

Introduction to Diagnostic Approaches

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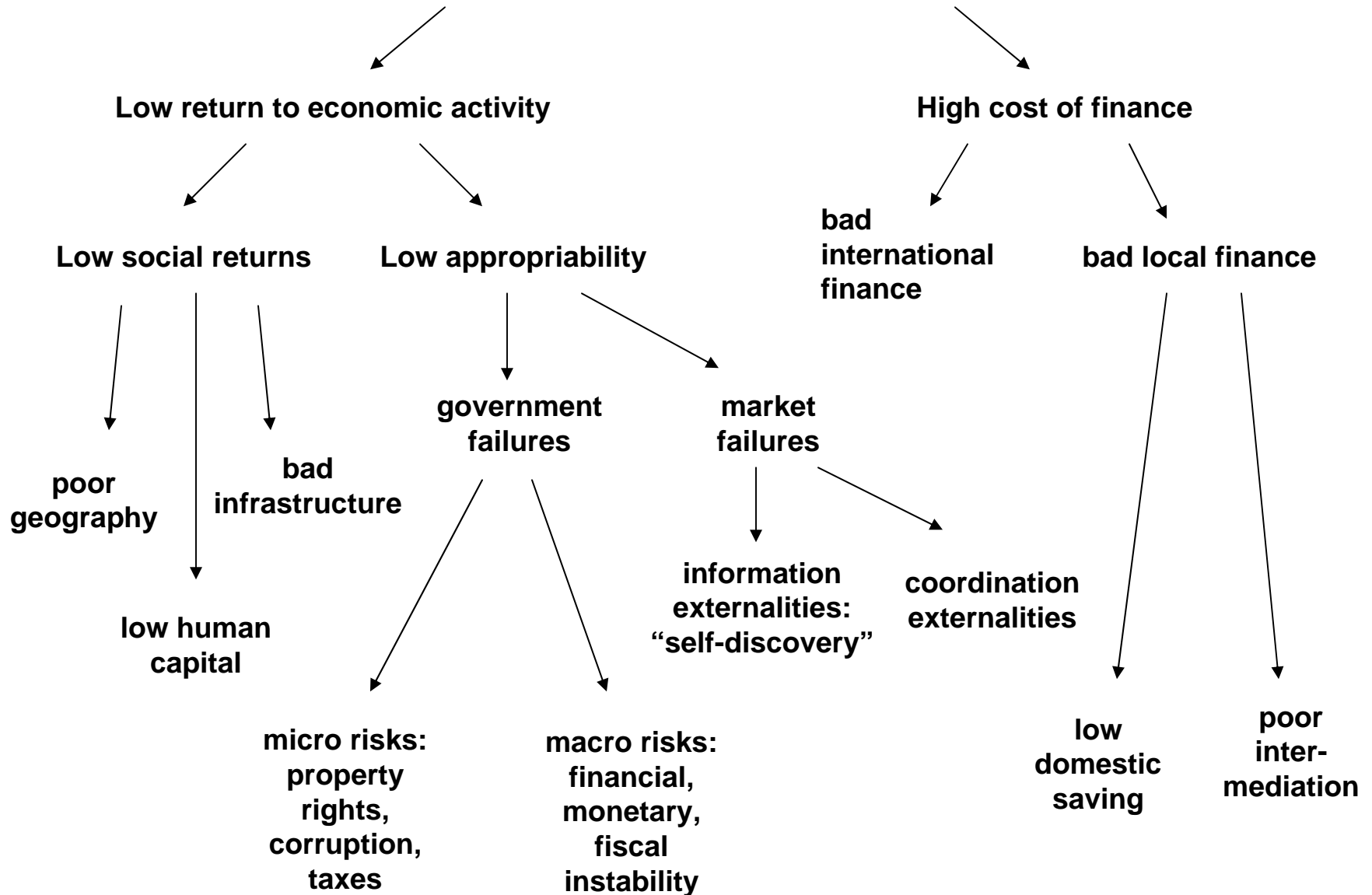
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I. Why focus on binding constraints

- An underperforming country faces many distortions constraining its economy from growing faster.
- Distortions are often caused by market failures (externalities, information asymmetry) or government failures (excessive tax, poor economic management, weak institutions).
- At a particular time, some constraints are binding and some may not. Among the binding constraints, some have higher shadow prices and their relaxation lead to greater development impact.
- A key challenge for the government and aid agencies in devising development or country assistance strategies is to identify the most binding constraints and to target efforts at relaxing the binding development constraints.

II-A. Framework for Identifying Binding Constraints to Growth

Low levels of private investment and entrepreneurship



II-B. From theory to practice

- Explicit search for “diagnostic signals”:
 - “If story A is correct, signals x, y, and z should present”.
- Searching for price signals, such as return to education, interest rates, cost of transport:
 - If low education is a serious problem, returns to skill/education should be high and unemployed skilled people should be low.
 - If investment is constrained by savings, interest rates should be high and growth respond to changes in available savings (e.g., inflow of foreign capital).
 - If poor transport links is a constraint, there should be bottlenecks and high private cost of transport.

II-B. From theory to practice

- Searching for non-price signals:
 - The camels and the hippopotamus.
 - When a constraint binds, it results in activities designed to get around it:
 - High tax → high informality.
 - Poor legal institutions → high demand for informal mechanisms of conflict resolution and contract enforcement.
 - Poor financial intermediation → internalization of finance through business groups, etc.

II-B. From theory to practice

- Searching for historical growth episodes:
 - High growth episodes of the past cause one to ask what has changed.
- Finding out what the business community says:
 - Conducting business climate surveys.
- Bench-marking with other countries and other periods:
 - To figure out thresholds.

II-B. From theory to practice

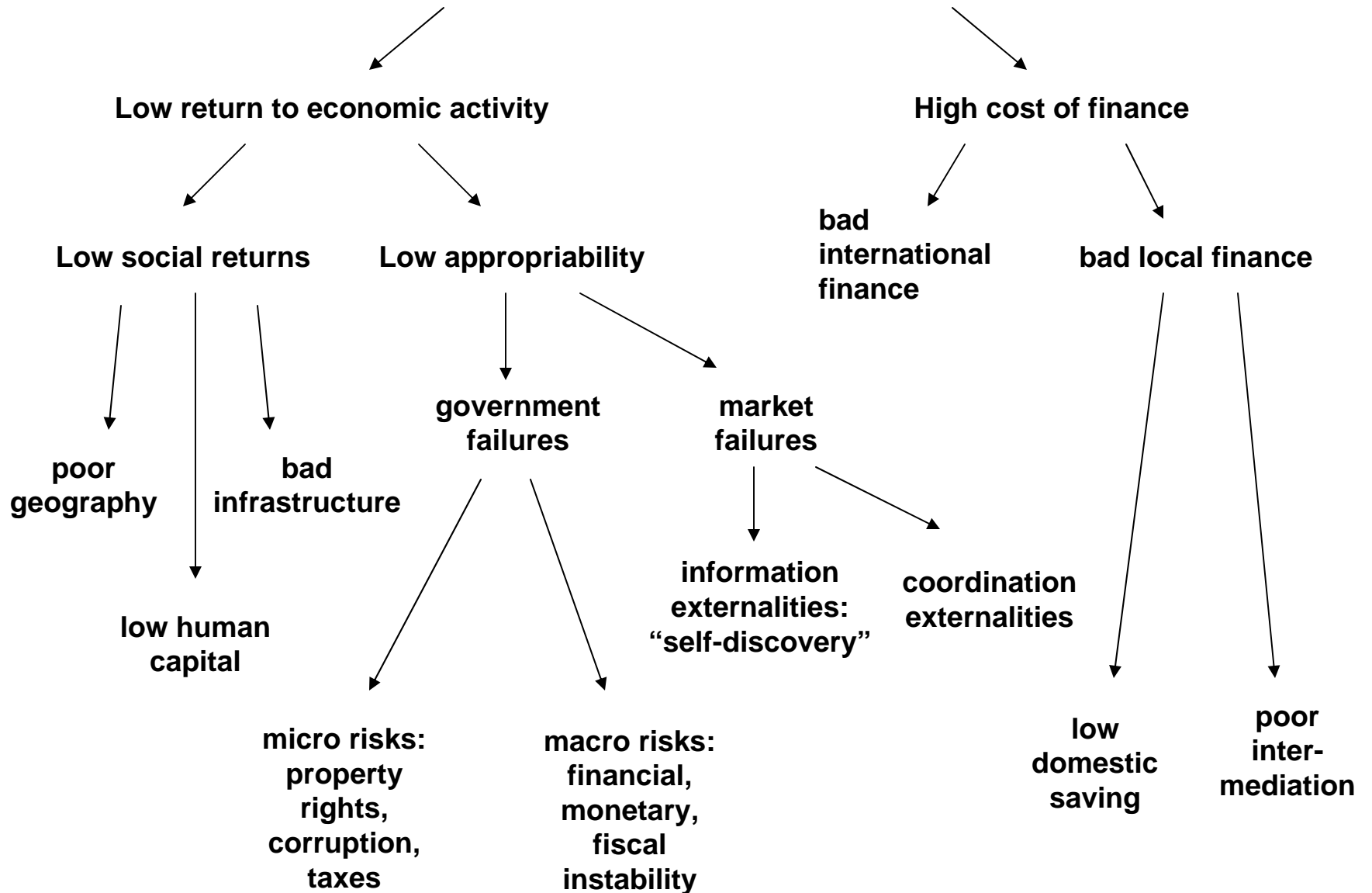
- For fast-growing economies, focusing on constraints to sustaining growth.
- Relying on in-depth local knowledge and conducting in-depth country-specific studies.

II-C. Case Study – 2007 Philippine Diagnostic

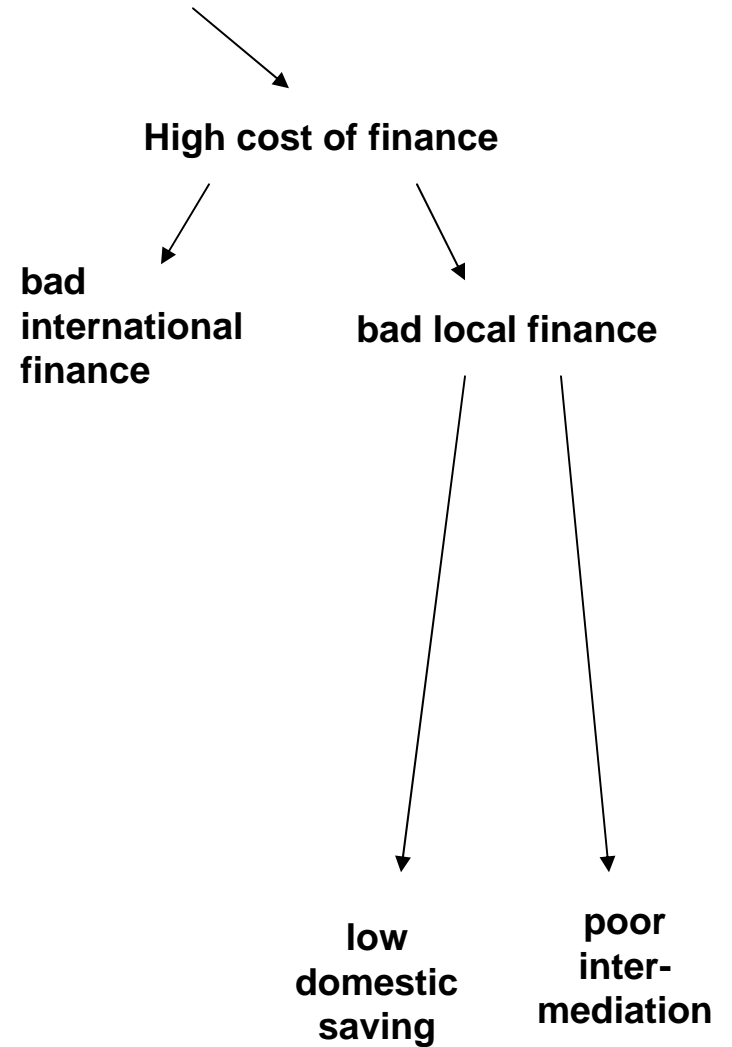
1. Philippine Development Experience

- Annual per capita GDP growth of 1.4% during 1961-2006, much lower than many of its East and Southeast Asian neighbors.
- Despite GDP growth is picking up in recent years (reaching 7% in 2007), domestic investment has remained sluggish and its share to GDP continued to decline.

Low levels of private investment and entrepreneurship



Low levels of private investment and entrepreneurship



2. Binding Constraints to Growth

- A. Cost of Finance is *not* a binding constraint because
- Aggregate domestic savings rate is modest in the Philippines but may not be a critical constraint to growth at present given that (i) the ratio of gross domestic savings to GDP has exceeded the ratio of gross domestic investment to GDP since 2002; (ii) the current account has been in surplus during the same period; and (iii) large remittances helped offset trade account deficit and reduce external indebtedness
 - Efficiency of domestic financial intermediation could be improved but may not be a critical constraint as reflected in the deposit-lending interest rate spread comparable to that of Thailand.

2. Binding Constraints to Growth

- Growth of real domestic credit has not recovered since the 1997 financial crisis, but this appears to be more a problem of weak borrowing appetite of the corporate sector or lack of sound borrowers than lack of liquidity in the banking system, as reflected in the excess reserves of commercial banks
- Lending rates is currently low by historical standards and real lending rates are comparable to some Asian neighbors
- Access to international financial markets has been improving as reflected in the declining sovereign spreads.

Low levels of private investment and entrepreneurship



Low return to economic activity



Low social returns



poor
geography



low human
capital



bad
infrastructure

2. Binding Constraints to Growth

B. Social Returns to Investments

- 1) Human Capital is *not* a critical constraint under the current industry structure.
 - Unemployment among educated workers is high
 - Most out migrant workers are employed in low paying and low skill occupations
 - but may be scarce in emerging industries especially in the high-skill services sector, which is evident in the wage premium for tertiary education

2. Binding Constraints to Growth

B. Social Returns to Investments

2) Infrastructure *is* a critical constraint.

- investment in infrastructure has been low and erratic and development expenditure has been low relative to other countries in the region
- Overall infrastructure quality ranks low relative to other Asian countries
- Expensive and unreliable electric supply and inefficient transport network are the two most critical constraints to growth.

Low levels of investment and poor conditions of infrastructure have increased the cost of doing business in the Philippines.

- Investment Climate Survey indicated that inadequacies in the transport network and disruption in the cost of electric supply are major constraints to doing business in the Philippines.
- Vehicle operating costs and intercity freights are 50% higher compared to Indonesia and Thailand.
- The costs of exporting a 20-foot container from the Philippines is 16-51% higher than from PRC, Singapore or Thailand.
- Power tariffs for business in Manila are 20-80% higher than major Southeast Asian cities.

Low levels of private investment and entrepreneurship



Low return to economic activity



Low appropriability



government failures

market failures



**information externalities:
“self-discovery”**

coordination externalities

**micro risks:
property rights,
corruption,
taxes**

**macro risks:
financial,
monetary,
fiscal
instability**

2. Binding Constraints to Growth

C. Appropriability of Returns to Investments

1) Macroeconomic Risks are a critical constraint.

- Historically the Philippines has had periodic macroeconomic instabilities and despite some improvement in recent years, macroeconomic stability has remained a key investor concern
- Persistent fiscal deficits have been a key source of macroeconomic instabilities and remained a critical constraint to growth

2. Binding Constraints to Growth

C. Appropriability of Returns to Investments

2) Microeconomic Risks are a critical constraint

- Poor governance is a credible threat to appropriability and a critical constraint to investment and growth

2. Binding Constraints to Growth

C. Appropriability of Returns to Investments

... High tax rates and poor tax administration are critical constraints and cumbersome business procedure and over regulation* are constraints which have affected FDI inflows

* According to the Global Competitiveness Report 2003/04 it took 59 days to register a business compared with 8 days for Singapore and the country ranked 98th out of 102 countries in terms of extent of regulatory burden)

Governance concerns affect investor confidence in the Philippines

- [Political instability](#) caused the decline in foreign direct investments since the 1980s.
- Worsening corruption was found to partly explain the low investment rate
- High lending rates are result of poor governance and this discourages private investment
- Corruption and patronage problems have resulted into leakages in revenue collection and is a major reason for the weak revenue generation

C. Appropriability of Returns to Investment

3) Market failures may have led to a small and narrow industrial base

- Philippine manufactured exports have not diversified and have low value-added
- Domestic manufacturing focuses mostly on goods with [low productivity](#)
- Government spending on research and development is one of the lowest in a recent survey (ranked 89 out of 103 countries)
- Weak investor confidence and poor infrastructure partly explain small and narrow industrial base, but the inability to address market failures, caused by information and coordination externalities, may also be part of the reasons

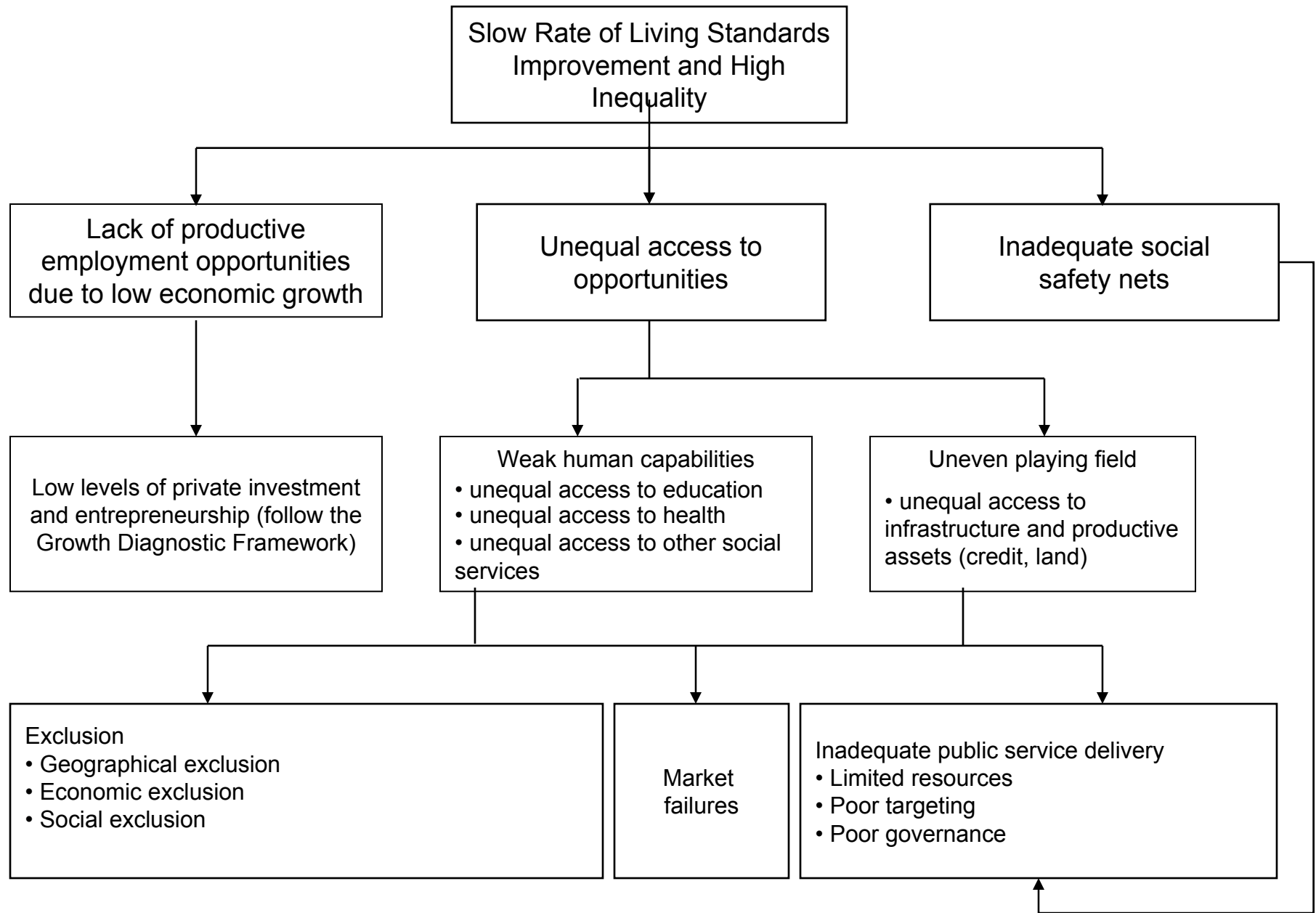
Summary of Critical Constraints to Private Investment and Growth in the Philippines:

- Inadequate infrastructure, particularly in electricity and transport;
- Weak investor confidence due to governance concerns, particularly, corruption and political instability; and
- Inability to address market failures leading to a small and narrow industrial base.

Other constraints that were examined but found to be less critical:

- Adequacy of domestic savings
- Efficiency of domestic financial intermediation
- Cost of international borrowing
- Stock of human capital

III-A. Framework for Identifying Binding Constraints Inclusiveness



III-B. From theory to practice

- A development strategy based on the inclusive growth concept is anchored on two pillars:
 - To create and expand economic opportunities through high and sustainable growth.
 - To broaden access to opportunities for all members of a society.
- Key questions we need to ask:
 - Has there been enough productive and decent employment opportunities?
 - Has access to opportunities been equal across the country, and among different social groups?

III-B. From theory to practice


- Searching for signals for first question:
 - Bench-marking with other countries and other periods.
 - Employment-related signals (direct signals):
 - Unemployment rates.
 - Underemployment rates.
 - Labor productivity.
 - Wages
 - Migration trends (internal, external).
 - Feedback signals:
 - Subjective assessment of living standards etc.

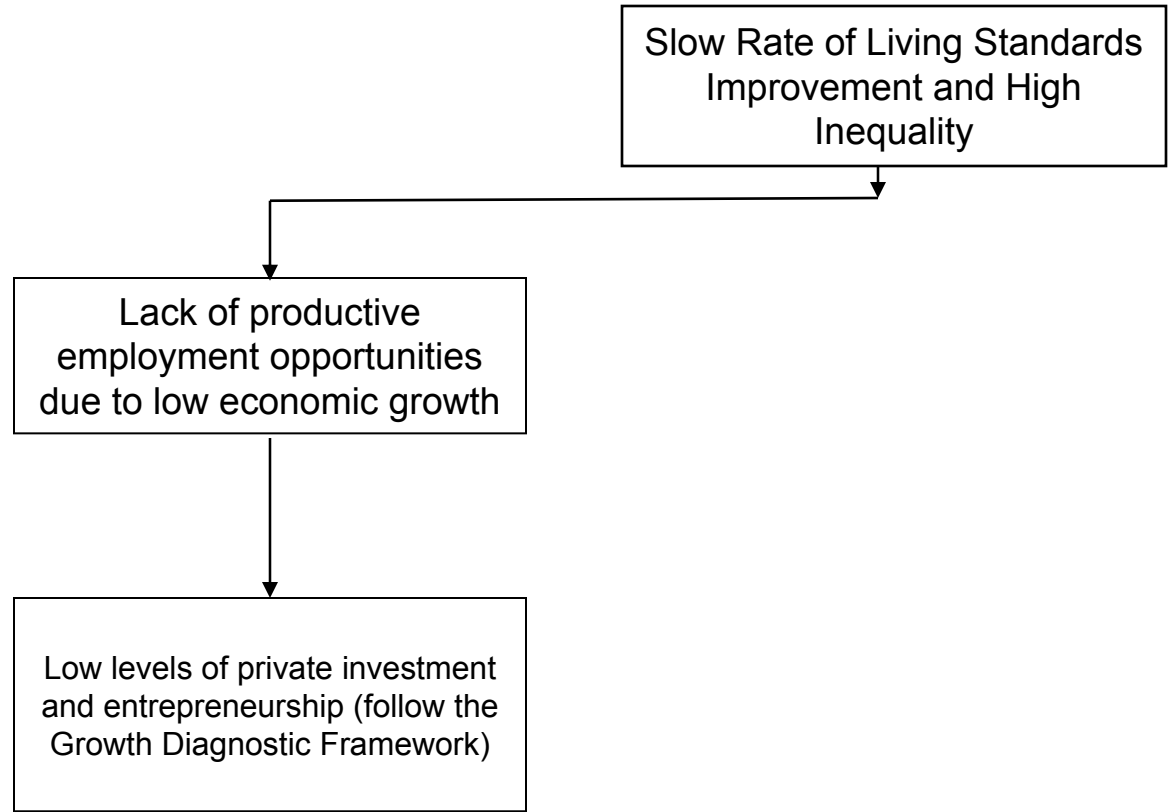
III-B. From theory to practice

- Searching for signals for second question:
 - Equity-related signals (direct signals).
 - Differences in employment-related indicators across the country, and among different social groups.
 - Differences in access-related indicators (e.g., access to education, health, water and sanitation, infrastructure, land, credit etc.) across the country, and among different social groups.
 - Differences in provision-related indicators (e.g., provision of schools, health centers, key infrastructure etc.) across the country, and among different social groups.
 - Indirect signals:
 - Determinants of welfare, employment etc.

III-C Case Study - Nepal Diagnostics

1. Has the Recent Growth been inclusive?

- Poverty reduction
 - From 42% in 1995-96 to 31% in 2003-04
 - But reduction rates – not uniform 
- Income growth – not uniform
- Increase in inequality
 - Gini – from 34.2 to 41.4
 - Further poverty reduction of 13 percentage points if inequality did not worsened
- Poverty dynamics – determinants



2. Critical Constraints to Inclusiveness

A. Limited productive employment opportunities is a constraint.

- Unemployment is relatively low, but underemployment remains high. ▶
 - Labor productivity in Nepal is lowest in South Asia, and has been stagnant.
 - High migration rates within and out of the country.
 - A large percentage of people feel their income is not enough to support their living. ▶
- Possible underlying causes for the lack of productive employment opportunities can be analyzed following the Growth Diagnostic Framework.

Slow Rate of Living Standards
Improvement and High
Inequality

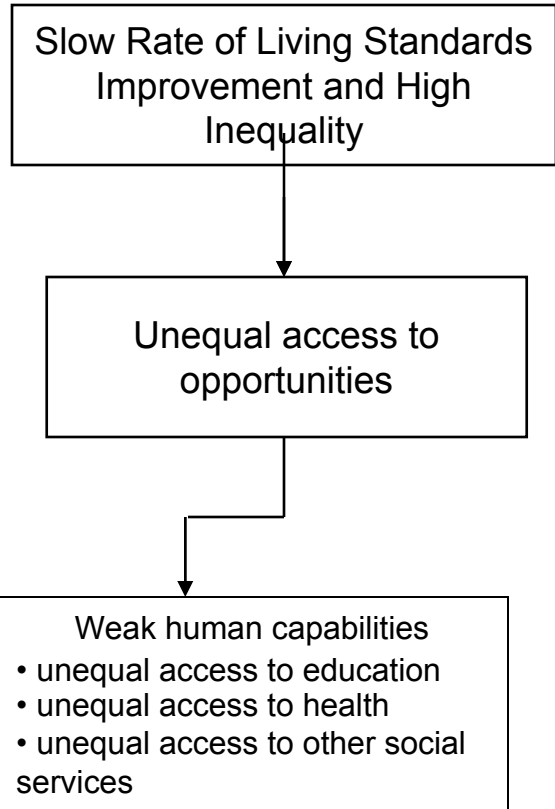


Unequal access to
opportunities

2. Critical Constraints to Inclusiveness

B. Unequal access to opportunities is a constraint.

- There is unequal access to employment opportunities, especially non-agricultural skilled wage employment.
 - Access to opportunities to commercialize and diversify agricultural activities remains unequal.
 - Opportunities to start and operate non-farm enterprises are limited in rural areas, and also for poor and disadvantaged groups.
 - Poor and disadvantaged groups have less opportunities to migrate to countries other than India.
- ▶
- Possible underlying causes are weak human capabilities and uneven playing fields.



2. Critical Constraints to Inclusiveness

C. Access to secondary education is inequitable and a critical constraint to inclusiveness.

- The regression analysis suggests that education played a key role in the movement out of poverty.
- There has been a significant increase in skill premiums. ▶
- We observe a great disparity in education level among the working population. ▶
- Primary school enrollment rates have significantly improved in recent years, but access to secondary school remains limited and inequitable. ▶

2. Critical Constraints to Inclusiveness

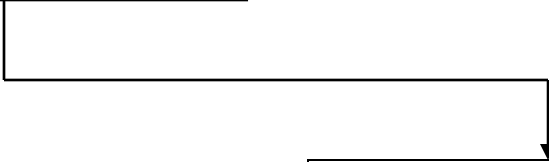
D. Access to health, water and sanitation may not be a critical constraint at present.

- Despite the decade-long conflict/civil war, Nepal has made significant progress in health outcomes in recent years (e.g., reduced infant and child mortality rates, increased life expectancy at birth etc.).
- The government still needs to continue its efforts in improving access to these services.

Slow Rate of Living Standards
Improvement and High
Inequality



Unequal access to
opportunities



Uneven playing field
• unequal access to
infrastructure and productive
assets (credit, land)

2. Critical Constraints to Inclusiveness

E. Access to infrastructure (e.g., roads, electricity) is a critical constraint.

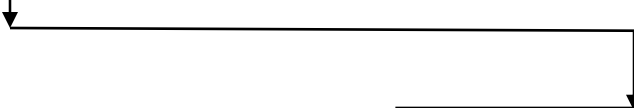
- Despite much efforts in the provision of roads in recent years, there remains a great room for improving connectivity in Nepal which is a geographically challenged country. ▶
- Roads are still not uniformly distributed – limited provision particularly in the mountainous and hilly areas. ▶
- Roads are also important in accessing key facilities.
- Access to electricity is limited in rural areas, and also for poor households. ▶

2. Critical Constraints to Inclusiveness

F. Access to productive assets (land, credit) is a critical constraint.


- More than land ownership, the size and access to irrigated land are inequitable in Nepal. ▶
- Despite the recent improvement in access to irrigated land, the greatest increase was observed among wealthy households.
- Access to financial services remains limited and has been deteriorating in recent years. ▶
- Compared with well-off households, poor households are more likely to obtain loans from informal sector with higher interest rates. ▶

Slow Rate of Living Standards
Improvement and High
Inequality



Inadequate social
safety nets

2. Critical Constraints to Inclusiveness

- G. Inadequate provision of social safety nets constitutes a critical constraint in Nepal where deep-rooted exclusion of certain segments of society exists.
- The provision of social safety nets in Nepal is relatively low in comparison with other South Asian countries. 

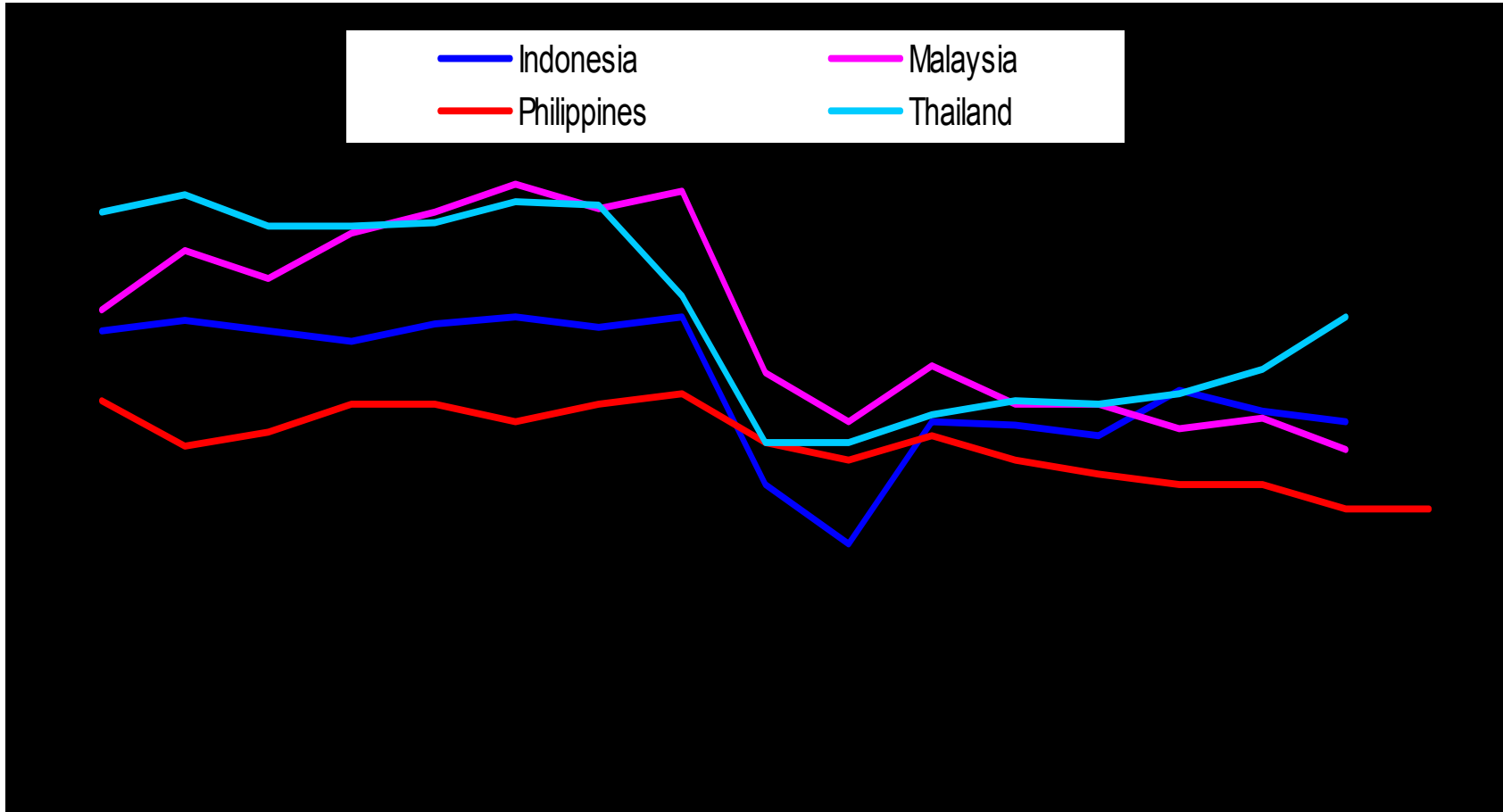
3. Summary of Critical Constraints to Inclusiveness

- Lack of productive employment opportunities, especially in rural areas.
- Unequal access to opportunities due to inequity in accessing education and skill development; unequal provision of infrastructure (roads, electricity, irrigation); unequal access to productive assets (land, credit).
- Inadequate social safety nets.

THANK YOU.

ANNEXES

Domestic Investment as a Share of GDP

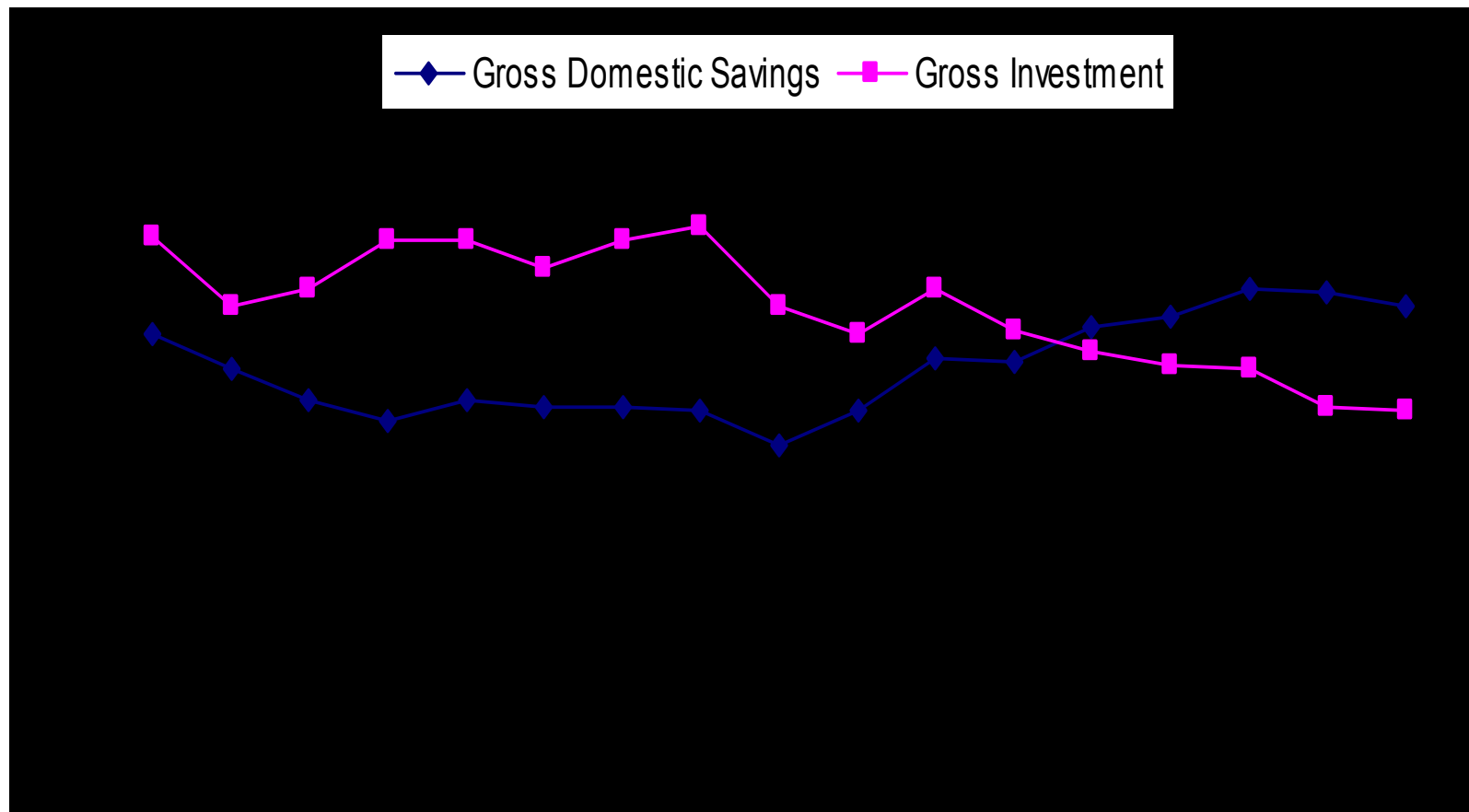


[Philippine Development Experience](#)

GDP = gross domestic product.
Investment = gross domestic capital formation.
Source: Data from NSCB (various years) and WDI.



Gross Domestic Savings and Investments as a Share of GDP (in %)

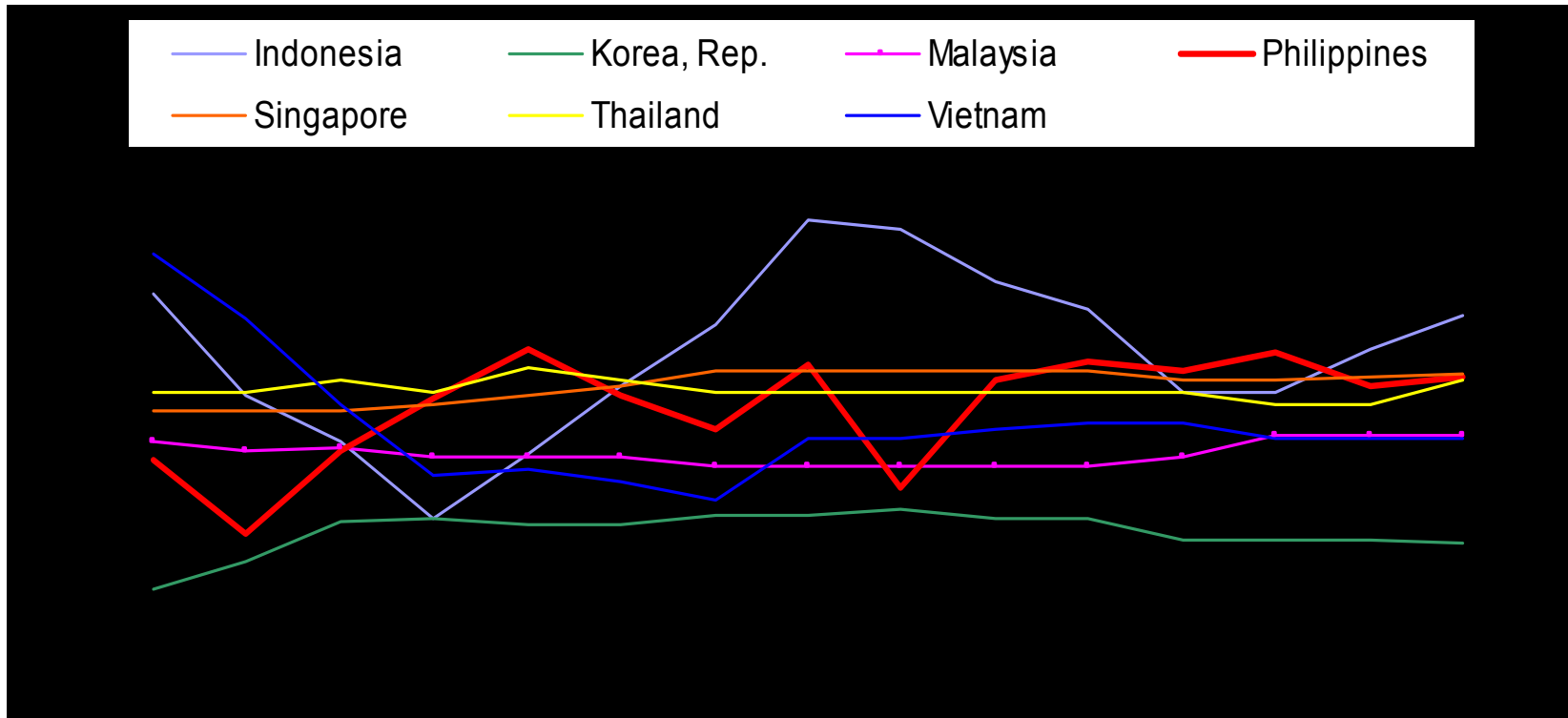


Binding
Constraints
to Growth

Source: Data from NSCB (various years)



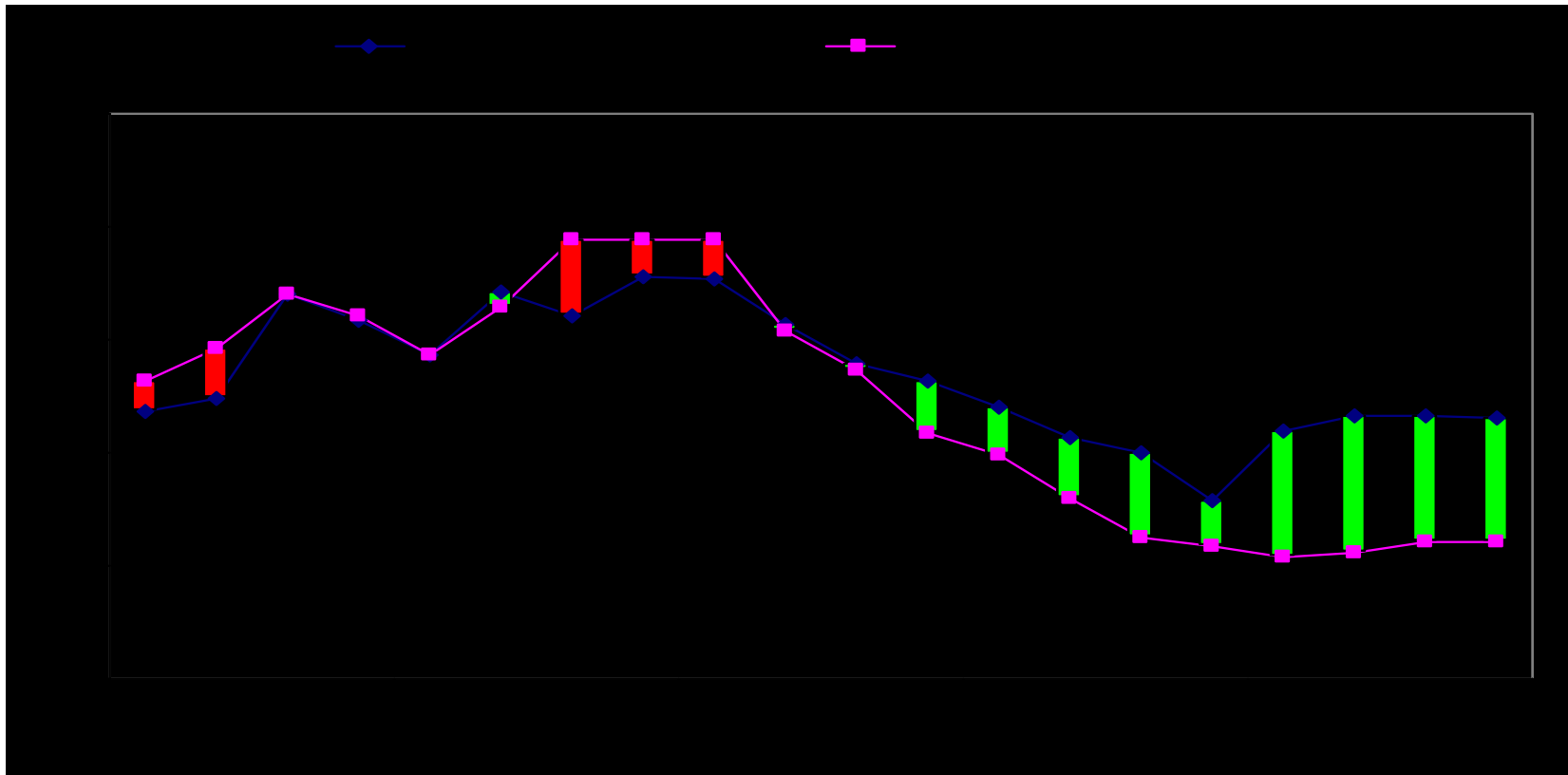
Spread between Lending and Deposit Rates selected ASEAN+3 countries



Source: IFS



Reserves Assets to Deposit Ratios of the Banking Sector



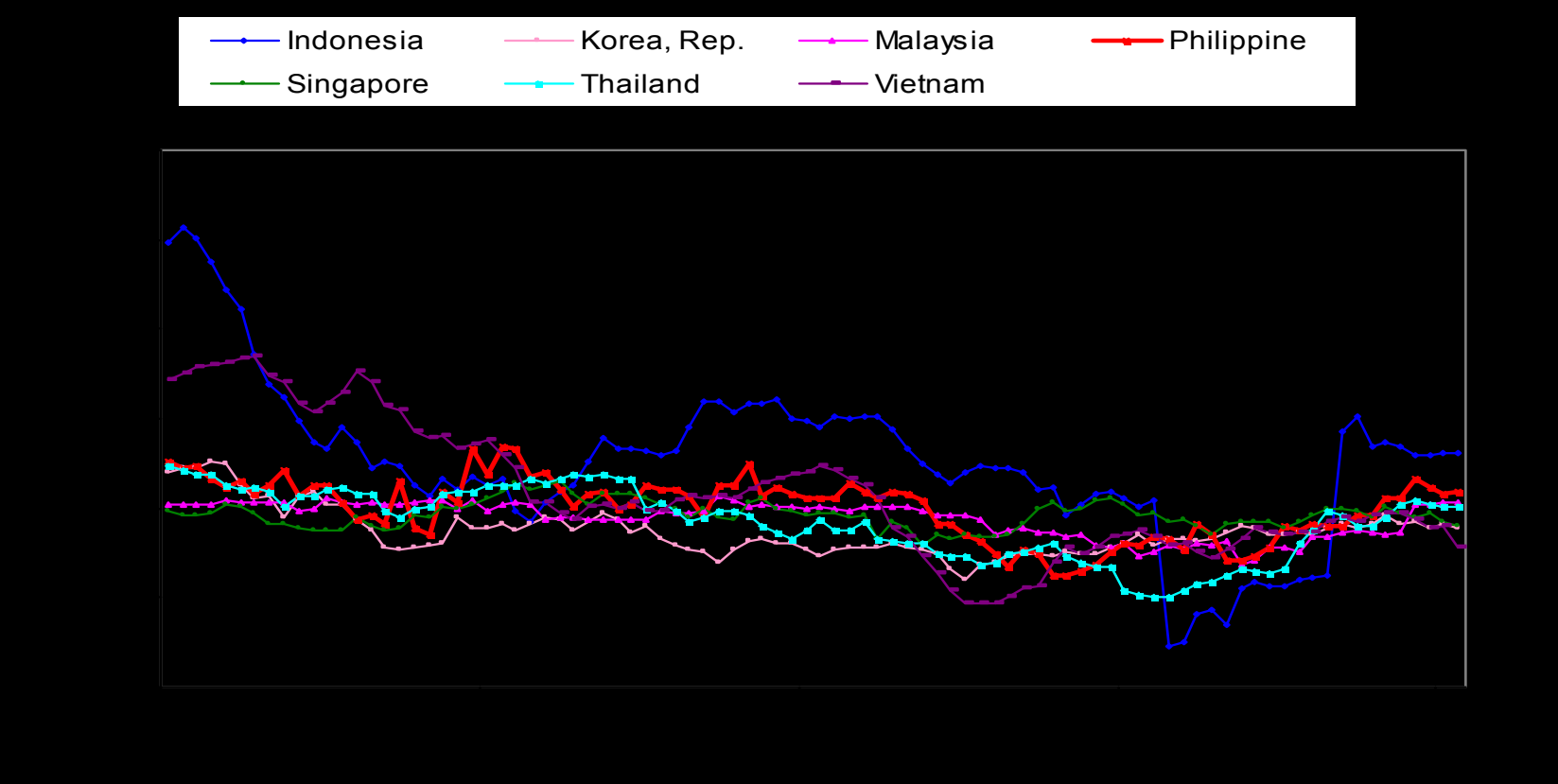
[Binding
Constraints
to Growth](#)

Note: green bar indicates that available reserves are more than required reserves
and red bar indicates the reverse

Source: Data from BSP (2007)



Real domestic interest rate of selected ASEAN+3 Countries

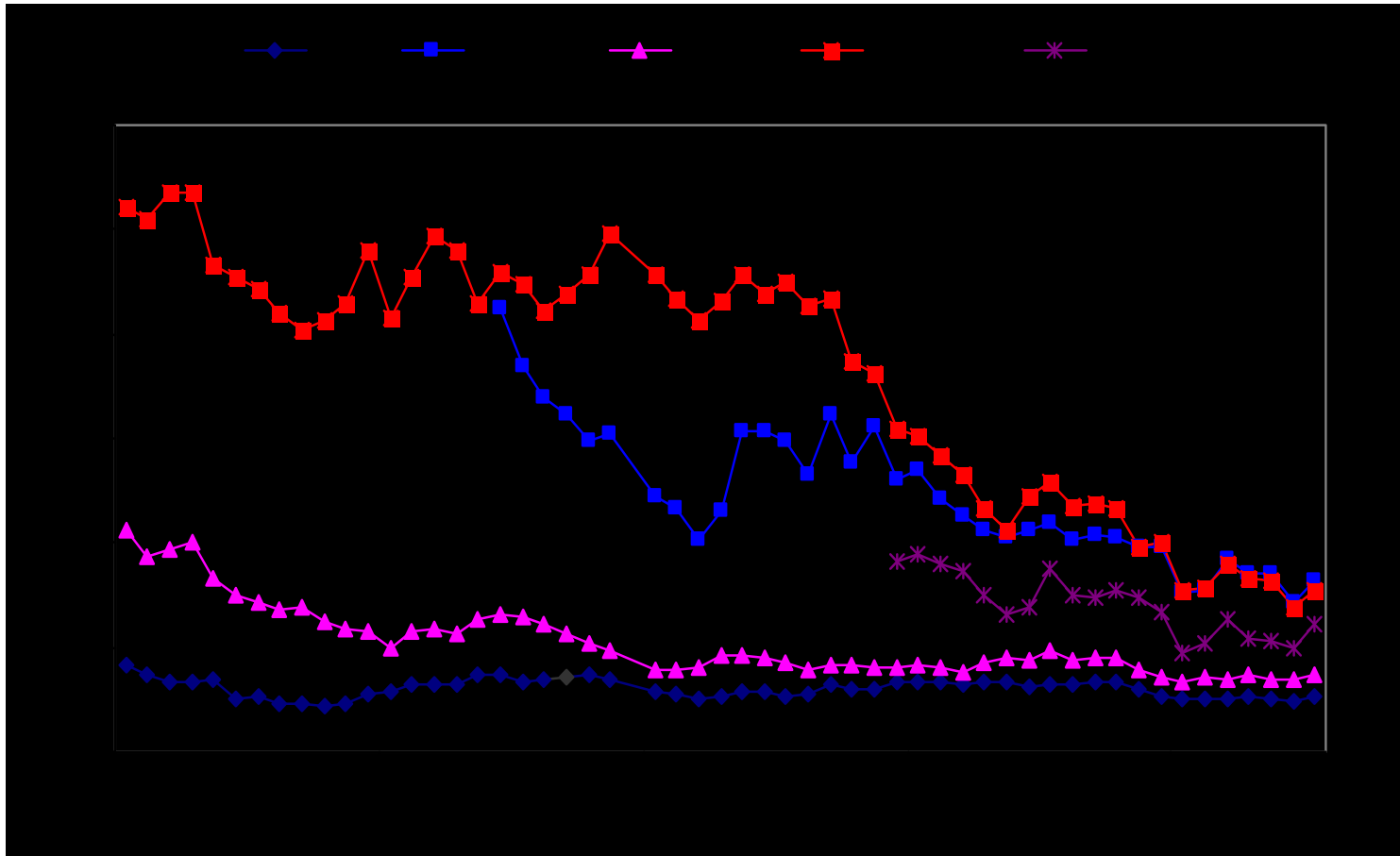


[Binding Constraints to Growth](#)

Source: Data from IMF (2007)



Comparison of Sovereign Spreads basis points



[Binding Constraints to Growth](#)

Source: JP Morgan



Unemployment rates by educational levels in the Philippines

Education levels	Unemployment rate (%)		Contribution to total Unemployment (%)	
	2002	2006	2002	2006
No grade completed	0.2	0.0	1.5	0.5
Elementary	2.1	1.0	20.8	14.0
Not completed	1.0	0.4	9.6	6.0
Completed	1.1	0.6	11.2	8.1
High school	4.3	3.3	42.7	45.5
Not completed	1.4	0.9	14.2	12.1
Completed	2.9	2.4	28.5	33.4
College	3.6	2.9	35.0	40.0
Not completed	1.8	1.5	17.4	21.0
Completed	1.8	1.4	17.6	19.0
Total	10.2	7.3	100.0	100.0

[Binding Constraints to Growth](#)

Sources: BLES



Rates of Returns by Education Levels and Sector

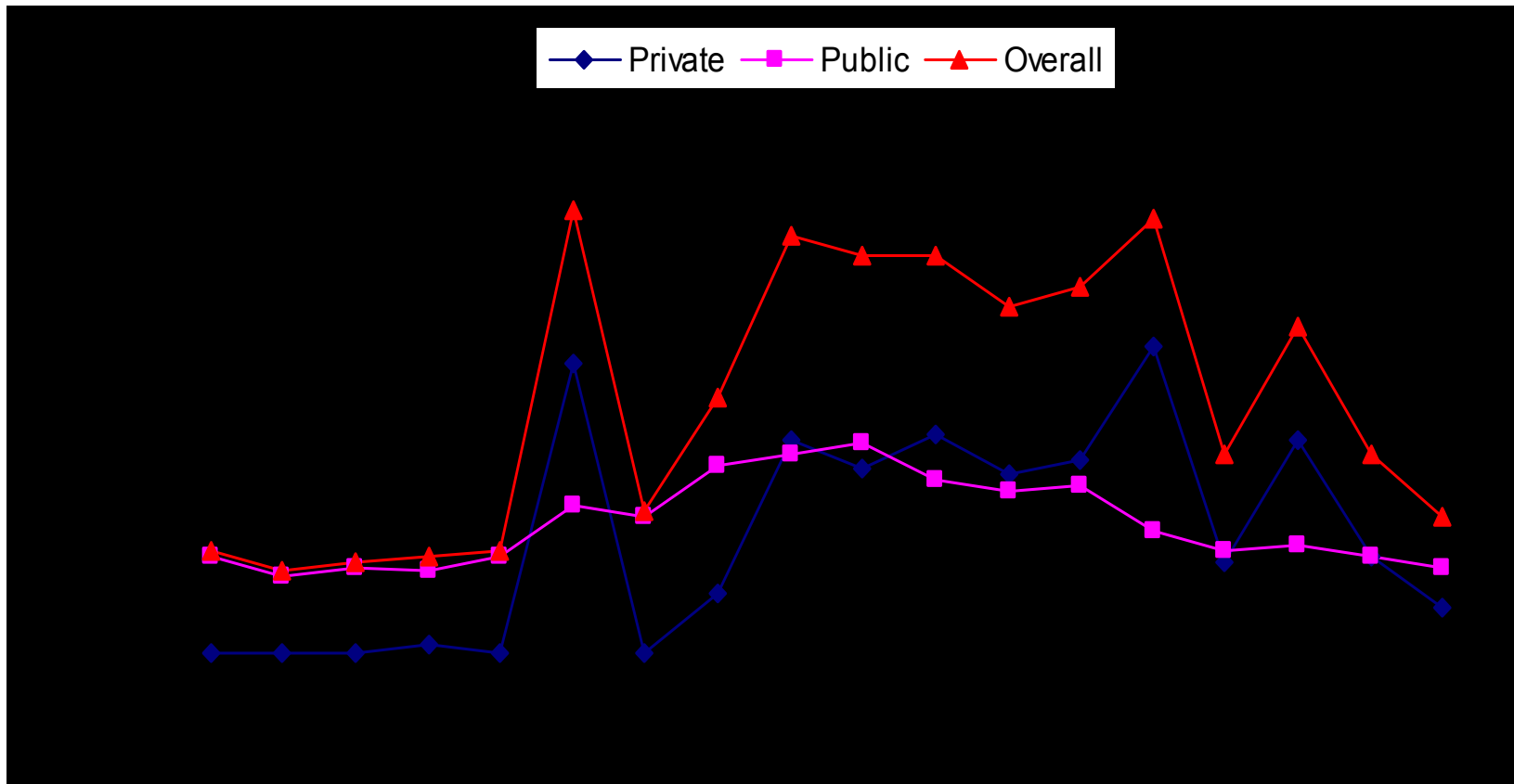
	1997	2000	2003
By educational levels			
Primary education	2.50	2.42	2.22
Secondary education	6.75	5.57	5.16
Tertiary education	19.80	17.62	16.57
By sectors			
Agriculture sector	0.84	0.96	0.89
Industry sector	7.57	7.01	7.23
Service sector	11.42	9.90	9.36

[Binding Constraints to Growth](#)

Source: Study estimates based on FIESs and LFSs.



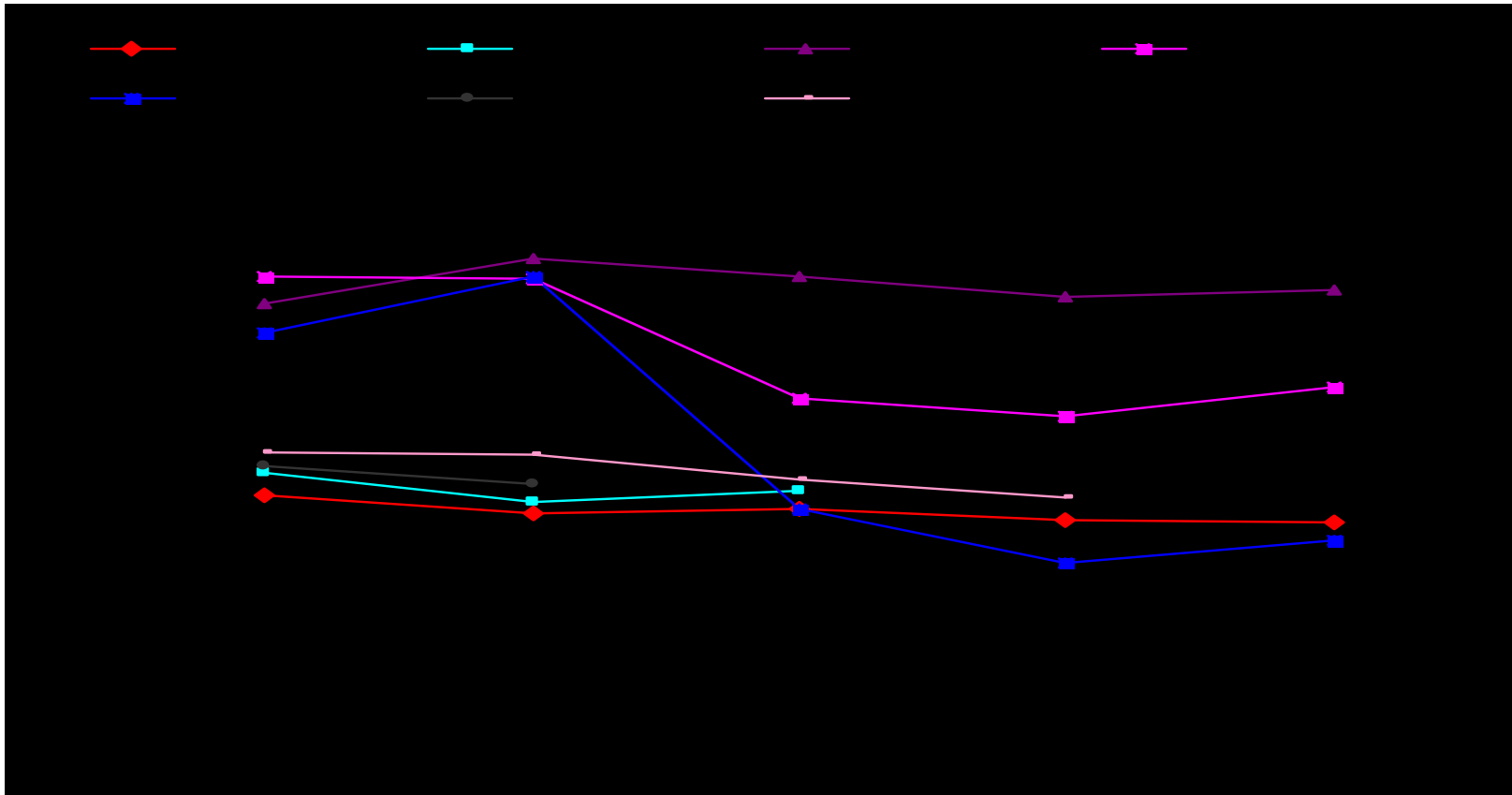
Public and Private Sector Investments in Infrastructure



Source: Meeting the Infrastructure Challenge 2005, World Bank



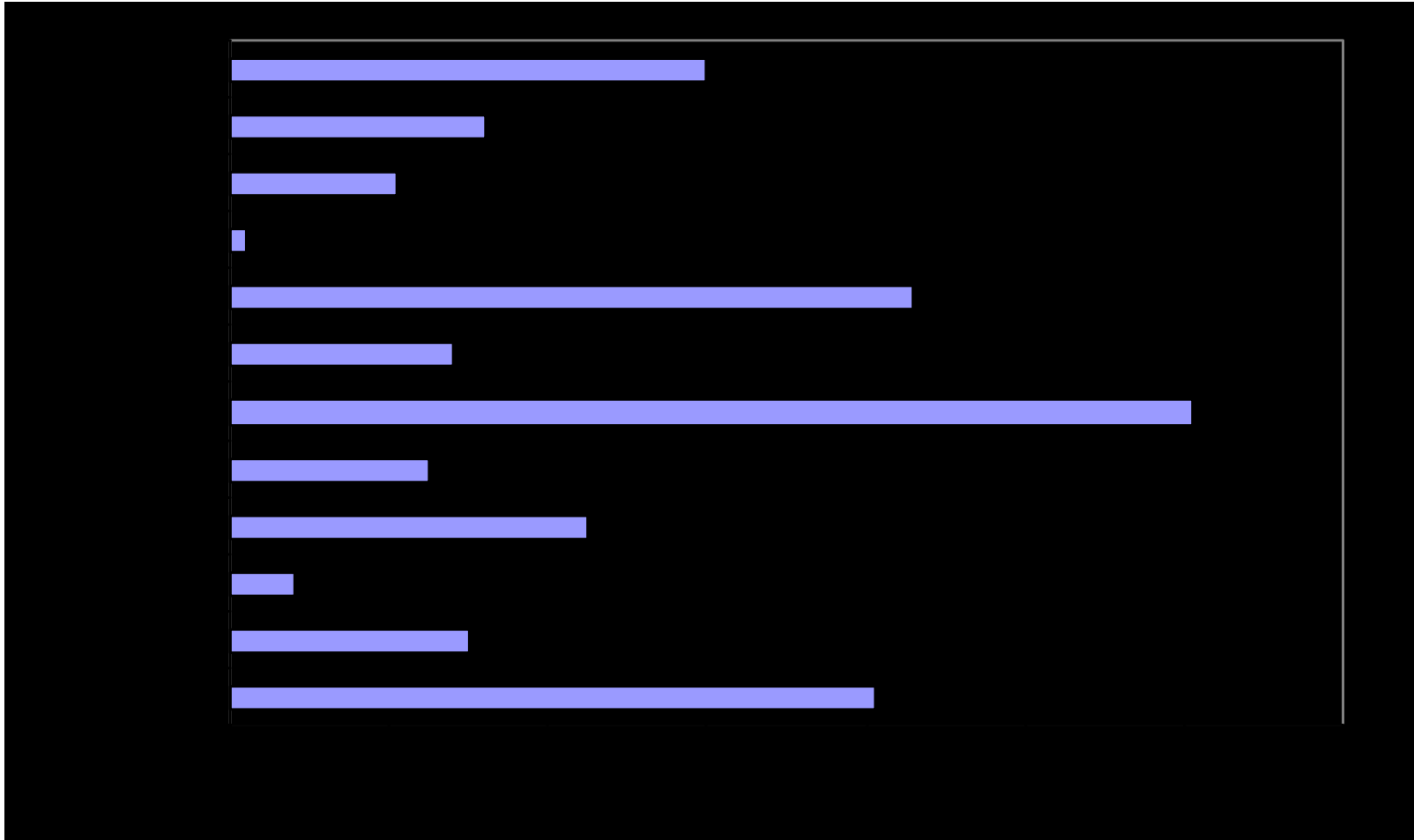
Development Expenditures as % of GDP



Source: ADB Key Indicators, 2007



Infrastructure Quality Ranking 2006-2007

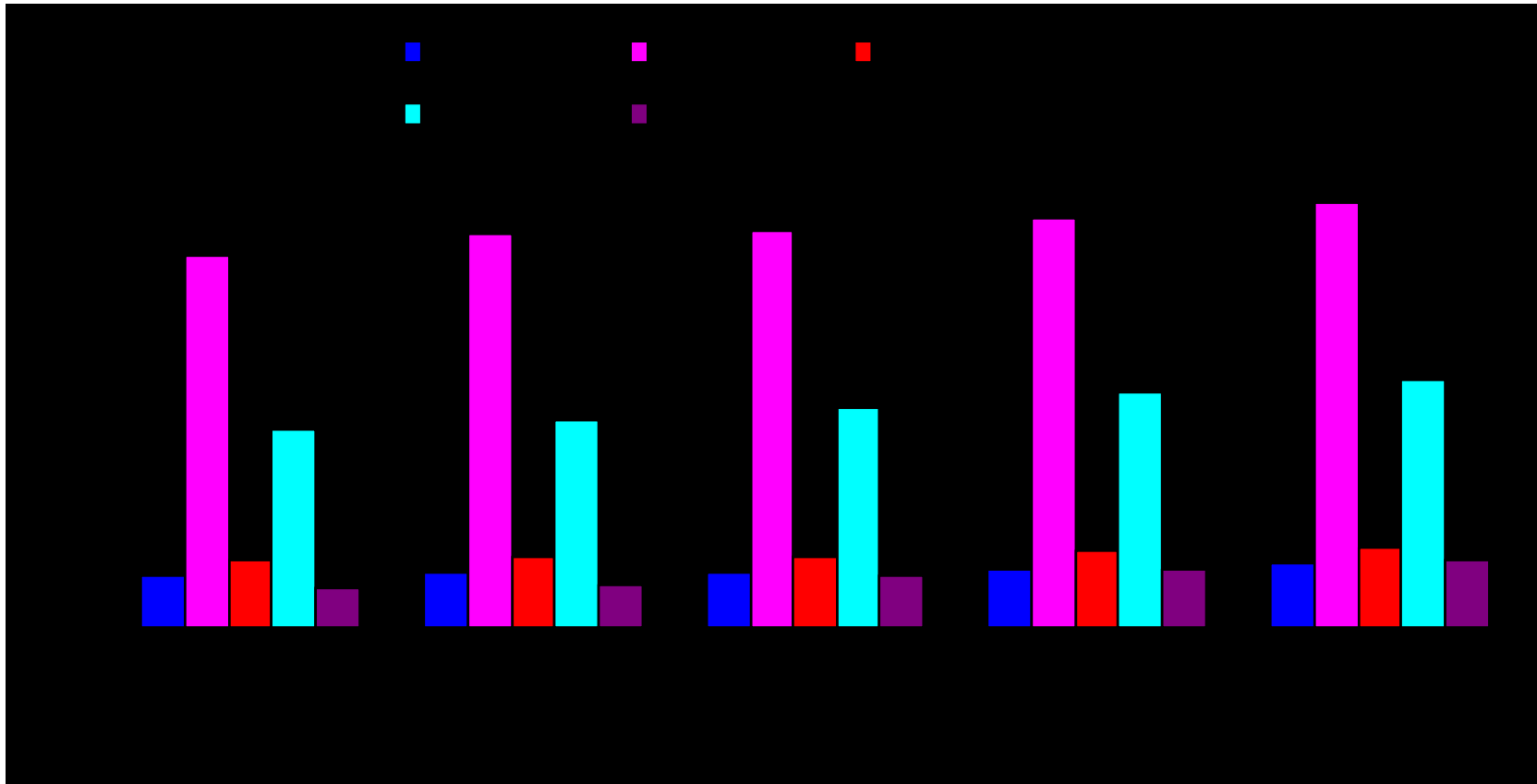


[Binding
Constraints
to Growth](#)

Note: Study ranked 150 countries, a higher ranking indicates poorer infrastructure quality
Source: Connecting to Compete: Trade Logistics in the Global Economy, WB



In terms of electricity: From 2000-2004 the Philippine's per capita power consumption level is 1/3 of Thailand and 1/5 of Malaysia.

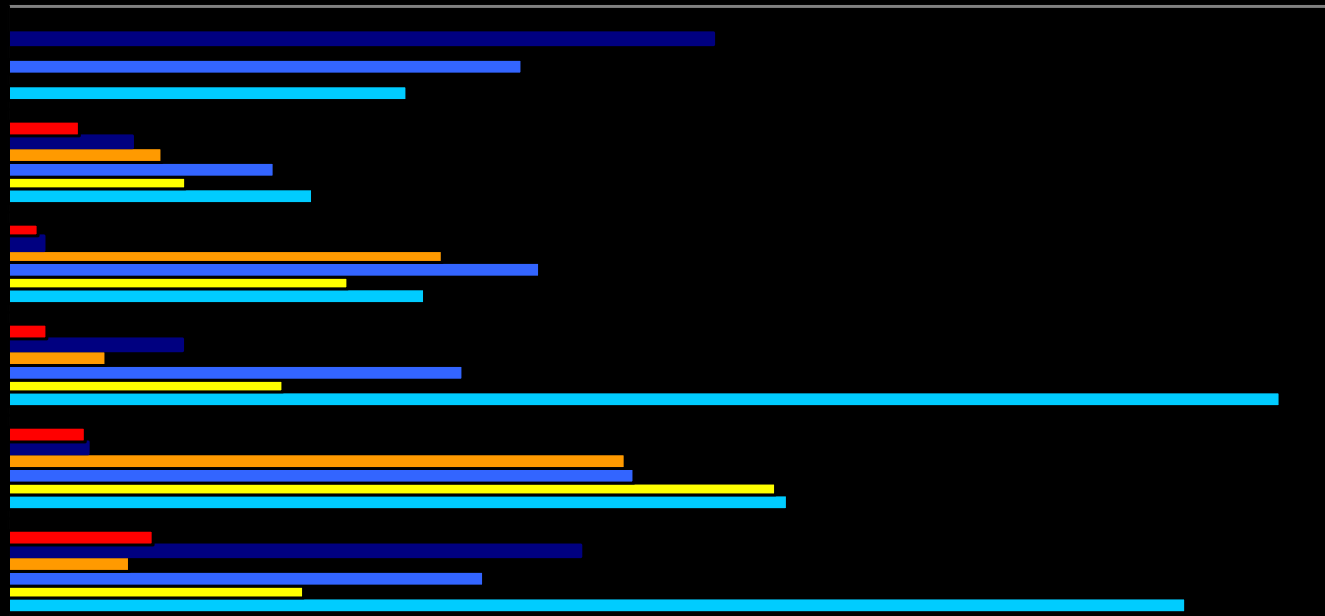


Power consumption is in kilowatt-hour.

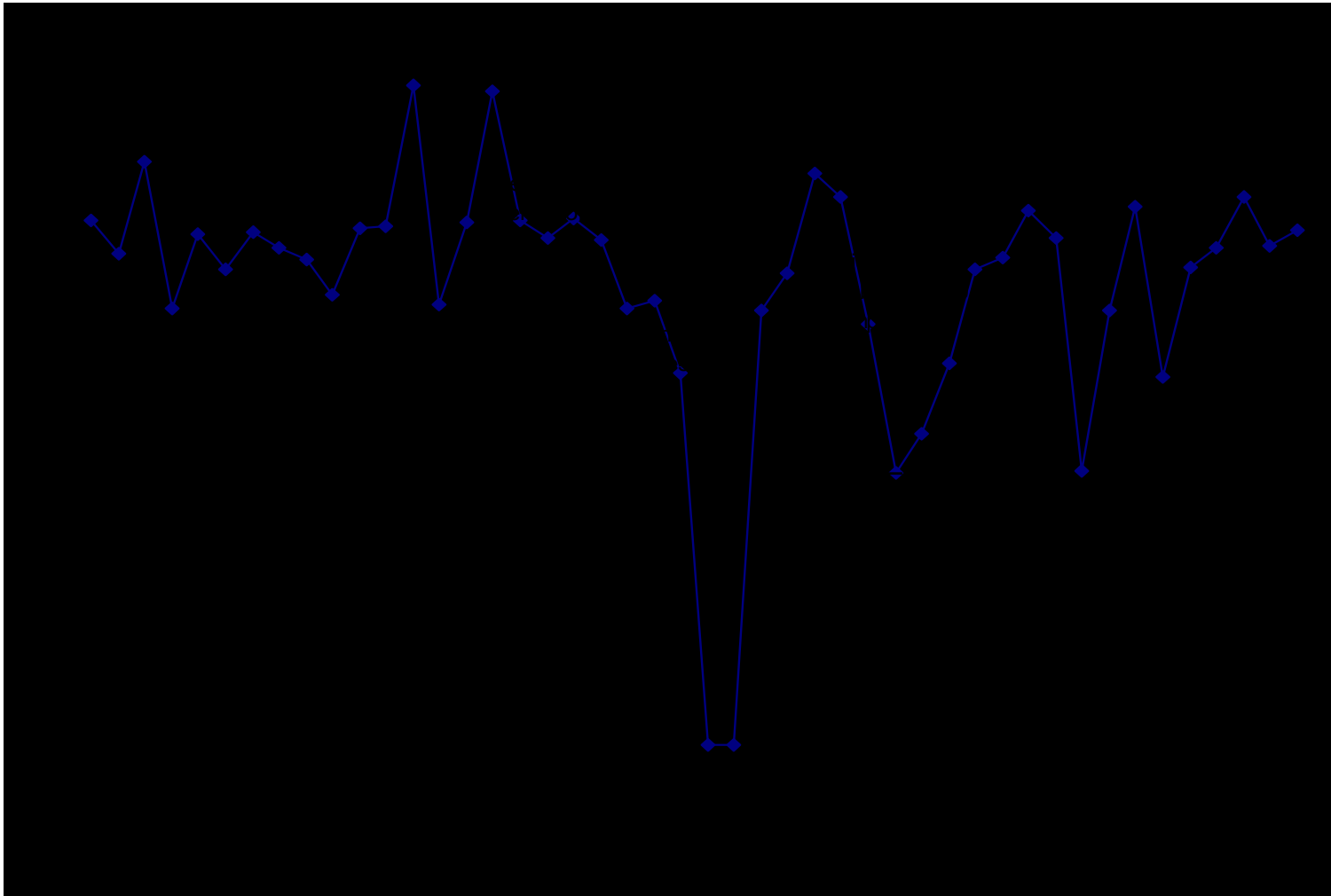
Source: Data from World Bank *World Development Indicators*, various years.



In transport infrastructure: per capita paved road length for the Philippines is roughly one sixth that of Thailand and one fourth of Malaysia.



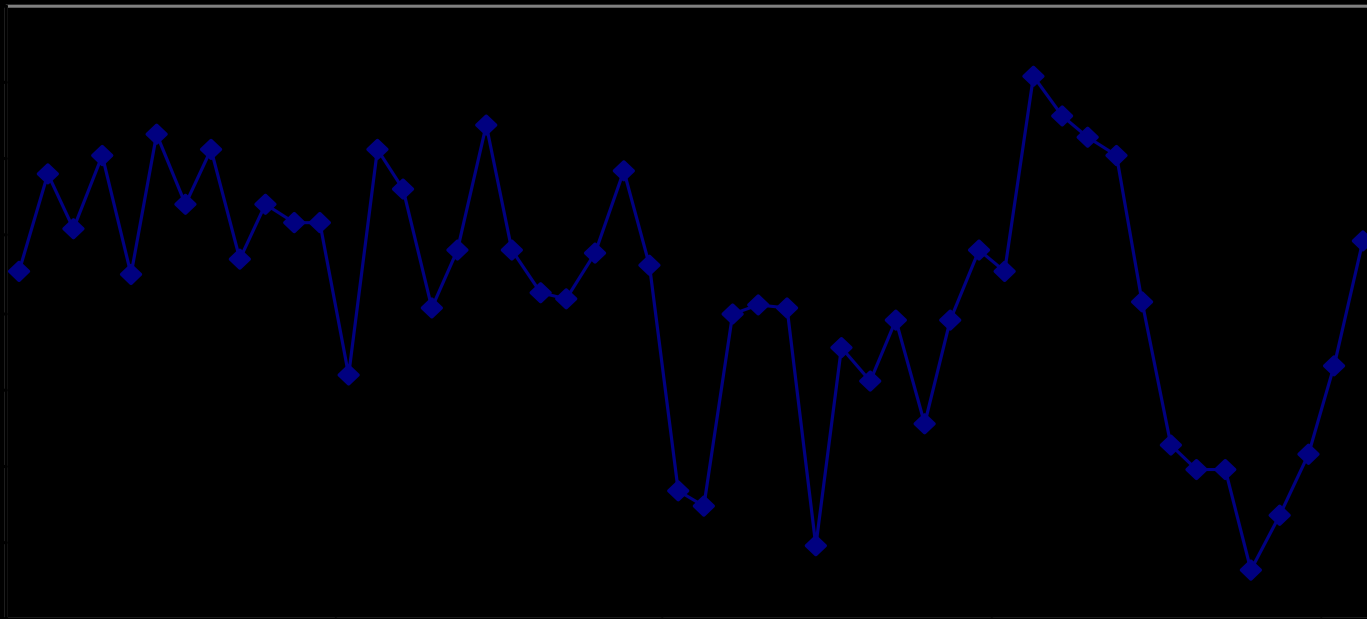
GDP Growth in % and External and Internal Shocks



Source: National Income Accounts, NSCB and Vos and Yap 1996



National Government Deficit % of GDP



Source: Data from IMF (2007)



Governance indicators show that the Philippines has scored among lowest for countries with similar income level on controlling corruption and maintaining political stability.

Governance Indicator	1996	1998	2002	2003	2004	2005	2006
Voice and Accountability		+	+	+	+	+	+
Political Stability	-	-	-	-	-	-	-
Government Effectiveness	+					+	+
Regulatory Quality	+	+	+	+		+	+
Rule of Law	+	+	-	-	-	-	-
Control of Corruption	-	-	-	-	-	-	-

Legend: + or - denotes a governance score for the Philippines that is significantly better (+) or worse (-) at the 5% level or less, compared to countries with similar gross domestic product per capita for the period.

Sources: Author's computations using data from Kaufmann, Kraay, and Mastruzzi 2006.



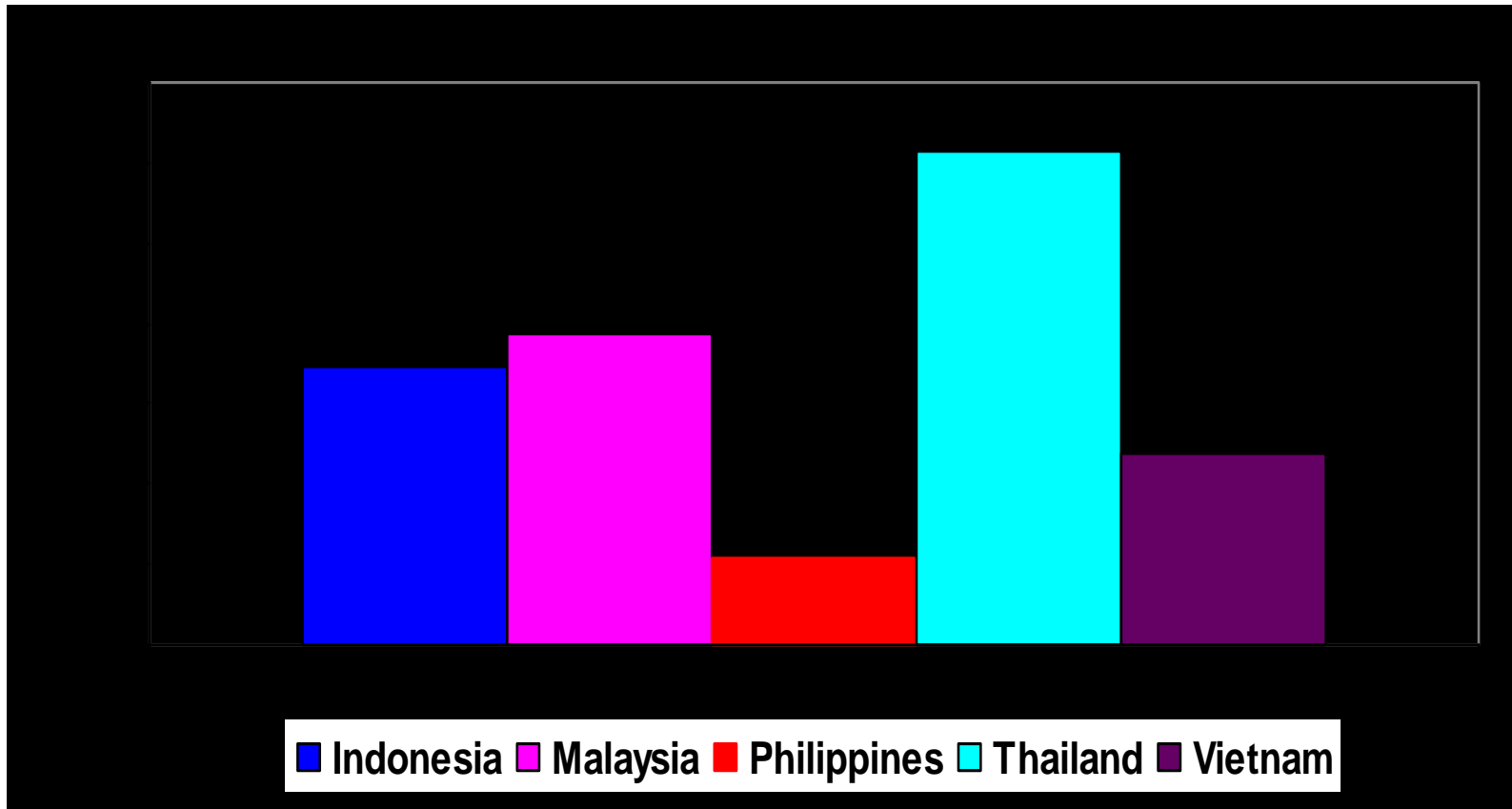
Corporate Income Tax and VAT in Selected Economies (%)

Country	Corporate Income Tax Rate (%)	Value Added Tax (%)
PRC	30	5-17
Hong Kong, China	17.5	-
Indonesia	10-30	10
Malaysia	28	-
Philippines	35	12
Thailand	30	10
Vietnam	28	0-10

Sources: For Philippines <http://www.bir.gov.ph>; for indonesia http://usasean.org/Indonesia/business_guide/taxation.asp; for Hong Kong, China <http://www.gov.hk>; for PRC <http://www.abailaw.com/english/tax>; for all other economies <http://www.aseansec.org/6524.htm>.



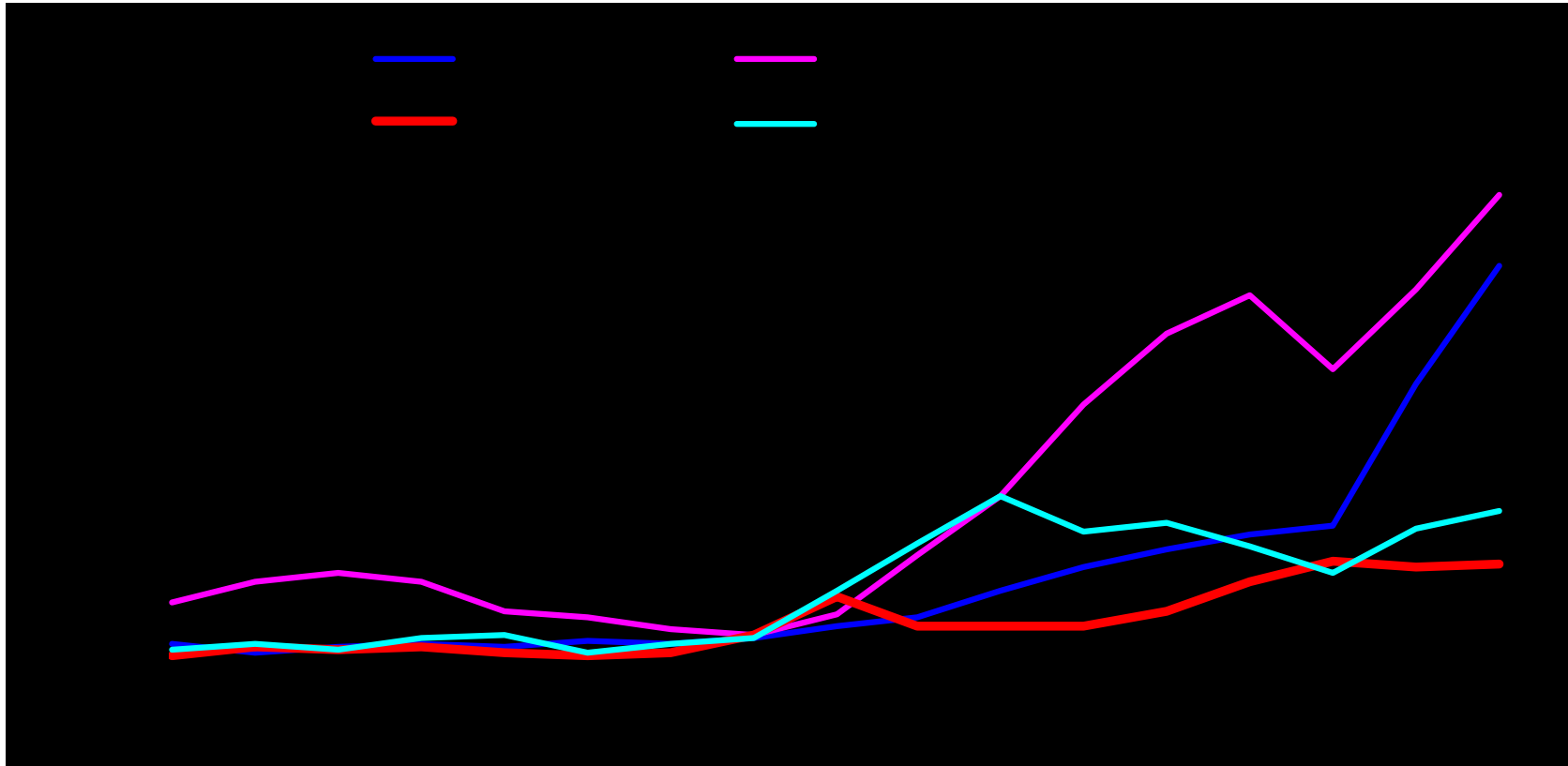
Annual Average Foreign Direct Investment over 2002-2006 US \$ million



Source: Asian Development Outlook 2007, ADB



Empirical studies found a causal relationship
between political instability
and foreign direct investments.

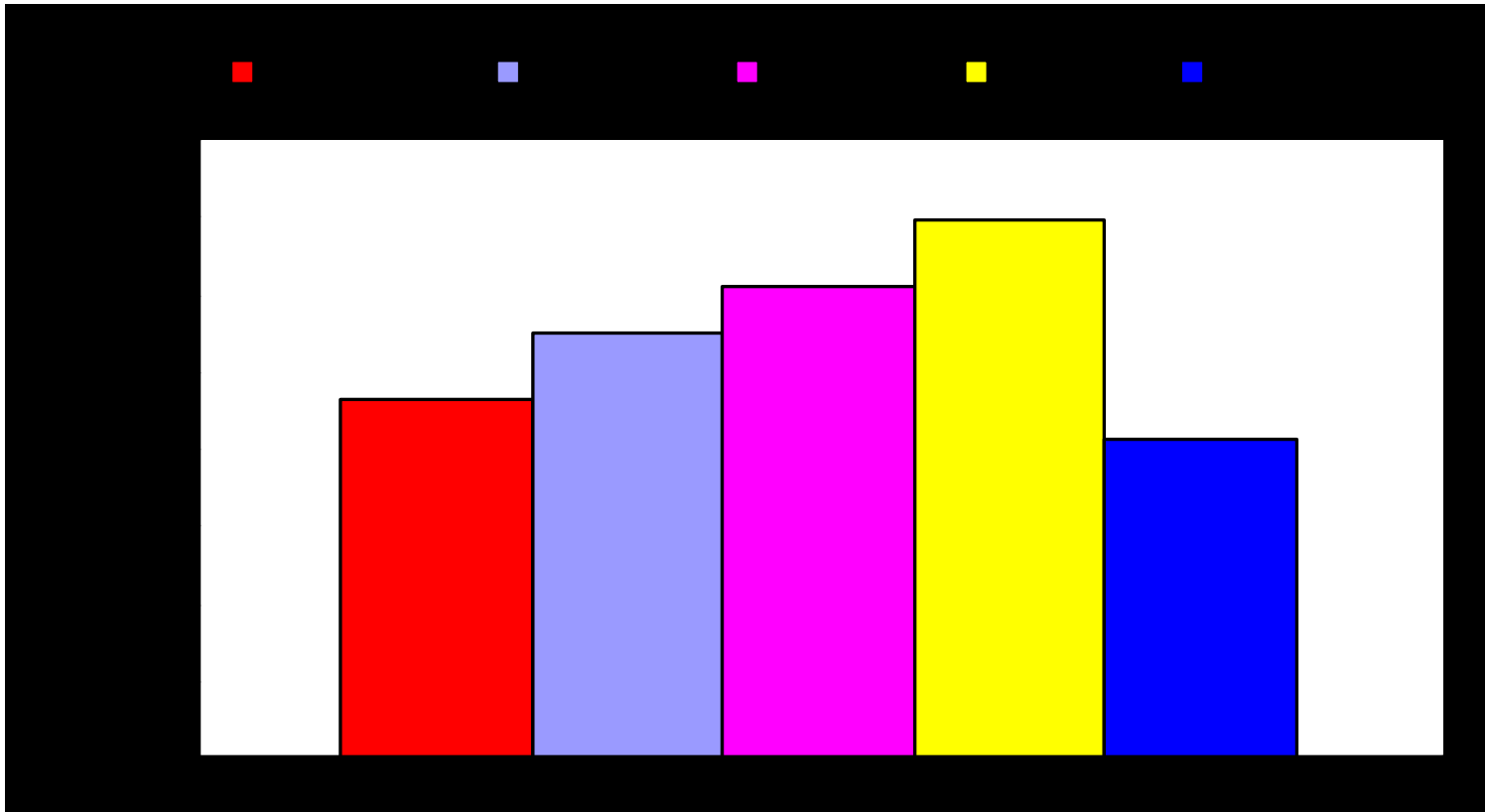


Source: Data from United Nations Commission on Trade and Development (UNCTAD).

Available: <http://www.unctad.org>.



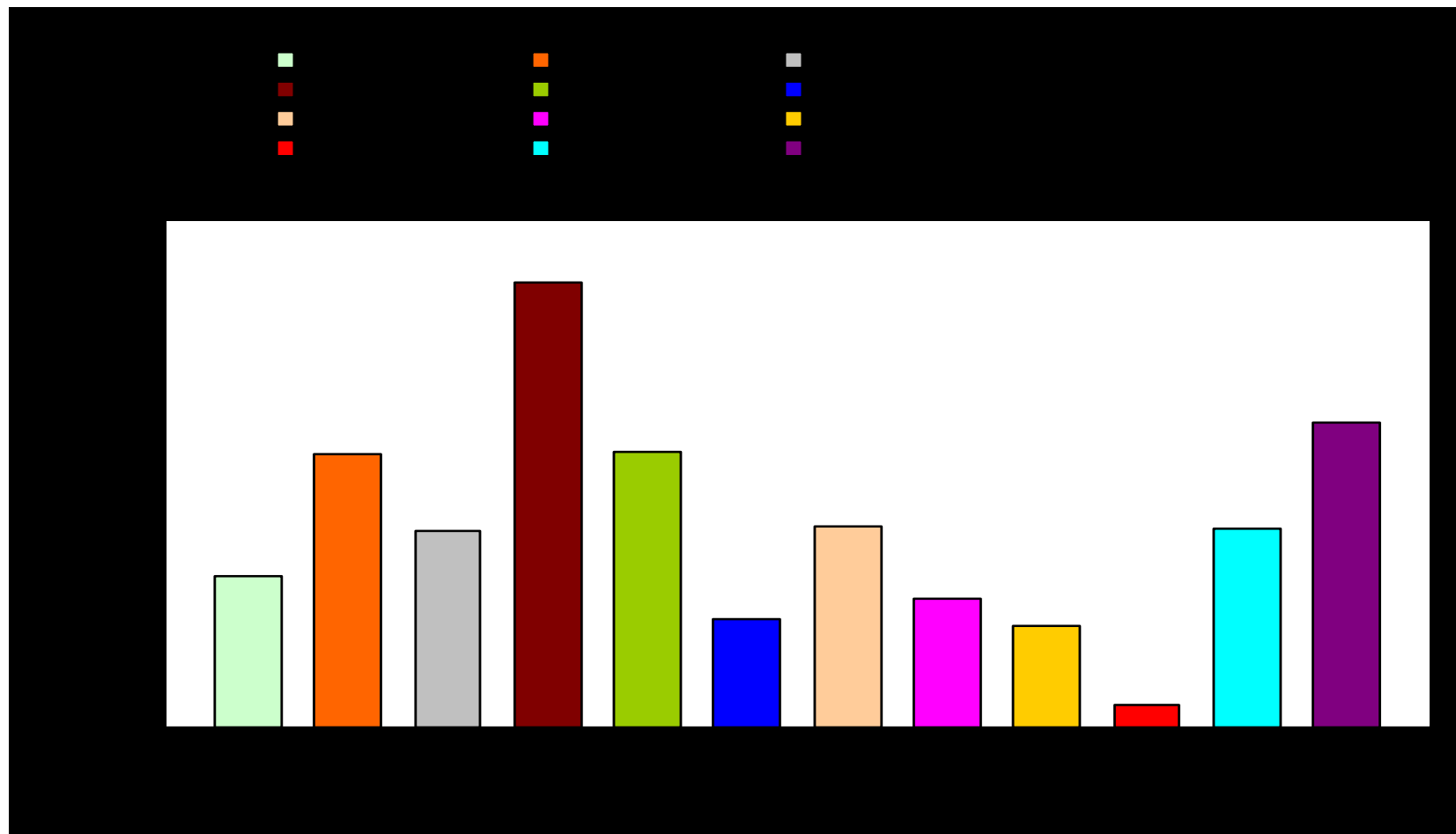
Manufacturing Share to GDP of Selected ASEAN Countries 2005



Binding
Constraints
to Growth

Source: WDI

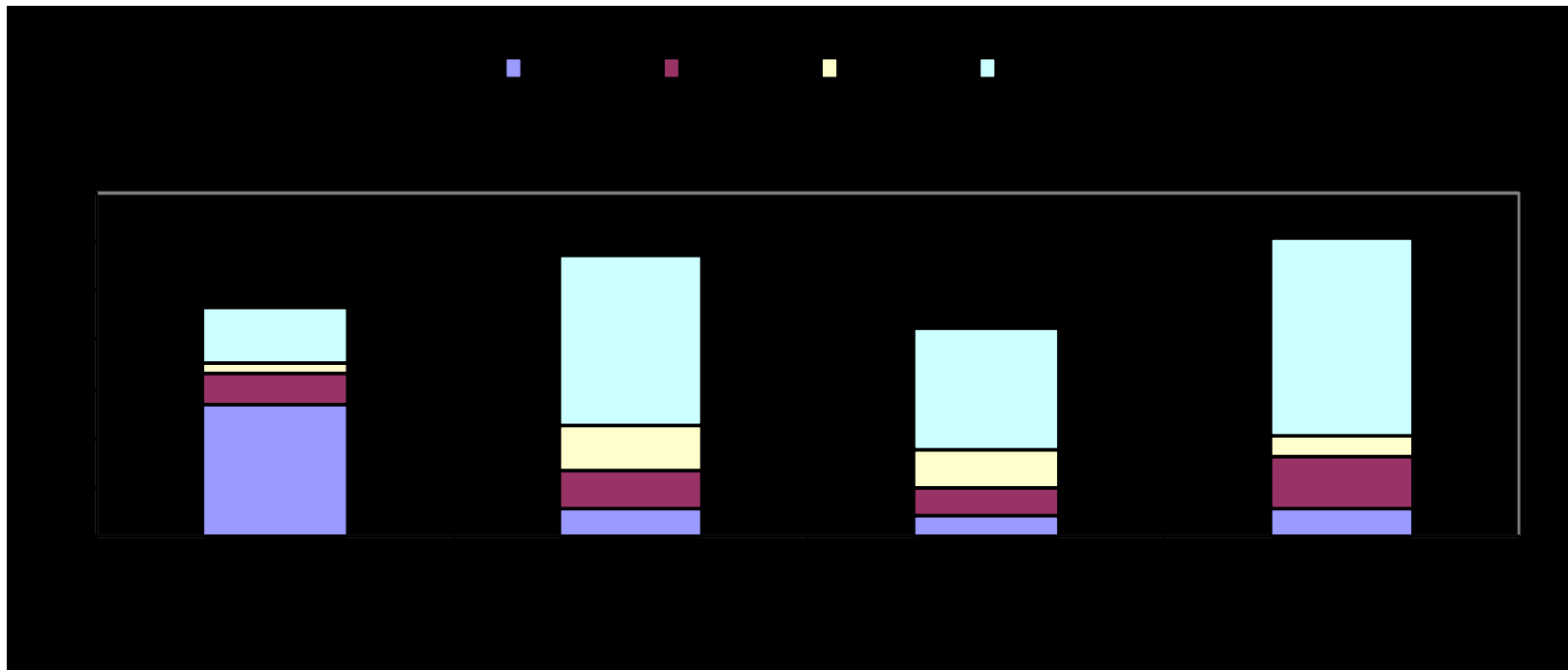
Philippines has a small and narrow industrial base. The manufacturing exports grew only by 1.4% per annum during 2000-05.



[Binding Constraints to Growth](#)

Source: Data from World Bank *World Development Indicators*, various issues.

Contribution of Manufacturing Sub-Sectors in Selected Countries by Technology Level of Production Process % of GDP



Source: National Statistics for Malaysia, Taipei, China and Philippines, ADB's CEIC for Korea, Rep.



Limited inclusiveness

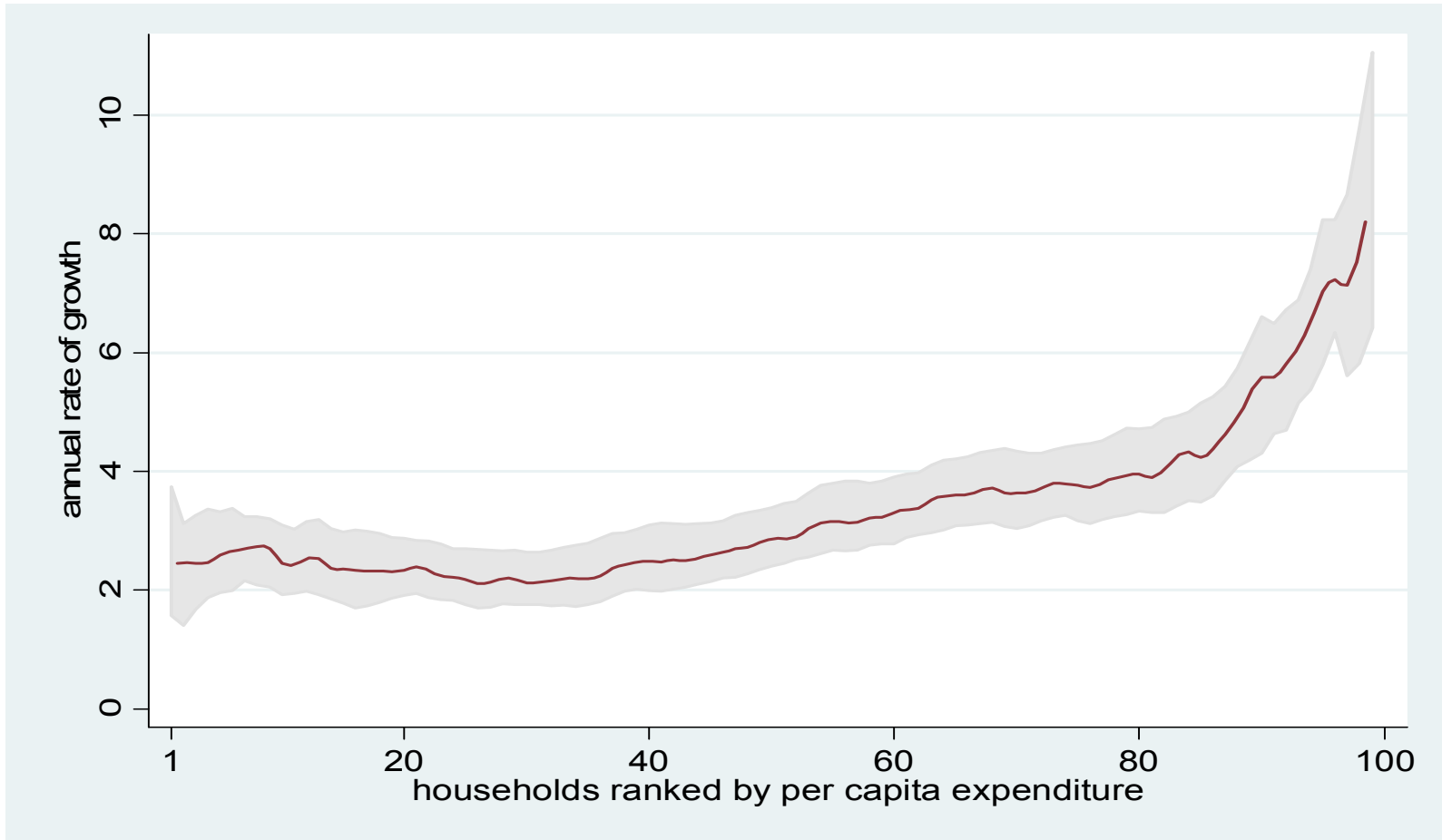
Poverty Headcount Rates in Nepal (1995-96 and 2003-04, %)

	1995-96	2003-04	Change
Nepal	41.8	30.8	-26
Urban	21.6	9.6	-56
Rural	43.3	34.6	-20
Ethnicity/Caste			
Brahman-Chhetri	34.1	18.4	-46
Terai Middle Caste	28.7	21.3	-26
Dalit	57.8	45.5	-21
Newar	19.3	14.0	-28
Hill Janajati	48.7	44.0	-10
Terai Janajati	53.4	35.4	-34
Muslim	43.7	41.3	-6
Other Minorities	46.1	31.3	-32

Source: World Bank et al. (2006).



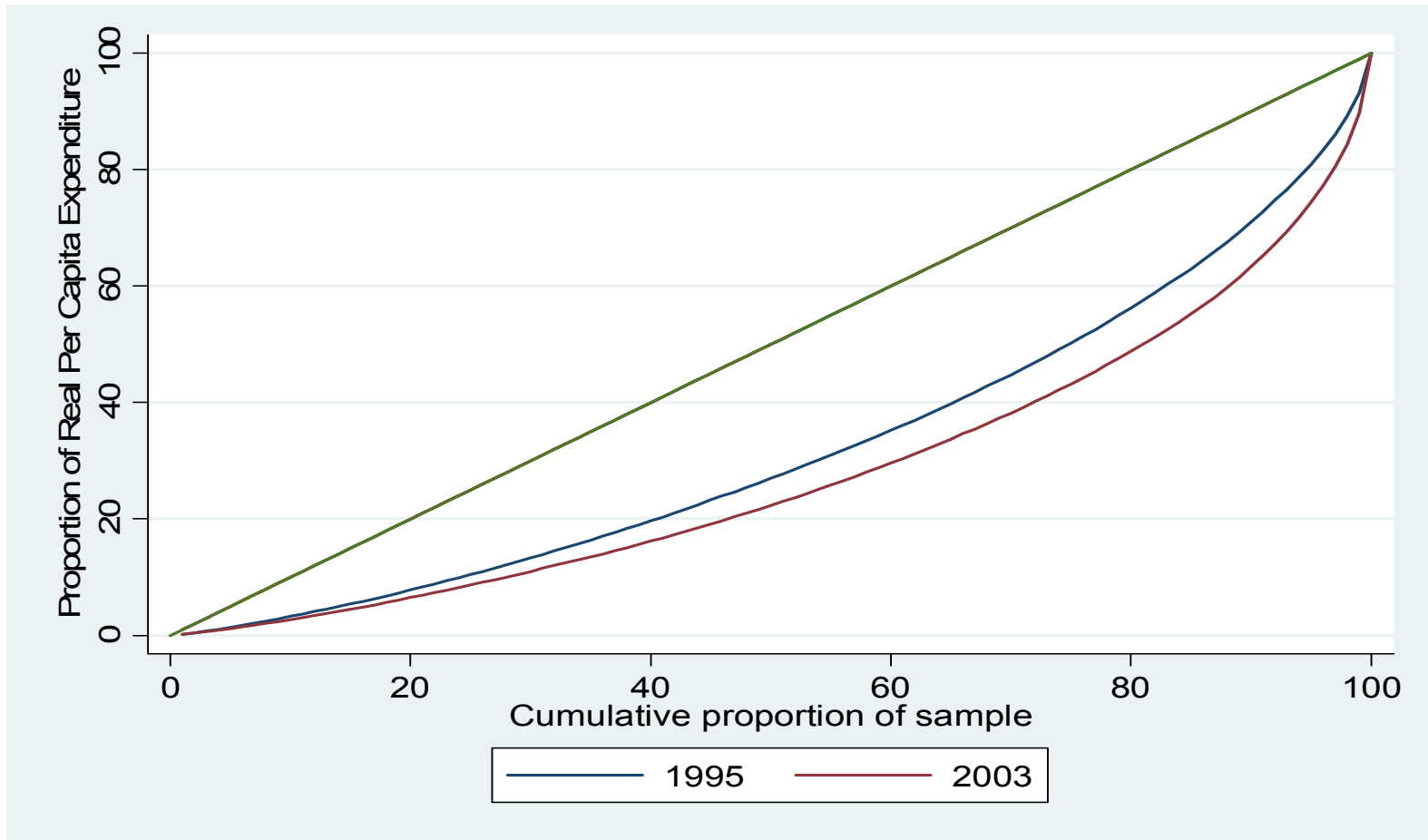
What was the Growth Rate of Per Capita Expenditure Between 1995-96 and 2003-04? (%)



Source: Calculations based on NLSS I and II.



Lorenz Curves of Expenditure (1995-96 and 2003-04, %)



Source: Calculations based on NLSS I and II.

Move In and Out of Poverty between 1995-96 and 2003-04 (%)

		2003-04		
		Poor	Non-poor	
1995-96	Poor	18.45	20.38	38.83
	Non-poor	13.59	47.58	61.17
		32.04	67.96	100.00

Source: Calculations based on NLSS I and II.

Factors that Enhance the Chance of Escaping from Poverty

Variables	RRR	Variables	RRR
<i>Household Head's characteristics</i>		<i>Household characteristics</i>	
Age	0.995	Household size	1.111 *
Female	3.160 **	Share of children aged 0-6	0.052 ***
Ethnicity			
(Brahman/Chhetri)		<i>Access to land</i>	
Terai middle caste	4.897 **	Own land	2.551 **
Dalits	0.387 **	Size of irrigated land (h.a.)	1.936 **
Newar	2.855		
Hill Janajati	0.879	<i>Access to finance</i>	
Terai Janajati	0.546	Loans	
Muslims	2.857	Remittances	1.258
Other minorities	0.672	(No remittances)	
Education		Received domestic remittances	2.207 *
(illiterate)		Received international remittances	0.803
4 or less	1.119		
5-10	6.164 ***	<i>Remoteness</i>	
11+	3.882 *	Access to paved road	1.572
Occupation			
(self-employed agriculture)		<i>Geography</i>	
self-employed/wage-skilled non-agri	2.178 *	Rural	3.866 *
wage agriculture	2.050 *	Development Regions	
wage-unskilled non-agri	2.113	Eastern	2.551 *
out of labor force/unemployed	2.460	Central	1.445
Chronically ill	0.879	Western	2.072
		Mid-western	1.194
		(Far-western)	

Source: Calculations based on NLSS I and II.



Limited Productive Employment Opportunities

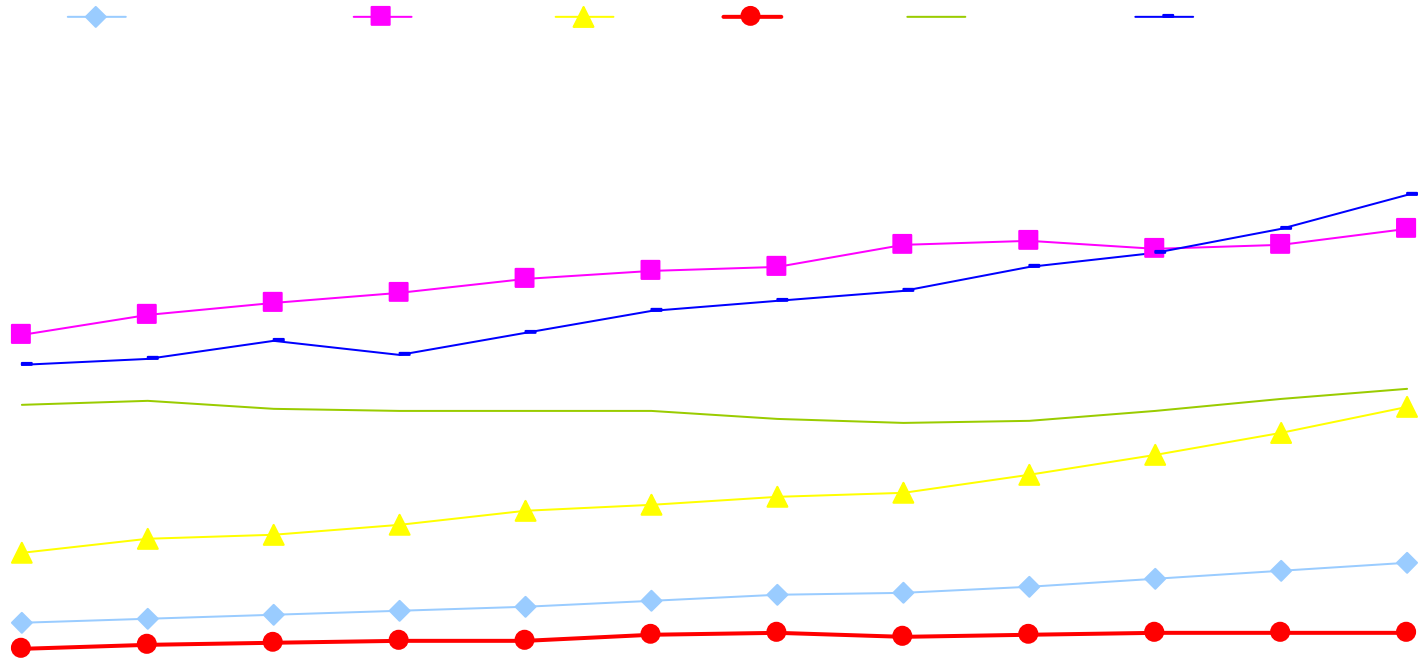
Employment Trends (1995-96 and 2003-04, %)

	Men		Women	
	1995-96	2003-04	1995-96	2003-04
Unemployment rate				
All	5.4	4.1	3.8	3.8
Urban	9.5	7.0	17.4	13.5
Rural	5.1	3.6	3.2	2.5
Poorest 40%	5.5	3.3	5.0	2.5
Underemployment				
All	14.2	15.4	24.3	25.7
Urban	9.1	9.3	22.5	26.1
Rural	14.6	16.6	24.3	25.7
Poorest 40%	13.3	16.3	22.6	24.1

Source: World Bank et al. (2006).



Labor Productivity in South Asia (GDP in 2000 \$/Labor Force)



Source: World Development Indicators.



Unequal Access to Opportunities

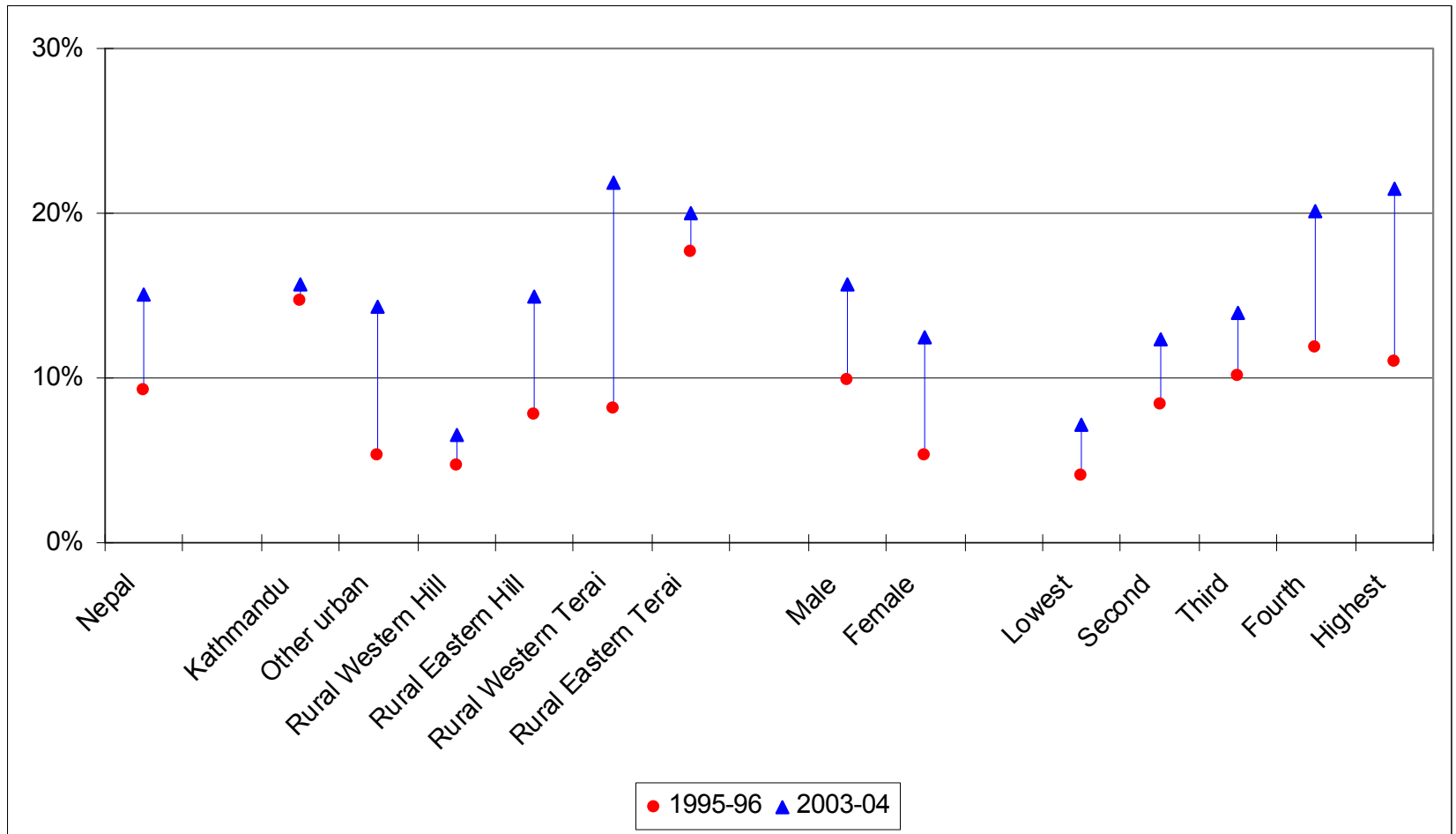
Occupation Patterns of Household Heads (2003-04, %)

	Self-employment				Wage-employment		
	Agriculture	Manuf.	Trade	Services	Agriculture	Skilled non-agri	Unskilled non-agri.
Nepal	64.6	4.6	4.9	3.4	7.0	3.5	11.9
Region							
Kathmandu	8.6	10.5	15.4	8.4	0.4	22.7	34.1
Other urban	32.1	10.7	12.0	8.8	1.8	8.0	26.7
Rural Western Hills	75.4	5.1	3.2	2.2	2.2	3.2	8.9
Rural Eastern Hills	83.6	3.2	1.9	1.4	3.0	1.3	5.6
Rural Western Terai	68.7	2.0	4.4	4.0	5.1	1.8	14.1
Rural Eastern Terai	61.1	3.5	4.4	2.8	17.9	1.2	9.0
Per Capita Expenditure Quintile							
Lowest	68.3	4.2	1.1	1.6	14.0	0.4	10.3
Second	69.7	4.9	1.8	2.0	9.5	0.3	12.0
Third	69.0	3.9	4.6	2.2	6.7	2.1	11.5
Fourth	69.4	3.3	5.8	3.0	5.3	2.6	10.7
Highest	49.2	6.8	9.8	7.4	1.6	10.6	14.6

Source: Calculations based on NLSS II.



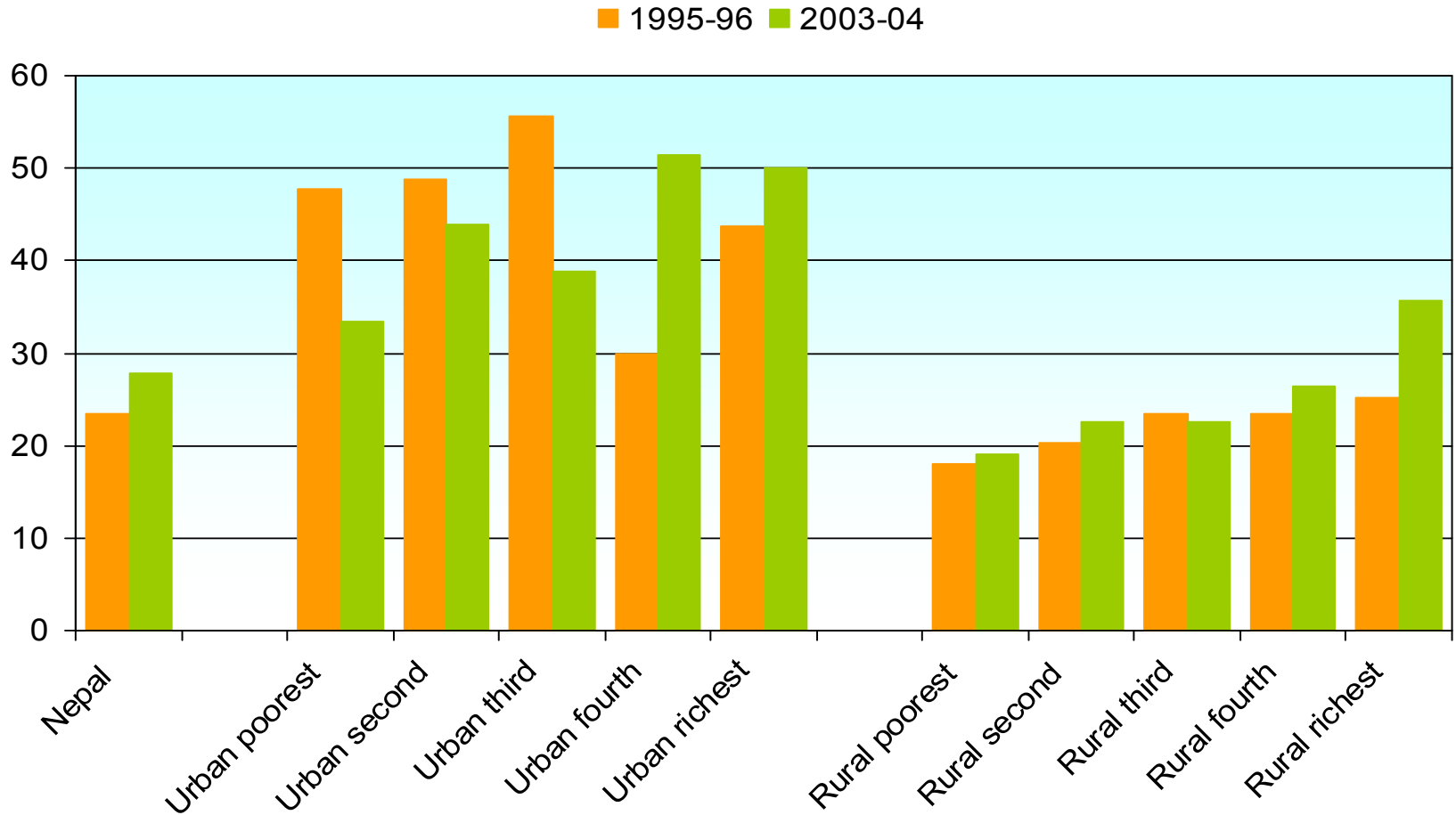
Share of Sales in Gross Agricultural Output (1995-96 and 2003-04)



Source: Calculations based on NLSS I and II.



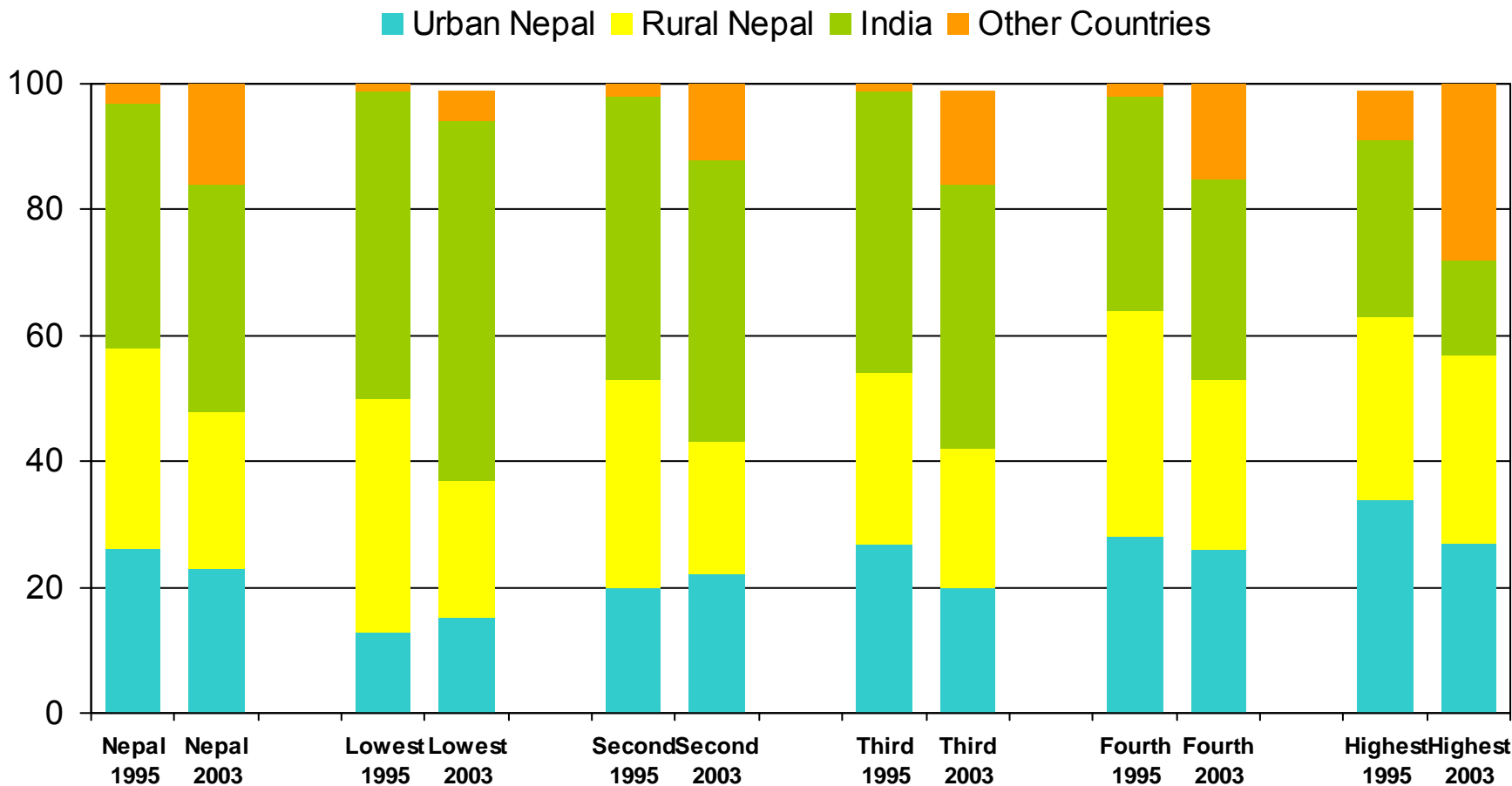
Percentage of Households with Non-farm Enterprises (1995-96 and 2003-04, %)



Source: Calculations based on NLSS I and II.



Destination of Migrants (1995-96 and 2003-04, %)



Source: Calculations based on NLSS I and II.



Unequal Access to Education and Skills Development

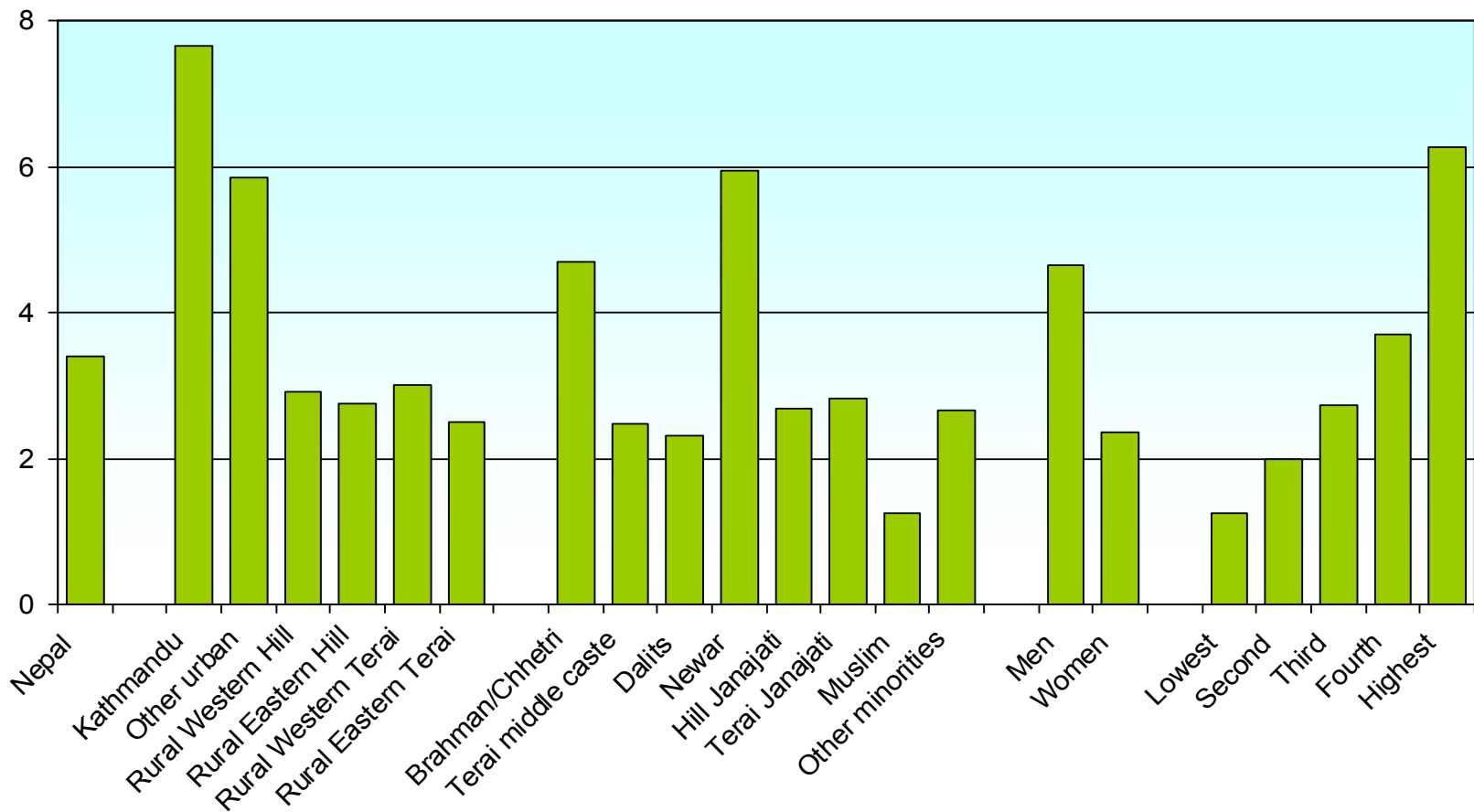
Average Daily Wages (1995-96 and 2003-04, Real 1995-96 Rupees)

	Agriculture			Unskilled non-agriculture			Skilled non-agriculture		
	1995-96	2003-04	changes (%)	1995-96	2003-04	changes (%)	1995-96	2003-04	changes (%)
Nepal	44	55	25	81	97	20	94	295	214
Region									
Kathmandu	-	-	-	103	83	-19	173	672	288
Other urban	40	57	43	91	101	11	111	170	53
Rural Western Hill	49	54	10	75	91	21	72	111	54
Rural Eastern Hill	37	54	46	84	90	7	83	137	65
Rural Western Terai	50	63	26	81	94	16	97	126	30
Rural Eastern Terai	42	54	29	75	113	51	80	159	99
Education level (years)									
Illiterate	43	52	21	73	83	14	-	-	-
Less than 5	53	61	15	82	99	21	-	-	-
5-7	44	65	48	94	99	5	-	-	-
8-10	45	63	40	86	108	26	75	113	51
11+	-	-	-	121	142	17	121	426	252

Source: World Bank et al. (2006).



Years of Schooling for Those Aged 15+ (2003-04, Years)



Source: Calculations based on NLSS II.



Net School Enrollment Rates (1995-96 and 2003-04, %)

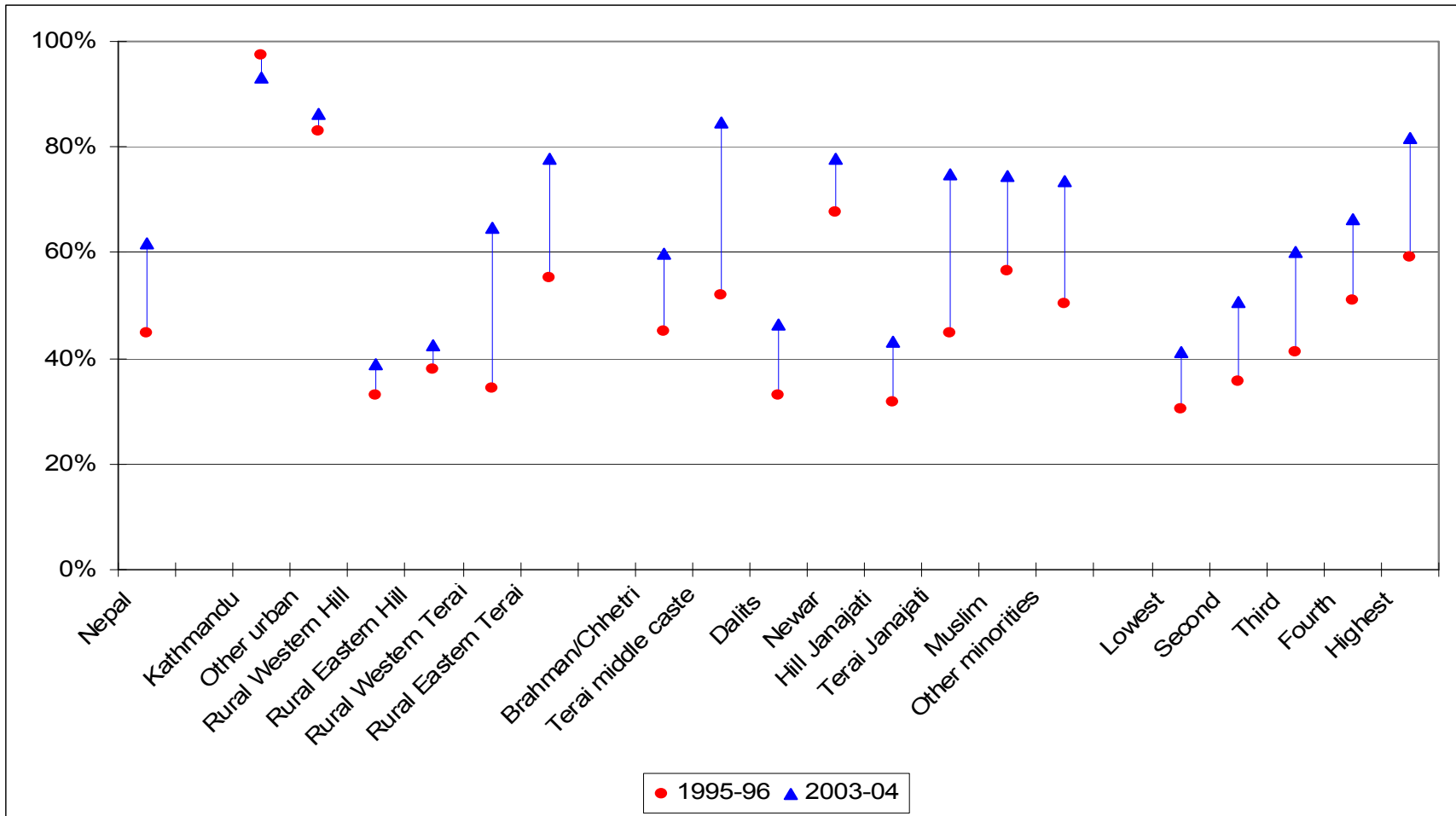
	Primary		Lower Secondary		Upper Secondary	
	1995-96	2003-04	1995-96	2003-04	1995-96	2003-04
Nepal	56.8	72.4	19.1	29.0	9.3	15.1
Region						
Kathmandu	75.3	85.5	43.1	63.5	37.3	33.2
Other urban	71.3	82.1	33.5	40.4	13.1	34.2
Rural Western Hill	59.9	84.7	19.3	24.4	5.3	10.9
Rural Eastern Hill	63.6	71.6	18.0	29.3	9.5	9.7
Rural Western Terai	57.8	76.2	10.7	28.5	2.6	12.3
Rural Eastern Terai	45.2	59.2	20.2	23.4	13.3	16.0
Per Capita Expenditure Quintile						
Lowest	38.3	55.8	5.4	7.9	1.7	1.3
Second	48.3	68.4	10.6	15.1	4.8	6.6
Third	61.7	80.7	18.4	30.4	6.6	8.9
Fourth	69.9	81.7	27.5	42.7	10.5	22.1
Highest	76.5	84.8	34.2	53.2	20.6	33.4

Source: Calculations based on NLSS I and II.



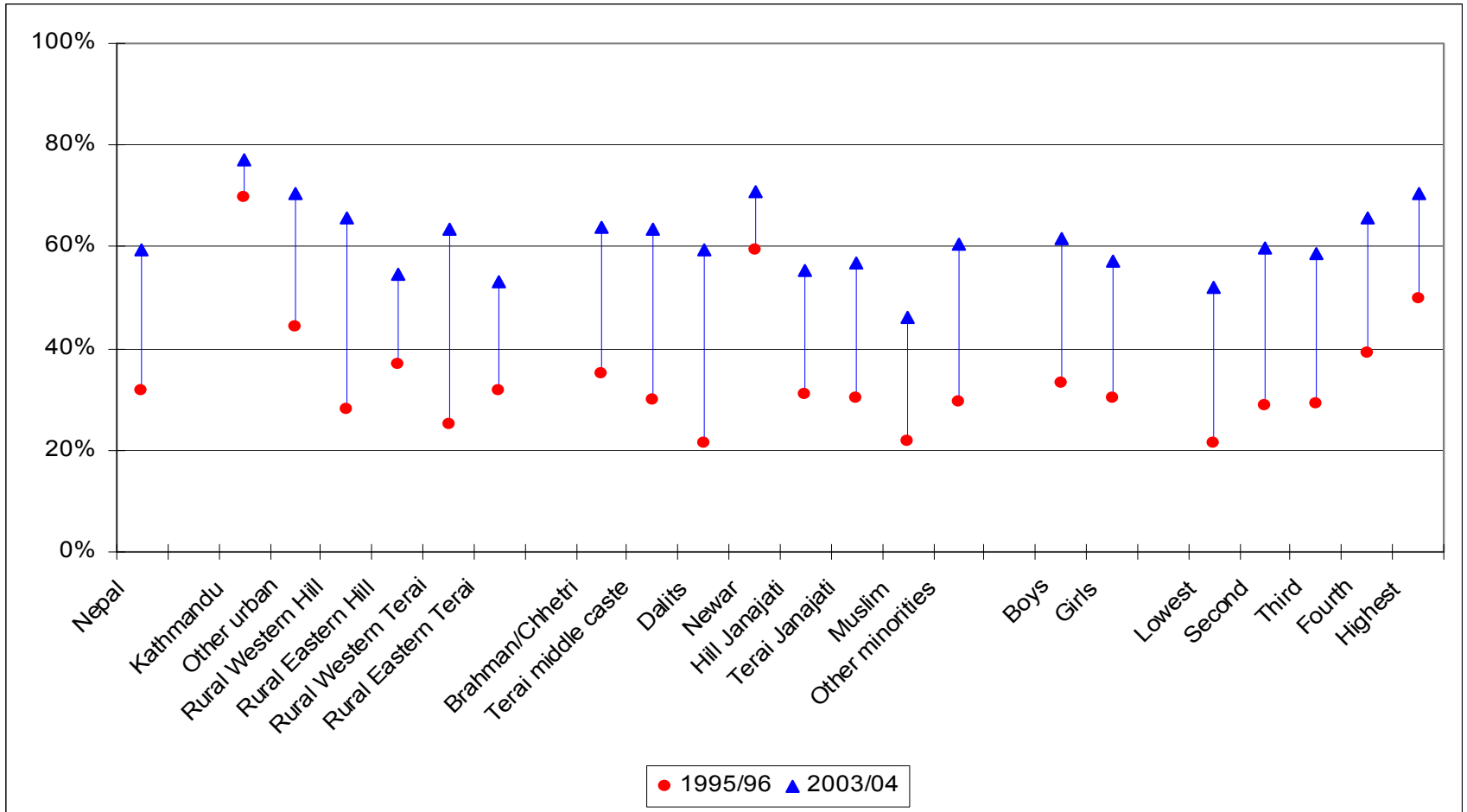
Unequal Access to Healthcare, Water and Sanitation

Access to Health Center (1995-96 and 2003-04)



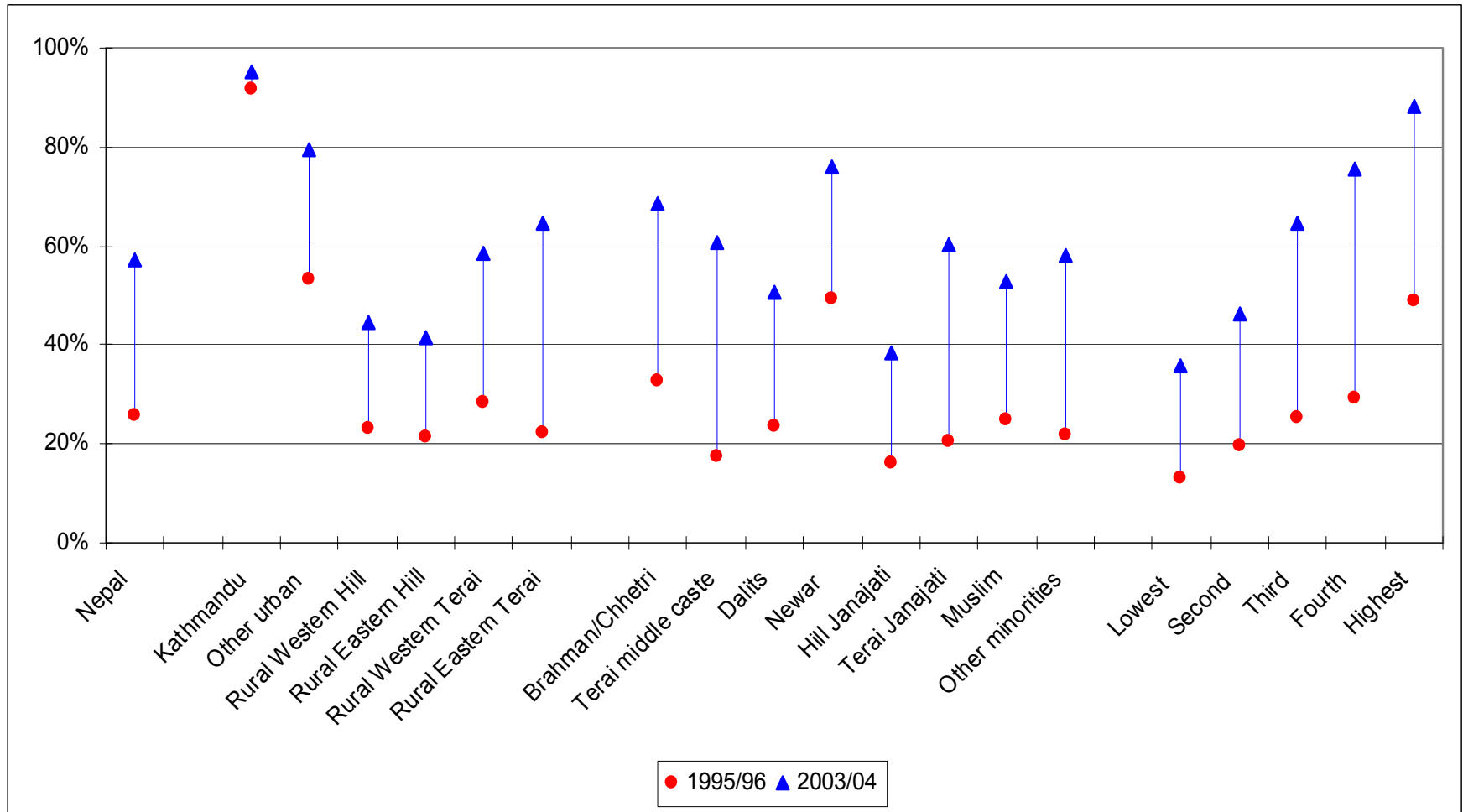
Source: Calculations based on NLSS I and II.

Access to Full Immunization for Children Aged 5 or Younger (1995-96 and 2003-04)



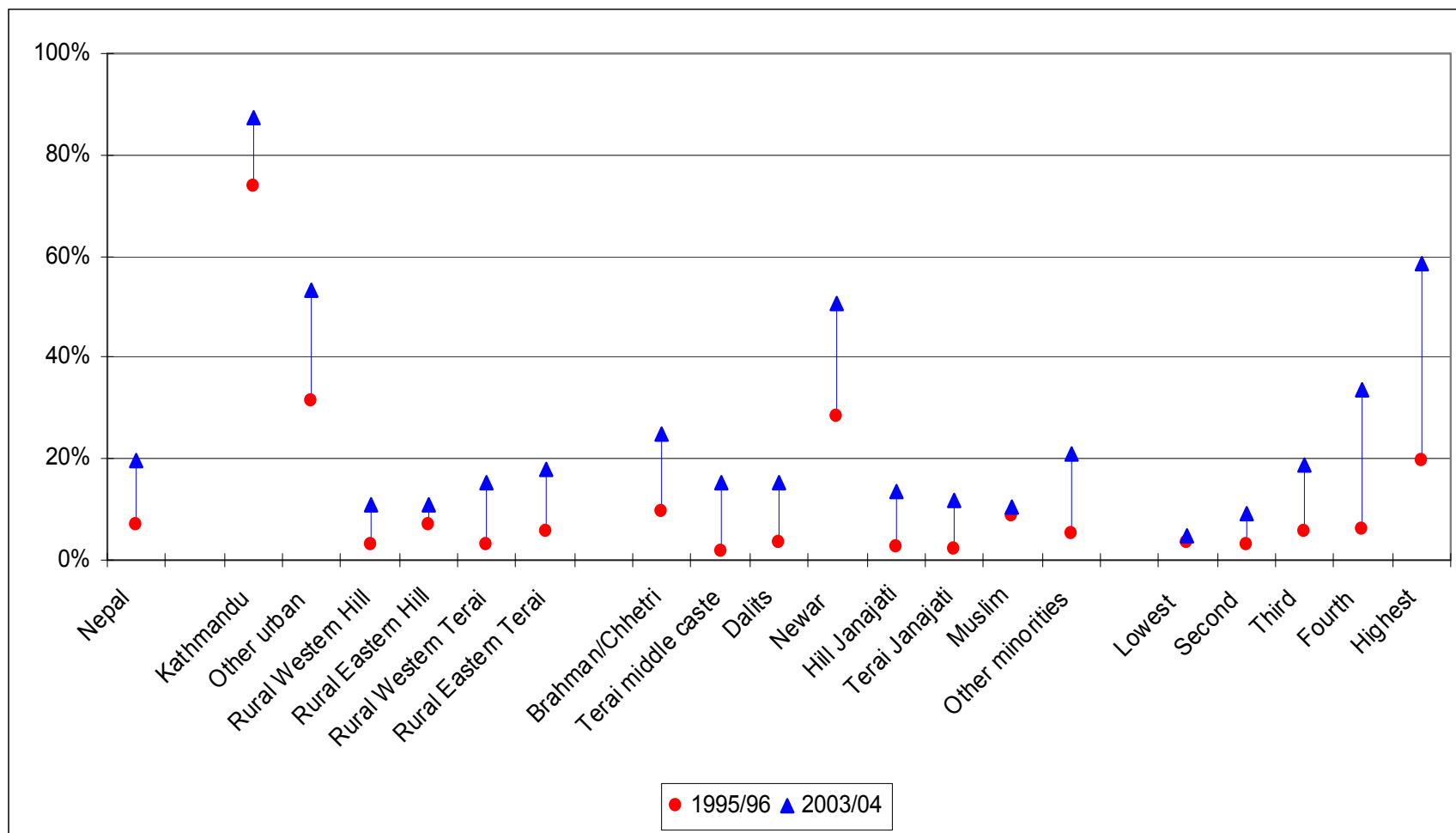
Source: Calculations based on NLSS I and II.

Access to Prenatal Consultation (1995-96 and 2003-04)



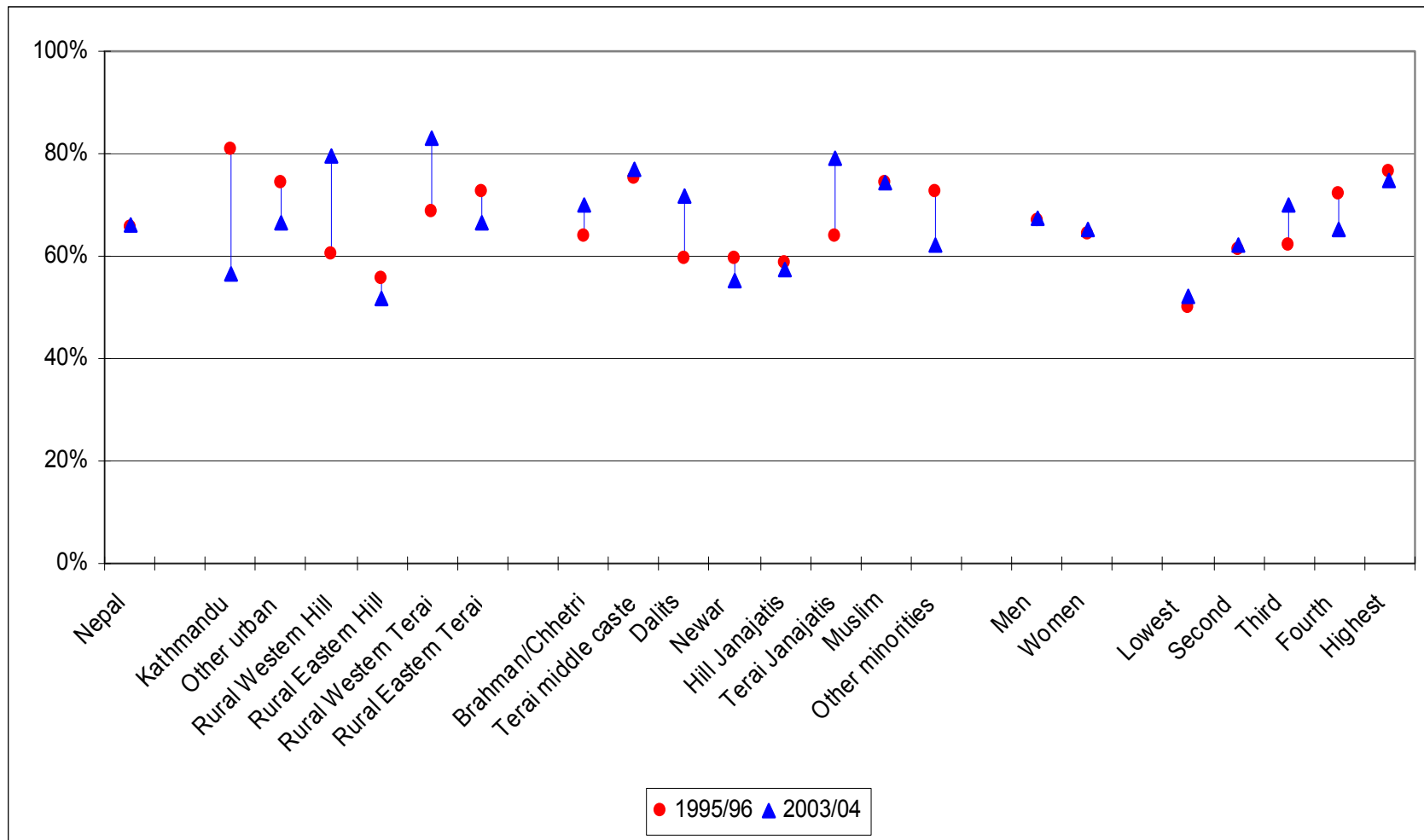
Source: Calculations based on NLSS I and II.

Access to Assisted Delivery (1995-96 and 2003-04)



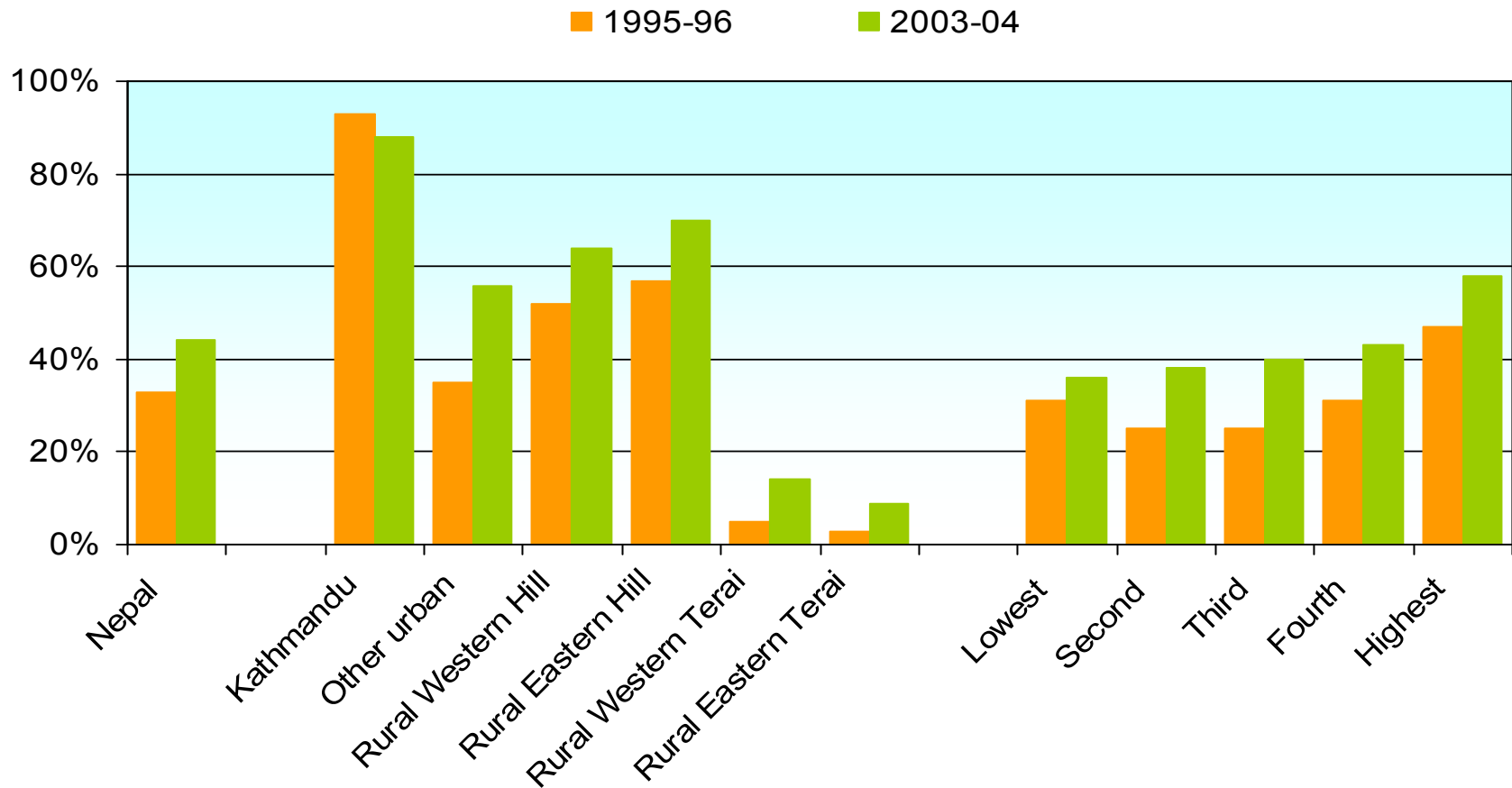
Source: Calculations based on NLSS I and II.

Access to Medical Consultation (1995-96 and 2003-04)



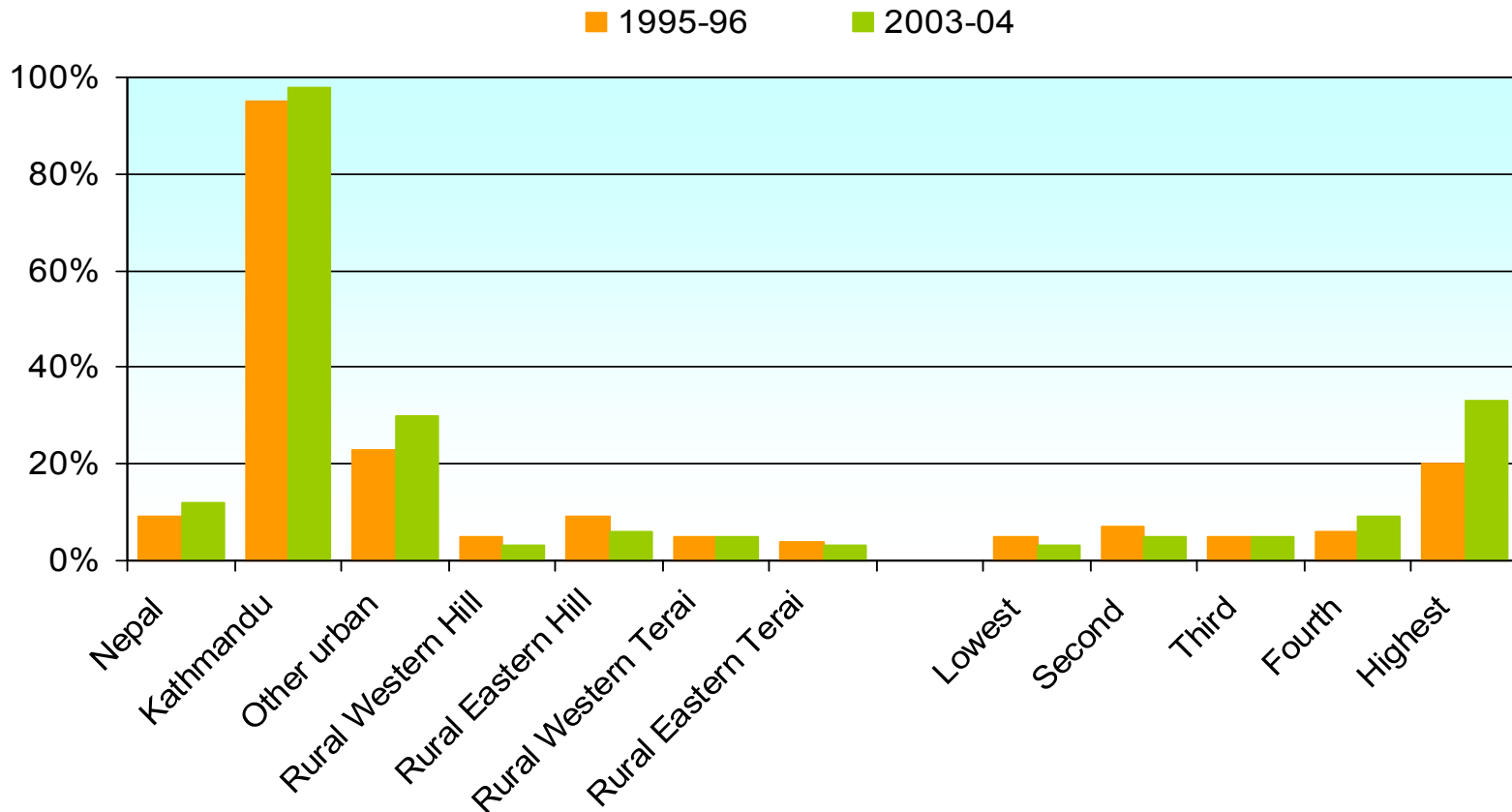
Source: Calculations based on NLSS I and II.

Access to Piped Water (1995-96 and 2003-04)



Source: Calculations based on NLSS I and II.

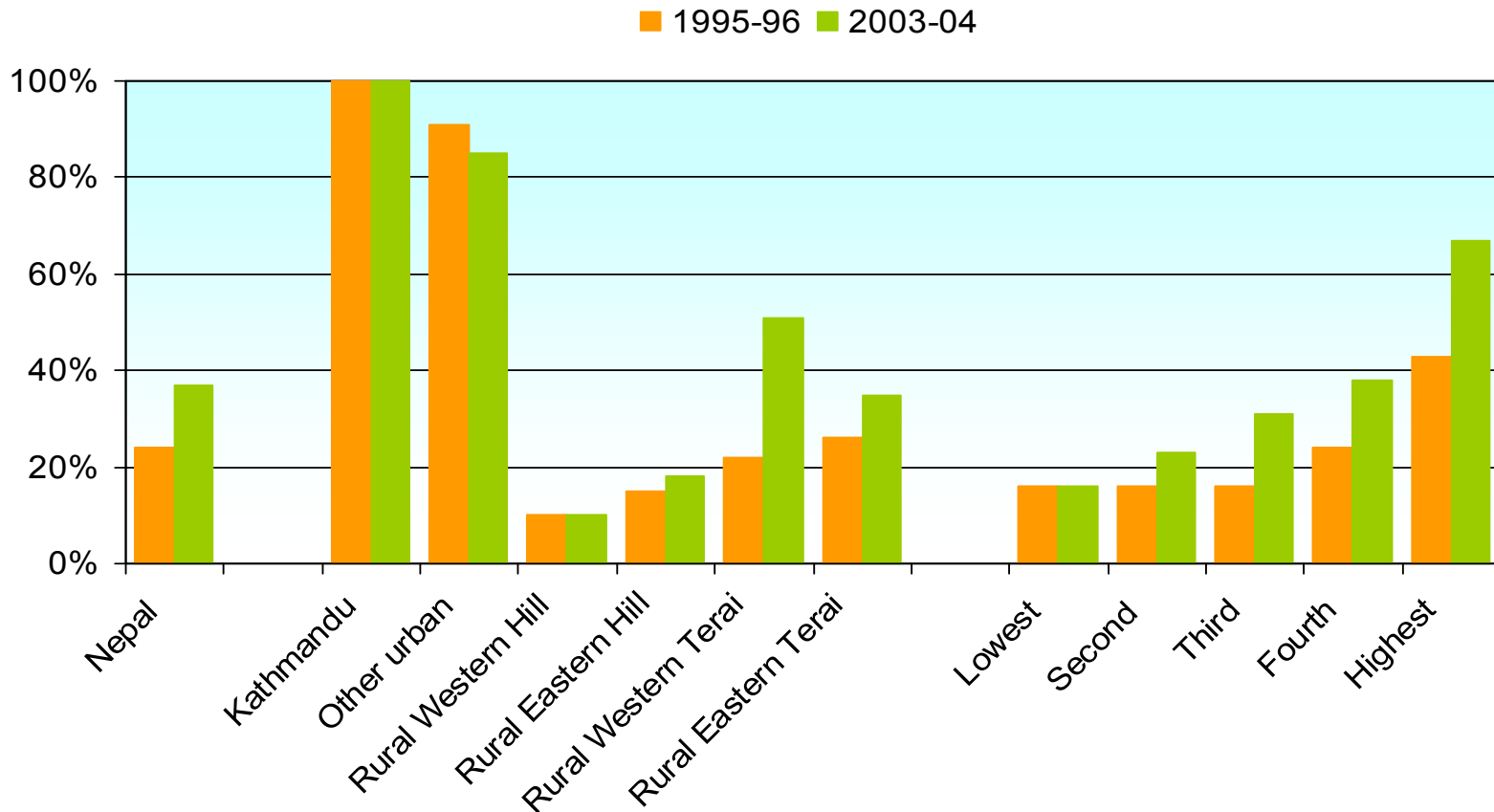
Access to Sanitary System (1995-96 and 2003-04)



Source: Calculations based on NLSS I and II.

Unequal Access to Infrastructure

Access to Paved Road (1995-96 and 2003-04)



Source: Calculations based on NLSS I and II.



Distribution of Roads

	Total Roads (km)	People per km of Roads (no.)	Road Density (km/100 km ²)
Region			
Eastern	3,481	1,535	12
Central	6,665	1,205	25
Western	2,955	1,547	10
Mid-Western	2,215	1,360	5
Far-Western	1,518	1,444	8
Ecological Belt			
Mountain	742	2,275	1
Hill	7,590	1,351	12
Terai	8,504	1,318	25

Source: Department of Roads.

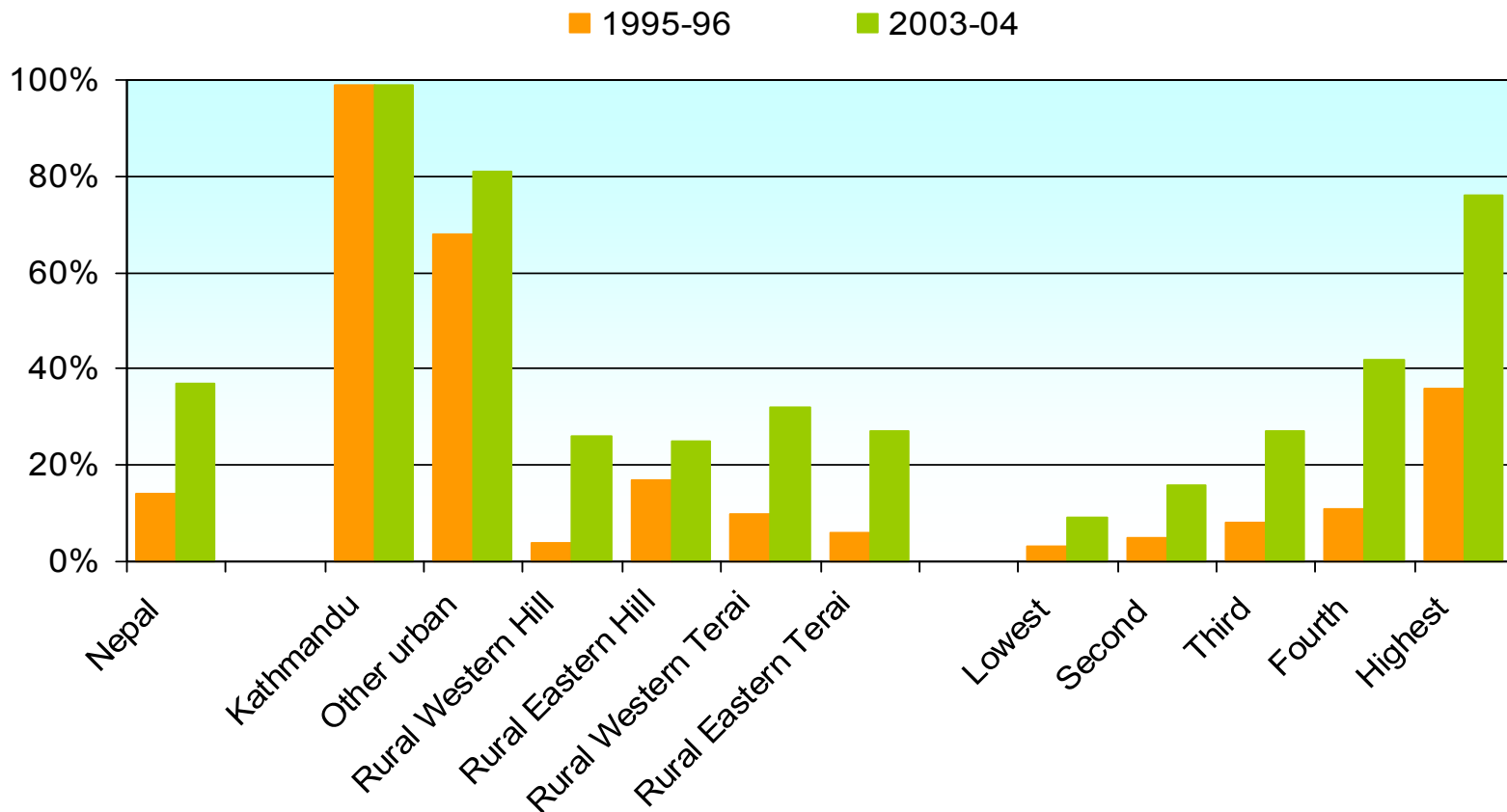


Time to Access Selected Facilities (2003-04, Mean Hours)

	School	Health Center	Paved Road	Market Center
Per Capita Expenditure Quintile				
Lowest	0.38	1.07	5.59	3.64
Second	0.30	0.88	5.50	2.72
Third	0.30	0.77	4.92	2.31
Fourth	0.29	0.69	4.23	2.02
Fifth	0.18	0.45	1.71	1.05

Source: World Bank et al. (2006)

Access to Electricity (1995-96 and 2003-04)



Source: Calculations based on NLSS I and II.



Unequal Access to Productive Assets

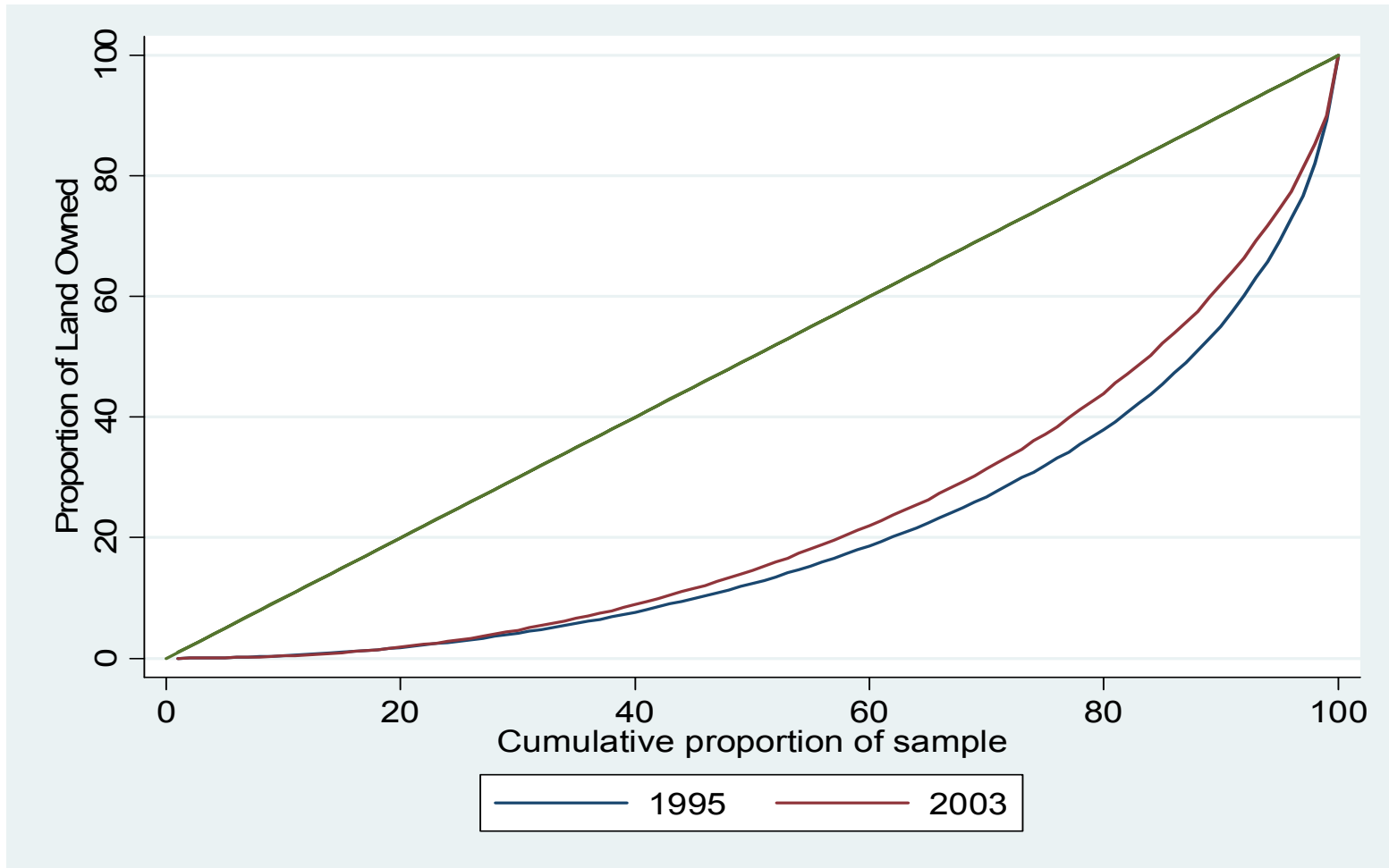
Land Ownership and Access to Irrigation (1995-96 and 2003-04)

	Land Ownership (%)		Land Area (ha)		Access to Irrigation (%)		Share of Irrigated land (%)	
	1995-96	2003-04	1995-96	2003-04	1995-96	2003-04	1995-96	2003-04
Nepal	82	77	1.04	0.79	50	63	30	44
Per capita expenditure quintile								
Lowest	83	81	0.96	0.50	47	47	20	26
Second	84	80	0.92	0.69	47	55	28	36
Third	82	79	0.89	0.69	49	63	30	42
Fourth	83	83	1.13	0.87	51	75	32	55
Highest	79	65	1.22	1.12	56	70	37	55

Source: Calculations based on NLSS I and II.

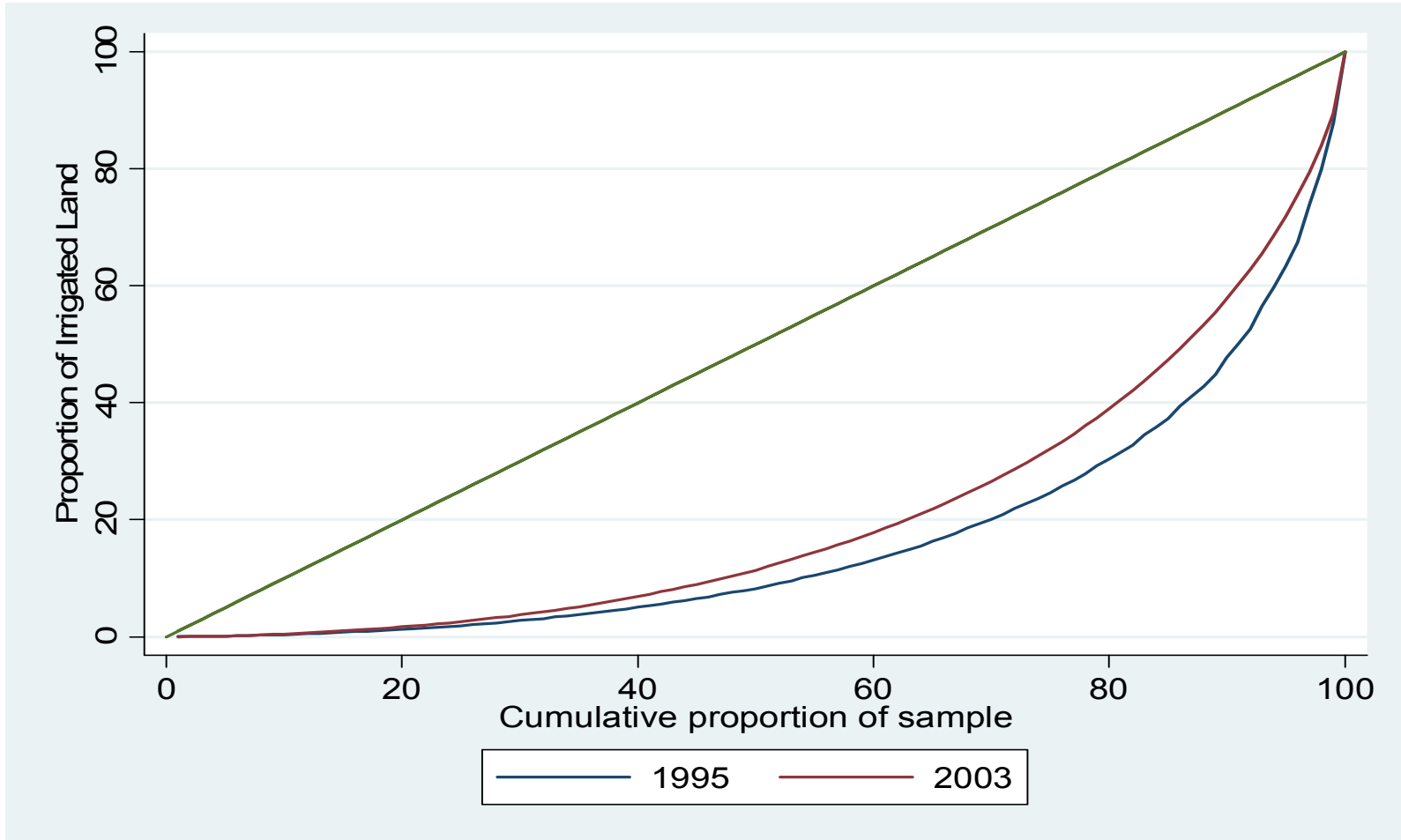


Distribution Land Holdings (1995-96 and 2003-04, %)



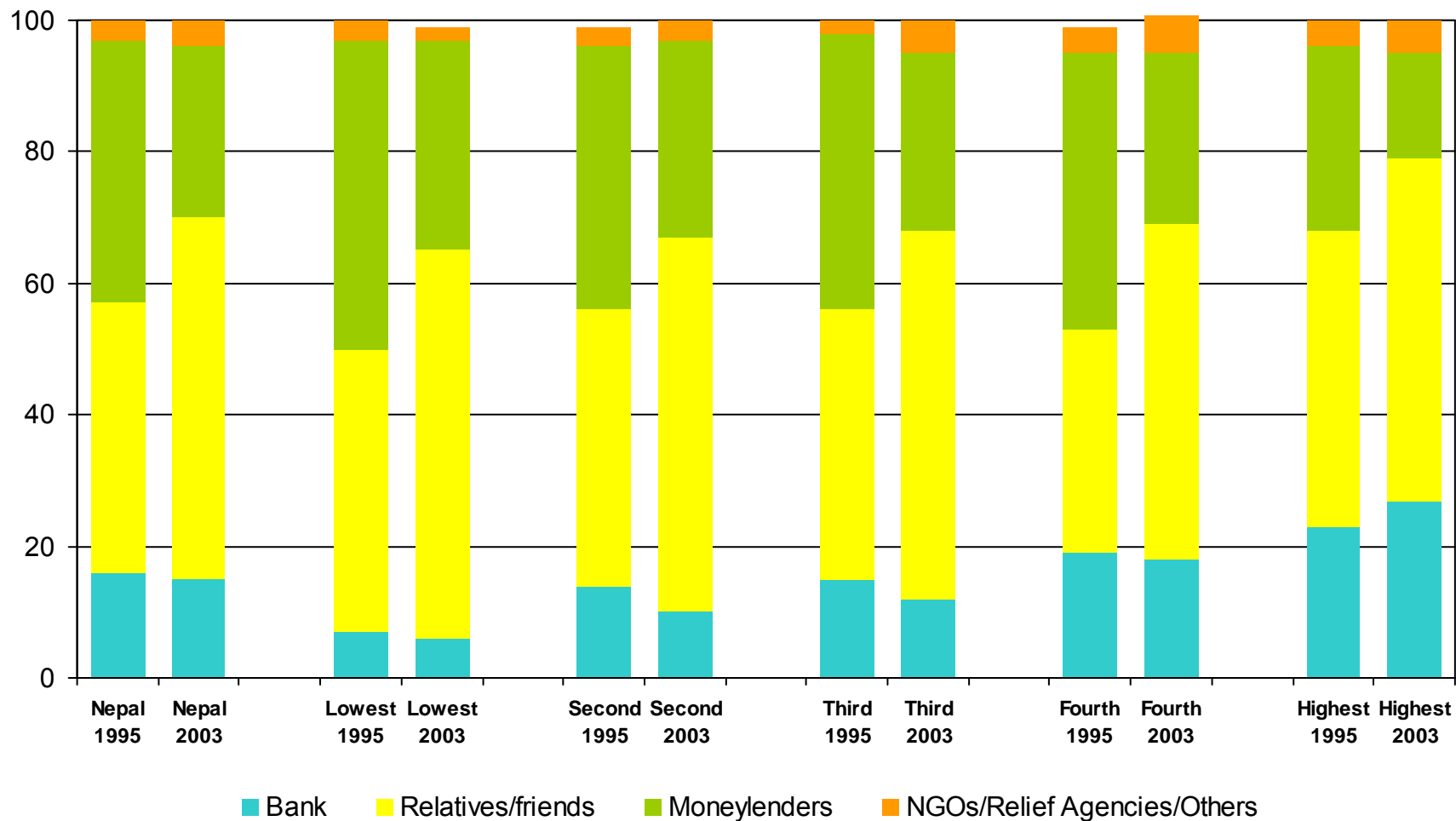
Source: Calculations based on NLSS I and II.

Distribution of Irrigated Land (1995-96 and 2003-04, %)



Source: Calculations based on NLSS I and II.

Distribution of Loans by Source (1995-96 and 2003-04, %)



Source: Calculations based on NLSS I and II.



Interest Rates (2003-04, %)

	Formal		Informal	
	Agricultural Banks	Commercial Banks	Relatives or Friends	Moneylender
Urban	16	12	21	20
Rural	18	16	30	31

Source: World Bank et al. (2006)



Inhabitants per Bank Branch (2005)

	No. of Inhabitants
Eastern	70,954
Central	49,617
Western	57,444
Mid Western	110,714
Far Western	100,654

Source: Ferrari et al. (2007).

Inadequate Provision of Social Safety Nets

Social Protection Index

	SP Expenditure (% of GDP)	SP Coverage (%)	Distribution Effect of SP (%)	Impact of SP on Income (%)	SPI Ranking
Nepal	2.3	18	35	7	24
Asia	4.0	35	57	23	-
Bangladesh	5.3	24	53	24	17
Bhutan	1.4	17	30	12	26
India	4.0	33	100	26	10
Maldives	1.5	22	74	8	21
Pakistan	1.6	7	8	3	30
Sri Lanka	5.7	41	85	26	9

Source: ADB (2008).

