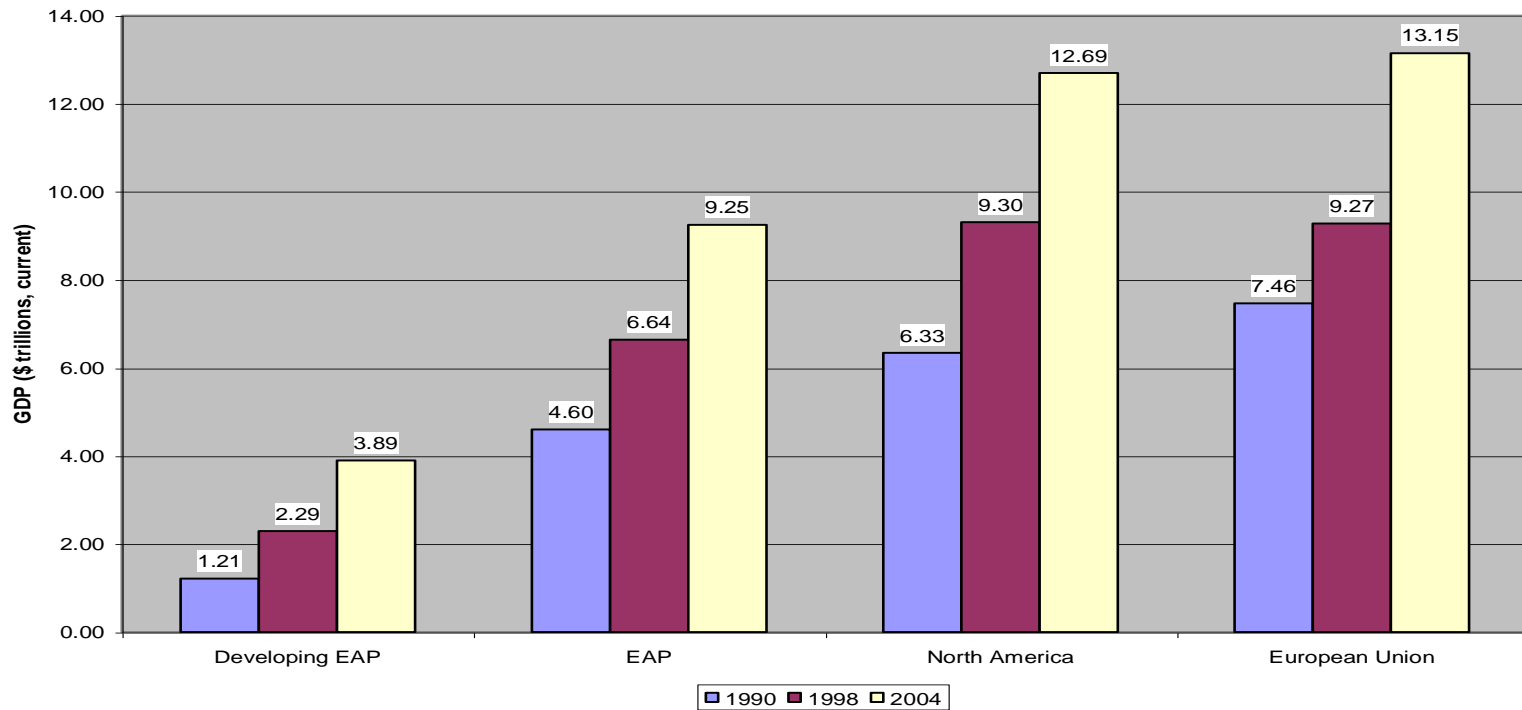
Scale economies play a central role in middle-income growth

Economic Growth in Middle Income Countries



Growth in East Asia

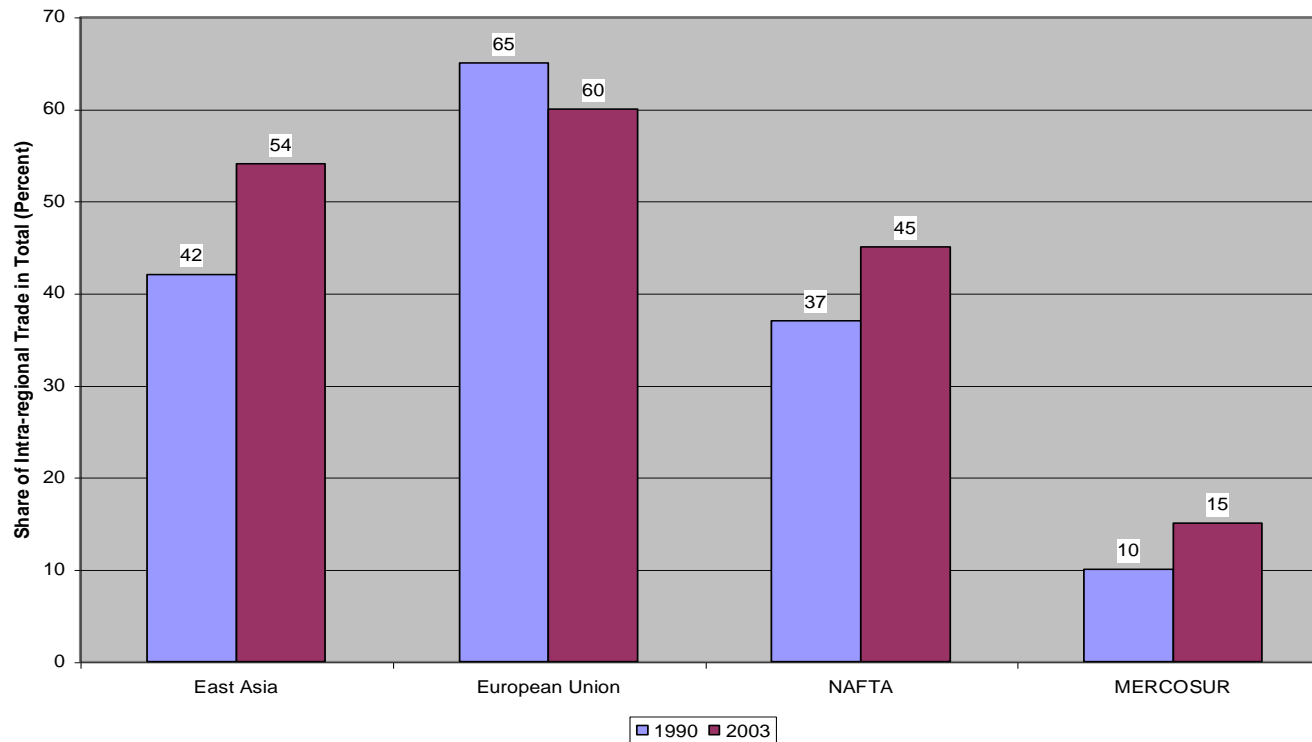
Figure 1
East Asia has kept pace despite Japan's stagnation and the 1997-98 crisis
Size of Regional GDP, 1990 to 2004



Gravity in East Asia

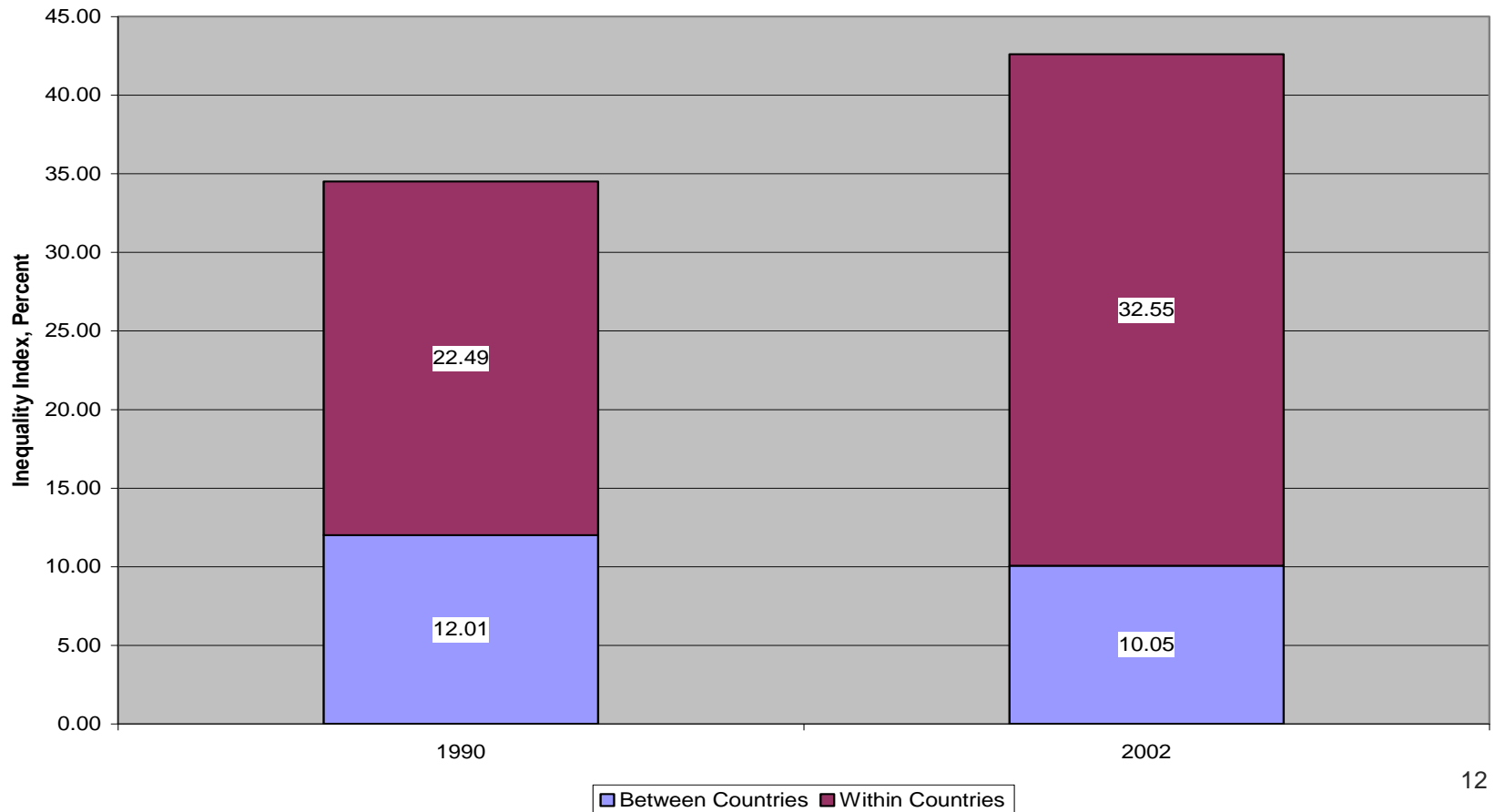
Figure 2
More than half of East Asia's trade is now within the region

Share of intra-regional trade in total, for selected trading areas



Friction in East Asia

Theil indices and their decomposition, 1990 and 2002



[Trade and integration]

■ Facts

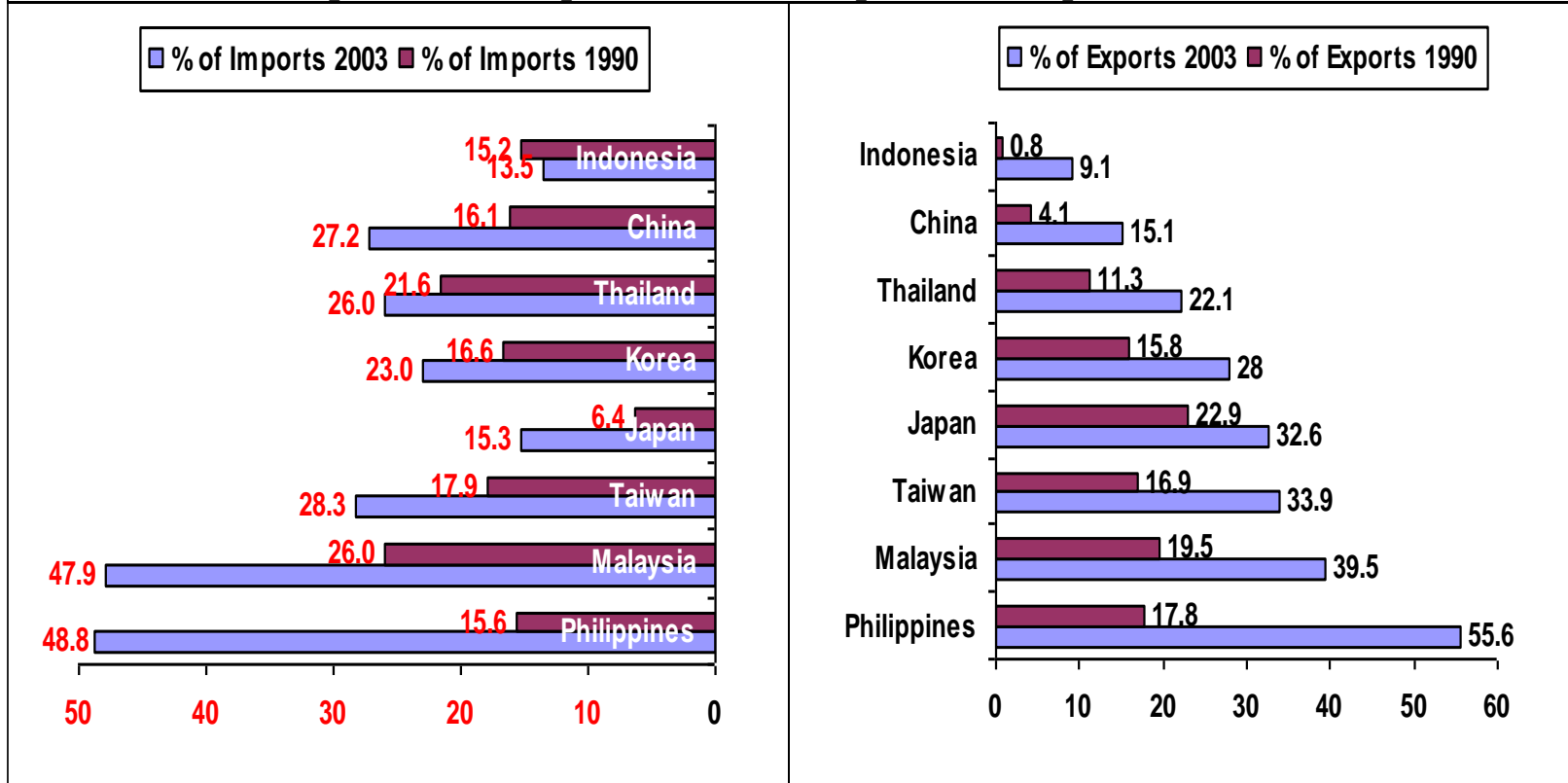
- East Asia is the most open region for trade in goods
- Parts and components and intra-industry trade has grown rapidly
- Sectors exhibiting increasing returns have seen the biggest expansion in exports

■ Implications

- Liberalize trade in business services
- Make logistics more efficient
- Enhance market access through regional integration; keep rules of origin simple

Intra-industry trade in East Asia has boomed

Share of parts and components in total exports and imports, 1990 and 2003



Source: Okamoto (2005).

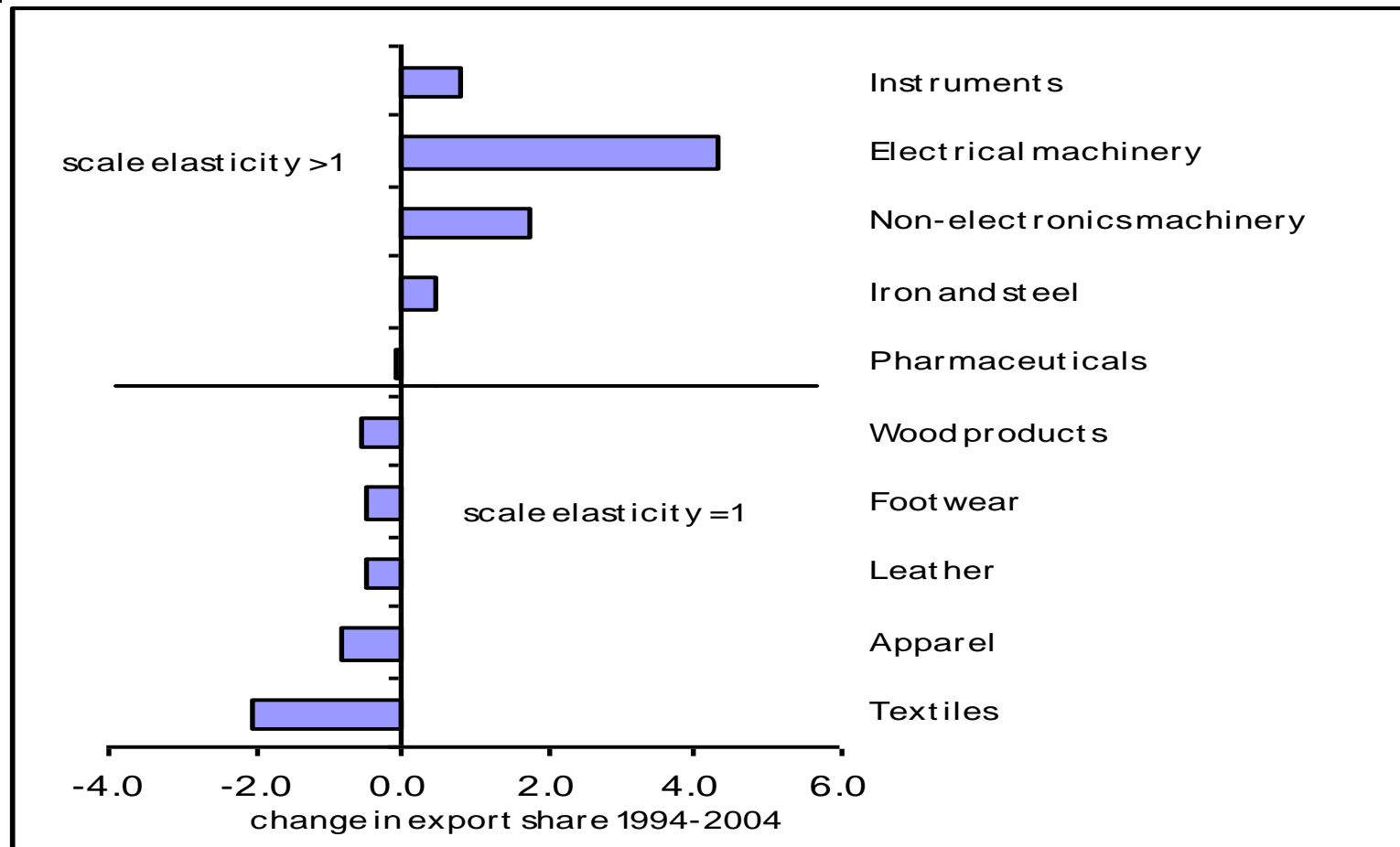
Intra-regional share of trade has risen

Country	Intra-regional Exports		Intra-regional Imports		Summary of Trend	
	1995	2004	1995	2004	Exports	Imports
<i>High Income</i>						
Japan	36	41	35	44	↑	↑
Korea, Rep. of	37	42	39	42	↑	↑
Taiwan, China	28	43	47	55	↑	↑
Singapore	46	47	55	55	↔	↔
<i>Middle Income</i>						
China	32	26	48	51	↓	↑
Indonesia	51	58	47	53	↑	↑
Malaysia	48	49	56	61	↔	↑
Thailand	52	55	44	47	↑	↑
Philippines	36	52	46	56	↑	↑
<i>Low Income</i>						
Mongolia	32	55	29	41	↑	↑
Vietnam	64	40	69	72	↓	↑
Cambodia	69	12	87	78	↓	↓
Lao PDR	61	38	69	85	↓	↑

Source: Authors' calculation, based on IMF Direction of Trade Statistics.

Note: Bold arrows indicate sizeable changes; other arrows indicate small or no change.

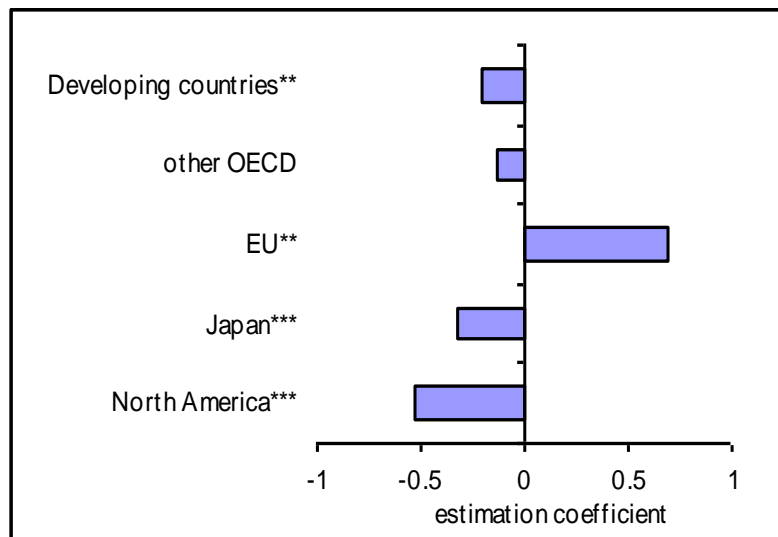
East Asian exports grew in sectors with increasing returns



China is now displacing high/middle-income countries

Figure 2.12: Who is displaced and where?

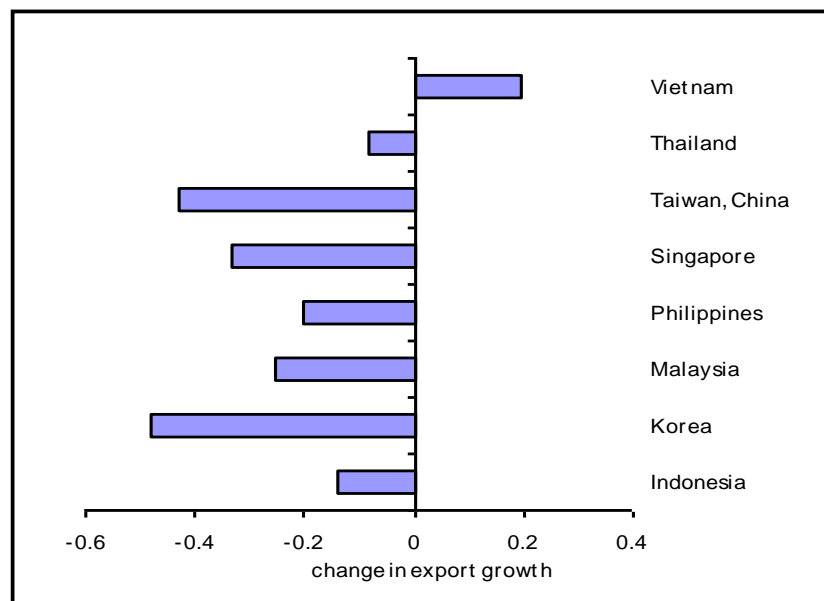
Where is the displacement



Note: ** significant at 5%; *** significant at 1%

Source: Freund (2006).

Which countries are displaced? 1995-2004



Note: This is the coefficient on $diflnimpCHN$ in equation 1 estimated by country.

Ideas and innovation

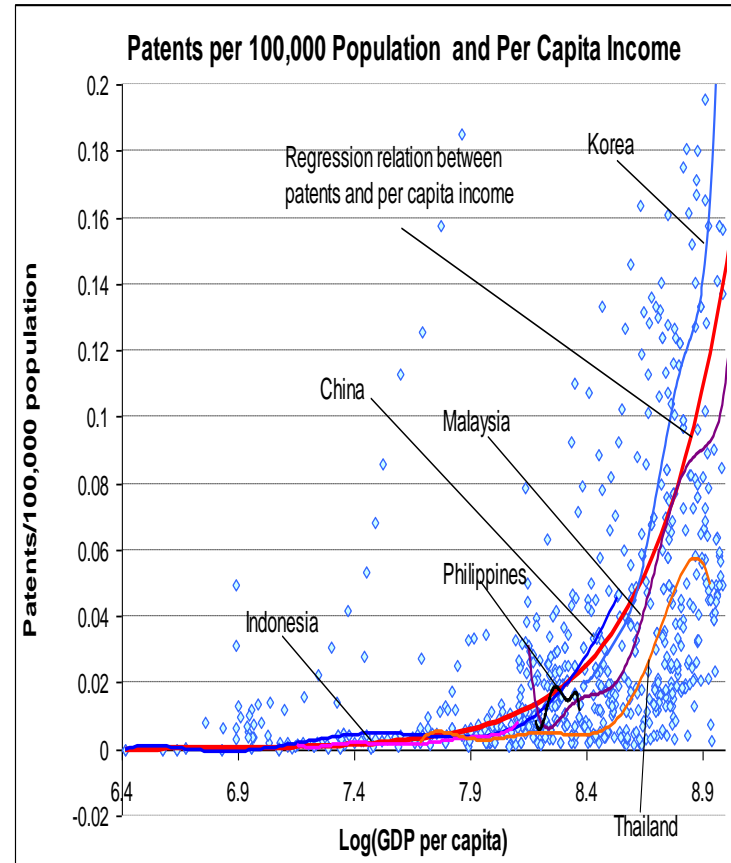
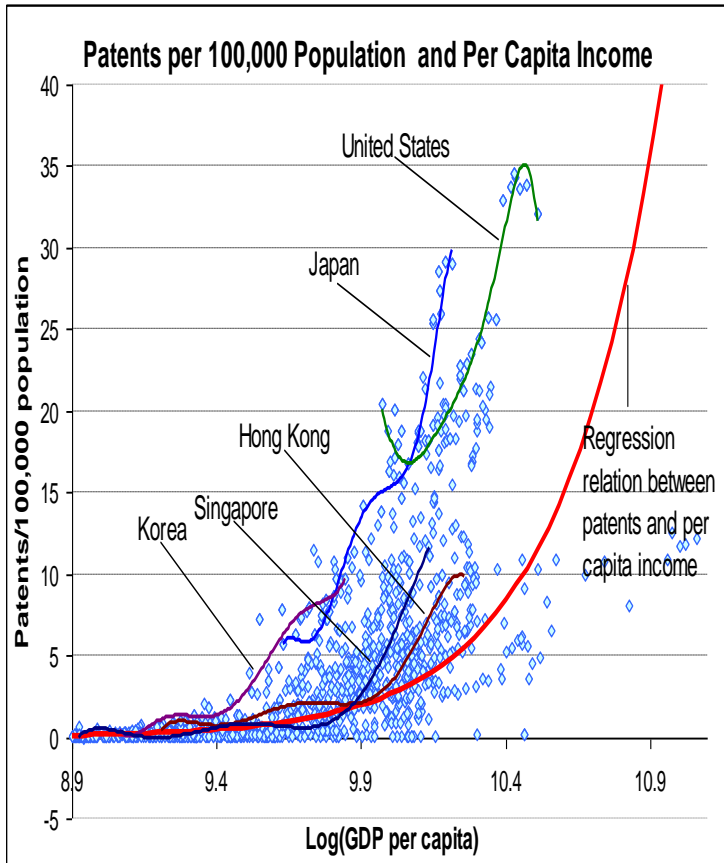
■ Facts

- Korea, Taiwan, Hong Kong are joining the technology leaders of the world
- Internationally competitive firms (exporters) are driving industrial growth; R&D and skills are driving innovation
- Regional knowledge flows are increasing: earlier such flows were through new equipment—now they also involve more direct use of patented knowledge

■ Implications

- Keep outward orientation and competitiveness
- Aggressively upgrade tertiary education

East Asia's innovation effort has been escalating



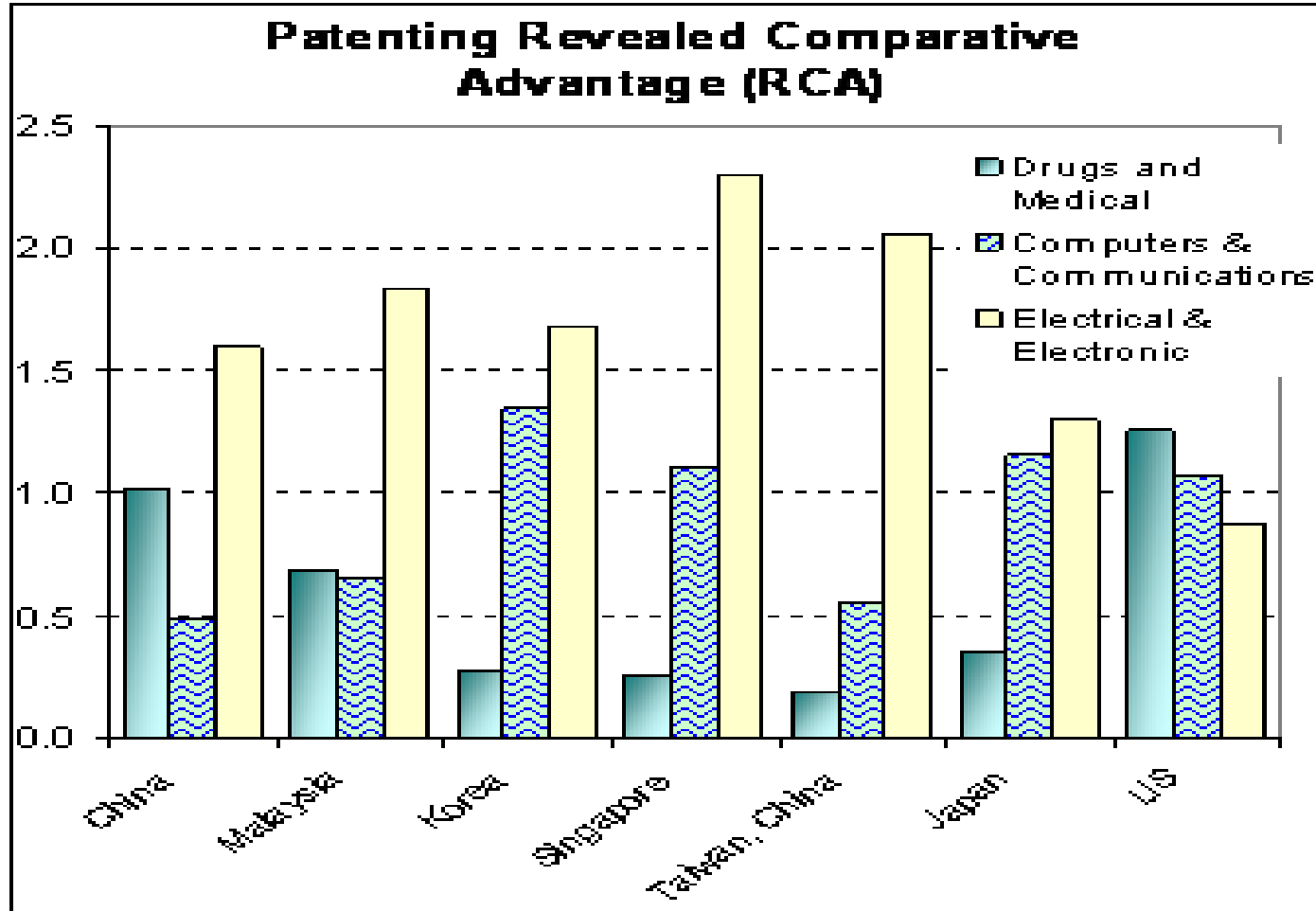
Firm dynamism comes from new products and technologies

Table 3.2. Most Important Source of Technological Innovation (% of Firms)

	Cambodia 2003	Indonesia 2003	Malaysia 2002	Philippines 2003	Thailand 2004	Average
Embodied in new machinery or equipment	42.1	48.7	49.9	43.0	33.1	43.4
Developed in cooperation with client firms	11.9	15.1	8.6	9.7	17.2	12.5
By hiring key personnel	14.5	17.9	11.4	14.2	3.0	12.2
Developed/adapted within the establishment locally	16.1	4.7	7.2	8.3	19.4	11.1
Transferred from parent company	6.0	2.7	11.0	4.3	11.8	7.2
Developed with equipment or machinery supplier	1.6	7.0	5.2	5.0	7.2	5.2
Other	7.8	3.9	6.7	15.5	8.2	8.4

Source: World Bank. Investment Climate Surveys.

Patenting in Increasing Returns to Scale Industries



[Finance and risk]

■ Facts

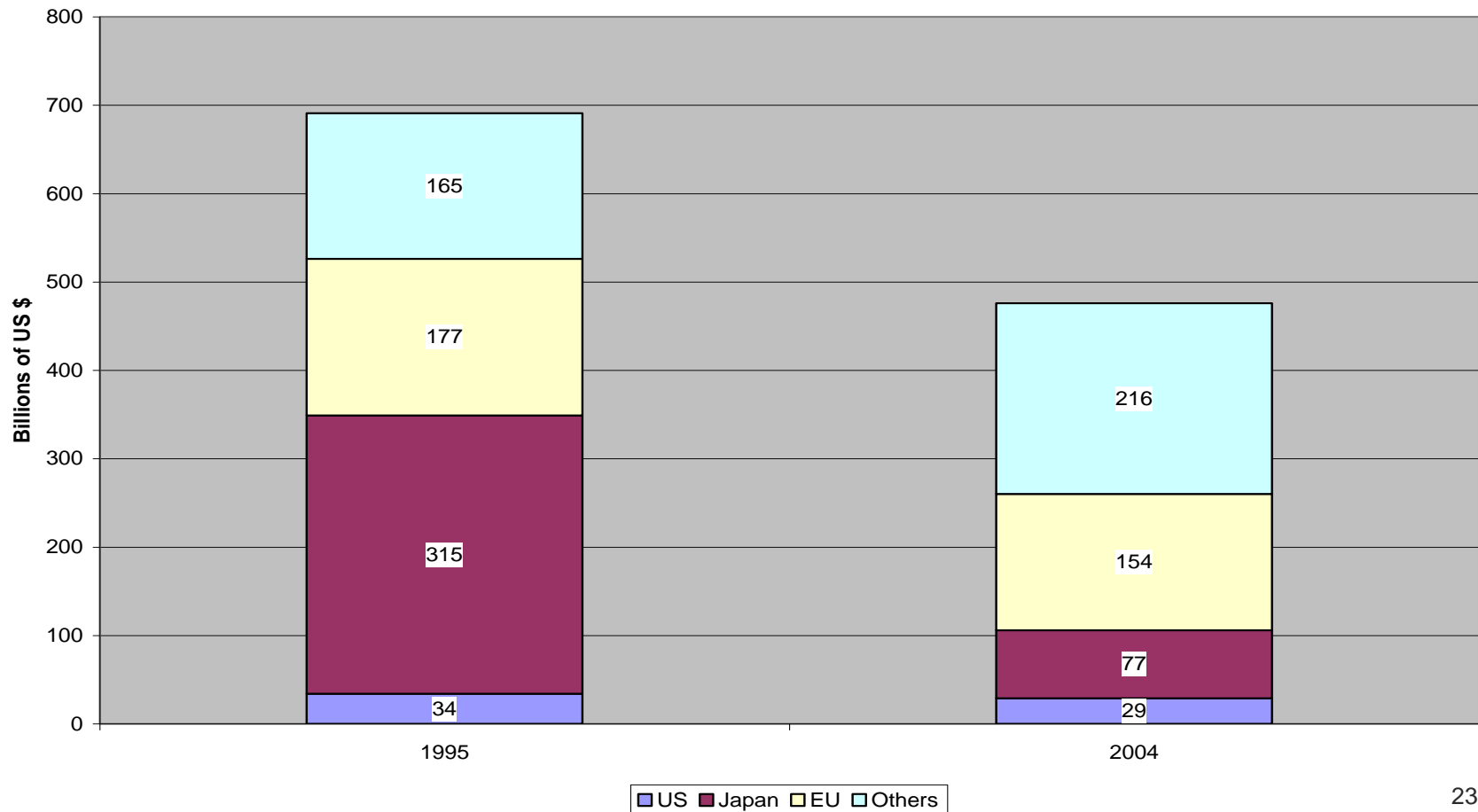
- Bank claims on the corporate sector have fallen since the 1997-98 financial crisis
- Foreign exchange reserves have soared since the financial crisis
- Bank-dominated financial systems are better suited for financing trade than for promoting innovation—financing for innovation requires better pricing of risks through markets

■ Implications

- Local credit risks need to be better identified and managed
- Regional cooperation may be a more efficient way to address the fear of floating
- Develop better securities markets, especially corporate bond markets

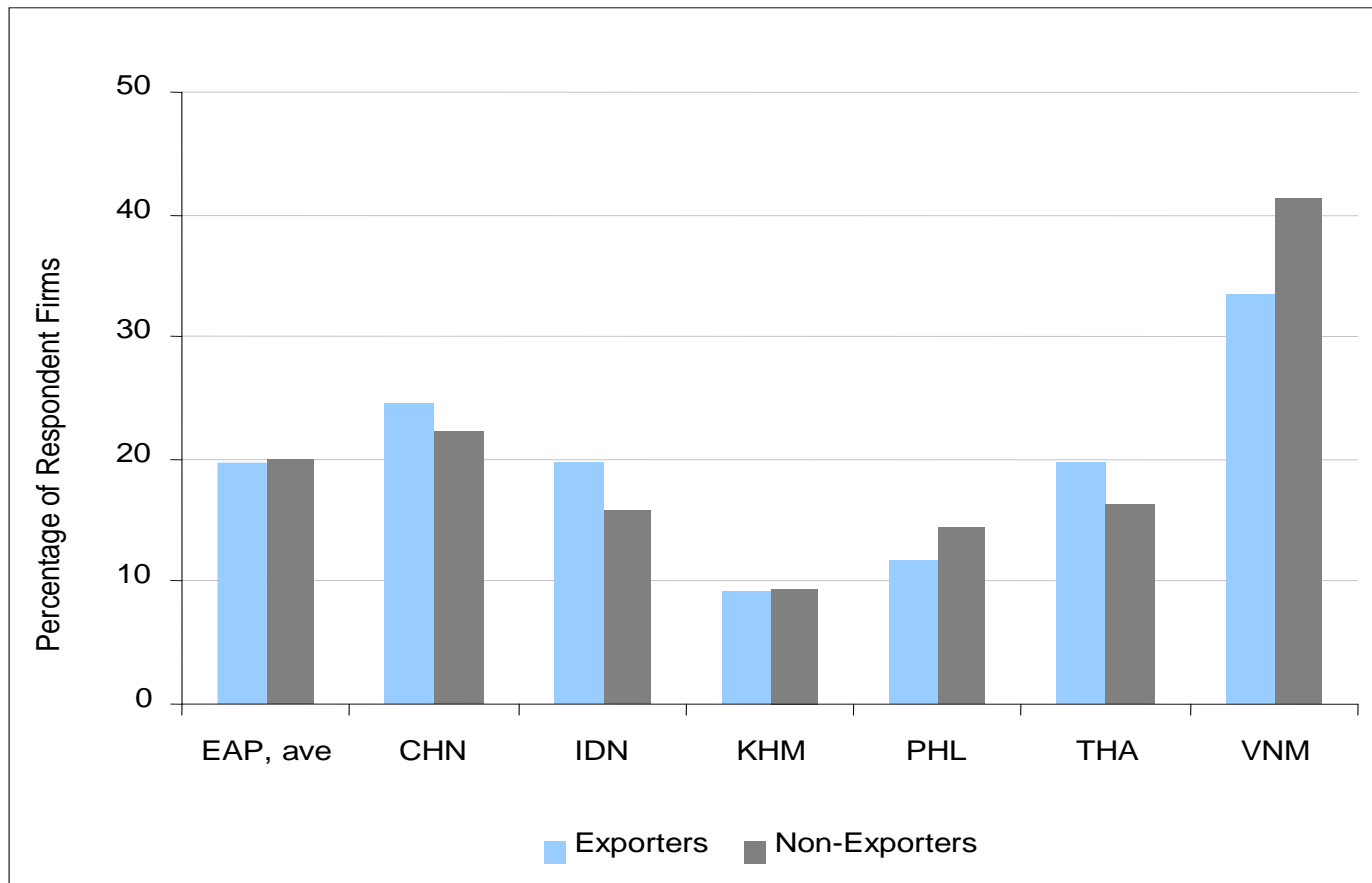
East Asia is less exposed to bank credit since the crisis

Bank Claims on East Asia, 1995 and 2004



But access to finance can be a problem for many firms

Figure 4.3: Access to finance is a problem for exporters and non-exporters



Growing complexity of growth in MICs: scale

Table 2
The growing complexity of development: Economies of scale

Force	Growing Complexity			Strategic Imperatives	
	<i>From: Exploiting comparative advantage</i>	+	<i>To: Also exploiting scale economies</i>	<i>New opportunities</i>	<i>Policy priorities</i>
<i>Specialization</i>	Labor intensive exports	+	Parts and components trade	Regional production networks	Logistics
<i>Ideas and human capital</i>	Basic and secondary	+	Post-secondary education	Regional knowledge spillovers	Scientists and engineers
<i>Managing economies</i>	High savings and low deficits	+	Risk management	Regional financial stability	Corporate bond markets

Cities and congestion

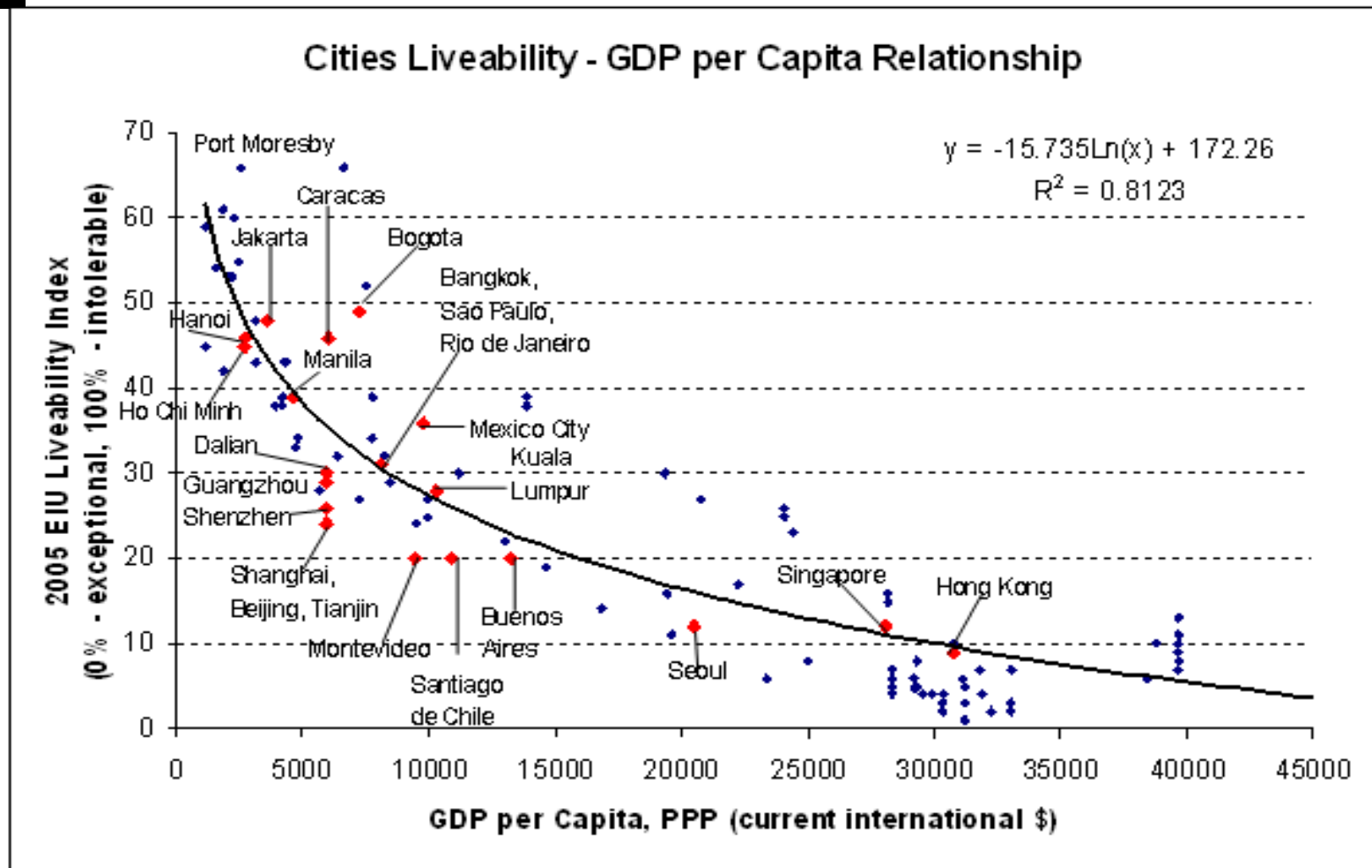
■ Facts

- Cities have three times the productivity of rural areas, reflecting agglomeration economies
- East Asia is witnessing the largest rural-to-urban shift in human history: 550 million over next 25 years
- Large cities are coming under stress; secondary cities are growing faster

■ Implications

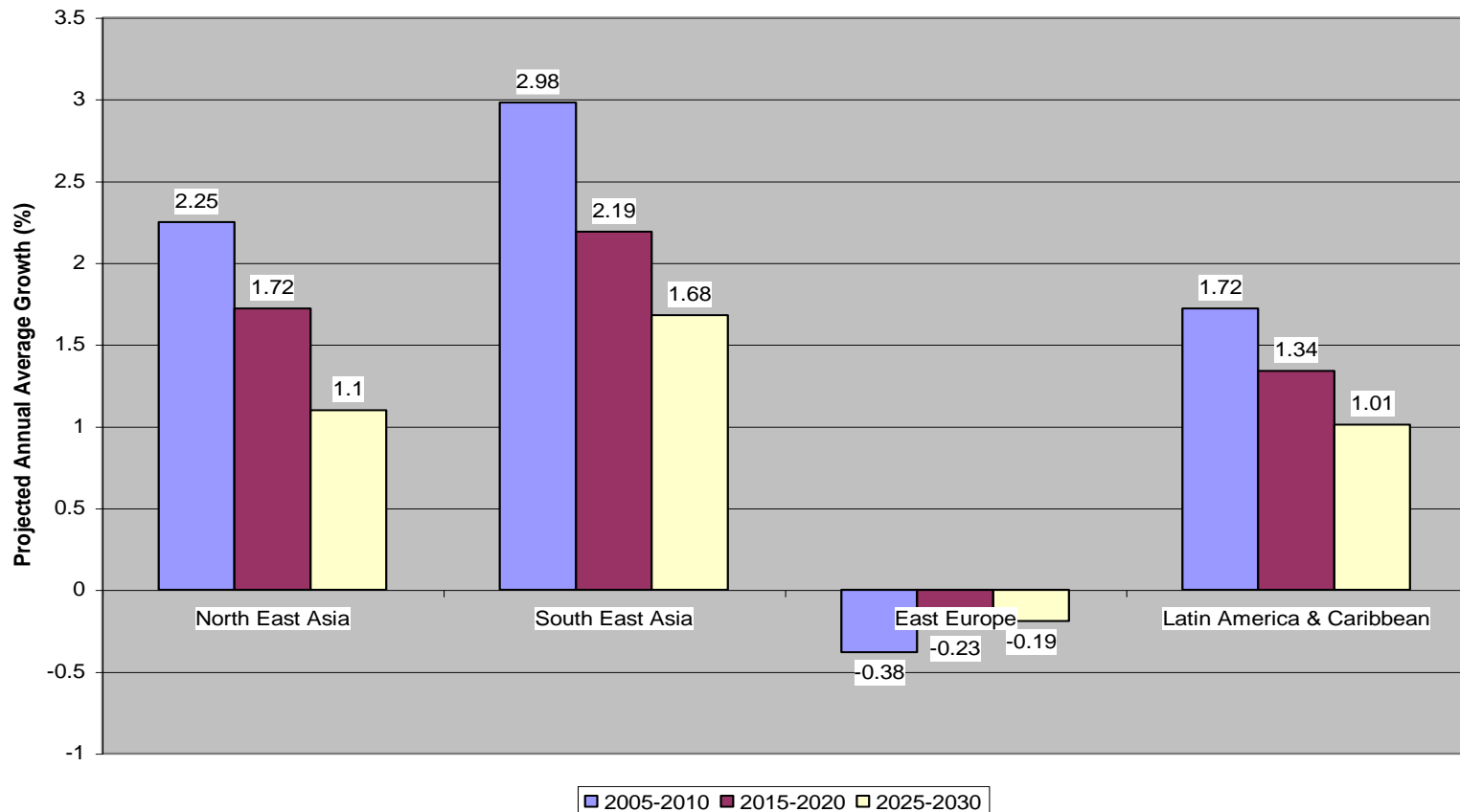
- Urban growth will drive regional differences
- Make large cities more livable
- Improve connectedness and economic management of smaller cities

East Asian cities are as livable as those in Latin America



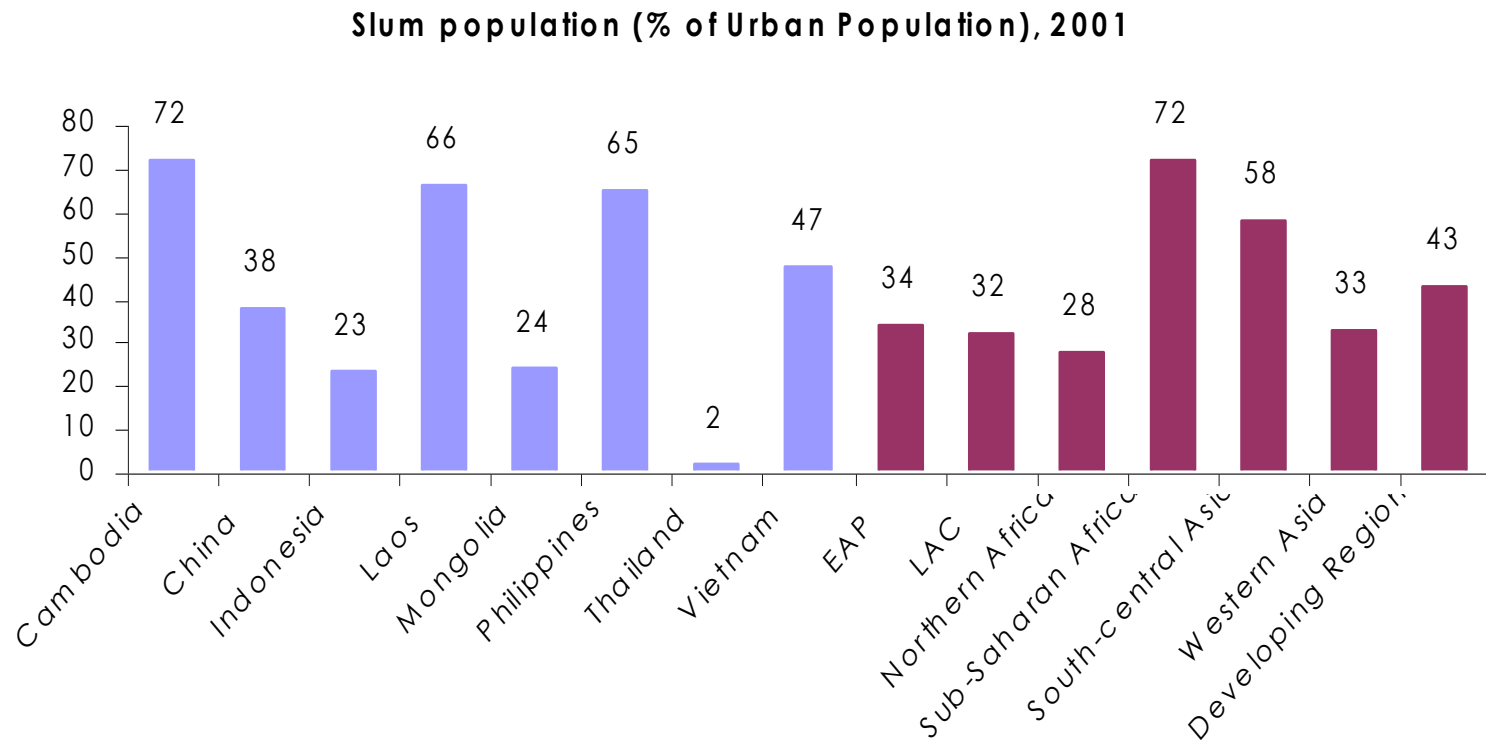
But urbanization is still to come for EAP

Urban Population Growth Rates, 2005-2030



And slums are already a big problem in East Asia

Figure 5.5: A third of East Asia's city-dwellers live in slums



[Inequality and cohesion]

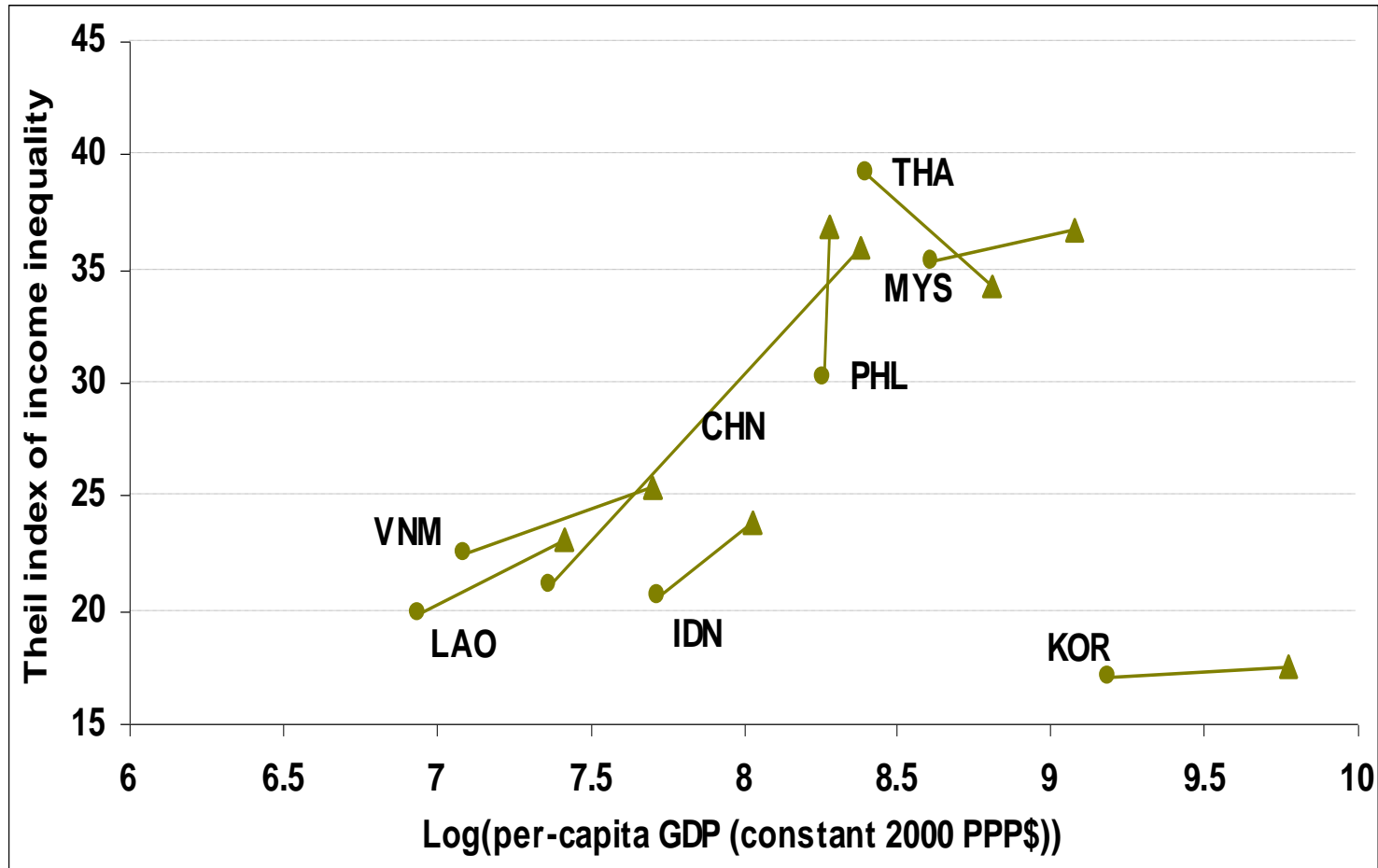
■ Facts

- Poverty rates have been falling rapidly in cities
- Within-country inequality is high because of urban-rural and coastal-interior gaps
- Within-country inequality is rising because of rising within-urban and within-rural inequality

■ Implications

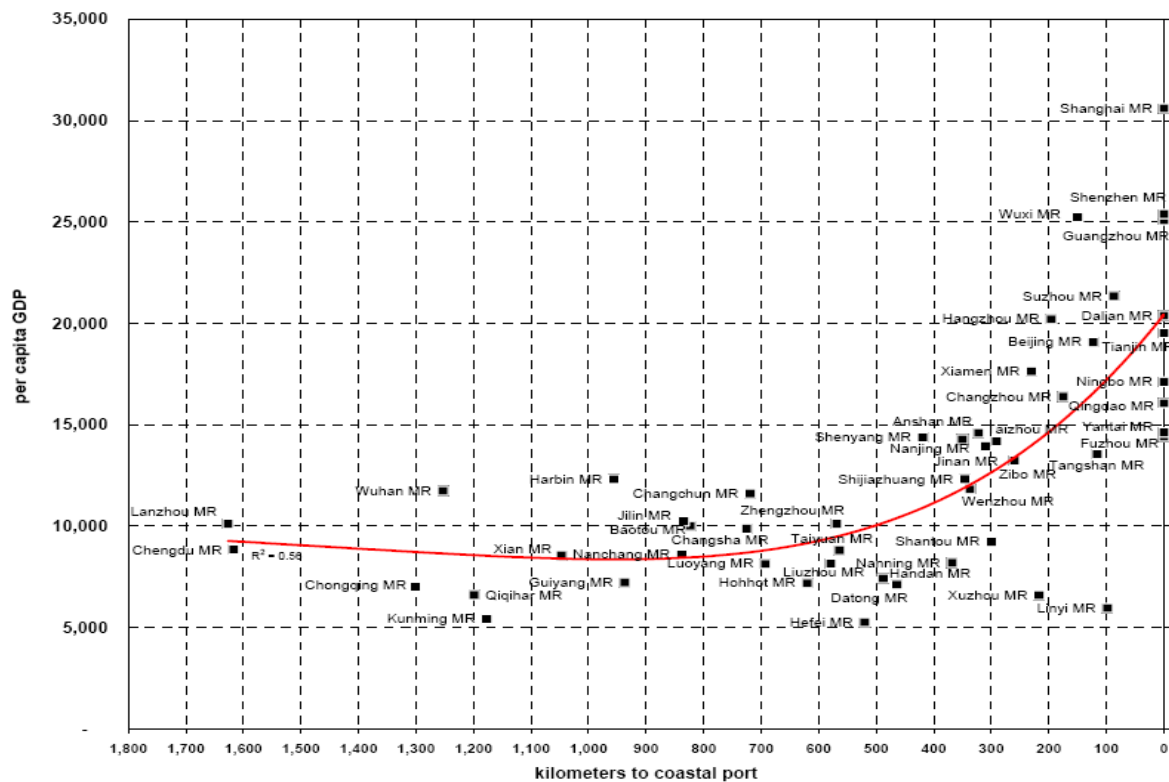
- Access to services, especially education, should not depend on location as much as it does
- Segmentation in labor markets by space and social groups should be reduced
- Rapid skill formation can offset high postsecondary wage premium

Inequality in East Asia has been increasing



Domestic integration is a big challenge in open economies

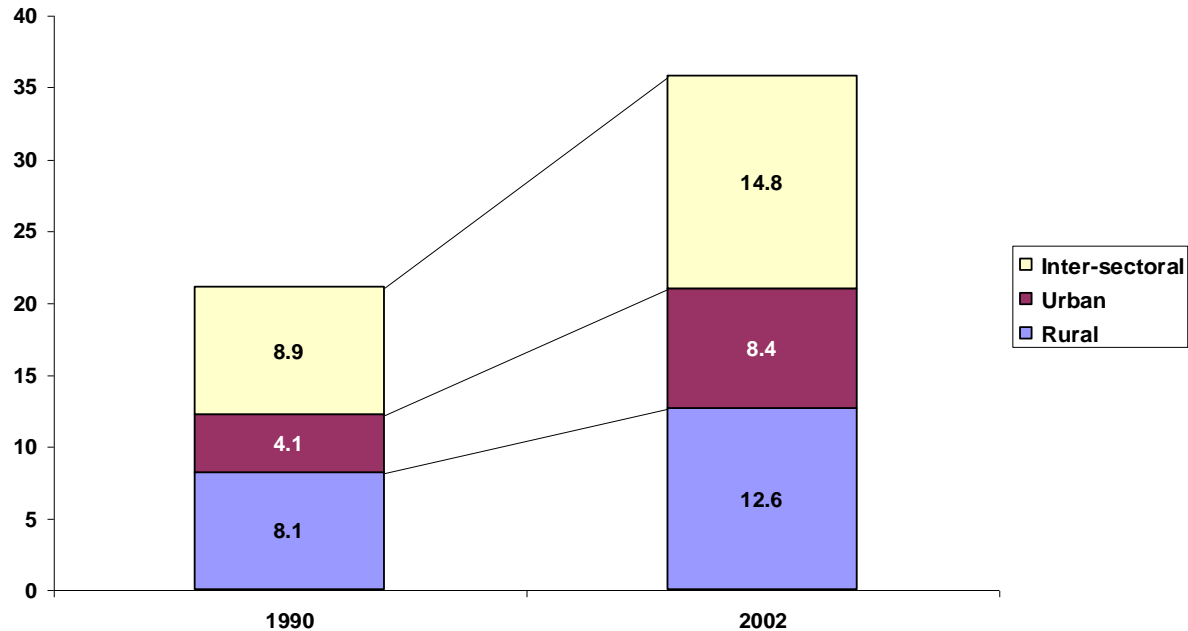
Distance to ports and per capita GDP in 53 Metropolitan Regions in China, 2000



Source: Leman (2005).

Inequality increases in China decomposed

Figure 6.2: Changes in inequality in China: A decomposition of Theil indices, 1990-2002



Source: Authors' calculations based on household survey data for China for 1990 and 2002.

Decentralization and corruption

■ Facts

- East Asia's decentralization is progressing faster than institutionalization of checks and balances
- Contestability of political power has grown in East Asia
- Tolerance for corruption is low in East Asia

■ Implications

- Corruption is seen as a significant threat to growth and perceptions of corruption are worsening
- Corruption could become a more serious obstacle to growth unless transparency and accountability at local levels develop
- Speed up the transition from rule of man to rule of law

Corruption can hamper business

Table 7.1: Corruption can be a severe constraint for enterprise in East Asia

Country	<i>Is corruption a constraint to business? (percent of responses)</i>		
	<i>No</i>	<i>Minor</i>	<i>Severe or major</i>
Cambodia	4.7	39.4	55.9
Indonesia	29.3	29.2	41.5
Philippines	40.6	24.3	35.2
China	24.1	48.5	27.3
Thailand	49.7	32.1	18.3
Malaysia	53.8	31.7	14.5
Vietnam	52.3	17.8	14.2

Source: Investment Climate (Enterprise) Surveys of the World Bank and IFC, using un-weighted averages.

Growing complexity of growth in MICs: distribution

Table 3

The growing complexity of development: Distribution of economic rents

Force	Growing Complexity		Strategic Imperatives		
	<i>From: Letting markets work</i>	+	<i>To: Also addressing coordination failures</i>	<i>Pressing challenges</i>	<i>Policy priorities</i>
<i>Agglomeration</i>	Mega-cities	+	Midsized and small cities	Congestion	Connected small & mid-sized cities
<i>Social and spatial effects</i>	Unskilled wage growth	+	Urban skilled wage growth	Inequality	Access to social services
<i>Managing societies</i>	Small centralized governments	+	Decentralized governments	Corruption	Transparency & accountability

Middle income: a time for big changes

- **From increasing diversification to specialization**
 - The reasons are likely related to economies of scale.
- **From investment to innovation**
 - Policies that favored investment by incumbent firms must give way to those that encourage entry of new firms.
- **From basic education to post-secondary education**
 - Governments must switch from general subsidies for schooling to more specific incentives for the creation of new products and processes.

Conclusion: East Asia needs a third integration

- East Asia has done well with **global integration**, and has grown.
- East Asia is doing well with **regional integration**, and is being transformed.
- But East Asian countries have to do better with **domestic integration**, and ensure that the growth and transformation is inclusive.
- Middle-income East Asia needs a **third integration**, this one at home.

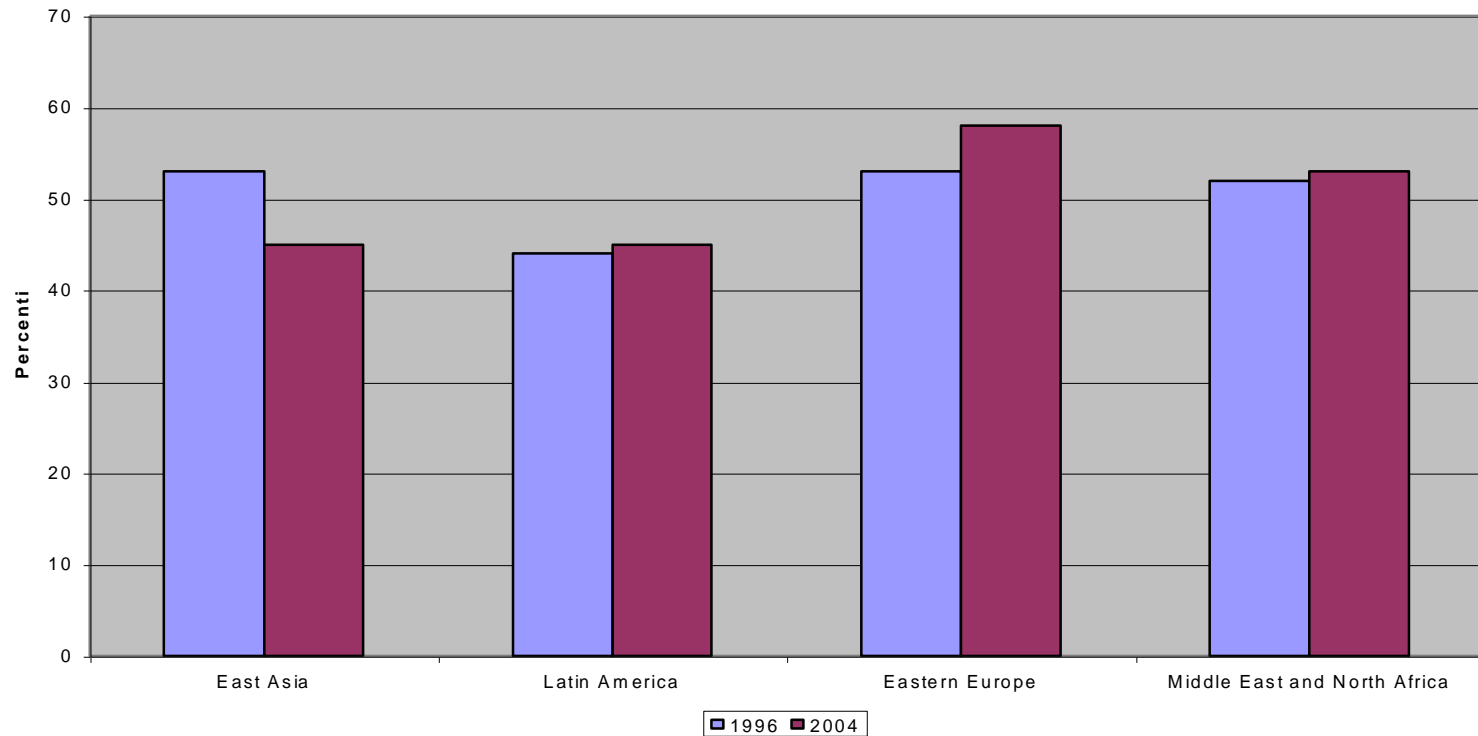
[Extra Slides



Friction in East Asia

Figure 8
East Asia is falling behind in the control of corruption

Control of corruption index, ranking in 1996 and 2004



Source: World Bank Institute Governance Indicators.

First diversification, then specialization

