

## Appendix 1

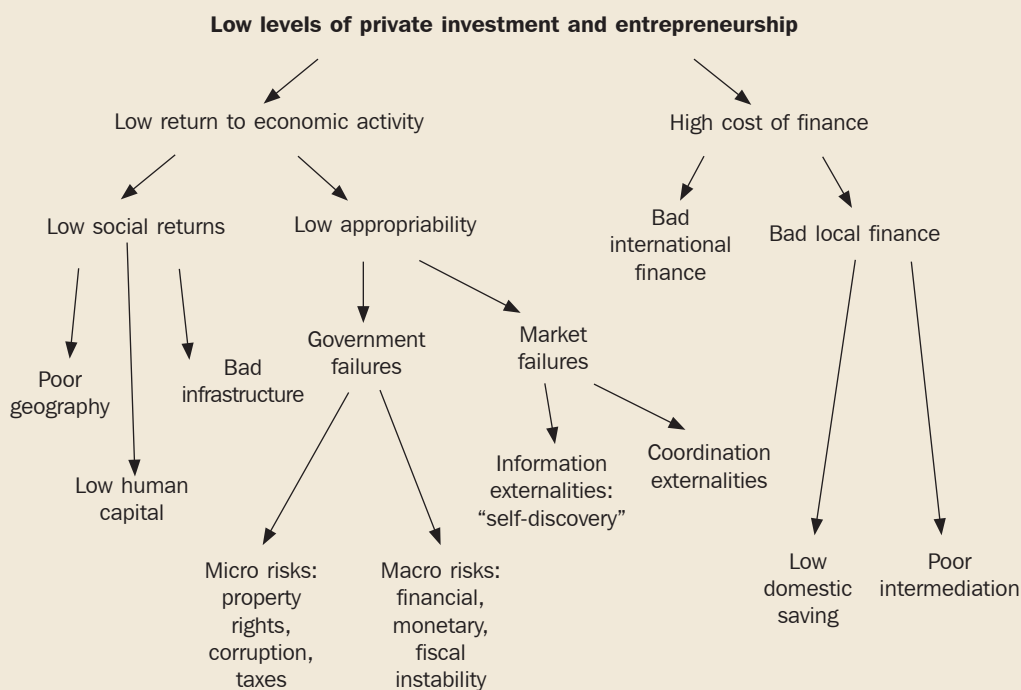
# IDENTIFYING BINDING DEVELOPMENT CONSTRAINTS —A DIAGNOSTIC APPROACH

The work on growth diagnostics, pioneered by Harvard professors Ricardo Hausmann, Dani Rodrik, and Andres Velasco (2005), represents a key element in the efforts to search for new approaches to growth strategy. Their framework—a strategy for discerning policy priorities and their desired sequence—was based on three considerations. First, while development is a broad concept entailing the raising of human capabilities in general, they believe increasing economic growth rates is the central challenge that developing nations face. Second, trying to come up with an identical growth strategy for all countries, regardless of their circumstances, is not likely to prove productive. Third, it is not helpful to provide governments

with a long, unprioritized list of reforms, which may not be targeted at the most binding constraints on economic growth and development.

The growth diagnostics framework is aimed at identifying binding constraints on economic activity, and hence a set of policies, which once targeted on these constraints, is likely to have the greatest impact. The methodology developed can be conceptualized as a problem tree (Figure A1). It begins by asking what keeps the level of domestic investment and entrepreneurship low. Is it inadequate returns to investment, inadequate private appropriability of the returns, or inadequate finance? If it is a case of low returns,

Figure A1. Growth Diagnostics



Source: Hausmann et al. (2005).

is that due to insufficient levels of complementary factors of production (such as human capital or infrastructure)? Or is it due to poor access to appropriate technologies? If it is a case of poor appropriability, is it due to high taxation, poor property rights and contract enforcement, labor–capital conflicts, or learning externalities? If it is a case of poor finance, do the problems emanate from domestic financial markets or external ones? And so on.

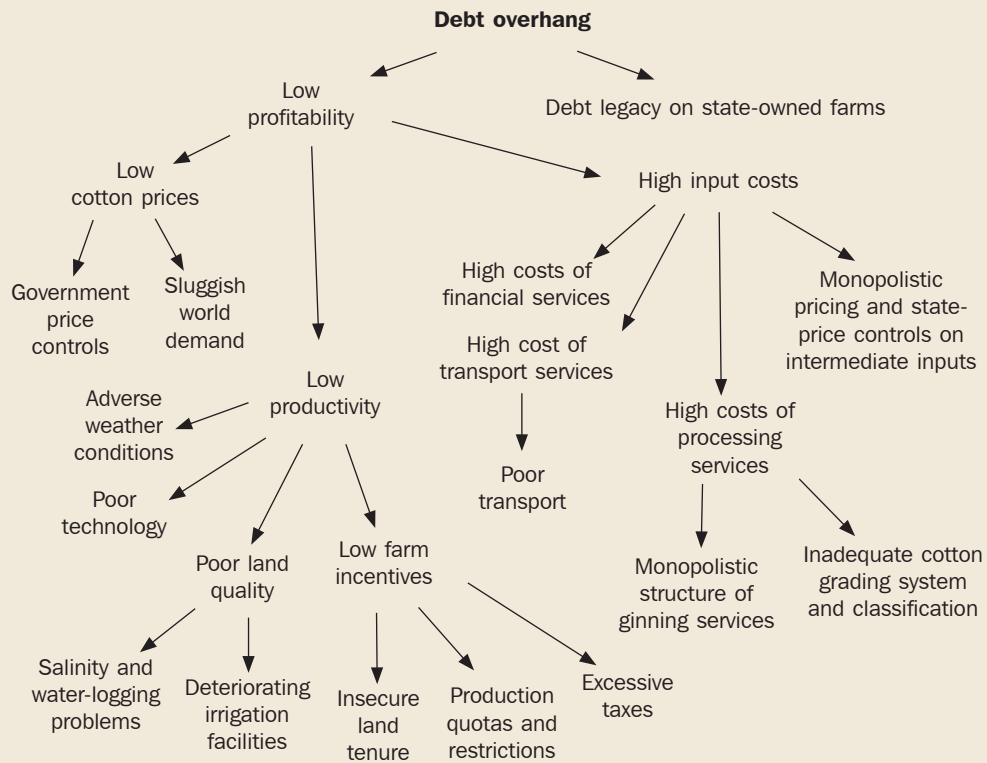
At each node of the problem tree, the method looks for diagnostic signals that would help answer the question one way or another on the basis that “If story *A* is correct, signals *x*, *y*, and *z* must be present.” There are two types of diagnostic signals that one can look for: price signals and nonprice signals. Examples of price signals are returns to education, interest rates, and cost of transport. For instance, if education is undersupplied, returns to skills/education should be high and the unemployment for skilled people should be low. If investment is constrained by savings, interest rates should be high and growth should respond to changes in available savings (for example, the inflow of foreign resources). If poor transport link is a serious constraint, bottlenecks and high private costs of transport would be observed. The use of nonprice signals is based on the idea that when a constraint binds, it results in activities designed to get around it. Here are a few examples: high tax tends to lead to high informality; poor legal institutions result in high demand for informal mechanisms of conflict resolution and contract enforcement; and poor financial intermediation leads to internalization of finance through business groups. Cross-country and cross-period benchmarking can be used to gauge whether particular diagnostic evidence signals a binding constraint for the country concerned.

The growth diagnostics approach provides a useful analytical framework for thinking about development challenges and binding constraints in developing member

countries (DMCs) when working on country strategy and programs (CSPs). But realizing its operational potential remains a challenging task and requires the creativity of the analysts and repeated use. This approach also suggests that identifying binding constraints is more a “disciplined art” than “science.” It points to the importance of in-depth knowledge of the economy being analyzed and the need for in-depth, country-specific studies.

The diagnostic approach can also be applied at a sector or project level. One report and recommendation of the President (RRP) reviewed by Economics and Research Department (ERD) recently proposed a program loan to a DMC to assist in debt resolution for the cotton sector. According to the RRP, the country’s cotton sector has been suffering from a debt overhang problem in recent years, and this undermines the sector’s long-term sustainability. ERD developed the following problem tree that would be a useful road map for diagnosing the root causes or binding constraints of the debt overhang (Figure A2). It starts by asking whether the debt overhang is due to the legacy of state-owned farming or low profitability of the cotton sector. If due to low profitability, is it because of low cotton prices, low productivity of cotton production, or high input prices? If it is a problem of low productivity, is the problem caused by low farmer incentives (due to, say, insecure land tenure, excessive taxes, or production restrictions); poor technology; deteriorating land quality; or adverse weather conditions? If low profitability is due to high input prices, are they caused by government controls on intermediate input prices, monopolistic market structure of ginning services, high transport cost due to poor infrastructure, or poor financial intermediation? And so on. By going through the problem tree and looking for signals and evidence, binding constraints to improving financial performance of the country’s cotton sector, due to either market failures or government failures, can be identified and policy responses devised.

**Figure A2. Identifying Binding Constraints at a Sector/Project Level**



## Appendix 2

### REVIEWED COUNTRY STRATEGY AND PROGRAM (CSP) PAPERS

- 1 Bangladesh: Country Strategy and Program 2006–2010 (October 2005)
- 2 Bhutan: Country Strategy and Program 2006–2010 (September 2005)
- 3 Cambodia: Country Strategy and Program 2005–2009 (January 2005)
- 4 Mongolia: Country Strategy and Program 2006–2008 (August 2005)
- 5 Nepal: Country Strategy and Program 2005–2009 (September 2004)
- 6 Philippines: Country Strategy and Program 2005–2007 (June 2005)

## Appendix 3

# REVIEWED REPORTS AND RECOMMENDATIONS OF THE PRESIDENT (RRP) (Project/Program Title)

### Investment Projects and Sector Loans

- 1 AFG: Power Transmission and Distribution Project
- 2 AFG: Western Basins Water Resources Management Project
- 3 AZE: East-West Highway Improvement Project
- 4 BAN: Agribusiness Development Project
- 5 BAN: Gas Transmission and Development Project
- 6 BAN: Second Urban Primary Health Care Project
- 7 BAN: Southwest Area Integrated Water Resources Planning and Management Project
- 8 BHU: Road Network Project
- 9 PRC: Central Sichuan Roads Development Project
- 10 PRC: Fuzhou Environmental Improvement Project
- 11 PRC: Henan Wastewater Management and Water Supply Sector Project
- 12 PRC: Hunan Roads Development III
- 13 PRC: Jilin Water Supply and Sewerage Development Project
- 14 PRC: Sanjiang Plain Wetlands Protection Project
- 15 PRC: Zhengzhou-Xi'an Railway Project
- 16 FIJ: Alternative Livelihoods Development
- 17 IND: Chhattisgarh Irrigation Development Project
- 18 IND: Kerala Sustainable Urban Development Project
- 19 IND: Rural Roads Sector II Investment Program
- 20 INO: Community Water Services and Health Project
- 21 INO: Road Rehabilitation-2 Project
- 22 INO: Rural Infrastructure Support Project
- 23 LAO: Greater Mekong Subregion Nam Theun 2 Hydroelectric
- 24 MLD: Regional Development Project, Phase II — Environmental Infrastructure and Management
- 25 PAK: Agribusiness Development Project
- 26 PAK: National Highway Development Sector Investment Program
- 27 PAK: Rawalpindi Environmental Improvement Project
- 28 REG: Establishment of the Pacific Aviation Safety Office Project
- 29 SAM: Education Sector Project II
- 30 SRI: Local Government Infrastructure Improvement Project
- 31 SRI: National Highways Sector Project
- 32 SRI: Technical Education Development Project
- 33 SRI: Tsunami Affected Areas Rebuilding Project and the Northeast Community Restoration and Development Project II (Special Procedure)
- 34 TAJ: Dushanbe-Kyrgyz Border Road Rehabilitation Project (Phase II)
- 35 UZB: Information and Communications Technology in Basic Education Project
- 36 VIE: Central Region Transport Networks Improvement Sector Project
- 37 VIE: Central Region Water Resources Project
- 38 VIE: Northern Power Transmission Expansion Sector Project
- 39 VIE: Preventive Health System Support Project

### Program Loans

- 1 AFG: Fiscal Management and Public Administration Reform Program
- 2 CAM: Financial Sector Program
- 3 INO: Development Policy Support Program
- 4 INO: Local Government Finance and Governance Reform Sector Development Program
- 5 KGZ: Banking Sector and Capital Market Development Program
- 6 MON: Financial Regulation and Governance Program
- 7 PAK: Balochistan Devolved Social Services Program
- 8 PAK: Punjab Resource Management Program (Subprogram 2)
- 9 PHI: Microfinance Development Program
- 10 VIE: Support the Implementation of the Poverty Reduction Program II

### Legend:

AFG	Afghanistan	PHI	Philippines
AZE	Azerbaijan	REG	Regional
BAN	Bangladesh	SAM	Samoa
BHU	Bhutan	SRI	Sri Lanka
CAM	Cambodia	TAJ	Tajikistan
PRC	People's Republic of China	UZB	Uzbekistan
FIJ	Fiji	VIE	Viet Nam
IND	India		
INO	Indonesia		
KGZ	Kyrgyz Republic		
LAO	Lao People's Democratic Republic		
MLD	Maldives		
MON	Mongolia		
PAK	Pakistan		

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