



MCC's Use of Constraints Analysis

During the first phase of MCC compact and threshold program development, eligible countries conduct a constraints analysis (CA) to identify the most binding constraints to private investment and entrepreneurship that hold back economic growth. The results of this analysis enable the country, in partnership with MCC, to select compact or threshold activities most likely to contribute to sustainable poverty-reducing growth.

Why Use Constraints Analysis?

MCC's CA approach builds on the pioneering work of Ricardo Hausmann, Dani Rodrik and Andrés Velasco (HRV).¹ As HRV point out, all developing countries face significant economic and development challenges, but not all these challenges equally restrict growth. Prioritizing is important since a country's implementation capacity, political space and financing to address these challenges are scarce and valuable. A particular strength of HRV's "growth diagnostic" methodology compared with other tools is its recognition that every country is different. The tool, which has been refined based on a range of experience inside and outside MCC, is designed to sift through available evidence to identify country-specific binding constraints.

What Constraints Analysis Seeks to Do

In the face of many challenges restricting growth, organizing the search for binding constraints is key. CA starts from the basic proposition that economic growth requires private investment. Incentives for private investment fall into three broad categories: (1) Overall expected return on an investment, (2) Share of the return an investor can expect to keep and (3) Cost of financing the investment. CA investigates the influence of each of these three factors in a country-specific context. The diagnostic tree in Figure 1 visualizes this investigation, with factors affecting investor returns on the left branch and factors affecting financing costs on the right.

How Constraints Analysis Works

Only in cases of low supply and strong demand is a factor considered a binding constraint to investment and growth. To assess whether a particular branch or factor within the diagnostic tree is a binding constraint, CA looks for signals that the economic factor of production is poorly supplied, while simultaneously in high demand.

For example, the quantity of credit in a country can be low, but this alone does not indicate a constrained supply of finance. The low quantity of credit may result from low demand because potential borrowers are constrained by other factors, like lack of infrastructure or an unsupportive business environment.

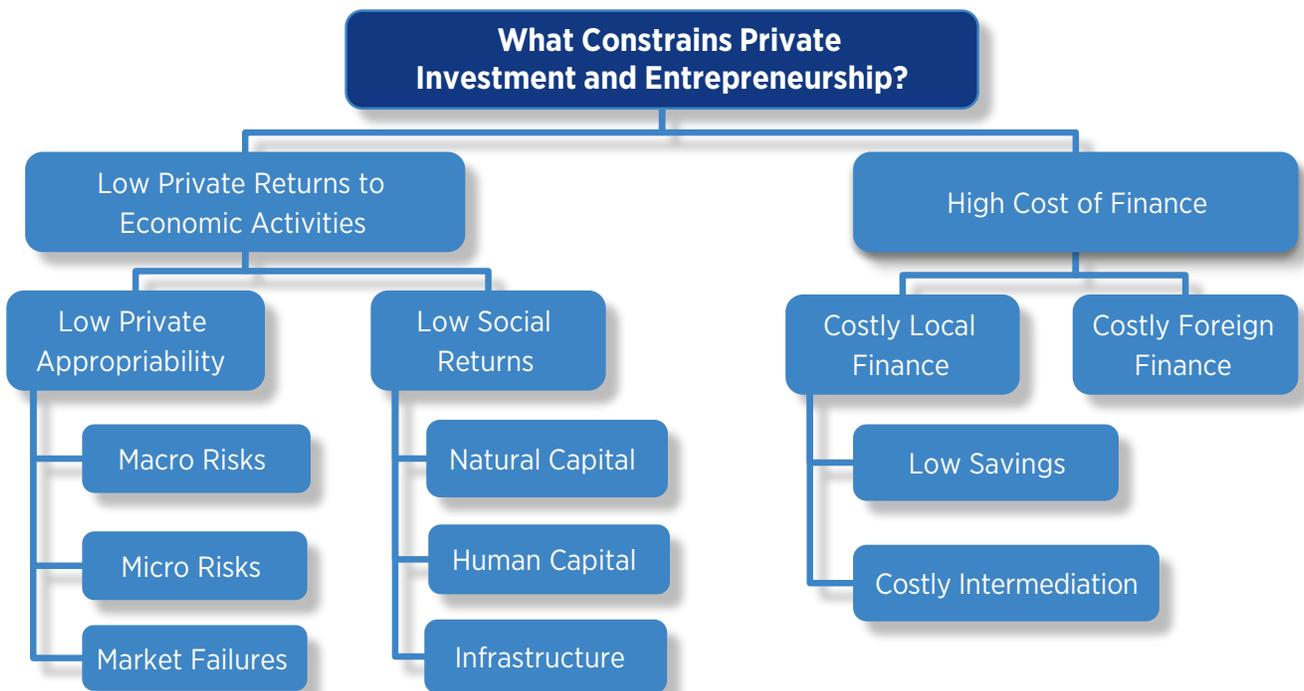
This approach helps keep the focus on problem identification and prevents the premature leap to possible solutions (for example, subsidized credit) that would not address the underlying causes.

Supply and demand dynamics can be difficult to disentangle. To help identify when the supply of a factor is low relative to demand, MCC asks four key questions:²

1. Is the price of the factor high?
2. Are changes in the factor's availability correlated with changes in investment or growth?
3. Do economic agents (manufacturers or farmers, for example) incur costs or risks to circumvent the constraint?
4. Are economic agents that rely heavily on the constraining factor unable to thrive? (This is the “camels versus hippos” test: In the same way that camels, and not hippos, thrive in an environment without water, activities that do not depend on the constraining factor thrive and activities that do depend on that factor stagnate or are missing altogether.)

Fully applying these tests depends on the nature of the data being examined around each factor. Some indicators, like returns to education, may change slowly over time, making it difficult to find a correlation with changes in investment or growth. Data availability is often an issue. That is why other available evidence and perception-based survey information can complement the data-driven examination of supply-demand dynamics, taking potential sources of bias into account.

Figure 1: The HRV Growth Diagnostic Tree



Source: HRV (2005)

Country Constraints

Country	Finance/Access to Credit	Transportation	Energy/Power	Water and Sanitation	Corruption	Governance (Regulatory Quality, Rule of Law, Stability)	Property Rights	Crime	Health	Irrigation/Water for Production Purposes	Geography	Innovation	Education	Other
Benin ¹		■	■		■	■								
Cape Verde ²		■	■	■							■	■		
El Salvador								■						Low Productivity in the Tradable Sector
Georgia ³		■											■	
Ghana	■		■				■							
Honduras ⁴					■	■		■						
Indonesia ⁵		■			■	■				■			■	
Jordan ⁶						■	■				■		■	
Malawi	■	■	■							■			■	
Moldova ⁷	■	■				■								
Mozambique ⁸		■		■		■			■		■		■	
Philippines ⁹		■	■		■	■								
Senegal ¹⁰		■	■			■	■			■				
Tanzania		■	■				■							
Tunisia ¹¹					■	■	■							
Zambia ¹²			■	■					■			■	■	
Total	3	10	8	3	5	9	5	2	2	3	3	2	6	1

Note: The use of Constraints Analyses (CAs) in compact and Threshold Program preparation was phased in starting in 2007. CAs were not prepared for countries in which compact preparation was well advanced at that time. **1.** Governance: Taxation, bad business environment (takes too long to start a business, for example), coordination failure. **2.** Innovation: Concentration of exports in low tech sectors. Geography: Limitations of total land area/island. **3.** Higher education and secondary roads. **4.** Governance: Public financial management (central government budgeting and procurement, management of state enterprises and public private partnerships). CA was prepared in connection with Threshold Program development. **5.** Governance: Poor governance, terrorism. Education: secondary and vocational education. The 2010 Indonesia CA prepared with the support of the Asian Development Bank was used as a basis for compact development. **6.** Governance: Tax system, costs of registering business, high hiring/firing costs, political instability. Geography: Water-poor country—extremely limited water availability harms agriculture, energy and household consumption. **7.** Governance: Problematic legal environment for businesses. **8.** Geography: Natural disasters. **9.** Governance: Rule of law, efficiency of public institutions. The 2007 Philippines CA prepared with the support of the Asian Development Bank was used as a basis for compact development. **10.** Governance: Labor law restricts hiring. **11.** Governance: Barriers to entry from government regulation/corruption, over regulation leading to high costs of hiring. **12.** Innovation: Coordination failure, e.g. low tech goods because innovation is not encouraged by government expenditures (tourism being low because of bad roads, for example).

Getting to the Root of the Problem

After identifying a small set of binding constraints (usually two or three), the analysis examines the root causes of those constraints. Understanding how a country's policy, institutional and social context underlies and gives rise to the constraints helps MCC and the partner country design the policy reforms and investments that will ease the constraints in a significant, sustainable and cost-effective manner. Peer review is used to test the rigor and evidence-based foundation of each assessment of the binding constraints and their underlying causes.

The results of the CA do not dictate specific projects to be funded by MCC, but rather provide a framework to help focus the consultative process—conducted with members of the local civil society and private sector—on appropriate programs that will address the identified constraints and stimulate economic growth. A successful CA constitutes a solid foundation for development of an MCC compact that addresses country priorities and is consistent with MCC's high standards.

For more information, visit www.mcc.gov to view *MCC's Guidelines for Conducting Constraints Analysis*.

Endnotes

1 Hausmann, Ricardo; Rodrik, Dani and Velasco, Andrés. "Growth Diagnostics." Harvard University, 2005. <http://www.hks.harvard.edu/fs/rhausma/new/growthdiag.pdf>.

2 Adapted from Hausmann, Ricardo; Klinger, Bailey and Wagner, Rodrigo. "Doing Growth Diagnostics in Practice: A 'Mindbook.'" Center for International Development, Harvard University, Working Paper No. 177, 2008. <http://www.hks.harvard.edu/centers/cid/publications/faculty-working-papers/cid-working-paper-no.-177>.