

---

World Economic Forum  
Geneva, Switzerland 2006

**Professor Klaus Schwab**

Executive Chairman, World Economic Forum

---

# **The Latin America Competitiveness Review 2006**

## **Paving the Way for Regional Prosperity**

---

**Augusto López-Claros**

Director, Global Competitiveness Network, World Economic Forum

# Contents

<b>Preface</b>	<b>v</b>
by Klaus Schwab	

<b>Executive Summary</b>	<b>vii</b>
by Augusto López-Claros	

## PART 1

### ASSESSING LATIN AMERICAN COMPETITIVENESS: CHALLENGES AND OPPORTUNITIES.....1

by Augusto López-Claros, Laura Altinger, Jennifer Blanke, Margareta Drzeniek, and Irene Mia

Introduction.....	3
Measuring the current competitive landscape in Latin America: The Global Competitiveness Index.....	4
Macroeconomy.....	6
Institutions.....	12
Infrastructure.....	16
Health and primary education.....	19
Higher education and training.....	19
Market efficiency.....	20
Technological readiness.....	25
Business sophistication.....	28
Innovation.....	29
Conclusions.....	33

## PART 2

### ESSAYS ON SELECTED ISSUES.....37

<b>2.1 Fiscal Policy in Latin America: Where Do We Stand? .....</b>	<b>39</b>
by Pablo Guidotti	
<b>2.2 Latin America and the External Environment: A Missed Opportunity?.....</b>	<b>43</b>
by Mario Blejer	
<b>2.3 Chavismo vs. Chilenismo .....</b>	<b>47</b>
by Moisés Naím	
<b>2.4 Is Latin America Moving Left?.....</b>	<b>51</b>
by Arturo Valenzuela	
<b>2.5 The Politics of Policies .....</b>	<b>55</b>
by Ernesto Stein	
<b>2.6 Poverty Reduction and Growth in Latin America: Virtuous and Vicious Circles .....</b>	<b>59</b>
by Guillermo Perry, Humberto López, William Maloney, Omar Arias, and Luis Servén	
<b>2.7 Mercosur's Identity Crisis .....</b>	<b>63</b>
by Paulo Roberto de Almeida	

<b>2.8 NAFTA: 12 Years of Mexico's Experience .....</b>	<b>67</b>
by René Villarreal	
<b>2.9 Can Latin American Countries Win in the World Trade Stakes?.....</b>	<b>71</b>
by Carlos Arruda	
<b>2.10 Prudential and Regulatory Challenges for Latin America.....</b>	<b>75</b>
by David Hoelscher	
<b>2.11 Latin American Multinationals.....</b>	<b>79</b>
by Laura Alfaro and Eliza Hammel	
<b>2.12 Innovation in Latin America .....</b>	<b>83</b>
by Felipe Larraín	

## PART 3

### COUNTRY PROFILES.....87

#### How country profiles work.....89

Argentina.....	92
Bolivia.....	96
Brazil.....	100
Chile.....	104
Colombia.....	108
Costa Rica.....	112
Dominican Republic.....	116
Ecuador.....	120
El Salvador.....	124
Guatemala.....	128
Guyana.....	132
Honduras.....	136
Jamaica.....	140
Mexico.....	144
Nicaragua.....	148
Panama.....	152
Paraguay.....	156
Peru.....	160
Trinidad and Tobago.....	164
Uruguay.....	168
Venezuela.....	172

<b>About the Authors</b>	<b>176</b>
--------------------------	------------

<b>Partner Institutes</b>	<b>179</b>
---------------------------	------------

<b>Acknowledgment</b>	<b>180</b>
-----------------------	------------

# Executive Summary

AUGUSTO LÓPEZ-CLAROS, World Economic Forum

The past decade and a half has been an eventful period for Latin America. A broad-based recognition of the deleterious impact of high inflation on growth, income distribution, and poverty has contributed to enormous progress in bringing inflation under control. With the move by many countries in recent years to inflation-targeting, flexible exchange rate regimes, and widening support for central bank independence, the prospects for sustaining the gains made on the inflation front are quite high, and this is good news. The region has been considerably less successful in addressing a broad range of weaknesses in management of the public finances. Even as inflation was coming down in the 1990s, public debt levels were going up, sometimes sharply. With rising debt levels, the ability of governments to respond to urgent needs in areas that can be characterized as competitiveness-enhancing, such as improving the region's infrastructure, has been constrained. These weaknesses, and the limitations they impose, in turn have often diverted policymakers' attention from a broad array of important challenges such as how best to confront the rise of India and China, how to upgrade the quality of educational institutions at a time when the level of skills and training of the labor force is emerging as a key component of improved competitiveness, and how to reverse perturbing income distribution trends.

The favorable external environment of the past couple of years has contributed to a good growth performance in the region and opened a window of opportunity to creatively address many important challenges in new ways. Failure to do so poses risks for the region, for the growth of per capita incomes, for the stable evolution of its institutions and, ultimately, for the region's place in the world economy, both in terms of its relative contribution to world GDP and, perhaps more importantly, its ability to compete effectively in an increasingly complex and sophisticated global environment in which countries that stand still rapidly fall behind.

This *Review* uses the World Economic Forum's Global Competitiveness Index (GCI) 2005 to assess the competitiveness of 21 countries in Latin America and the Caribbean. Table 1 shows a summary of the ranks and scores achieved by these countries in the GCI. The scores are represented in the first column. The second column shows the ranks within the region, while the third lists the ranks out of the entire sample of 117 countries covered in the last edition of the *Global Competitiveness Report* published last September.

**Table 1. Global Competitiveness Index 2005–2006**

Country	Score	Rank out of LA&C countries	Rank out of 117 countries
Chile	4.84	1	27
Argentina	4.09	2	54
Costa Rica	4.08	3	56
Brazil	4.08	4	57
Colombia	4.07	5	58
Mexico	4.07	6	59
El Salvador	4.05	7	60
Jamaica	4.03	8	63
Panama	4.00	9	65
Trinidad and Tobago	3.99	10	66
Uruguay	3.95	11	70
Peru	3.83	12	77
Venezuela	3.71	13	84
Ecuador	3.59	14	87
Dominican Republic	3.56	15	91
Guatemala	3.50	16	95
Nicaragua	3.48	17	96
Honduras	3.47	18	97
Bolivia	3.39	19	101
Paraguay	3.36	20	102
Guyana	3.27	21	108

Chile confirms its superior economic performance within the region by ranking 27th in the overall sample of 117 countries covered in the GCI and surpassing all its regional neighbors by a wide margin. Not only is Chile ahead of 13 of the EU's 25 members, but there is actually no other country in Latin America that surpasses any EU member. Argentina, second in the region and 54th in the world, is seven places behind Greece (47), the EU's weakest performer. Not only does Chile continue to benefit from remarkably competent macroeconomic management but, as will be seen in the subsequent sections of this *Review*, it also operates in an institutional environment characterized by transparency, openness, and predictability. The remaining Latin American and Caribbean countries are spread over the lower half of the Index range, with Argentina closely followed by Costa Rica, Brazil, Colombia, and Mexico. Bolivia, Paraguay, and Guyana are the least competitive economies in the region and are also among the weakest performers of the 117 countries covered by the Index.

In "Assessing Latin American Competitiveness: Challenges and Opportunities," the main chapter contribution to this *Review*, we explore the relative performance of countries in the region in the nine pillars measured by the GCI: macroeconomy, institutions, infrastructure, health and primary education, higher education and training,

market efficiency, technological readiness, business sophistication, and innovation.

Based on the GCI we identify a number of major challenges for improving competitiveness in the region as well as strengths to be built upon. From the assessment of the region's governance structures we conclude that governments should accelerate the reform of institutions to align them better with the requirements of an open market economy and to enable the formulation and implementation of better policies. Upgrading the institutional environment that underpins the policy framework would have additional positive effects—it would increase the effectiveness of subsequent reforms and reduce their distortionary effects.

In terms of the quality of infrastructure our results confirm what has already been widely recognized by governments and aid agencies alike—that there is an urgent need for greater investment in transport, telecommunications, and energy infrastructure in most countries of the region. Indeed, according to the results of the GCI, businesses identified the lack of appropriate infrastructure as one of the most serious impediments to increasing competitiveness.

On a more positive note, Latin America's performance on health indicators and on primary education compare favorably with that of other regions of the world, although weaknesses remain with respect to higher education and training. Governments will have to give priority to the latter in the period ahead, as the growing complexity of the global economy demands increasing levels of sophistication and training on the part of the labor force. Countries that have invested heavily in higher education and training have been able to boost their competitiveness and we expect this relationship to become even stronger in coming years.

Goods and labor markets remain distorted and efforts need to be continued to deregulate and liberalize. Reform of the labor markets is particularly important in light of the pressing social needs in the region; virtually all of the growth in the world's population in the next 20 years and, therefore, in the labor force, will take place in the developing world, in countries such as Brazil and Mexico, creating huge pressures for job creation. In addition to efforts to improve the flexibility of labor markets, there is also a need to increase worker mobility through better training programs and to boost the coverage and effectiveness of social safety nets. Although financial market vulnerabilities were at the root of many crises in the region in the past, today, key indicators of financial soundness have improved. Nevertheless, there is much scope to enhance the extent of financial intermediation in the region and to address other weaknesses, such as the lack of access to venture capital, a shortcoming that seriously limits investment and innovation possibilities.

Businesses in the region operate at a fairly high level of sophistication for their stage of development. Clusters are fairly numerous and contribute to increasing produc-

tivity, although they mainly operate at the back end of the value chain, and regional multinationals are appearing and expanding. It is noteworthy that businesses consider the extent of marketing to be their particular strength vis-à-vis international competitors. Production processes and management practices, however, are in need of upgrading.

Finally, we argue that efforts to improve the ability to absorb technologies from abroad and to innovate need to be strengthened, building on the progress achieved in recent years. Despite a number of successful examples from the region, an insufficient technological capacity is a serious drag on the overall competitiveness of the region.

A number of brief essays on selected issues touch on a broad range of topics of relevance to the region's competitiveness. They provide key insights into some of the major policy issues affecting the region and are an extremely useful intellectual complement to the competitiveness indicators provided in the main chapter.

In his essay "Fiscal Policy in Latin America: Where Do We Stand?" Pablo Guidotti shows that public sector debt levels remain high, with virtually all countries save Chile with debts above an empirically "safe" level of 30 percent of GDP. He explores the ramifications of this observation, noting that policymakers in the region have often lacked meaningful guidance on the determinants of fiscal sustainability, the underpinnings of which are complex. Guidotti provides an interesting overview of the challenges faced by policymakers as they reconcile the need for responsible fiscal management, the disciplining mechanisms of capital markets, and the growing claims on public resources.

Mario Blejer maintains in his piece "Latin America and the External Environment: A Missed Opportunity?" that Latin American leaders will have to show vision and determination to use the currently benign external conditions to implement reforms that would push their countries toward improvements in competitiveness, which would, in turn, enable them to address the region's pressing social needs. Failure to rise to the challenge could well result in the region falling further behind.

Two of the authors analyze the recent political developments in the region. Moisés Naím eloquently warns of the dangers of a swing toward more populist policies that would further undermine Latin America's competitiveness. In his article "Chavismo vs. Chilenismo" he stresses that there is a need for political leaders with fresh ideas to offer an alternative to the spreading of populist and backward-looking ideas that have already been tried and found wanting. Arturo Valenzuela provides insightful answers to the question that is on many people's minds: "Is Latin America Moving Left?"

Given the recent political developments in the region, Ernesto Stein argues in his piece "The Politics of Policies" that the strengthening of key political institutions, including political parties and the policymaking process, is crucial for ensuring economically sound policies. Often economic reforms fall captive not to a lack of a proper understanding

of what needs to be done or the absence of sufficient political will, but rather to institutional deficiencies in the process whereby ideas get transformed into successfully implemented policies, with tangible benefits on the ground. Latin America has serious shortcomings in this area that need to be addressed.

In their contribution “Poverty Reduction and Growth in Latin America: Virtuous and Vicious Circles,” Guillermo Perry and his colleagues at the World Bank point to what is arguably the central policy challenge that policymakers in the region will have to address in coming years. They caution that the prevailing high level of poverty and income inequality in these countries pose the risk of setting off a vicious cycle that could impede further growth.

Three contributions deal with Latin America’s experience with regional integration and international trade: Paulo Roberto de Almeida reviews Mercosur’s integration efforts in “Mercosur’s Identity Crisis,” a thoughtful look at the complexities and interconnectedness of economic integration and macroeconomic stabilization. René Villarreal looks farther north and provides a sobering analysis of Mexico’s track record with north-south integration in “NAFTA: 12 Years of Mexico’s Experience.” Carlos Arruda analyzes the trade potential of Latin America in light of the expansion of global trade under the title “Can Latin America Win in the World Trade Stakes?”

David Hoelscher assesses the regulatory challenges that the financial sectors in Latin America are facing. The message from his compelling analysis is quite encouraging: countries have already begun addressing some of the most important challenges and progress is expected to continue. Once completed, Latin America will have a stronger and more resilient financial system, capable of supporting sustained economic growth. Laura Alfaro and Eliza Hammel review the emergence of “multilatinas” in their essay “Latin American Multinationals” and the message is also a reassuring one: Latin American multinationals are entirely capable of becoming world-class companies, overcoming some of the weaknesses present in the institutional environments of their respective home countries with discipline and creativity. Finally, Felipe Larraín provides an overview of efforts to improve the innovative capacity in the region in his piece “Innovation in Latin America.”

The *Review* concludes with a comprehensive overview, presented in detailed country profiles in Part 3, of key competitiveness indicators for 21 Latin American countries.

---

# Part 1

## Assessing Latin American Competitiveness: Challenges and Opportunities

# Assessing Latin American Competitiveness: Challenges and Opportunities

AUGUSTO LÓPEZ-CLAROS, LAURA ALTINGER, JENNIFER BLANKE,  
MARGARETA DRZENIEK, and IRENE MIA, World Economic Forum

## Introduction

A favorable external environment and a more cautious approach to macroeconomic management over the past few years have noticeably benefited Latin America and the Caribbean. The region has grown strongly over the past two years (4.9 percent on average), and this is expected to continue through 2006. Growth has been further buttressed by sustained price stability and some fiscal consolidation, which has helped to reduce budget deficits. As energy and commodity exporters, many countries in the region were also beneficiaries of major gains in the terms of trade.

However, while Latin American economic performance over recent years has been positive, the region has been less successful than other emerging market areas, as noted by Mario Blejer in his contribution to this *Review*, entitled “Latin America and the External Environment.” While Latin American governments have been able to significantly lower inflation, many have not yet consolidated their fiscal positions, and debt levels have continued to be a heavy burden on the budget. Structural weaknesses, such as excessive red tape or weak property-rights regimes, must also be tackled. Many other difficulties remain, such as income inequality and poverty rates that foment social unrest, widespread reform fatigue, and even the risk of unraveling structural reform efforts before they have borne fruit.

Recent years have already seen moves in this direction in a number of countries. The contribution to this *Review* by Moisés Naím, “Chavismo vs. Chilenismo,” highlights the ongoing trends and associated dangers, noting that the latest spate of highly interventionist policies are similar to those already tried by previous administrations in decades past—with devastating economic consequences.

If the competitiveness of Latin America is to catch up to the levels of the most successful emerging market economies, such as those in Central and Eastern Europe and East Asia, the reform agenda remains critical and must be tackled with a sense of urgency. This means that governments must build on the stabilization successes of the past decade, while at the same time giving a higher priority to improving education and infrastructure, enhancing the efficiency of markets, strengthening the institutional environment through better protection of property rights, and rooting out corruption. By highlighting some of the most glaring deficiencies across the region and how these can be improved upon in the years ahead, we will highlight the priorities in the long reform agenda aimed at improving Latin American competitiveness.

This chapter assesses the competitiveness of 21 countries in the Latin American and Caribbean region: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Guyana, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Trinidad and Tobago, Uruguay, and Venezuela. These countries were featured in the *Global Competitiveness Report 2005–2006* and included in the



2005 Executive Opinion Survey (Survey), which remains a key tool and the basis for much of our analysis.

The first section frames the discussion by outlining the recently developed Global Competitiveness Index (GCI), which represents the latest insights in competitiveness research. The GCI includes a variety of factors which are particularly critical to the competitiveness of Latin America and the Caribbean, such as the stability of the macroeconomic environment, the quality of the institutional environment, the state of physical infrastructure, and human resource development.

Following the description of the overall methodology employed by the GCI are detailed analyses of how specific Latin American and Caribbean countries fare in each of the areas covered by the Index. In addition to comparing the performance of these countries with each other, we also provide information on the region's performance as compared with all 117 countries covered by our dataset used for the *Global Competitiveness Report 2005–2006*. We also provide data for a number of other developing regions and countries, including China, India, Central and Eastern Europe, and the East Asian NICs, as benchmarks for Latin American and Caribbean performance. These comparisons place the region's competitiveness in an international perspective.

Part 2 provides a collection of short essays by leading thinkers on the economic, political, and social issues of this region, which serve to provide deeper insight into some of the issues covered in the underlying competitiveness analysis, and, in part, reinforce its findings. Part 3 includes competitiveness profiles for each country in the Latin American and Caribbean region, identifying specific strengths and weaknesses, and offering the reader an opportunity to see how the 21 countries are performing vis-à-vis each other in the various areas driving their levels of competitiveness.

With its rank of 27 in the overall sample of 117 countries covered in the GCI, Chile confirms its superior economic performance within the region, surpassing all its regional neighbors by a wide margin. Not only is Chile ahead of 13 of the EU's 25 members, but there is actually no other country in Latin America which is ahead of *any* of the EU-25. Argentina, second in the region and 54th in the world, is seven places behind Greece (47), the EU's worst performer. Not only does Chile continue to benefit from remarkably competent macroeconomic management but, as will be seen in the subsequent sections of this *Review*, it also operates in an institutional environment characterized by transparency, openness, and predictability. The remaining Latin American countries are spread over the lower half of the Index range, led by Argentina and closely followed by Costa Rica, Brazil, Colombia, and Mexico. Bolivia, Paraguay, and Guyana are the least competitive economies in the region, and are also among the weakest performers among the 117 countries covered by the index.

## Measuring the current competitive landscape in Latin America: The Global Competitiveness Index

The World Economic Forum works with leading academics worldwide to ensure that the latest thinking and research on global competitiveness are incorporated into its reports. The goal of our work is to contribute to a better understanding of the key ingredients of economic growth and prosperity. By highlighting the strengths and weaknesses of an economy, policymakers, business leaders, and other stakeholders are offered an important tool to assist them in the formulation of improved economic policies and institutional reforms.

Over the years, we have integrated the latest thinking on competitiveness into our analysis, and the GCI reflects state-of-the-art competitiveness research, measuring “the set of institutions, policies and factors that set the sustainable current and medium term levels of economic prosperity.” The GCI is the most comprehensive competitiveness index to date, measuring both the macro- and microeconomic drivers of productivity across a large number of countries.<sup>1</sup>

### *The nine pillars of competitiveness*

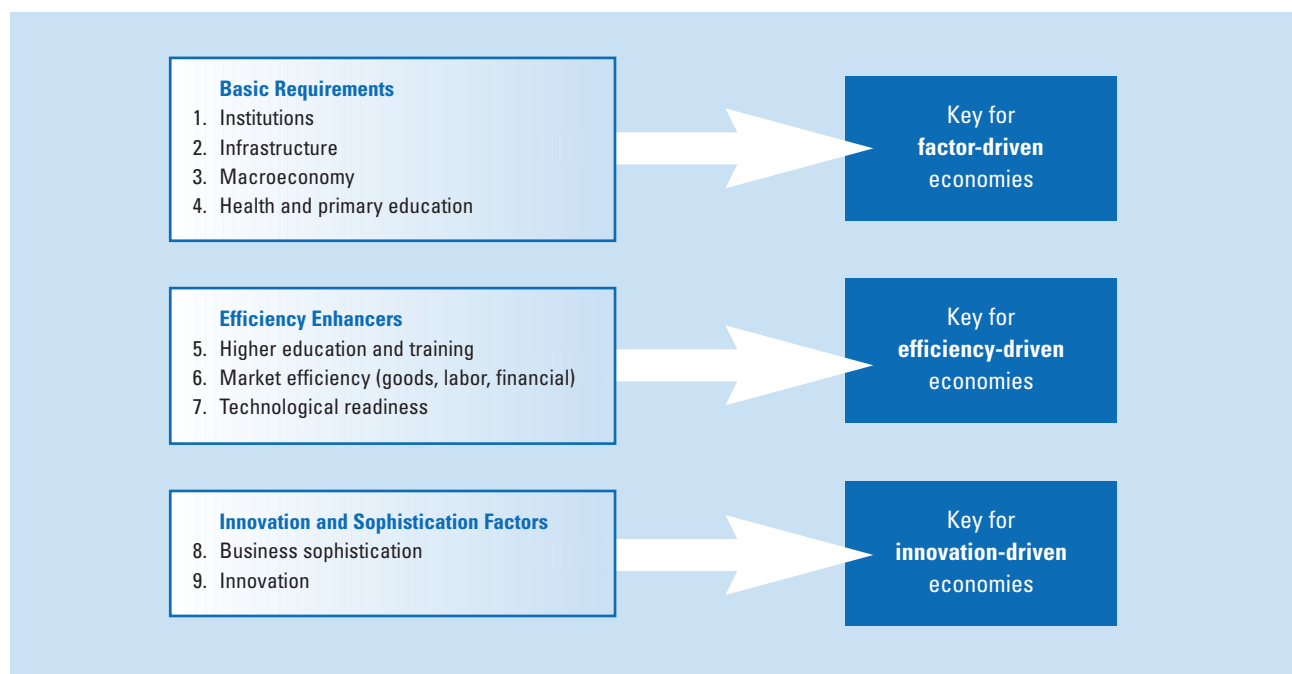
We have learned from years of research that the measurement of competitiveness is a complex undertaking. One cannot simply pinpoint one or two areas as being critical for growth and prosperity. In light of this complexity, the GCI, with its nine distinct “pillars,” captures the idea that many different elements matter for competitiveness. The World Economic Forum has identified these as:

*Macroeconomy*  
*Institutions*  
*Infrastructure*  
*Health and primary education*  
*Higher education and training*  
*Market efficiency*  
*Technological readiness*  
*Business sophistication*  
*Innovation*

Each of these pillars plays a critical role in driving national competitiveness. More details on each are included in the discussion of the region's countries' levels of competitiveness which follow.

The nine pillars are measured using both hard data from public sources (such as inflation, Internet penetration, and school enrollment rates) as well as data from the World Economic Forum's Executive Opinion Survey, conducted annually among top executives in all of the countries assessed. The Survey provides crucial data on a number of qualitative issues, such as corruption, property rights, and the independence of the judiciary, for which no hard data exist.<sup>2</sup>



**Figure 1: The nine pillars of competitiveness**

Source: World Economic Forum, 2005.

### *Competitiveness and the stages of economic development*

Another important reality taken into account by the GCI is that countries are at different levels of economic development. What is important for improving the competitiveness of a country at one stage of development may be less so for a country in another stage. What presently drives productivity in the United States is necessarily different from what drives it in Paraguay. In other words, economic development progresses in stages. Thus, the GCI separates countries into three specific stages: *factor-driven*, *efficiency-driven*, and *innovation-driven*.

In the factor-driven stage (stage 1), countries compete based on low prices. They sell commodities or simple products, taking advantage of such factors as low cost labor and inexpensive natural resources. At this stage of development, the basic ingredients of competitiveness include strong institutions, adequate infrastructure, a stable macroeconomic environment, and sufficient health and primary education levels.

As countries move into stage 2, the efficiency-driven stage, it is important for them to develop more efficient production practices. At this stage, product quality, rather than low price, drives competitiveness, which depends more on efficient goods, labor, and financial markets, education and training programs which prepare the workforce for more streamlined production, access to and use of the latest technologies, and large markets that allow companies to exploit economies of scale.

In the third, innovation-driven stage, countries can no longer compete simply by being efficient. Now, companies must compete through innovation, producing new, value-

added and different goods, and using the most sophisticated production processes.

So, while all nine pillars matter to a certain extent for all countries, the relative importance of each depends on a country's particular stage of development. To take this into account, the pillars are organized into three subindexes, each critical to one particular stage of development. The *basic requirements* subindex groups those pillars most critical for countries in the factor-driven stage. The *efficiency enhancer* subindex includes those pillars critical for countries in the efficiency-driven stage. And the *innovation and sophistication* subindex includes all pillars critical to countries in the innovation-driven stage. Figure 1 illustrates how the nine pillars relate to each stage of development.

The GCI implements the concept of developmental stages by weighting each of the subindexes differently, depending on the stage of a given country. More specifically, as shown in Table 1, the index places more weight on those pillars that are most important at a given stage of a country's development.<sup>3</sup>

**Table 1: Weighting of subindexes, based on stages of development**

Stage	Basic requirements (%)	Efficiency enhancers (%)	Innovation and sophistication factors (%)
Factor-driven	50	40	10
Efficiency-driven	40	50	10
Innovation-driven	30	40	30

Source: World Economic Forum, 2005.

**Table 2: Classification of Latin American and Caribbean countries into stages of development**

Stage of development	LA&C countries in this stage	Other countries in this stage	Important areas for competitiveness
Stage 1 (factor-driven)	Bolivia, Guyana, Honduras, Nicaragua, Paraguay	China, Egypt, Georgia, India, Kenya, Nigeria, Philippines, Ukraine	Basic requirements (critical) and efficiency enhancers (very important)
Transition from stage 1 to stage 2	Colombia, Dominican Republic, Ecuador, El Salvador, Guatemala, Peru	Kazakhstan, Thailand, Tunisia	Basic requirements and efficiency enhancers (both very important)
Stage 2 (efficiency-driven)	Argentina, Brazil, Chile, Costa Rica, Jamaica, Mexico, Panama, Uruguay, Venezuela	Botswana, Estonia, Latvia, Lithuania, Poland, Russia, Slovak Rep., Turkey	Basic requirements (very important) and efficiency enhancers (critical)
Transition from stage 2 to stage 3	Trinidad and Tobago	Korea, Malta, Portugal, Taiwan	Same as above, but innovation factors become increasingly important
Stage 3 (innovation-driven)		Austria, Finland, Hong Kong, Japan, Singapore, United States	All three areas: basic requirements, efficiency enhancers and innovation factors

Source: World Economic Forum, 2005.

Specific weights are given to each of the subindexes for countries in the different stages of development. Table 1 shows that for countries at the factor-driven stage, most weight (50 percent) is placed on basic requirements, considerable weight (40 percent) is placed on efficiency enhancers, and only 10 percent is placed on innovation and sophistication factors. For countries at the factor-driven stage, the weights between basic requirements and efficiency enhancers are reversed, and very little weight is placed on innovation factors. Finally, for the countries at the innovation-driven stage, some weight is still placed on the two first subindexes, but substantially more weight is placed on the innovation and sophistication factors subindex.

The economic diversity of the Latin American countries becomes apparent in their classification into the three stages of development, as summarized in Table 2, showing that five countries are classified as being in stage 1. Six countries are in transition between stages 1 and 2. Nine countries are in stage 2. And one country, Trinidad and Tobago, is already in transition between stages 2 and 3. The diversity of developmental stages indicates the different pillars on which each of the countries should be focusing. It also means that the region contains countries that can serve as models for others to follow as they move up the development ladder.

Table 3 presents the rankings and scores of the countries in Latin America on the overall GCI, as well as on each of the three component subindexes. The first column shows the overall score on the GCI; the second column shows the rank among the 21 countries in the region covered in this *Review*; the third column shows the rank among the 117 countries covered in *The Global Competitiveness Report 2005–2006*.<sup>4</sup> The last three columns show the scores on the three subindexes of the GCI (basic

requirements, efficiency enhancers, and innovation and sophistication factors). All scores are on a scale from 1 to 7, with higher scores demonstrating stronger performance.

The overall regional average is shown at the bottom of the list of the region's countries. This is followed by the data for the four countries or country groupings we are using for comparison: China, India, Central and Eastern Europe, and the East Asian newly industrializing countries (NICs). Thus, the table illustrates how countries in Latin America are faring vis-à-vis each other, as well as how they compare with other developing regions and countries.

What is driving the competitiveness of each of the Latin American countries? Although Table 3 provides a basic overview of how each of the countries in the region is performing, it is necessary to explore the specific factors driving competitiveness in each of these countries in order to understand what must be done to increase their economic performance. Tables 4, 5, and 6 provide the details behind the competitiveness rankings and the scores are summarized in Table 3. These three tables show the performance of each country or region in each subindex, and in all of the pillars composing the particular subindex.

Each country's specific performance on the individual variables (factors) within each pillar is shown in detail in the country profiles, which appear in Part 3 of this *Review*. Based on this comparative information, we now turn to an analysis of how countries in the region are faring in each of the nine pillars of the GCI.

## Macroeconomy

The macroeconomy pillar of the Global CI brings together the key variables that are relevant for assessing the quality of the macroeconomic environment in a given country. Unlike other pillars of the index which blend hard and

**Table 3: Ranking and scores of Latin American and Caribbean countries in the overall Global Competitiveness Index (GCI) 2005**

Country/Group	Final index			Subindexes		
	Score	Rank out of 21 LA&C countries	Rank out of 117 countries	Basic requirements	Efficiency enhancers	Innovation factors
Chile	4.84	1	27	5.46	4.49	4.09
Argentina	4.09	2	54	4.52	3.81	3.72
Costa Rica	4.08	3	56	4.32	3.90	4.01
Brazil	4.08	4	57	4.32	3.89	4.03
Colombia	4.07	5	58	4.52	3.63	3.74
Mexico	4.07	6	59	4.61	3.73	3.60
El Salvador	4.05	7	60	4.67	3.53	3.45
Jamaica	4.03	8	63	4.33	3.87	3.59
Panama	4.00	9	65	4.54	3.64	3.68
Trinidad and Tobago	3.99	10	66	4.60	3.63	3.49
Uruguay	3.95	11	70	4.61	3.53	3.39
Peru	3.83	12	77	4.20	3.57	3.31
Venezuela	3.71	13	84	4.23	3.42	3.11
Ecuador	3.59	14	87	4.32	2.93	2.94
Dominican Republic	3.56	15	91	3.91	3.26	3.10
Guatemala	3.50	16	95	4.05	2.93	3.08
Nicaragua	3.48	17	96	4.02	2.99	2.79
Honduras	3.47	18	97	4.14	2.77	2.93
Bolivia	3.39	19	101	3.89	2.97	2.57
Paraguay	3.36	20	102	3.96	2.80	2.56
Guyana	3.27	21	108	3.64	2.93	2.75
<b>Latin America average</b>	<b>3.83</b>	—	—	<b>4.33</b>	<b>3.44</b>	<b>3.33</b>
<b>China</b>	<b>4.26</b>	—	<b>48</b>	<b>4.79</b>	<b>3.70</b>	<b>3.83</b>
<b>India</b>	<b>4.32</b>	—	<b>45</b>	<b>4.47</b>	<b>4.09</b>	<b>4.48</b>
<b>Eastern Europe average<sup>a</sup></b>	<b>4.59</b>	—	—	<b>4.90</b>	<b>4.51</b>	<b>3.99</b>
<b>East Asian NICs<sup>b</sup></b>	<b>5.51</b>	—	—	<b>5.88</b>	<b>5.50</b>	<b>5.16</b>

a. Includes Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovak Republic, and Slovenia.

b. Includes Hong Kong, Singapore, and Taiwan.

Source: World Economic Forum, 2005; and authors' calculations.

**Table 4: Ranking and scores of Latin American and Caribbean countries in the basic requirements subindex**

Country/Group	Basic requirements subindex			Component pillars			
	Score	Rank out of 21 LA&C countries	Rank out of 117 countries	Institutions	Macroeconomy	Infrastructure	Health and primary education
Chile	5.46	1	24	4.76	5.78	4.40	6.91
El Salvador	4.67	2	50	3.75	4.46	3.72	6.77
Uruguay	4.61	3	54	4.20	3.76	3.63	6.84
Mexico	4.61	4	55	3.44	4.85	3.32	6.83
Trinidad and Tobago	4.60	5	56	3.39	5.13	3.19	6.69
Panama	4.54	6	59	3.51	4.28	3.55	6.82
Argentina	4.52	7	62	3.08	4.67	3.53	6.81
Colombia	4.52	8	63	3.57	4.54	3.19	6.76
Jamaica	4.33	9	72	3.59	3.25	3.64	6.83
Costa Rica	4.32	10	73	3.74	3.51	3.16	6.89
Ecuador	4.32	11	75	2.60	5.22	2.74	6.72
Brazil	4.32	12	77	3.38	3.97	3.20	6.72
Venezuela	4.23	13	79	2.47	4.68	2.96	6.80
Peru	4.20	14	82	3.06	4.48	2.64	6.60
Honduras	4.14	15	83	2.97	4.20	2.77	6.65
Guatemala	4.05	16	90	2.69	4.36	2.60	6.55
Nicaragua	4.02	17	91	3.08	3.97	2.36	6.68
Paraguay	3.96	18	94	2.37	4.48	2.21	6.80
Dominican Republic	3.91	19	97	2.83	3.59	2.58	6.63
Bolivia	3.89	20	99	2.81	3.89	2.49	6.37
Guyana	3.64	21	111	2.83	3.14	2.11	6.47
<b>Latin America average</b>	<b>4.33</b>	—	—	<b>3.24</b>	<b>4.30</b>	<b>3.05</b>	<b>6.72</b>
<b>China</b>	<b>4.79</b>	—	<b>45</b>	<b>3.72</b>	<b>5.33</b>	<b>3.44</b>	<b>6.65</b>
<b>India</b>	<b>4.47</b>	—	<b>65</b>	<b>4.25</b>	<b>4.06</b>	<b>3.21</b>	<b>6.33</b>
<b>East Europe average<sup>a</sup></b>	<b>4.90</b>	—	—	<b>3.99</b>	<b>4.56</b>	<b>4.27</b>	<b>6.77</b>
<b>East Asian NICs<sup>b</sup></b>	<b>5.88</b>	—	—	<b>5.33</b>	<b>5.42</b>	<b>5.97</b>	<b>6.79</b>

a. Includes Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovak Republic, and Slovenia.

b. Includes Hong Kong, Singapore, and Taiwan.

Source: World Economic Forum, 2005; and authors' calculations.

**Table 5: Ranking and scores of Latin American and Caribbean countries in the efficiency enhancers subindex**

Country/Group	Efficiency enhancers subindex			Component pillars		
	Score	Rank out of 21 LA&C countries	Rank out of 117 countries	Higher education and training	Market efficiency	Technological readiness
Chile	4.49	1	31	4.45	4.86	4.16
Costa Rica	3.90	2	50	4.08	4.04	3.58
Brazil	3.89	3	51	4.19	4.14	3.35
Jamaica	3.87	4	52	3.75	4.15	3.71
Argentina	3.81	5	57	4.68	3.65	3.11
Mexico	3.73	6	61	3.79	4.08	3.32
Panama	3.64	7	65	3.75	4.06	3.10
Trinidad and Tobago	3.63	8	66	3.71	4.04	3.14
Colombia	3.63	9	67	3.83	4.19	2.86
Peru	3.57	10	70	3.70	3.98	3.03
Uruguay	3.53	11	71	4.15	3.38	3.07
El Salvador	3.53	12	73	3.38	4.21	2.99
Venezuela	3.42	13	76	3.63	3.49	3.13
Dominican Republic	3.26	14	85	3.18	3.49	3.10
Nicaragua	2.99	15	97	3.20	3.34	2.42
Bolivia	2.97	16	98	3.43	3.21	2.26
Guyana	2.93	17	102	3.16	3.39	2.25
Guatemala	2.93	18	103	2.79	3.36	2.64
Ecuador	2.93	19	104	3.04	3.23	2.51
Paraguay	2.80	20	107	2.99	3.08	2.35
Honduras	2.77	21	110	2.63	3.24	2.46
<b>Latin America average</b>	<b>3.44</b>	—	—	<b>3.60</b>	<b>3.74</b>	<b>2.98</b>
<b>India</b>	<b>4.09</b>	—	<b>46</b>	<b>4.28</b>	<b>4.77</b>	<b>3.22</b>
<b>China</b>	<b>3.70</b>	—	<b>62</b>	<b>3.76</b>	<b>4.26</b>	<b>3.08</b>
<b>East Europe average<sup>a</sup></b>	<b>4.51</b>	—	—	<b>4.91</b>	<b>4.40</b>	<b>4.21</b>
<b>East Asian NICs<sup>b</sup></b>	<b>5.50</b>	—	—	<b>5.38</b>	<b>5.48</b>	<b>5.63</b>

a. Includes Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovak Republic, and Slovenia.

b. Includes Hong Kong, Singapore, and Taiwan.

Source: World Economic Forum, 2005; and authors' calculations.

**Table 6: Ranking and scores of Latin American and Caribbean countries in the innovation factors subindex**

Country/Group	Innovation factors subindex			Component pillars	
	Score	Rank out of 21 LA&C countries	Rank out of 117 countries	Business sophistication	Innovation
Chile	4.09	1	32	4.77	3.41
Brazil	4.03	2	36	4.63	3.42
Costa Rica	4.01	3	37	4.54	3.49
Colombia	3.74	4	49	4.31	3.16
Argentina	3.72	5	52	4.25	3.18
Panama	3.68	6	54	4.21	3.15
Mexico	3.60	7	57	4.13	3.07
Jamaica	3.59	8	59	3.98	3.20
Trinidad and Tobago	3.49	9	69	4.04	2.95
El Salvador	3.45	10	73	4.21	2.68
Uruguay	3.39	11	75	3.79	2.98
Peru	3.31	12	82	3.97	2.64
Venezuela	3.11	13	92	3.39	2.83
Dominican Republic	3.10	14	93	3.74	2.45
Guatemala	3.08	15	94	3.64	2.52
Ecuador	2.94	16	101	3.41	2.47
Honduras	2.93	17	104	3.37	2.48
Nicaragua	2.79	18	107	3.06	2.51
Guyana	2.75	19	110	3.22	2.29
Bolivia	2.57	20	114	2.90	2.24
Paraguay	2.56	21	115	3.11	2.02
<b>Latin America average</b>	<b>3.33</b>	—	—	<b>3.84</b>	<b>2.82</b>
<b>China</b>	<b>3.83</b>	—	<b>48</b>	<b>4.11</b>	<b>3.56</b>
<b>India</b>	<b>4.48</b>	—	<b>26</b>	<b>5.02</b>	<b>3.94</b>
<b>East Europe average<sup>a</sup></b>	<b>3.99</b>	—	—	<b>4.48</b>	<b>3.50</b>
<b>East Asian NICs<sup>b</sup></b>	<b>5.16</b>	—	—	<b>5.41</b>	<b>4.92</b>

a. Includes Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovak Republic, and Slovenia.

b. Includes Hong Kong, Singapore, and Taiwan.

Source: World Economic Forum, 2005; and authors' calculations.

survey data, the macroeconomy pillar is based entirely on hard data indicators, drawn from reputable international sources, and compiled on an internationally comparable basis. The choice of this particular set of variables—inflation, the real exchange rate, the national savings rate, the budget deficit, the level of public indebtedness, and a measure of the interest rate spread—is well founded in economic theory. Moreover, there is a considerable body of empirical and theoretical work supporting their presence in any assessment of a country's overall macroeconomic position.<sup>5</sup>

Several interesting stories emerge from an examination of the above data covering the region. One is country-specific and refers to Chile's superior performance—first among 117 countries—in the macroeconomy pillar. The others are issue-specific and pertain to inflation, public finances, and the exchange rate.

### Chile

Chile, ranked 1st in Latin America, outshines the rest of the region by a wide margin. Not only is Chile ahead of all OECD countries in terms of the quality of macroeconomic management, but the gap in rank with respect to some of the larger economies in the rest of Latin America is quite large. The ranks for Mexico (34), Argentina (46), Colombia (51), and Brazil (91) suggest that, metaphorically speaking, Chile has abandoned its geographic surroundings and is operating in a different league altogether. Chile continues to benefit from remarkably competent macroeconomic management, and, as will be seen in the subsequent sections of this *Review*, operates in an institutional environment characterized by transparency, openness, and predictability.

### Inflation

Countries in the region have made enormous progress in bringing inflation under control (see Figure 2 for inflation rates for 2004). Average consumer price inflation for the region was close to 500 percent in 1990 but had slowed to single digit levels by the latter part of the decade and has remained subdued since.<sup>6</sup> Recent data suggest that there are no runaway-inflation countries, and no acute-inflation countries, in the region. In fact, there is not even a single case of chronic inflation—to refer to a useful but now, fortunately, outdated terminology developed at the International Monetary Fund in the late 1980s.<sup>7</sup> As in the rest of the world, inflation in Latin America came down as a result of a combination of factors, including a broad-based recognition of the deleterious impact of high inflation on growth, income distribution and poverty, and a gradual shift to non-monetary forms of financing of the budget deficit, made possible by easier access to capital markets.

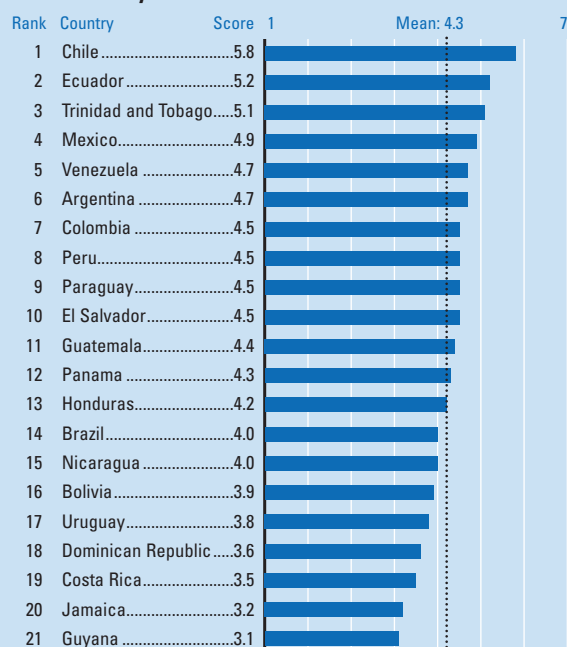
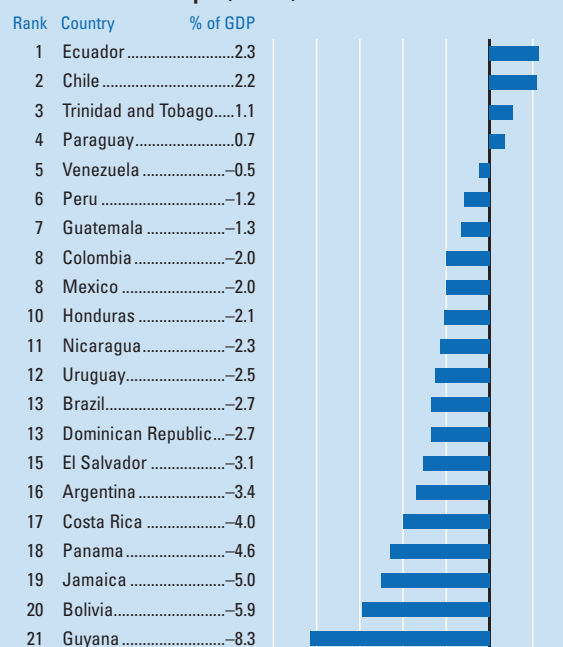
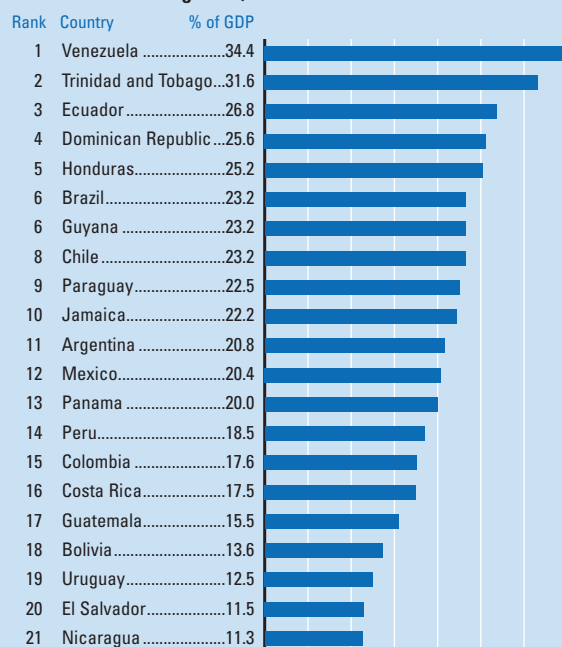
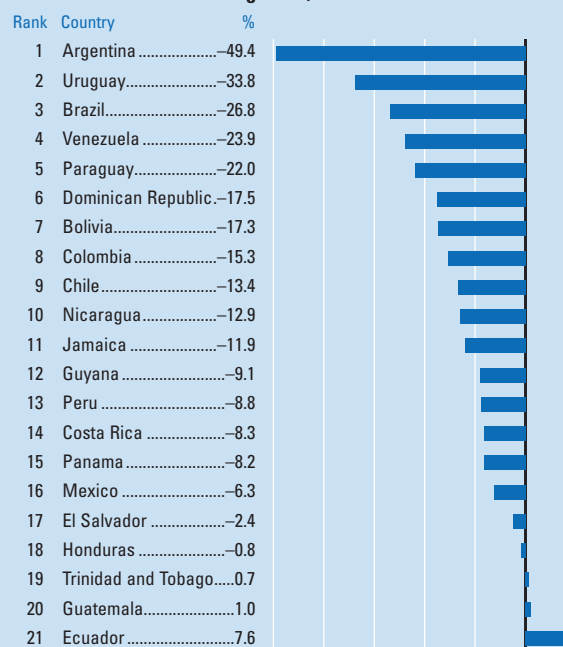
The debate in Latin America in the early 1990s was clearly won by the “price stability” school—carried out by central bank officials and leading academics, helped by the considerable leverage exerted by the IMF in the context

of stabilization programs across a broad swath of the region—which argued that the primary goal of monetary policy should be the achievement of low and stable inflation, and that interest rates should move as needed to prevent price disturbances from spilling over into rising inflation. In addition, central banks were to refrain from intervening in the foreign exchange market, while monetary authorities were to leave it to structural and fiscal policies to deal with rigidities and supply constraints which might be dampening the economy's growth potential. Indeed, the optimal strategy for the monetary authorities would be not to yield to the temptation of accelerating money growth in the hope of temporarily stimulating output. With the move by many countries in recent years to inflation-targeting (e.g., Brazil, Chile, Colombia, and Mexico), flexible exchange rate regimes, and widening support for central bank independence, the prospects for the gains made on the inflation front to be sustainable are quite high.

By the end of 2005, there was a handful of countries in the region with double-digit inflation (Venezuela, Costa Rica, Jamaica, Argentina, and Nicaragua), but the rates were all under 15 percent, well above the average world inflation of 3.9 percent in 2005 according to the World Economic Outlook, but well below historical benchmarks for the region. Nevertheless, because inflation has been on a downward trend across the globe, our methodology for assessing the impact of macroeconomic variables on competitiveness will penalize countries whose inflation rates depart significantly from the norm. Thus, Venezuela's inflation rank in the last issue of the *Global Competitiveness Report 2005–2006* (which used 2004 inflation rates) was 115 among 117 countries, making it one of the world's worst performers. The equivalent rank for Argentina was 63. This example illustrates one important point: countries may improve vertically with respect to their own histories—certainly the case in Argentina as regards inflation—but, in a dynamic world economy, other countries will be improving as well, and a horizontal comparison at a given moment in time may show Argentina's recent “successes” to be quite mediocre.

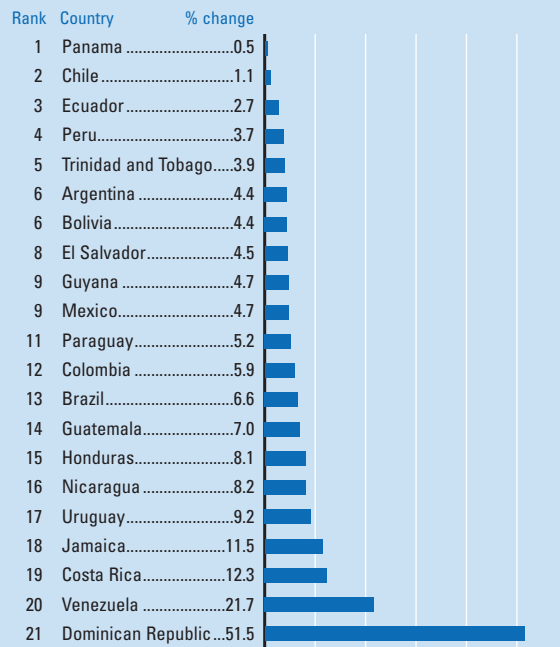
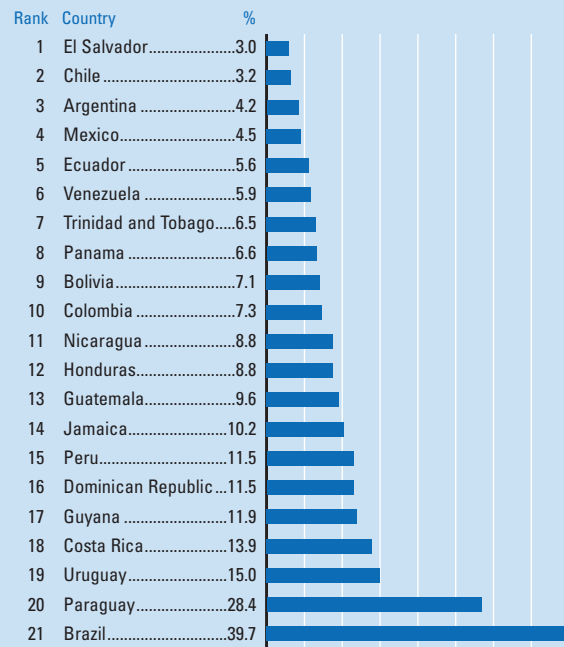
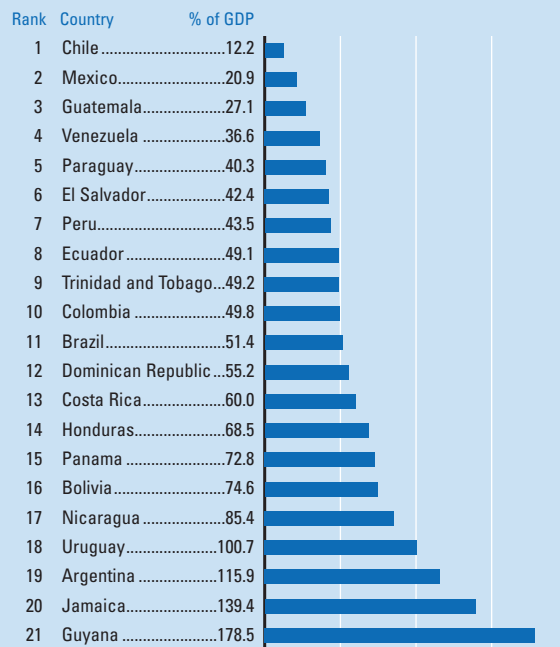
### Public finances

Careless management of the public finances has been a serious problem in the region during the past several decades. Even as inflation was coming down in the 1990s, public debt levels were going up, sometimes sharply. As noted by Pablo Guidotti in his contribution to this *Review*, “Fiscal Policy in Latin America: Where Do We Stand?” the region's external debt rose by US\$350 billion to US\$750 billion in the 10-year period to 1998. Fiscal indiscipline has had a number of undesirable consequences for the region. With rising debt levels, it has constrained the ability of governments to respond to urgent needs, in areas which enhance competitiveness, such as education, infrastructure, and public health. According to the IMF (Singh et al., 2005), between 1990 and 2000 public spending in

**Figure 2: Country performance in the macroeconomy pillar****Macroeconomy****2.13 Government surplus/deficit, 2004****2.14 National savings rate, 2004****2.15 Real effective exchange rate, 2004<sup>a</sup>**

a. Relative to the 1997–2003 average

Sources: World Economic Forum, 2006; Economic Intelligence Unit, 2005; IMF, 2005c, 2005d, 2005e, 2005f; national sources.

**Figure 2: Country performance in the macroeconomy pillar** (cont'd.)**2.16 Inflation, 2004****2.17 Interest rate spread, 2004****2.20 Government debt/GDP ratio, 2004**

Sources: World Economic Forum, 2006; Economic Intelligence Unit, 2005; IMF, 2005c, 2005d, 2005e, 2005f; national sources.



infrastructure fell by somewhere between 2–3.5 percent of GDP in Argentina, Brazil, and Mexico, with an average drop for the region of close to 2 percent of GDP.

Unfortunately, this did not reflect the phasing-out of buoyant investment in the region's infrastructure since Latin American infrastructure was inadequate in 1990 and remained so 10 years later. Instead, the drop in spending occurred in the context of fiscal consolidation efforts; governments, unable to reduce public sector wages or eliminate other forms of earmarked expenditure, were forced to cut public investment programs.

Fiscal adjustment has been made difficult by a number of institutional rigidities, including the widespread practice of earmarking revenue to particular expenditure categories. According to the IMF, this practice in some countries, such as Argentina, Brazil, Colombia—affecting between 60 and 80 percent of total spending—combined with the indexation of social benefits to the minimum wage, and inadequacies in labor legislation, has sharply limited the ability of the government to control the public wage bill.

Moreover, high public debt levels have led to periods of financial turmoil, caused partly by increasing reliance by governments on dollar- or interest-linked debt instruments and their vulnerability to movements in the exchange rate. During various periods in the past decade—viz., Argentina in the two-year period leading to its debt default at the end of 2001; Brazil in 1999 and at various other periods thereafter, to name two prominent examples—"governing" has often boiled down to day-to-day cash management, with most other issues being put off to the distant future; worries for the next government. These "other issues" include how best to confront the rise of India and China, upgrade the quality of educational institutions (at a time when the level of skills and training in the labor force is emerging as a key component of improved competitiveness), or reverse worrisome income distribution trends.

Chile is the region's notable exception to the above points. Public debt levels have fallen from close to 100 percent of GDP in 1986 to 12 percent of GDP in 2004. Not only has this sharply reduced the debt-servicing burden of the public debt, but it has also contributed to a sustained reduction in interest rates, and to the highest credit ratings in Latin America. A lower debt burden has allowed successive governments to increase spending in education, infrastructure (see section below) and public health, and has clearly been a factor in the remarkable reduction in the incidence of poverty, which fell from close to 40 percent in 1990 to under 19 percent in 2003. Chile has benefited from an impressively rigorous institutional framework for the implementation of fiscal policy, which has depoliticized the budget process and insulated it from political cycles.<sup>8</sup>

Rising public debt levels notwithstanding, there is growing recognition among an increasing number of governments across the region of the need for some measure of fiscal discipline. Some countries have adopted fiscal rules, on excellent example being Chile's targeting of a

surplus on the central government's structural balance. Brazil's Fiscal Responsibility Law is also an important attempt to improve various aspects of fiscal management. Efforts to improve the coverage of budgetary indicators and to monitor the evolution of various contingent liabilities can also be seen in a number of countries. Improved public debt management has also been part of this process, with a noticeable trend to issue debt at longer maturities, fixed rates, and in domestic currency. While revenue-to-GDP ratios for the region as a whole remain extremely low, there have been various initiatives to improve tax administration, which, if sustained, could allow a more creative use of the budget as a mechanism of distribution in countries which remain among the most unequal in the world.

### The real exchange rate

Our measure of the exchange rate compares the trade-weighted average real rate for 2004 with the average for the period 1997–2003. As shown earlier in Figure 2, Argentina has the lowest real exchange rate, reflecting the sharp nominal depreciation of the currency in the aftermath of the end-2001 default. While the real depreciation of the currencies in Brazil and Uruguay has also been sharp, what is perhaps most noteworthy about the region is that 18 of the 21 countries examined have witnessed a real depreciation of their currency. Indeed, there is not a single country in Latin America that has experienced the sort of real appreciation seen, for instance, in Central and Eastern Europe. On the whole, the region appears to have moved away from inflexible exchange rate regimes, which in the past, in the presence of high inflation often resulted in overvalued exchange rates, with negative effects on the willingness of governments to pursue active trade liberalization and a more rapid insertion into the global economy.

### Institutions

Latin American experience with economic policy formulation and implementation over the past decade is an excellent example of how institutional weaknesses can undermine economic reform, growth, and competitiveness. Despite haphazard efforts to liberalize and privatize the economy and establish a macroeconomic foundation of stability, progress in terms of economic growth, with a few exceptions, has generally been slow and erratic. This, in turn, has contributed to an erosion of public support for reforms, the benefits of which have not always been evident in rising levels of income or employment. Today, it is widely believed that inadequate progress in improving the institutional framework which lies at the heart of the market economy—characterized by respect for property rights, an efficient judicial system, integrity in the management of public resources, to name but a few—is one of the main reasons behind the relatively mediocre growth performance of the region. Indeed, a number of researchers have suggested that part of the problem with

economic reforms in the region has been that they were incomplete. Heated debates about the merits of the Washington Consensus have tended to ignore the fact that, frequently, its key components were not implemented with consistency or coherence.<sup>9</sup>

The result of such incomplete reforms often left countries with political and institutional frameworks that either had serious flaws or were not suited to open market economies. This had the effect of undermining the reform efforts undertaken in the 1990s. Corrupt practices jeopardized privatization programs, extensive bureaucracy and red tape suffocated business initiative, a lack of government accountability undermined macroeconomic stability, and inefficient management of public resources sharply limited the ability of governments to respond to urgent social needs, to give only a few examples of the negative consequences. In addition, institutional weaknesses throughout the region allowed influential interest groups to capture the political process, skewing the income distribution in their favor, and fuelling discontent with the outcomes of economic reform among broad segments of Latin American society. These weaknesses also prevented progress in the area of poverty reduction, as seen in other parts of the developing world, most notably in India and China which, during the past two decades, have accounted for over 100 percent of the total reduction in global poverty.

The institutional framework is a system of rules, which shape incentives and define the way economic agents interact in an economy. Because it influences investment decisions and the organization of production, the institutional framework has a strong bearing on competitiveness and growth as well as on the distribution of wealth in a country. To assess the effectiveness of public institutions in an economy, the GCI uses five criteria: a) respect for property rights, b) ethics of government behavior and the prevalence of corruption, c) the independence of the judiciary and the extent to which the government gives the private sector freedom to operate or engages in interventionist discretionary practices (concepts captured under the heading “undue influence”), d) government inefficiency (reflected in the waste of public resources and a heavy regulatory burden), and e) the ability to provide an environment for economic activity characterized by adequate levels of public safety. As these concepts are difficult to determine with quantitative measures, the quality of public institutions is assessed using data from the Survey.

The large corporate scandals which occurred over the past few years in the United States have highlighted the significance of accounting and reporting standards for preventing fraud and mismanagement, and for maintaining investor and consumer confidence. It is of central importance, especially for countries that are most affected by corruption, to enforce those standards strictly, as domestic and foreign investors are more likely to become engaged if they are confident that they will be able to retrieve their investment and profits earned.

Overall, the state of economic institutions in Latin America is a weak link in the region’s competitiveness picture. Of the nine pillars of the GCI, the quality of institutions receives one of the lowest scores (3.2). In this context, it is worth noting that countries which opened up and benefited from globalization, such as the East Asian NICs, tended to achieve a significantly higher score for economic institutions (5.3) and even China’s score (3.7) lies above the average for the Latin American region, and this, despite the serious weaknesses from which China’s institutions are widely considered to be suffering.

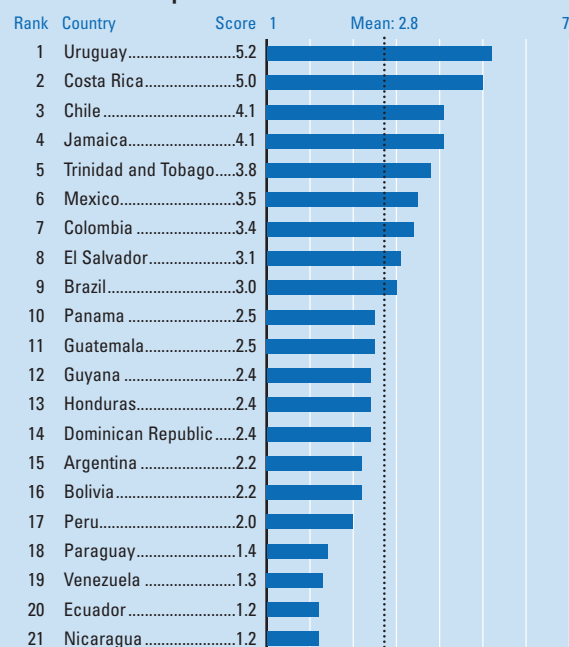
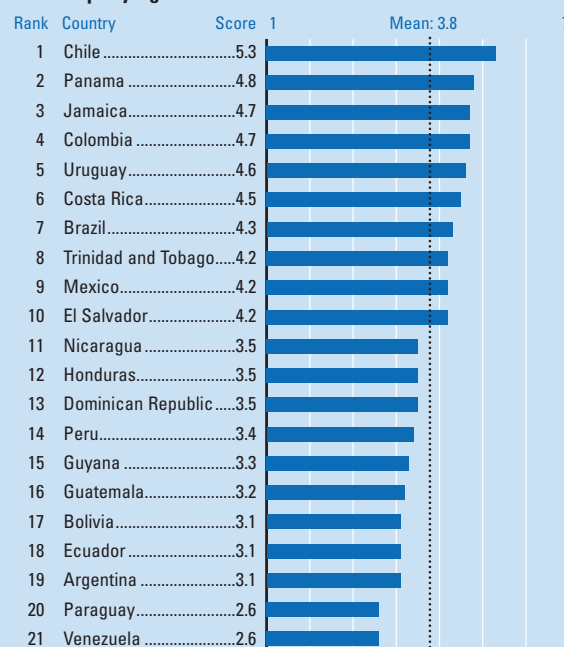
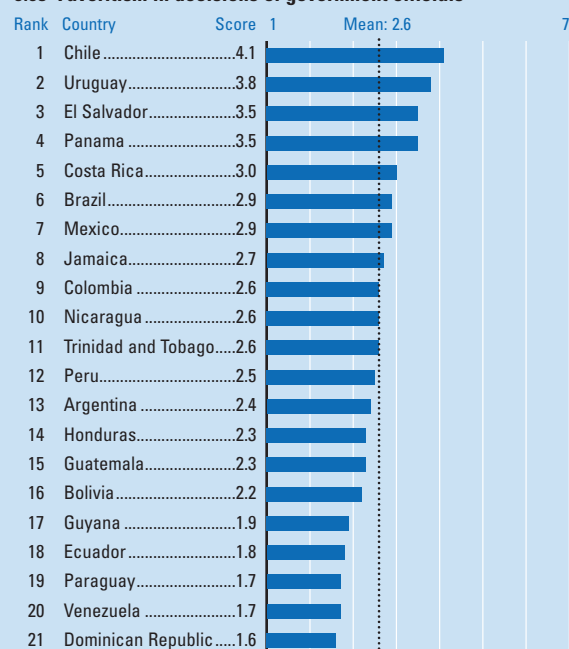
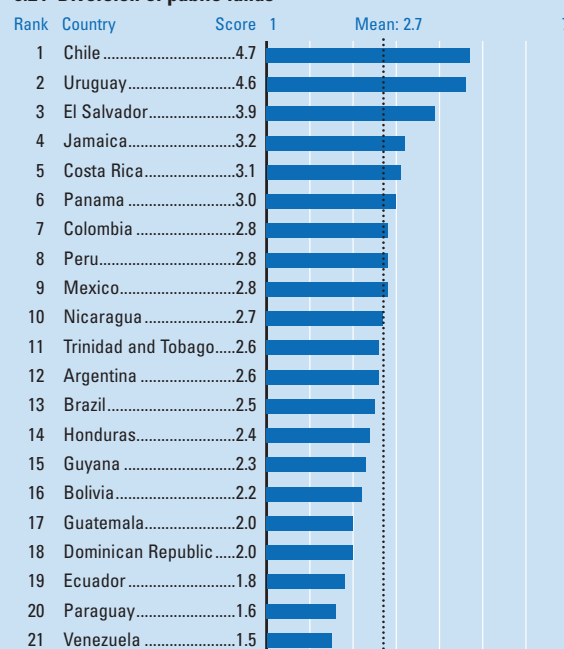
Individual country performance across the region is highly uneven. While Chile, Uruguay, and Costa Rica outperform even some OECD countries on a number of indicators, other nations in the region often find themselves ranked at the very bottom of the sample. Figure 3 highlights these differences.

Not surprisingly, Chile, given its excellent economic track record, is the best performer in the region in four of the six indicators presented. In these four categories: property rights (31 out of 117 countries), diversion of public funds (32), public trust of politicians (23), and favoritism by government officials (20), Chile outperforms countries at a much higher level of income development, such as Spain or Greece. Indeed, the strength of the country’s political and economic institutions is considered to be one of the key drivers of its recent economic success. Contrary to many other countries in the region, Chile’s recent history was characterized by a fairly stable and orderly transition to democracy. This enabled the country to consolidate its democratic institutions early on, and provided a good basis for successive governments to generate and implement sound policies.

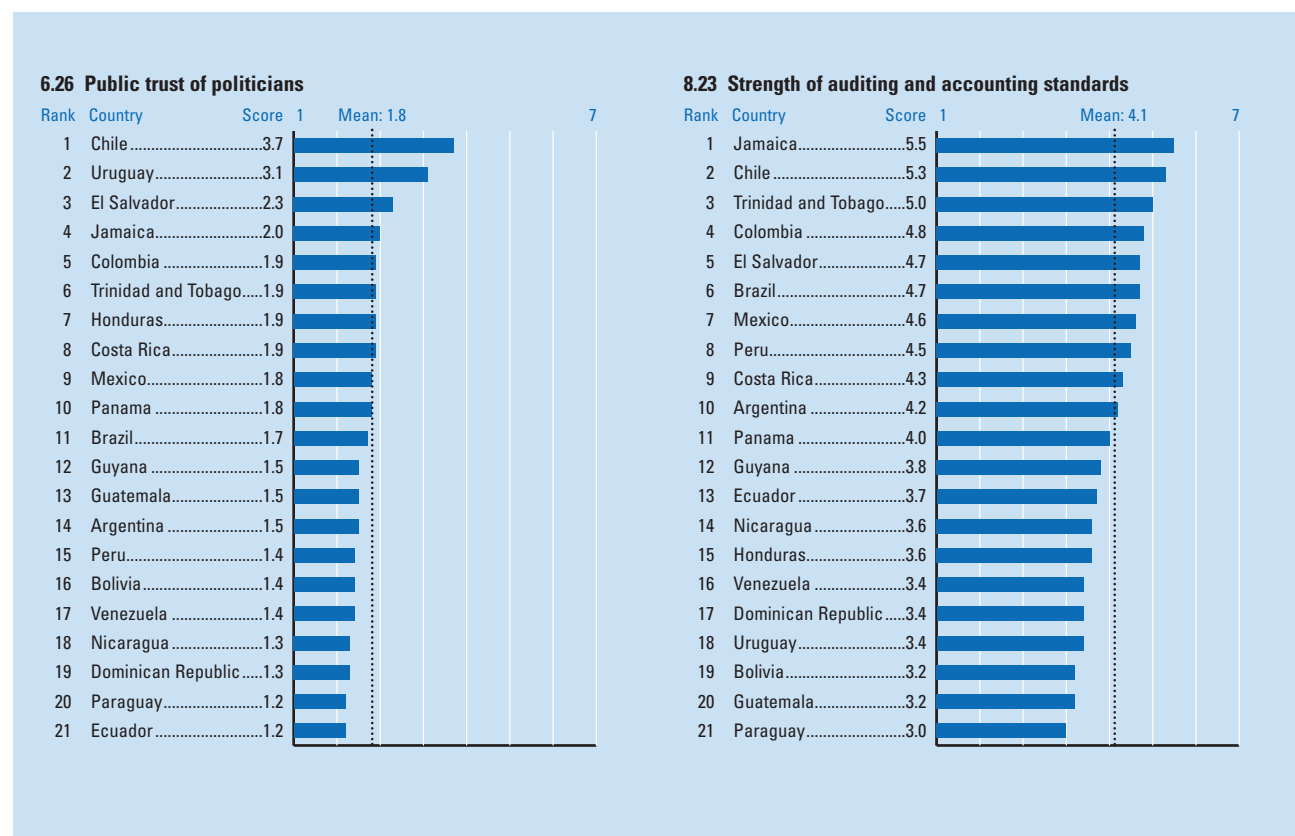
Figure 3 also documents a very low score throughout the region for the variable that captures public trust in politicians. It appears that political stability has paid off in Chile and Uruguay, where the public still widely trusts its politicians, whereas disenchantment with political elites and the poor results of economic reforms undermined trust in one third of the countries of the region, including Peru, Bolivia, Venezuela, Nicaragua, the Dominican Republic, Paraguay and Ecuador, which rank at the bottom of the sample of 117 countries.

Probably the most significant feature of a sound institutional framework is the willingness of democratic governments to open their activities to public scrutiny and ensure transparency of their actions. When well-informed voters can exert pressure on the government to act in the public interest, government actions are more likely to lead to gains for society as a whole. Increased transparency and government accountability have important positive effects on different areas of economic policy.

First, if government finances are subject to a measure of public scrutiny and openness, the ability of the government to collect tax revenues will be enhanced. The tax regime is likely to be fairer and government spending to be more efficient in serving the public good.

**Figure 3: Country performance in the institutions pillar (selected variables)****6.01 Judicial independence****6.03 Property rights****6.08 Favoritism in decisions of government officials****6.24 Diversion of public funds**

Source: World Economic Forum, Executive Opinion Survey, 2005.

**Figure 3: Country performance in the institutions pillar (selected variables) (cont'd.)**

Source: World Economic Forum, Executive Opinion Survey, 2005.

Second, increased transparency and accountability are likely to reveal a clearer distinction between public and private interests, thus limiting the opportunities for corruption. The prevalence of corruption negatively affects the efficiency of the government and its agencies, its ability to effectively manage resources, pass necessary laws, and implement good policies. Corruption has a negative impact on the development process, as it undermines the credibility of public officials, and, hence, their ability to implement reform programs. For example, calls for austerity by a government or by public officials known, or perceived, to be corrupt are likely to be met with skepticism by the private sector and civil society. Conversely, in countries where levels of corruption are known to be low and where safeguards have been introduced to deal swiftly with instances of abuse tend to nurture a culture of respect for the law; businesses will be far more likely to behave like responsible public citizens, pay taxes on time, show greater concern for the public good, and so on. Rampant corruption significantly adds to the cost of doing business and deters foreign investors, who are not likely to operate in countries where the rules of the game are not fully known or where they are unstable.

Finally, transparency and accountability increase government efficiency and improve the functioning of government institutions, and help to reduce undue

influence and capture of the political process by special interest groups.

Research suggests that the prevailing lack of transparency and low accountability of government agencies is undermining the quality of governance across the region, with the notable exception of Chile, Uruguay, and Costa Rica (Singh et al., 2005). Transparency International's Corruption Perceptions Index shows that nine out of the 25 countries in the region are characterized by rampant corruption, achieving a score of 3 or less. Corruption scandals, such as those in Brazil in 2005, supply further anecdotal evidence of the region's problems in this area. By contrast, Chile is ranked 21st and Uruguay 32nd, ahead of some OECD economies.

The consequences of weak governance are numerous. In Argentina, for example, loose fiscal policies and the lack of accountability resulted in extensive tax evasion (López-Claros, 2003). Latin American countries are falling behind in foreign direct investment: while in 1997 the region attracted 15.2 percent of total global investment flows, this share dropped to 10.4 percent in 2004. In addition, respondents to the Survey indicate that the pervasive nature of corruption and burdensome regulation are among the most important obstacles to doing business, resulting in lower levels of registered business activity and entrepreneurship than in other regions of the world.<sup>10</sup>

With low government accountability, and underdeveloped mechanisms to manage conflict and build consensus in the political process, powerful vested interests were able to capture the political process, and reduce trust in government. In his short essay in this *Review*, called “The Politics of Policies,” Ernesto Stein provides additional insight into how weaknesses in political institutions undermined reform in Latin America.

Another important feature of the institutional framework is the definition and enforcement of property rights. Property rights ensure that the interests of investors and corporations and their returns are protected. When property rights are inadequately defined, investment and business activity—most notably start-ups—can be severely restricted (De Soto, 2000). In large parts of Latin America and the Caribbean, property rights are insufficiently defined or poorly enforced, with the result that 70 percent of the population are excluded from using their property for business activity (Multilateral Investment Fund (MIF), 2003). While large companies often have recourse to appropriate informal networks to cope with the problem, small- and medium-sized businesses suffer disproportionately.

The business community in Chile considers the property rights environment in the country to be sufficiently clear and well developed, and ranks Chile 31st among 117 countries in this category, ahead of some European countries, such as Spain, Greece, or Italy. This is not representative of the region, however, as the other countries did not fare so well. Venezuela occupies the last place in the ranking for this category, and its score has been declining steadily since 2002, reflecting a political climate characterized by arbitrariness, lack of respect for the rule of law, and erosion of the independence of those institutions, such as the courts, which are meant to play a stabilizing role and provide adequate internal safeguards against the abuse of executive power.

The ability to enforce property rights hinges in large part on the rule of law, that is, on the independence of the judiciary, and on the consistency and predictability with which it creates, interprets, and applies the law. In addition to enforcing property rights, a well-functioning judicial system can reduce business costs, as it keeps the cost of commercial disputes low—for example, through mediation processes. By reducing uncertainty and lowering the cost of obtaining credit, it also encourages investment.

For a number of reasons, the functioning of judicial systems in the countries of the region is in need of much improvement (Singh et al., 2005). First, because they lack effectiveness; according to the World Bank’s *Doing Business* database, the time required to enforce a commercial contract in Brazil averages 546 days, while in OECD countries the average is 35.5 days. Even in Chile, the region’s star performer, 390 days are required. Judicial systems across all Latin American countries are not only ineffective, but in some countries, heavily politicized. On average, according to a poll taken by the *Latinobarómetro*, only 30 percent of

the population in the region have confidence in the judiciary. In fact, the last four ranks in the Survey for this indicator are occupied by Latin American countries (Paraguay, Venezuela, Ecuador, and Nicaragua), and ten countries from the region rank in the lower third of the sample, among them Argentina, in 105th place.

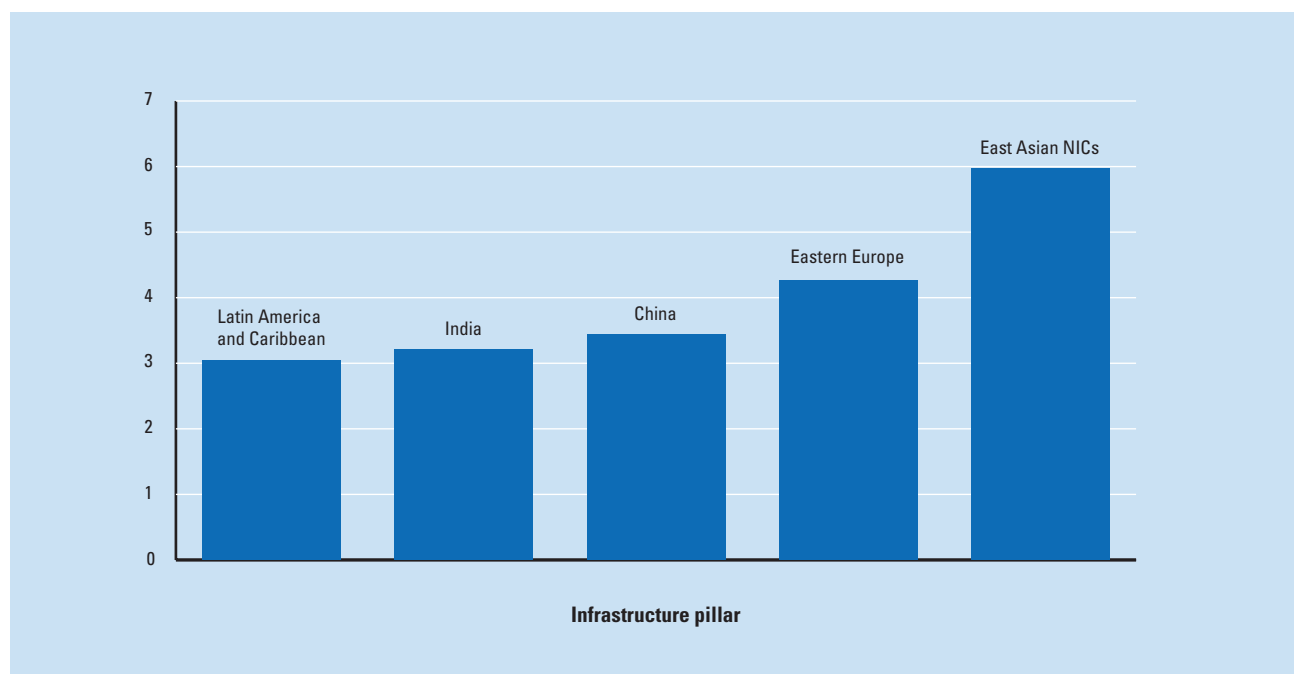
Given the inability of many governments in Latin America to either significantly raise the standards of living of their populations or lower poverty over the past decade, it comes as no surprise that the region has witnessed a steady deterioration in the public trust in politicians, reflected in the strikingly low score for this category in the Index. Although the survey only targets business leaders, other studies show that people in general are becoming increasingly skeptical about the merits of democracy itself. When people and businesses do not trust their governments, they are not likely to support their development programs and strategies, thus undermining their success.

Thus, unfortunately, the outlook for further institutional reform in the region is bleak. Following a decade of relatively low growth, there has recently been a resurgence of interventionist tendencies, with a number of governments in the region appearing to return to policies already discredited by past experience, from price controls, managed trade, to the relaxation of hard budget constraints. In his paper “Chavismo vs. Chilenismo,” Moisés Naím offers an insightful analysis of these trends. Regrettably, this shift in the orientation of policies—which betrays an assumption that market forces were given a chance during the 1990s and failed, justifying a new form of dirigisme—is not likely to boost growth and employment. In fact, it might well result in a further widening of the gap in per capita income with respect to other countries in the developing world, which are growing more quickly and already establishing their presence in the global economy. With discretionary policymaking already observable, it is likely that these institutional inefficiencies will significantly limit and distort the effects of further economic reforms.

## Infrastructure

Infrastructure plays an important role in enhancing the growth prospects of an economy. Both the level and quality of infrastructure are important in raising private sector productivity and investment rates, as shown by various empirical studies.<sup>11</sup>

As highlighted by the GCI, quality infrastructure is particularly critical for spurring productivity and competitiveness in countries at more basic stages of economic development. The importance of infrastructure development for Latin American competitiveness and growth should not be underestimated. Therefore, a major objective for this region is to improve the quality and reliability of existing infrastructure, such as the functioning of railroads, ports, and air transport, as well as an electricity supply free of interruption and an adequate telecommunications network.

**Figure 4: Regional performance in the infrastructure pillar**

Source: World Economic Forum, 2005.

Unlike measures of the quality of the macroeconomic environment or human capital, for which there is a large body of well-developed, internationally comparable statistical indicators, there are no equivalent hard measures for assessing the quality of infrastructure across a large number of countries. Where such quantitative variables do exist, their availability is limited to a small number of countries, and may not represent good proxies for measurement. For example, while it might be possible to obtain data on the overall number of air passengers carried in a country over a particular period, it is not possible to make inferences from this data about the *quality* of the air transport infrastructure. Such quality measures are better captured by data from surveys targeting regular travellers, such as business executives, in order to obtain an international perspective on the perceived quality of a country's air transport. The infrastructure pillar of the GCI is based on a number of survey variables drawn from the Survey, which allow us to make cross-country comparisons of each country's infrastructure in such areas as railroads, ports, air transport, electricity supply, telecommunications, and general infrastructure.

As shown in Figure 4, the quality of infrastructure in the region on average received a comparatively low score of 3.0. This means that Latin America's infrastructure quality lags behind other comparator regions and country groups. For example, this score compares unfavorably with both an average score of 4.2 for other upper middle-income countries and 3.2 for other lower middle-income countries (excluding their peers in Latin America and the Caribbean)<sup>12</sup> and to other developing regions and countries shown in the figure. It is clear that this is a critical

area for improvement, particularly given the stage of development of most countries in the region.

At the individual country level, the results show that Chile's infrastructure (score 4.4) is superior to that of other countries in the region and also surpasses the Central and East European average (score 4.3), reflecting the country's relatively advanced stage of overall development. Chile's particular strengths lie in the quality of its ports (ranked 27 out of 117 countries)—an important attribute given its long coastline and the importance of ocean trade—and of its air transport (ranked 22). Although Chile's infrastructure quality in these areas is on a par with high-income countries such as Spain or Switzerland, the country's railroad infrastructure ranked only 58, while main telephone lines were deemed not to be sufficiently prevalent across the country (ranked 56). These weaknesses undoubtedly diminish the overall quality of Chile's infrastructure and remain areas requiring improvement.

However, even Chile's overall infrastructure quality still lags considerably behind that of East Asian NICs (score 6.0), which compare favorably with the most developed countries in the world. The size of the gap illustrates how much is needed to match the best infrastructural quality, even by those more advanced Latin American countries, such as Chile.

Across the region, there is wide disparity in infrastructure quality. After Chile, those countries judged to have the next best infrastructure levels in the region, such as Jamaica, Uruguay, Panama, and Argentina, are still behind Chile, albeit ahead of India and China. While weaknesses vary across countries, compared to Chile, the quality of basic transport and dependable electricity seem to be



particularly problematic in many countries, depressing their competitive potential.

Further down the rankings, there are still large variations in quality between countries such as Brazil (ranked 70), and countries such as Paraguay (108) and Guyana (109), which have infrastructure levels that are assessed as being among the least developed in the world, lacking even the most basic features. These countries will require significant investment just to catch up with the rest of the region, and to develop the capacity to participate fully in regional, and global, economic activities.

The need for greater investment in infrastructure projects throughout Central and South America has been widely recognized by governments and aid agencies alike as an important development priority. In fact, such projects have been the key component of Inter-American Development Bank (IADB) operations in the region for many years. However, despite its efforts, the IADB still warns that until now, the region's investment in infrastructure has been inadequate, leading to a growing gap between this and other regions such as East Asia.<sup>13</sup> A recent World Bank study<sup>14</sup> estimated that infrastructure spending in Latin America has been reduced by half since the 1980s, now representing only 2 percent of GDP, compared with some 4–6 percent on average in other middle-income countries.

Fiscal adjustment in many of the region's countries—a recurrent theme during the past two decades, given the region's poor track record in sound management of public finances—has often led to a retrenchment of public investment programs. Unable to curtail either the growth of public sector wages or other expenditures with strong political constituencies, governments have often opted for cutting spending on infrastructure and maintenance. Increased public investment in infrastructure is made difficult because of what are perceived to be excessive levels of public indebtedness.

By contrast, Chile's ability during the past two decades to slash public debt levels to the lowest levels in Latin America (about 11 percent of GDP in 2005), has significantly reduced the burden of interest payments on the budget, and permitted the government to boost spending in infrastructure, education, and public health. These have contributed significantly to enhancing the competitiveness of the Chilean economy.

At the same time, in much of the region, private sector spending has not compensated for public sector spending cutbacks. Private investment in infrastructure projects in Latin America dropped noticeably after the late 1990s when extensive privatization was completed. A World Bank study found that, overall, the region would need to triple its spending on infrastructure in order to catch up with the East Asian economies. It is clear that in order to improve their productivity and competitiveness, upgrading the quality of infrastructure in the region must remain a key goal of policymakers, and the moderately high levels

already achieved by Chile can serve as an example for other countries.

There is increasing consensus that an important goal for policymaking will be to increase private sector investment in infrastructure. This, it is hoped, will also lead to improvements in the quality of projects selected, as well as their implementation. Once again, it is Chile that has already taken important measures to increase private sector involvement in infrastructure development. In the early 1990s, Chile put into place franchising programs called build-operate-and-transfer (BOT) contracts that effectively addressed its infrastructure deficit. Under a BOT, a private firm is given a permit to build and finance a particular infrastructure project, and to collect user fees for a specified period, typically between 10 and 30 years, after which the infrastructure becomes the property of the state. In Chile, 21 of these concessions had been awarded to private companies by the end of 1998, encompassing investments of US\$3.6 billion, primarily in highway (motorway) and airport development. This enabled Chile to upgrade its infrastructure without imposing an additional burden on public finances. Moreover, quality was assured, since the same firms were responsible for both construction and maintenance.<sup>15</sup> The result has been a significant improvement in much of Chile's transport infrastructure, much appreciated by travellers to the country, and providing an example to be emulated by other countries in the region.

While FDI is an important source of private funding for infrastructure development, it may also help to attract new technologies to the region, initiating a virtuous cycle for the improvement of infrastructure, as each one leads to improvements in the other, generating additional positive externalities for the region's overall development.

Finally, regional cooperation and integration initiatives presently promoted by leaders in the region should be given priority, especially where they target areas such as road system integration, electricity, and telecommunications. Such projects have the potential to boost competitiveness in several countries of the region simultaneously, while promoting regional integration among small countries, which is so critical for the overall economic development of the region. Examples of such projects include the Plan Puebla Panama and the Initiative for Regional Infrastructure Integration of South America (IIRSA). The Plan Puebla Panama, launched in 2001, is a regional integration initiative involving seven countries of Central America and nine states in southern Mexico. The initiative includes infrastructure investment (highway integration, electricity integration, and telecommunications) as well as human development projects. IIRSA was launched in 2000 by several South American presidents in order to provide a strategic vision behind the regional integration process. IIRSA aims to coordinate plans for infrastructure development, to modernize regulatory systems, and harmonize transportation, energy, and telecommunications policies, encompassing all 12 South American countries. The initiative includes coordination mechanisms for the



exchange of information among governments, development banks working in the region, the private sector and civil society, as well as preparing studies on the specific short- and longer-term priorities to be addressed by countries in their move toward greater sectoral integration.<sup>16</sup>

### Health and primary education

In order for a country to be competitive even at the early stages of economic development, it must have a healthy, basically educated workforce. This is a minimum requirement in order for workers to perform well even at basic tasks, and can be measured by health indicators and the level of enrollment in primary schools. Providing universal education is particularly important to address Latin America's high income disparities.

Development economist and Nobel laureate Amartya Sen has repeatedly emphasized the importance of literacy and basic education for empowering people to become active participants in the development process. He writes, "a child who is denied the opportunity of elementary schooling is not only deprived as a youngster, but also handicapped all through life."<sup>17</sup> Extrapolating to the national level, Sen shows how those countries that developed successfully and drastically reduced poverty have done so by providing widely available basic education to their citizens. Furthermore, he asserts that given the increasing demands of a globalizing world, a "country that neglects basic education tends to doom its illiterate people to inadequate access to the opportunities of global commerce."<sup>18</sup>

Latin America's performance in the areas of health and primary education may be seen in Table 4. The figures suggest that this is an area in which the region, on average, compares quite favorably to other regions of the world. With a high average score of 6.7, the region comfortably outperforms China (6.6), and is not very far behind Central and Eastern Europe (6.8) and the East Asian NICs (6.8). In particular, we see that, on average, Latin American countries have attained universal enrollment in primary education, an important feat, given where they stood just a few decades ago. By contrast, the region does less well on the health indicators and is outperformed by Central and Eastern Europe and the East Asian NICs.

At the country level, Chile leads the health and primary education ranking for the region with an overall score of 6.9, followed very closely by Costa Rica. As expected, the rankings for health and primary education in the region generally reflect country development levels. Therefore, those already in the efficiency-driven stage of economic development, including Uruguay, Mexico, Panama, Argentina, and Venezuela all have comparatively higher scores.

Overall, our ranking shows that while the levels of health and basic education are strong points for the region as a whole, there are still some gaps. In particular, better health standards are needed in countries such as Bolivia,

Guatemala, and Peru, where infant mortality and the rates of communicable diseases remain relatively high compared with other countries in the region.

It is important to keep in mind that the overall enrollment rates mask significant regional disparities *within* particular countries in the region which suffer from very low enrollment and high illiteracy rates.

Finally, as pointed out in a recent report by the United Nations Economic Commission for Latin America and the Caribbean (ECLAC), the quality of education still varies considerably as a function of household income, mirroring the large income disparities in the region as a whole. This serves to reinforce the existing inequalities in these economies, with all of the repercussions for economic development that this implies.<sup>19</sup>

Some governments in the region have implemented programs targeting poorer households, such as transfers aimed at keeping children in school and attending health services. For example, by the end of 2002, Mexico's "Oportunidades" program was financing educational and health costs for 4.2 million rural and urban families. A World Bank report found that this program significantly helped to raise education enrollment rates. Similarly, improvements in health and nutrition linked to the program have also been striking, as measured by increases in children's height and a decline in disease. Brazil's "Programa Nacional de Bolsa Escola" and "Programa Bolsa Alimentação," which subsidize education and nutrition, respectively, have also seen impressive results, according to the World Bank. Similar programs are also being implemented in some Central American countries, such as Nicaragua.<sup>20</sup> Overall, the quality of basic human resources in the region should be seen as a competitive strength to be built on and further developed, buttressed by such public sector initiatives.

### Higher education and training

As an economy begins to move beyond the early stages of development and take on more complex production tasks, higher education and training become critical for developing a human capital base capable of contributing effectively to increased productivity and prosperity. These measures can be proxied by enrollment rates in secondary and tertiary education, the quality of the educational system, and the availability of specialized training for the workforce, all of which are necessary for more sophisticated business processes, particularly in the context of an increasingly global, technological, and rapidly evolving marketplace.

While the region's performance in the areas of health and basic education is relatively strong, the region does less well for higher education, the overall quality of its educational system, and continuous training programs. In other words, although many of the region's citizens are being educated at a basic level, they are not necessarily being educated well, and are not receiving the kind of on-the-job training required by an evolving global economy.

This is the case even in countries like Chile and Argentina, which have traditionally enjoyed the best higher education in the region.

For Chile in particular, the OECD's recent PISA study showed levels of reading comprehension and mathematical ability among school children that were far behind those of countries such as Finland, New Zealand, and Ireland, which Chilean policymakers increasingly regard as the relevant benchmarks for assessing overall levels of competitiveness.<sup>21</sup> Indeed, weaknesses in this area may well be preventing Chile from moving further up on the World Economic Forum's rankings, given the progress the country has already made in improving the quality of its public institutions and its macroeconomic management.

As shown earlier in Table 5, the average performance of the region for higher education and training (score 3.6) lags well behind other comparable regions (Central and Eastern Europe and the East Asian NICs). Scores for individual indicators confirm that the region has fallen far behind in secondary and tertiary education enrollment rates, in on-the-job training, and in the *quality* of education. The evidence overwhelmingly suggests that the educational system in the region is not meeting the needs of a competitive economy; indeed when addressing this specific question, ten of the 15 worst-rated countries (of the total of 117) were from Latin America.

The problem seems to be that while Central and South America have made progress in recent decades, other regions have moved forward much faster. This is a worrisome trend for the region, given the increasing sophistication and complexity of the global economy and the demands it makes on the education and training of the labor force.

At the country level, there is again significant diversity across the region. With regard to secondary school, countries such as Argentina and Brazil have attained universal enrollment, while rates go all the way down to 43 percent in Guatemala and 32 percent in Honduras. A similar trend is discernible at the tertiary level, where Argentina has an enrollment rate of almost 60 percent, while Guatemala and Trinidad and Tobago have rates below 10 percent. Similarly, the perceived ability of the educational system to meet the needs of a competitive economy is very different. While Costa Rica's educational system is ranked 39th of 117, Bolivia, Ecuador, the Dominican Republic, Honduras, Guatemala, and Paraguay occupy ranks 111 to 116, followed only by Chad in Africa.

These findings corroborate the research carried out by a number of international organizations active in the region. For example, a recent book published by the World Bank pointed out that while higher education enrollment and quality have both increased significantly in the past decades, the region's full potential continues to be unrealized, as so much remains to be achieved. Specifically, "...graduation rates are low, higher education institutions face a multitude of quality problems, inequities are widespread, and there is a mismatch between many specialties

offered and the needs of the labor market."<sup>22</sup> As regards professional training, a recent IADB draft strategy paper notes that Latin America's training institutions are generally not equipping the region's workforce with the skills needed to efficiently perform in today's economy. The report points out that "although there has been some notable progress toward a more diversified menu of options, few training systems have been able to adequately respond to the dual challenge of the changing demands of the labor market and the large numbers of workers that failed to complete mandatory levels of lower education."<sup>23</sup>

One of the major challenges facing the entire region is that its educational systems are under strong demographic pressure. Since the 1960s, there have been significant increases in the number of students in the region, while government spending on education has actually decreased in some countries. This is an area where greater investment is not only warranted, but critical for the future competitiveness of the region. Moreover, the content of educational programs offered will have to be overhauled if they are to better prepare students for the workplace of the future.

In sum, although Latin America does fairly well when it comes to the quality of its primary health and education resources, it is clear that policymakers and business leaders now have to focus on the more complex areas of advanced education and on-the-job-training. These will be increasingly critical for the region as it moves up the value chain and into higher stages of economic development.

## Market efficiency

Efficient markets are a prerequisite for sustained productivity and growth, providing the most efficient allocation of goods, labor and capital. Due to its importance for competitiveness, market efficiency features prominently in the GCI.

### Goods market efficiency

Underpinning the methodology of the GCI is the notion that the efficiency of goods markets is affected by a) domestic and foreign competition, b) the size of local and export markets, and c) the prevalence of distortions.

To assess the degree of both domestic and foreign competition in a country, the GCI relies on import and export data, as well as on information collected from the Survey to derive proxies for these two variables. For the former, it analyzes how the intensity of domestic competition and the effectiveness of competition (anti-trust) policy influence the local market, and for the latter, examines how the ratio of imported goods and services to GDP, trade barriers, and restrictions on foreign ownership affect foreign competition.

Since the mid-1980s, Latin America has made great strides in increasing competition. The end of the debt crisis caused a radical rethink of the development strategy. Sectoral and industrial policies were largely sidelined in

favor of the Washington Consensus paradigm, characterized by economic openness, liberalization, and privatization policies, aimed at reducing protectionism and excessive state intervention.

Most recently, some countries in the region have partially returned to sectoral policies, in an attempt to close the growth and productivity gap with the developed world and dynamic developing regions, such as Asia and Central and Eastern Europe. In the light of globalization, some countries in the region have now refocused on manufacturing activity. Vertical intervention has lost its attractiveness and been replaced by a mixture of neutral sectoral and horizontal policies designed to remedy market failures and increase international competitiveness. Support for the Mercosur automotive industry, the IT sector in Costa Rica and Brazil, and forestry in Chile are good examples of this new approach.

The modernization of the productive sector in the region has long been a policy objective to ensure the region's competitive participation in global markets through a strong manufacturing sector, higher value-added exports and a shift away from the traditional focus on production and export of primary commodities and low value-added goods.

Market size is also an important consideration for market efficiency, based on the idea that size will boost competition among producers and buttress their ability to profit from economies of scale. Given the importance of production efficiency, the size of the reference market determines the degree to which national firms can profit from economies of scale, and use the resulting lower average unit cost to improve production processes and overall competitiveness. The GCI assesses the size of both local and export markets, the former proxied by GDP minus net exports, and the latter by the level of exports as a percentage of GDP.

In the 1990s, the wave of regional integration that gripped Latin America sought to expand the size of national markets, and to allow member countries to use newly created regional free trade areas as a springboard for upgrading their production structures before launching full-scale into the global market. These efforts differed from their predecessors in their more liberal underpinnings: the North-American Free Trade Area (NAFTA), Mercosur, and the revived Andean Pact adopted an "open regionalism" approach, through which integration was seen as a way of achieving a collective structural modernization of member economies, simultaneously with opening to the rest of the world. The new schemes were not conceived as alternatives to the multilateral trading system, but rather as complementary to it. As a result, the emphasis shifted to the promotion of intra-area investment and of intra-sector specialization within the member countries. The aim was to facilitate the structural transformation of the entire region, so that every country could reap the benefits of integration, of diversification of institutional

links and markets, and, ultimately, participate in the world markets.

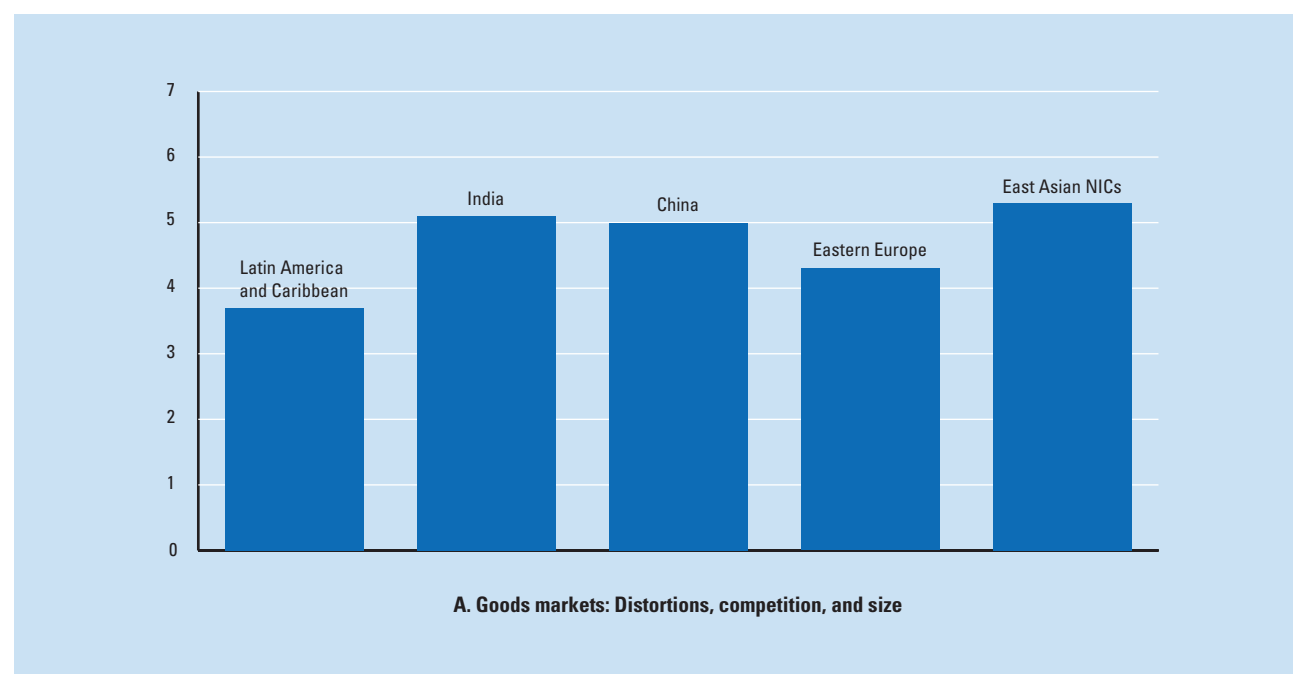
Contributions to Part 2 of this *Review* by Paulo Roberto de Almeida and René Villarreal, respectively entitled "Mercosur's Identity Crisis" and "NAFTA: 12 Years of Mexico's Experience," assess the integration trajectory of Mercosur and NAFTA, by far the most interesting attempts in the region. The former created a common market for Brazil and Argentina, the region's two largest economies; the latter was the first example of North-South integration.

A glance at Latin American post-liberalization trade patterns shows that these efforts have paid off. The region's openness ratio doubled from 10 percent of GDP in the late 1960s to 20 percent of GDP by the early part of this decade. Regional exports have also maintained a consistent upward trend during the 1990s, expanding from 11.7 percent of GDP during 1991–1993 (ECLAC, 2004) to 20.8 percent of GDP in the 2001–2003 period.<sup>24</sup> In terms of diversification, the 1990–2003 period saw Latin American merchandise exports grow at a rate of 8.1 percent, more slowly than those of China and Central and Eastern Europe, but faster than the world average (6.2 percent), or Asia, the United States, the EU, and Japan (ECLAC, 2004). The growth of merchandise exports was led by Mexico and some of the Central American countries, due mainly to maquila-based trade with the United States. South American exports displayed a slower growth until 2001, when exports from Mercosur picked up and surpassed those of Mexico.<sup>25</sup>

Overall, the last 20 years have seen a diversification of the region's export basket, whereby the commodity share has declined from over 50 percent to less than 30 percent, while the manufactured share has risen from 50 percent to approximately 70 percent between the 1985–1987 and 1999–2002 periods (ECLAC, 2004). Although the regional figures conceal significant differences in the performances of specific countries, and the maquila system has been a major catalyst for diversification, it should be noted that intra-regional and intra-bloc trade in manufactured goods—notably within Mercosur—picked up during the 1990s, and led to some export diversification in the exports of the Southern Cone as well.

Finally, goods and services can be allocated most efficiently when government regulations and interventions cause little or no distortion. Thus, the GCI analyzes factors such as the burden of agricultural policies, the efficiency of dispute settlement, the effects of taxation on incentives, and the regulatory ease of starting new businesses.

Turning to the concrete results of the GCI, it comes as no surprise that the actual assessment of the efficiency of goods markets in the region shows a disappointing average score of 3.7 (out of 7) in the GCI ranking. For this particular indicator, Latin America was outperformed by all other regions or countries by a considerable margin (Figure 5), including the NICs (5.3), China (5.1), India (5.0), and even Central and Eastern Europe (4.3).

**Figure 5: Regional comparators for goods market efficiency**

Source: World Economic Forum, 2005.

Across the three dimensions, the region scores relatively better for the intensity of competition (3.8) and large market size (3.8) than for the existence of distortions (3.3).<sup>26</sup> The GCI identifies areas of particular concern, such as the quality and efficacy of the legal system in the region—referring to both the general (2.9) legal system and those legal provisions relevant to competition policy (anti-trust) (3.3)—as well as the extent and efficiency of taxation (2.9). On the other hand, the region shows relative strengths in the ease of starting a business (scores of 4.4 for the number of days required and 3.5 for the number of procedures required, respectively) and in the intensity of local competition (4.3).

Taking the analysis to the country level, the picture looks somewhat brighter for particular countries, which registered scores more in line with those of other comparator regions. Chile leads with a remarkable 4.8, followed closely by Mexico (4.4), Brazil (4.2), and Colombia (4.1). These four occupied 26th, 39th, 48th, and 51st place, respectively, out of the 117 countries covered.

It is of interest to note that Chile and Mexico score higher than Central and Eastern Europe. The above-mentioned four countries should be recognized for their liberalization, successful diversification strategies, and expansion of trade links. Conversely, the worst performers in the region are Guyana (3.1), Nicaragua (3.1), Ecuador (3.1), Bolivia (3.3), and Paraguay (3.2), all small countries with restricted local and export markets, and rather distorted competitive conditions. Argentina and Venezuela obtained scores of 4.0 and 3.5, respectively. Venezuela's rank of 86 (out of 117) is particularly disappointing, and its performance on the various indicators of market effi-

ciency has been on a downward trend for several years, reflecting significant distortions in resource allocation and other institutional weaknesses, such as a sharp deterioration in the quality of the legal environment.

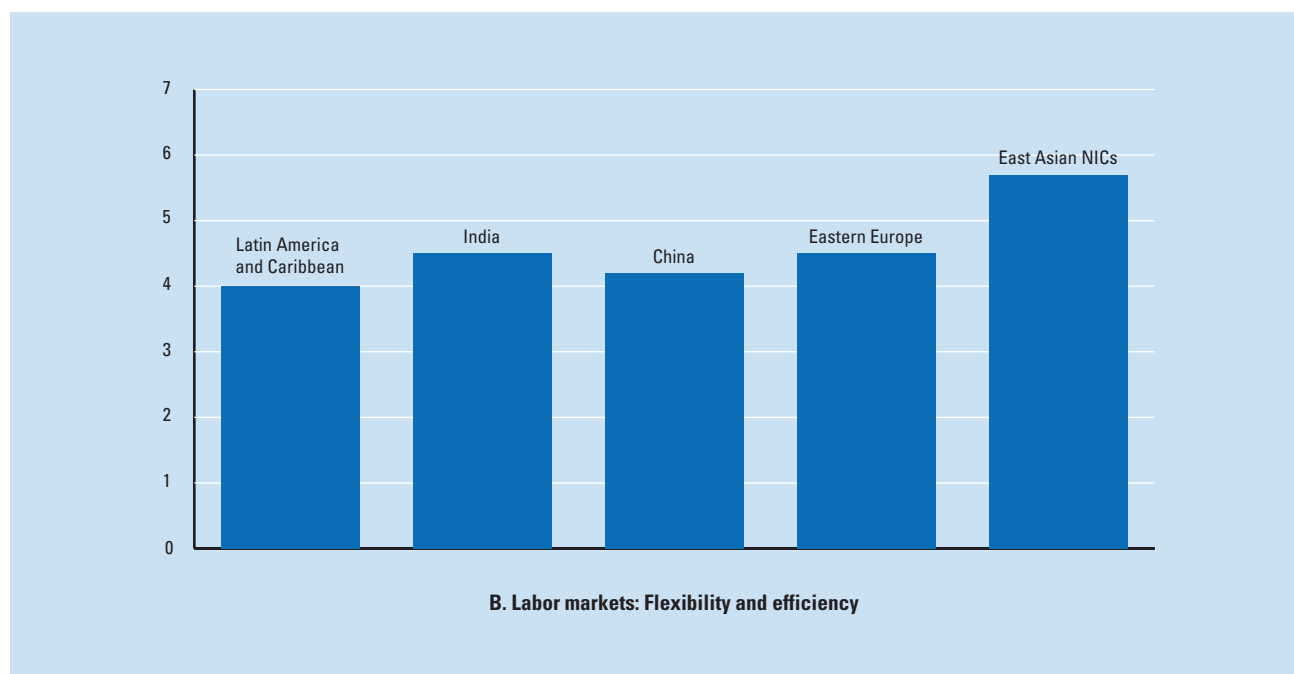
In view of the above analysis, it is clear that there is much left to be done to reform, enlarge, and deregulate regional goods markets, in order to achieve the degree of efficiency necessary to transform them into competitiveness engines for Latin American countries.

### Labor markets

The methodological underpinnings of the GCI to characterise labour markets distinguish between flexibility and efficiency. The Index measures flexibility of both hiring and firing practices, as well as of wage determination. Moreover, it captures the degree to which worker/employer relations are cooperative or confrontational.

As regards efficiency, the GCI looks at such elements as the reliance on professional management in national companies and the extent to which salaries are linked to gains in productivity. And since the efficiency of labor markets also depends on the pool of labor available in a given country, the pervasiveness of brain drain, and the extent to which women can attain equal employment opportunities in the private sector are also taken into consideration.

On the basis of the above criteria, the GCI assigns an overall score of 4.0 to Latin American labor markets—a rather mediocre performance, although slightly better than the score for goods market efficiency. Comparing the scores of other regions and countries, Figure 6 shows that Latin America lags behind Asian NICs (5.7), Central and

**Figure 6: Regional comparators for labor market efficiency**

Source: World Economic Forum, 2005.

Eastern Europe (4.5), China (4.5), and India (4.2). It is interesting to note that the gap between the best regional performer and all the others is much wider than in the case of goods markets, since the scores of the latter are clustered between 4.0 and 4.5.

The region scores higher for labor market flexibility (4.2) than for efficiency (3.8), possibly as a consequence of the limited progress made in the 1990s in liberalizing labor markets, at a time when other liberalization measures were being introduced, for instance in the trade area.

The GCI points to the flexibility of wage determination (a respectable 4.9), cooperative worker–employer relations (4.2), reliance on professional management (4.1) and the extent of women’s employment (4.3) as relative competitive advantages of the region. On the other hand, particularly problematic are the lack of flexibility in hiring and firing practices (3.4), the weak link between salary and productivity (3.5) and the rather high perceived level of brain drain (3.1). While brain drain and, more generally, emigration may have had a positive effect on the region’s balance of payments through the remittances it generates, it has also deprived local employers of qualified human resources, not to mention the lost return for the government in terms of its investment in education.

Individual country data show that Chile is once again the leader of the region (4.8), followed closely by El Salvador (4.7), Colombia (4.4), and Jamaica (4.3). Those scores are equally remarkable when making international comparisons: Chile ranks 17th (out of all 117 countries) El Salvador 24th, Colombia 44th, and Jamaica 49th.

On the other hand, those with the least efficient labor markets are Paraguay (3.2), Bolivia (3.5), Honduras (3.6),

and Ecuador (3.6). The large economies of the region also do not distinguish themselves for their labor market efficiency: indeed Brazil (4.0), Mexico (4.0), Argentina (3.7), and Venezuela (3.6) all register poor scores, pushing them into the lower end of the general rankings, to 81st, 83rd, 101st and 113th place, respectively.

The GCI analysis offers a rather gloomy picture of labor markets in the region, characterized by high levels of unemployment, structural rigidities, and a huge informal sector. The stabilization and liberalization policies of the 1990s were not accompanied by labor market reforms that would have made labor regulation more flexible. This resulted in a sharp increase in unemployment, which seriously aggravated social inequities in the region. With the exception of Chile—which placed labor market reforms at the top of its policy agenda in the early 1990s—the region paid scant attention to the issue and, thus, did not achieve the necessary political momentum to deregulate restrictive labor practices and reduce high payroll taxes (including social contributions). As a consequence, jobs losses in declining sectors could not be offset by the creation of new ones.<sup>27</sup> This, coupled with increases in labor force participation rates<sup>28</sup> and low economic growth rates, resulted in a surge in unemployment. Even in 2004, after growth had started to pick up, the region still displayed poor job creation: most of the big economies had unemployment rates well above 10 percent (Brazil 11.5 percent, Argentina and Colombia 13.6 percent, Venezuela 15.1 percent), while in some cases the rates were much higher, as in Honduras (28.5 percent) and the Dominican Republic (18.4 percent).



As often happens in the region, the surge in unemployment was mirrored by an increase in informal sector employment. In fact, the informal sector absorbed most of the displaced and new (especially low-skilled) workers to the point where, according to ECLAC (2004), in 2000 more than 63 percent of the two lowest income quintiles in the region derived their entire income from the informal sector and spent it on mere subsistence. Moreover, ECLAC estimates that during the 1990s, seven out of ten new jobs created were in the informal urban sector. Considering that the informal sector is characterized by unstable and poorly paid, marginal jobs, this trend does not bode well for improving social equity in the region, already the worst in the world.

The growing importance of the informal sector is also a major hindrance to the achievement of sustainable levels of growth and competitiveness in the medium to long term. Jobs in the informal sector are characterized by diminishing returns; therefore, whenever the share of informal employment increases at the expense of the formal sector, the overall productivity of the economy declines. This explains the apparent paradox that regional productivity performance remained lackluster, even in the presence of significant productivity gains achieved by world-class local firms.

In light of the above, reform of the labor markets appears to be a high priority for the region in the short term, if improved growth and sustained levels of prosperity are to be achieved. Reforms should target market and institutional rigidities—in general Latin American labor laws are very restrictive, especially in the low-income regions—but should also aim to establish adequate safety nets to address the transitional problems associated with intra-sectoral labor mobility and training and upgrading programs to ensure that workers' skills satisfy market demand. Social equity is likely to go hand in hand with more efficient labor markets, triggering a virtuous circle leading to high, sustainable levels of competitiveness for the region.

### Financial market efficiency

Underdeveloped financial markets are often a common feature in the economic landscape of emerging countries and have helped to precipitate major economic crises, involving high and variable rates of inflation, debt-servicing difficulties and anaemic growth rates. The debt crisis of the early 1980s triggered a “lost decade” of negative growth, characterized by an average  $-0.6$  annual growth in output per capita for the Latin American and Caribbean region. Nor were the 1990s free of instability; Fraga (2005) records as many as nine crises involving some of the largest economies of the region.

Aside from the serious disruption to the national economy, these financial crises are often symptomatic of structural deficiencies in the availability of credit, and the functioning of domestic financial markets. These weaknesses constitute serious impediments to development and

growth, as they not only limit local economic actors from accessing the capital needed to build and conduct business, but also introduce distortions in the allocation of existing resources. Well-functioning and developed financial markets are, therefore, a pivotal feature of national competitiveness.

For these reasons, the GCI also covers the sophistication and openness of domestic financial markets as one of its components. These are important characteristics of an efficient financial system, as they ensure the health of national financial markets and shelter them from recurring crises and financial contagion. In his contribution to this *Review* “Prudential and Regulatory Challenges for Latin America,” David Hoelscher offers some insights into the current state of the region's banking sector and the challenges ahead.

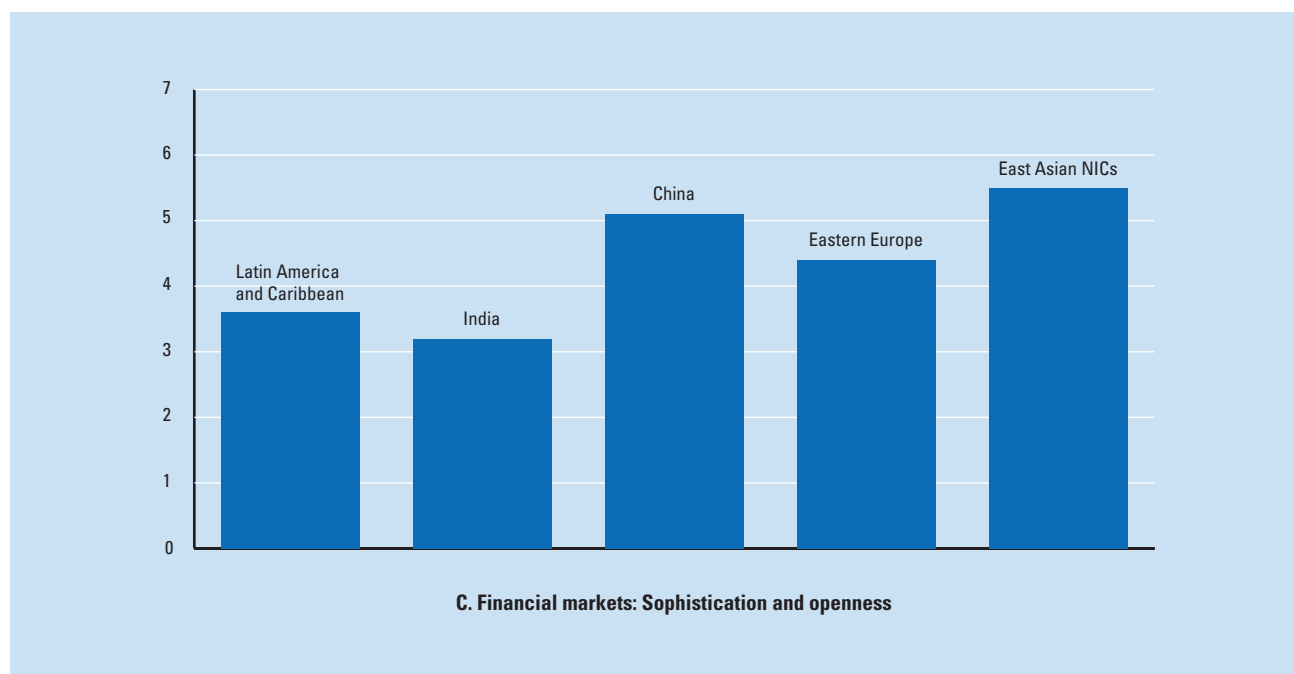
The quality of the financial market in a given country is measured by: a) the level of sophistication, b) the ease of obtaining bank loans, c) the availability of venture capital, d) the soundness of banks, and e) the ease of raising money on the local stock market. The availability of capital is undoubtedly a crucial element for companies in all stages of development. A local stock market that offers companies adequate means to raise money is particularly important for small national companies, which normally do not have access to international capital markets. This is the case for most companies in this region, with the exception of the rising star “multilatinas.”

On the basis of the above criteria, the region receives a disappointing score of 3.6 for the efficiency of its financial markets, the second lowest after China (3.2) among the regions compared, as shown in Figure 7.

Latin American financial markets also seem to be less efficient than the goods or labor markets, both assessed by the GCI, indicating that much work is still required to bring the region's financial system up to international standards.

The soundness of the banking system (5.1) and, to a lesser extent, the ease of raising capital on the local stock markets (4.0) show good scores. It would seem from the above that the domestic business sector has recovered some degree of confidence in the local banking system, badly shaken by the crises of the last two decades. On the other hand, the GCI points to specific areas of concern, notably the ease of access to loans (which only scored 2.7) and the availability of venture capital for risky projects (2.6), scores which cast doubt on the ability of the region's private sector to grow and serve as a catalyst for increased regional competitiveness. Access to venture capital has been shown in many countries to be an important factor in jump-starting technological innovation, and the glaring deficiencies in this area do not bode well for the region's aspirations to reach higher stages of development.

With regard to the country-level analysis, it is no surprise that Chile and Panama lead the way with scores of 5.0 and 4.7 respectively, which translate into 30th and 34th places out of 117, far ahead of China and better than

**Figure 7: Regional comparators for financial market efficiency**

Source: World Economic Forum, 2005.

Central and Eastern Europe (4.4). Some of the scores of the other Caribbean countries and Brazil (4.3, 52nd worldwide) are quite respectable, although still quite far behind the front runners. At the bottom of the scale, Paraguay (2.8), Bolivia (2.9), and Honduras (2.9) show significant weaknesses across virtually all indicators.

Argentina (with a low score of 3.2) is still recovering from the massive debt default of 2001, which had a devastating impact on the financial sector. Mexico fared somewhat better, but at 3.9, has not yet achieved the level of the best performers in the region.

Given these facts, it seems fair to conclude that Latin America and the Caribbean still lag behind most other world regions in terms of credit availability and financial intermediation. Also, real interest rates remain fairly high in most countries, as a consequence of structural deficiencies in the banking sector. As Singh and Collyns (2005) suggest, the reform agenda should focus on strengthening and upgrading financial system regulations to meet international prudential standards, and should pay attention to the further development of the local currency capital markets. This would have a calming effect on interest rates and minimize exchange rate risks.

Better financial markets would also reduce the high level of dollarization that still characterizes many countries in the region, making them vulnerable to international interest rate or exchange rate fluctuations. In this regard, several Latin American countries, led by Brazil, Chile, Colombia, and Mexico, have recently begun to reduce their foreign exchange-denominated debt and are increasingly relying on domestic market issuance—a general emerging market trend, as default risks are perceived

as being lower. This is an encouraging step, not only because it minimizes exchange-rate risk, but also because it increases liquidity and frees resources for local currency markets. Brazil, Colombia, Brazil, and Uruguay have also begun issuing external bonds in their local currencies.

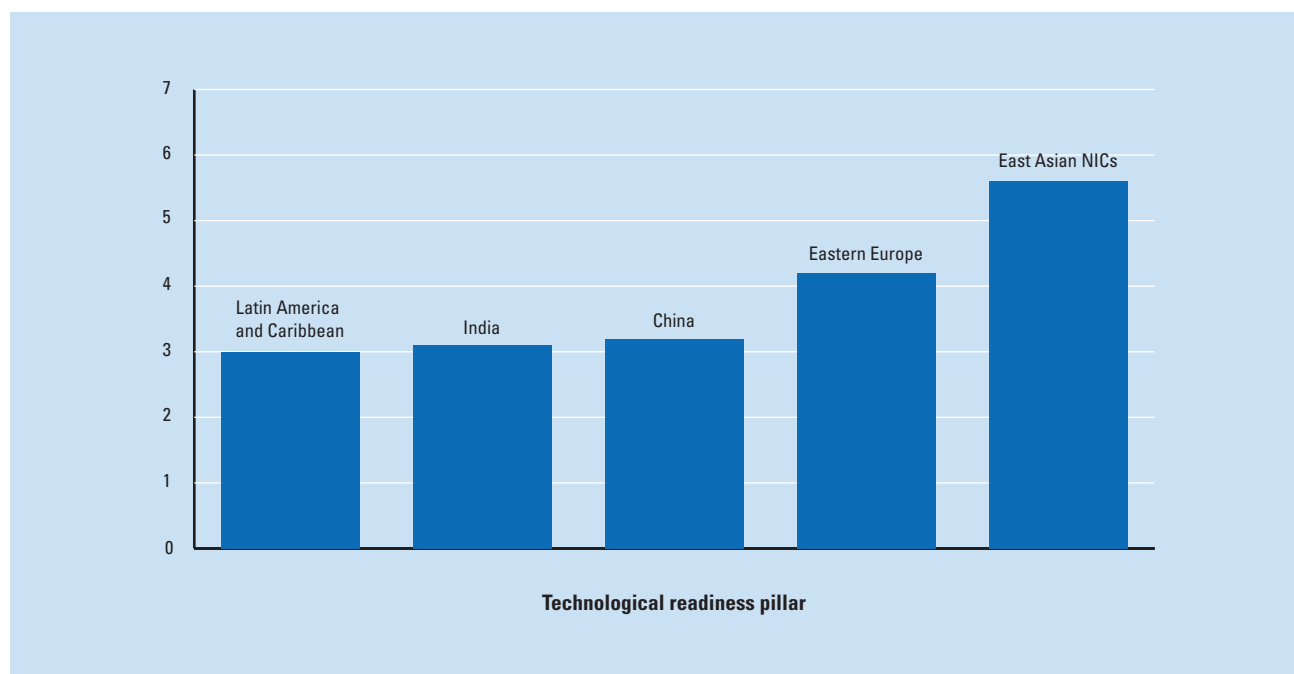
### Technological readiness

Rapid technological progress over recent decades, coupled with the globalization of production and trade flows, has led to a situation in which the survival and prosperity of firms depend increasingly on their ability to integrate knowledge into production. Technology has become a vital factor in determining the range, quality, price, and, ultimate exportability of goods, and, therefore, the competitiveness of firms in both national and international markets.

Technology is as critical for low-income countries as it is for developed ones approaching the technological frontier, and the low level of development in this area constitutes one of the most serious impediments to development. This explains why so much prominence is given in international debate to the digital divide.

The challenge is for countries either to develop the capacity to generate technology internally, to access it from abroad, or to put in place a combination of both. What is most important for Latin American countries, most of which are at relatively early stages of technological development, is the presence, within the country, of a corpus of knowledge accessible to national actors, independently of the source, whether national or international.



**Figure 8: Regional comparators for technological readiness**

Source: World Economic Forum, 2005.

The presence of a competitive private sector determines whether an economy will be able to achieve sustained growth over time, lending added importance to the accumulation and efficient use of knowledge for long term national competitiveness and prosperity. The Networked Readiness Index<sup>29</sup> of the World Economic Forum is based on the premise that integration and intelligent use of technology by three main stakeholders (individuals, government, and the business sector) are essential in order to fully leverage the potential of knowledge for a country's development and growth.

Due to their importance for national competitiveness, the GCI incorporates technology readiness together with national capacity for endogenous innovation into its pillars. These two dimensions are taken to be complementary and theoretically linked, the difference between them being that innovation becomes increasingly important as countries move from the efficiency-driven to the innovation-driven stage of development.

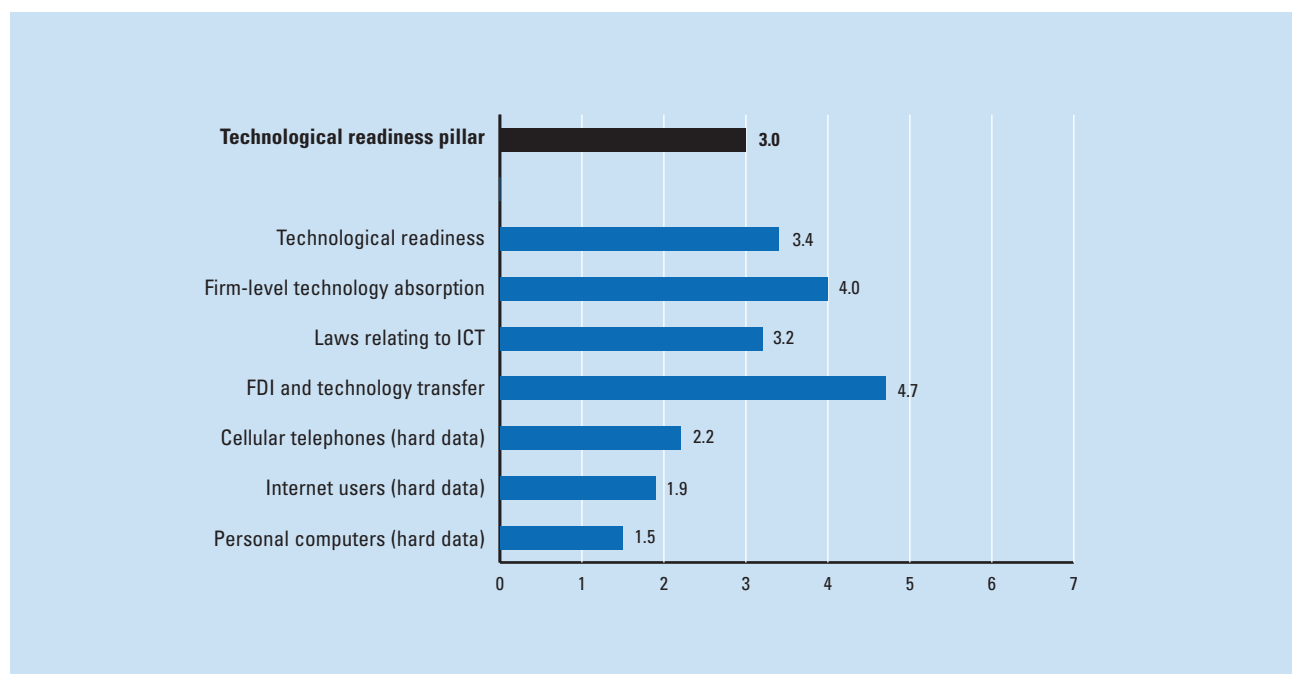
The GCI considers technological readiness through two broad dimensions: a) general availability of technology and technological capability, and b) the ICT regulatory framework and ICT penetration. The former encompasses the perceived general level of national technological readiness, firm-level absorption of technology, and the extent of technological transfer from abroad, usually via FDI. The latter includes the development and efficiency of laws governing ICT, as well as quantitative variables, such as the numbers of cellular phones, personal computers per 100 inhabitants, and Internet users per 10,000 inhabitants.

As shown in Figure 8, Latin American performance in terms of technological readiness is low (3.0 out of a

possible 7), far behind the East Asian NICs (5.6), but close to the scores of China (3.1) and India (3.2). Central and Eastern Europe (4.2) does relatively better, but still lags behind the high-income countries.

Figure 9 gives more detail about Latin American performance in terms of the individual components of the GCI technology index. The region does fairly well in absorbing technology via FDI (a relatively satisfactory score of 4.7) and the evidence suggests that firms are proactive and aggressive in absorbing technology (4.0). These are undeniably encouraging trends toward technological improvement and increasing competitiveness. Since FDI represents one of the main and most economical sources of technological transfer, a country's success in attracting it is a healthy sign. Likewise, the receptiveness of regional firms to new technology and their willingness to integrate it into production processes are fundamental for the creation of more competitive regional production and export structures.

The trend to embrace FDI as a source of technology is something quite recent in the region, brought about by economic liberalization and stabilization introduced in the early 1990s. Indeed, the region previously took a hostile attitude to foreign capital, as witnessed by extremely restrictive national and regional laws and regulations. The liberalization process prompted a complete reconsideration of the role of FDI, which came to be viewed as a useful complement to national strategies aimed at modernizing productive structures in the region. This change in attitude is also reflected in regional integration agreements, the best example of which is NAFTA, which provides favorable rules for intra-bloc FDI and guarantees the principle

**Figure 9: Latin America's technological readiness**

Source: World Economic Forum, 2005.

of “national treatment,” i.e., giving others the same treatment as one’s own nationals.

The region’s poor results for ICT penetration, as shown by the low scores for the number of personal computers (score 1.5), internet users (1.9), and cellular telephones (2.2), are less encouraging, indicating the high priority which must be given throughout the region to these fundamental forms of technology. The even lower scores for overall ICT penetration received by China and India further confirm the presence of a serious digital divide.

Country-specific figures show that Chile (4.2), Jamaica (3.7), and Costa Rica (3.6) outperform the rest of the region for technological readiness. Brazil and Mexico follow at 3.3, not far ahead of Venezuela and Argentina (3.1). At the bottom of the scale, once again, are smaller countries, such as Guyana (2.2), Bolivia (2.3), and Paraguay (2.3), which also occupy some of the lowest positions in the ranking of 117 countries (112nd, 111th, and 104th, respectively). Even the best performers in the region are not in the same league as the world’s best: Chile ranks 36th, Jamaica 42nd, Costa Rica 47th, Brazil 51st, and Mexico 53rd, indicating much room for improvement.

The regional trends highlighted above are reflected in the country-specific performances, which are generally led by good scores on FDI and firm-level technology absorption, but held back by poor ICT penetration rates. The countries enjoying both the greatest success in attracting foreign technology through FDI and the best absorption of technology by firms are those with more sophisticated economies, such as Brazil and Argentina, which can offer foreign investors large markets, potential economies of scale, and in many cases access to regional markets. This

applies in particular to Mercosur members and the more open and dynamic countries such as Chile and Costa Rica. The latter, in particular, has recently been pursuing an active policy of FDI promotion through tax breaks and incentives, especially in the ICT sector.

In sum, the disappointing rates of ICT penetration would appear to be the most problematic area for the region’s countries. While most acknowledged the centrality of ICT for development and incorporated it into their policy agendas in the 1990s—led by Argentina and Chile in 1998, Brazil in 1999, and Venezuela and Colombia in 2000—the region has now adopted well-articulated national strategies to promote ICT readiness and usage. These strategies, with time frames varying from 18 months to five years, have managed to survive numerous changes of administration in some countries, reflecting general awareness of the importance of ICT for national competitiveness. Although the specific time frames and implementation mechanisms differ from country to country, they have similar scope, hinting at a common strategy to prioritize the implementation of an extensive and modern ICT infrastructure, the reduction of the digital divide, and the creation of e-government structures. Another common focus has been on Internet access for schools. Some countries, notably Brazil, have abandoned technological neutrality in favor of open-source software as the best way to create a broader base of users. In any event, serious efforts are required to improve ICT regulatory frameworks—rated a disappointing 3.2 by Latin American business leaders—in order for the region to achieve world-class ICT penetration levels.

## Business sophistication

Some aspects of the business environment have already been discussed, including macroeconomic stability, quality of public institutions, and infrastructure. But while the business environment provides the opportunity to create wealth, the wealth itself is created in the business sector, using resources in a productive manner.<sup>30</sup>

The business sophistication of firms is critical for productivity and company performance. While it is relatively more important for businesses operating at the top end of the global value chain, located principally in high-income countries, companies at the lower end must also keep upgrading their operations in order to compete successfully. Business sophistication is driven by the quantity and quality of local suppliers, well-developed production processes, as well as the extent to which companies in a country are turning out the most sophisticated products and controlling marketing and distribution.

Most companies in Latin America operate at the low end of the value chain, with their competitive advantage often based more on the abundant pool of inexpensive labor or the region's natural resources, than on unique products and processes. This is confirmed by an average regional score of 3.2 (out of 7) for value chain presence—low by international comparison—and a score of 3.0 for the nature of competitive advantage. Indeed, a recent study undertaken by ECLAC confirms that commodities, resource-based manufactures and low-technology products constitute more than half the total exports of the entire region. An exception to this scenario is Costa Rica's success in attracting FDI in the IT sector, which in turn triggered a wave of investment and entrepreneurial activity linked to the IT sector.

Latin American products are mainly sold in domestic markets. On average, the region exports only 27 percent of GDP, of which approximately one third goes to North America and another 21 percent to Europe. Given the speed of integration of global markets and increasing exports of manufactures from Asian countries, pressures on global markets for these goods increased significantly. As a result, some regional sectors, such as the shoe industry, have lost significant shares of their domestic and international markets over the past few years. Given the fast pace of development and significantly lower labor costs in other regions of the world, South and Central American businesses will have to continue efforts to move into more technology-intensive industries in order to improve their competitive position.

To move up the value chain, companies could build on what, according to the Survey, is a relative strength of the region's businesses: the ability to market products and services. Some internationally branded products, such as Corona Beer or Colombian Coffee provide evidence of the strength of the region's marketing. Ranked 23rd and 25th in the GCI, respectively, Chile and Brazil lead the group in this category and outperform a number of significantly more developed economies such as Norway (29th)

or Finland (30th). Export marketing is clearly one of the strong relative advantages of the region, as compared with some emerging Asian exporters, such as China, which ranks 74th of 117 countries.

However, our research indicates that the region does less well on another related aspect of business sophistication, the extent to which companies control the distribution of their products. Like marketing, choosing the right channels of distribution requires specific skills, but allows companies to obtain a higher price for their products. The Survey data shows that, on average, not many companies in the region control the distribution of their products and services, with a low score in this area of 3.7. Panama (22nd) and Brazil (39th) are the best performers in the region. More important, given the region's stage of development, the scores on production process sophistication (3.3) are quite low, although Chile and Brazil obtain high scores (4.7 and 4.3 respectively). World Bank data shows that the region is also lagging quite far behind in the implementation of quality management systems, usually a precondition for participation in the international value chain, in particular in sectors dominated by multinational corporations. Only about 8 percent of Latin American companies have ISO certification, as opposed to 17 percent in South Asia.

Although the scope for public policy to actively improve business sophistication is limited, experience has shown that clustering of firms active in the same sector can significantly improve the competitive performance of firms. The same applies to suppliers, service providers, and specialized institutions. By fostering vertical and horizontal linkages, clusters bring about productivity growth for the companies involved. Firms have better access to specialized suppliers of inputs and machines, appropriately skilled employees, specialized knowledge and information than do firms operating in an isolated environment. Within this specialized environment, opportunities for innovation are often taken up more easily and new business formation in the sector is facilitated. In a cluster environment, companies more quickly adopt knowledge and production skills, allowing them to move up the value chain, upgrade production processes, and develop new or improved products.

The Survey results indicate that clusters are relatively numerous and well developed in the region, and this is reflected in the good results on the vertical linkages. On quantity and quality of local suppliers the region scores on average 4.5 and 4.0 respectively, with Chile and Brazil as top performers in the region (Figure 10).

There are a number of clusters active in South and Central America, the best examples being the salmon cluster in Chile and the IT cluster in Costa Rica. Hundreds of smaller agglomerations, mainly driven by price competitiveness, operate in the region, such as the shoe cluster in Sinos Valley in Brazil, and the garment cluster "Complejo Gamarra" in Lima, Peru. Although a thorough, systematic assessment of the performance of clusters in the region is difficult to find, analysis shows that they have difficulties innovating and moving up the value chain. The reasons for

this are many, but the most important appear to be low skill levels of the workforce, the low level of absorption of new technologies, and inadequate quality and quantity of linkages between businesses, who are reluctant to cooperate with peers (Albaldejo, 2001).

A clear link can be made between the quality of management and firm-level total factor productivity, as assessed by three criteria: manufacturing operations, organizational practice and talent management (Bloom et al., 2005). Taken together, these factors significantly affect the competitiveness of enterprises. Our Survey results on production process sophistication highlight the lack of modern management practice in Latin America and the Caribbean, as compared to other regions of the world. With its score of 3.3, production processes in the region are, on average, much less advanced than in East Asian NICs (5.4). Nevertheless, some countries, such as Chile and Brazil fare relatively well internationally, ranking at 35th and 37th respectively, out of 117 countries.

The low scores on management practice reflect the region's recent history. Good management practice is relatively new in Central and South America, and the import-substitution policies of the 1970s and 1980s resulted in strong protection of local markets and seriously distorted the incentives created by a market economy. In the earlier highly regulated and inflation-ridden economies, the payoff for maintaining good relationships with regulators and placing assets on the financial market were higher than those from increasing productivity and satisfying customer demands. As a result, the region's companies made low quality, expensive goods, and their managerial ability was greatly restricted. Indeed, labor productivity at firm level was well below that in developed countries in the mid-1990s. This was the conclusion of a McKinsey study of four industries in Latin America, which found that poor productivity in processed food and retail banking sectors—less than 40 percent of the US level—resulted from poor management and organization and not from skill shortages.<sup>31</sup> Today, companies from Mexico or Brazil are significantly behind their competitors from other emerging countries such as China in terms of firm-level labor productivity (Mesquita Moreira, 2006).

Overall, business sophistication in Latin America (average regional score 3.8) lags behind that of China (score 4.1), India (5.0), and the East Asian NICs (5.4). With labor costs in the region significantly higher than those in Asia<sup>32</sup> and the threat of increasing competition from China growing, Latin American businesses will have to keep upgrading operations and improving products and services in order to move away from pure price competition.

The contribution in this *Review* by Laura Alfaro and Eliza Hammel, “Latin American Multinationals,” points to the growing number of successful regional multinational companies or “multilatinas” as a sign of increasing business sophistication, since enterprises that venture abroad generally take advantage of their superior technology, organizational and branding skills to outperform country business-

es. Inflows of FDI significantly contributed to improving management practice in the past, from both internal transfer of knowledge and skills, and more intense competition in domestic markets. FDI inflow, openness, and a sound business environment are key to improving business sophistication in the region.

## Innovation

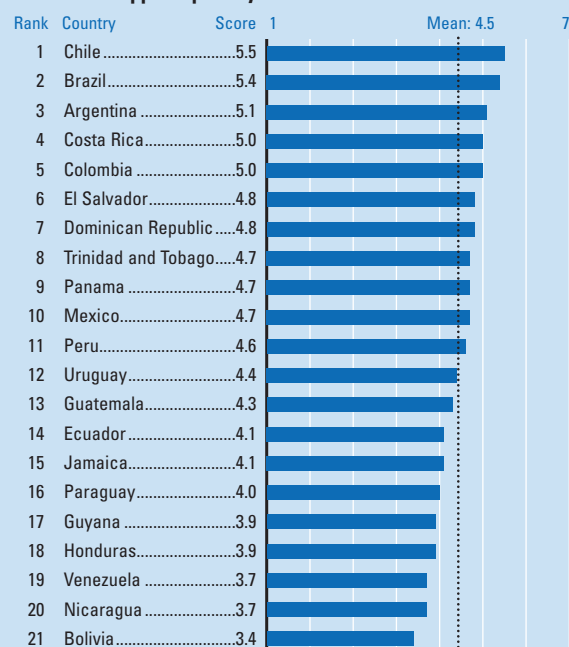
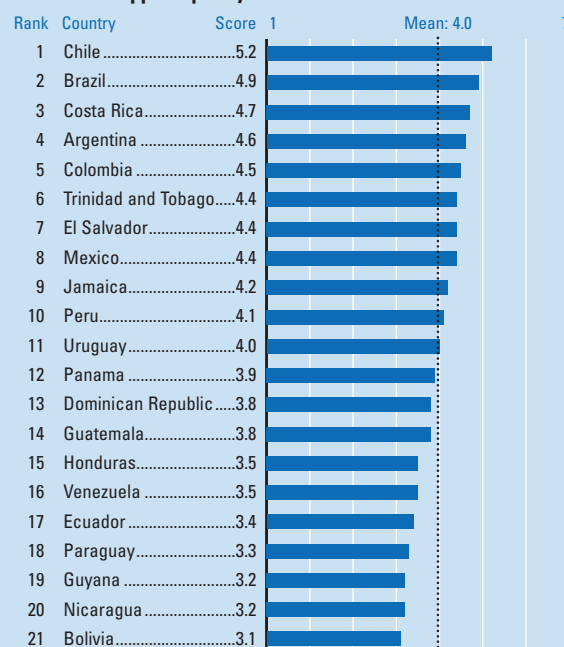
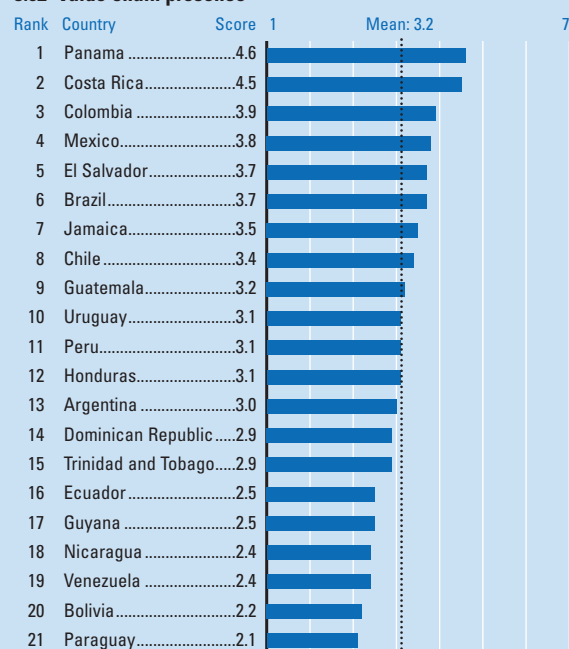
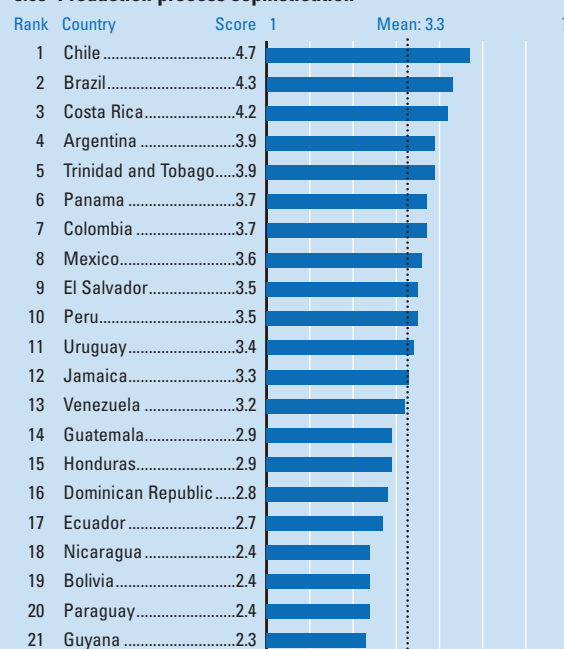
There is broad agreement among academics and practitioners about the strategic importance of innovation for a country's long-term growth. In today's increasingly knowledge-based and interconnected economic systems, innovation plays an important role in giving a country a competitive edge. By developing dynamic competitive advantages based on technology and high value-added products, rather than relying on natural resources and products with diminishing rates of return, countries can increase prosperity and raise living standards for their people.

Innovation can be developed either internally or absorbed from abroad. For countries in an advanced, innovation-driven stage of development, the absorption of exogenous technology and imitation of external products may not be enough to sustain productivity increases. Such countries are already competing on the basis of innovation and business sophistication, so the internal generation of advanced technology, both at the product and process level, is a basic precondition for growth.

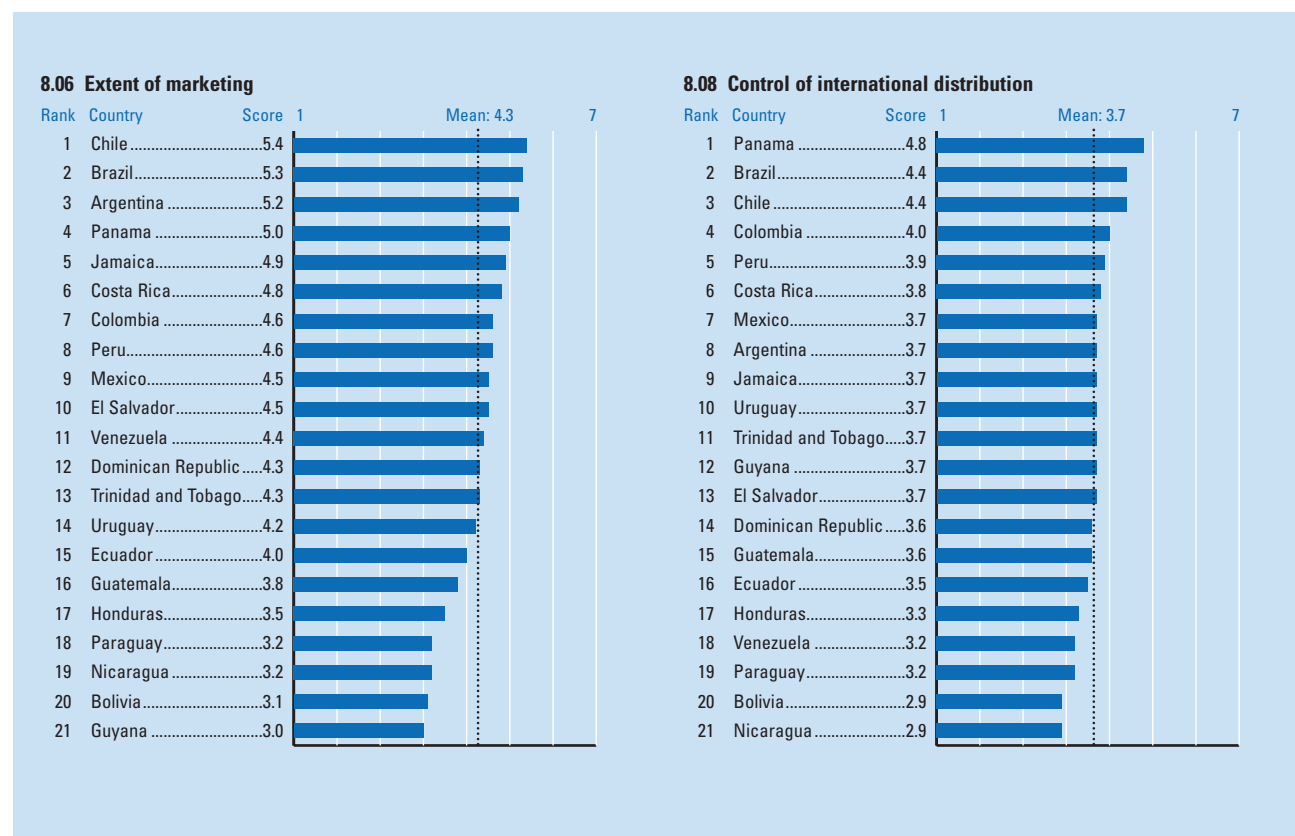
The countries of Latin America can not yet be characterized as knowledge economies and, therefore, may still benefit from leveraging external technology for their development. However, since their future growth prospects depend to a large extent on their capacity to anticipate and put in place the key elements to equip them for continued development, the region's innovation agenda (for generating innovation internally and attracting exogenous technology) should be given special attention.

Nurturing an environment conducive to innovation is not exclusively the responsibility of government, but is shared by the private sector and universities/research institutions. The GCI captures aspects relevant to innovation pertaining to these three stakeholders, and also draws on the number of US utility patents granted per million inhabitants, a widely accepted general proxy for a country's innovative capability. Specifically, the GCI uses the following information: a) government related: the extent of public procurement of advanced technology products, as well as the extent and quality of intellectual property protection provided; b) private sector related: company spending on R&D, capacity for internal innovation, as well as the extent of R&D collaboration with universities and research institutes; and c) university related: the quality of the scientific research institutions and the availability of qualified scientists and engineers.

According to the GCI results, Latin America is quite weak on innovation, with an overall score of 2.8, the lowest for any region (see Figure 11). While China, India, and

**Figure 10: Country performance in the business sophistication pillar (selected variables)****7.05 Local supplier quantity****7.06 Local supplier quality****8.02 Value chain presence****8.05 Production process sophistication**

Source: World Economic Forum, Executive Opinion Survey, 2005.

**Figure 10: Country performance in the business sophistication pillar (selected variables)** (cont'd.)

Source: World Economic Forum, Executive Opinion Survey, 2005.

Latin America share similar levels of technology readiness, the first two score much better for innovation —3.6 and 3.9 respectively—thanks mainly to better research institutions, higher levels of investment in R&D and greater availability of qualified labor. For Central and Eastern Europe, the situation is reversed: a relatively good performance in technological readiness (4.2) is not matched by the one in innovation, a rather disappointing 3.5. The NICs excel overall, but even their 4.9 score on innovation ranks lower than what they earned in technological readiness (5.6).

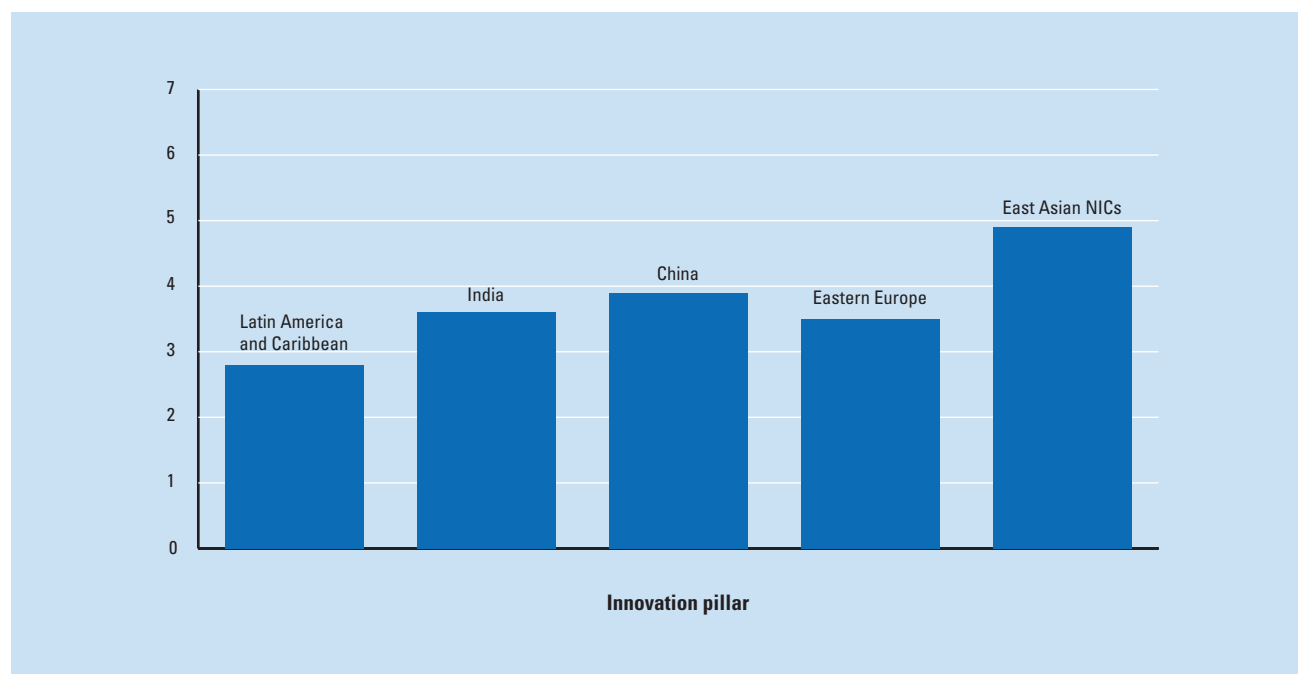
Regional performance at the level of individual components of the GCI (Figure 12) shows relative competitive advantage in the availability of scientists and engineers (3.8), somewhat less in the quality of the scientific research institutions (3.2) and in government procurement of advanced technology (3.2). However, these results are overshadowed by the region's poor track record in absolute terms, pointing to serious deficiencies in all dimensions important for developing endogenous innovation. The region's main weaknesses lie in the low level of collaboration between firms and universities (2.6) and in low private-sector spending on R&D (2.8).

The above observations are corroborated by country-specific scores: Costa Rica (3.5), Brazil (3.4) and Chile (3.4) lead the region in innovation, followed closely by Argentina, Colombia, Panama, Mexico, and Uruguay. As

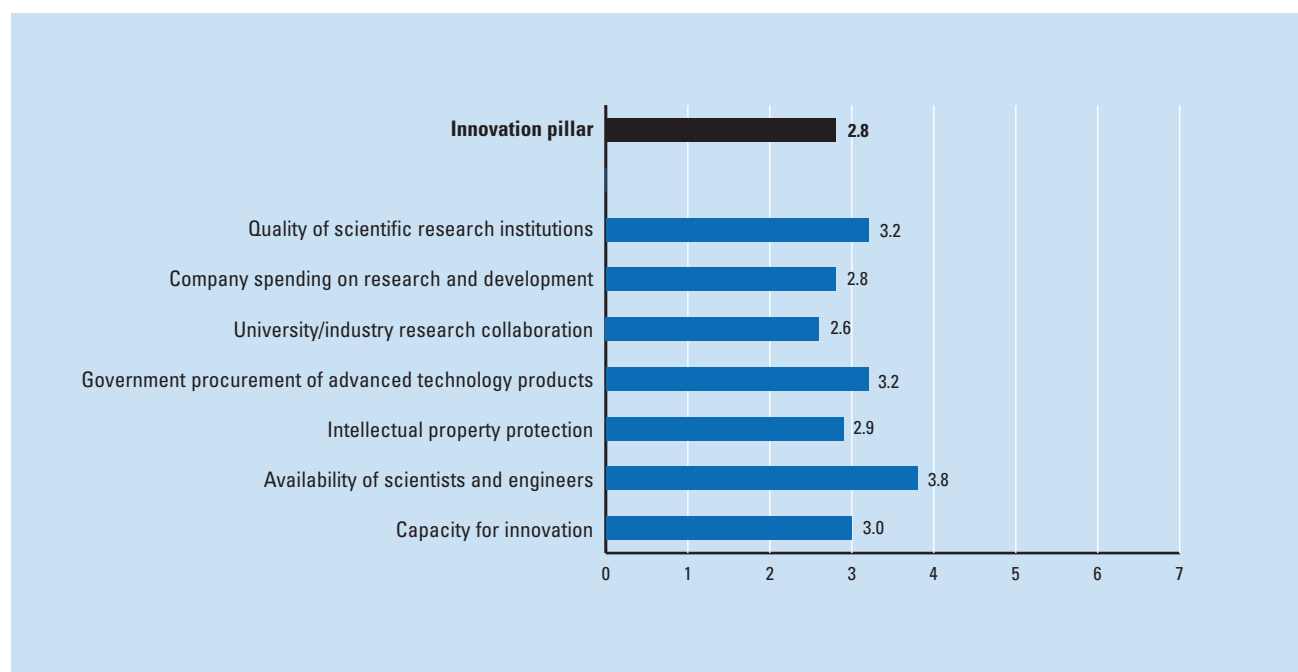
one might expect, the bottom ranks are occupied by Paraguay (2.0), Bolivia (2.2), and Guyana (2.3), with scores that are equally disappointing at the international level: Paraguay ranks last out of the 117 countries covered in the World Economic Forum's *Global Competitiveness Report*, Bolivia takes 112th place and Guyana 111th.

In contrast, the relatively poor scores realized by the best performers in the region, Costa Rica, Brazil, and Chile (with ranks of 37, 39 and 41, respectively) do not compare unfavorably with those of other developing countries. This trend is mirrored for the ranking by number of US utility patents per million inhabitants. Patent registrations per country show a wide gap between the top three performers—the United States (283.7), Japan (276.6), and Taiwan (263.9)—and second tier countries (Switzerland, with 177.4). The most glaring differential is between the top 24 countries and the rest of the world, which registered very few or no patents. Even Argentina and Chile, the best Latin American performers, registered only 1.2 and 0.9 patents per year, respectively, but which nevertheless obtained an entirely respectable position of 40 and 41 out of the 117 countries covered.

However, even the relatively good absolute rankings of the region should not obscure the magnitude of the challenge Latin America faces to improve its innovation potential. The reader is referred to Felipe Larraín's essay in this *Review*, entitled "Innovation in Latin America," which

**Figure 11: Regional comparators for innovation**

Source: World Economic Forum, 2005.

**Figure 12: Innovation in Latin America and the Caribbean**

Source: World Economic Forum, 2005.



discusses the challenges for innovation in the region. The region's expenditure figures for R&D (as a percentage of GDP), relative to those of developed countries, are suggestive. According to UNESCO, in 2000, the US, Japan, and Korea invested between 2.5 and 3 percent of GDP in R&D, followed by the EU at nearly 2 percent. In comparison, most Latin American countries invested less than 0.5 percent, with the sole exception of Brazil (slightly over 1 percent of GDP in 2000), including expenditure on postgraduate studies (ECLAC, 2004).

Apart from inadequate overall investment in R&D, another worrisome feature in the region is the predominance of government investment in comparison to that of the private sector. In 2000, the government accounted for 58.2 percent of total R&D expenditure, while only 33.3 percent was provided by the private sector.<sup>33</sup>

Figures for per capita R&D expenditures by private firms in the region are even more striking; Argentina, Brazil, and Chile, the region's star performers, annually spend a mere US\$50 per capita, compared to some US\$200–700 in developed countries.

This pattern is a legacy of the policy of import substitution,<sup>34</sup> which the subsequent market-based shift in the public R&D strategy<sup>35</sup> failed to fully reverse. However, it must be emphasized that the region has been very active in recent years in promoting both the role of private firms in innovation and closer linkages between private companies and research centres. In this context, it is of interest to note that technology funds have been set up across Latin America, aimed at either subsidizing companies or at paving the way for or actively encouraging coordination and cooperation between the private sector and academic and research institutions. Examples of the former include funds established in Argentina, Chile, Colombia, Costa Rica, and Mexico,<sup>36</sup> while those in Brazil are the most notable example of the latter. The funding pattern in Brazil is particularly interesting as it provides a well-articulated structure of fourteen specialized funds, financed by companies from relevant sectors and targeting strategic areas, including among others, energy, ICT, agribusiness, and infrastructure. A special fund has also been established to strengthen the links between private companies and research institutions, with resources being devoted to maintaining and modernizing the technology infrastructure of public universities and research institutions.

In summary, the region is undoubtedly moving in the right direction toward fostering its innovative potential. However, the task ahead remains gargantuan. Greater resources must be devoted to increasing the region's R&D capacity, to training human resources to the highest standard, and to upgrading ICT and general infrastructure.

## Conclusions

In this chapter we have assessed the competitive performance of 21 countries in Latin America and the Caribbean and shown that much work lies ahead. It is evident that

the favorable external environment which promoted the good growth performance of the region is a double-edged sword: while it opens a window of opportunity for further reform, it also carries the risk of complacency and a drift toward short-sighted, populist policy.

Our findings show that, although many countries have a respectable track record for improving competitiveness in relation to their own past, the progress made is not sufficient to enable them to compete in today's fast-paced global economy, especially given the dynamism of other countries and regions such as East Asian NICs, Central and Eastern Europe, China, and India. When benchmarked against those economies, Latin America on average falls behind by a considerable margin, although significant differences between countries remain. Particularly noteworthy here is Chile's excellent performance in practically all areas assessed by the GCI.

We have identified a number of challenges which must be addressed in the near future, if competitive performance in the region is to improve. Given the heavy reliance of these economies on primary products, the weak average performance in technological readiness is particularly worrisome. Although commendable progress has been made, efforts to close the technological gap with respect to more advanced economies should be intensified. A vast potential could be realized through broader adoption and assimilation of technologies from abroad, underutilized to date, but which many other countries have used to their advantage in their development process. Boosting the currently low levels of ICT penetration and IT literacy would be logical initial steps toward success in this respect.

The further upgrading of infrastructure, already high on government agendas over the past few years, could significantly enhance productivity and competitiveness. It should remain a key goal, with a particular focus on transport infrastructure. Given the past record of fiscal laxity in the region, priority should be given, to the extent possible, to fiscally neutral investments under diverse schemes of public private partnerships, such as those successfully put in place in Chile.

It is imperative that the current benign external environment be used for upgrading educational and training institutions, in particular for enabling the region's poor to have better access to better quality education at all levels. In the medium term, this would help reach the dual objective of increasing the skills of the labor force, while also working toward social inclusion. The trend toward increasingly intense competition in the global markets is likely to continue, and thus the quality of the region's human capital is going to be among the factors decisive for future success.

Even after a decade of structural reform, deregulation of goods and labor markets remain among the priorities for action. A strengthening of market forces and intensified competition in domestic markets would enable businesses to use economies of scale and would induce them to innovate, assimilate new technologies, improve managerial

skills and provide more and better on-the-job-training for employees, to give only a few examples. Companies could also benefit from significantly improved access to loans and venture capital, both of which are currently considered a major obstacle to innovation and upgrading.

An overhaul of the institutional frameworks—which often do not match the requirements of open market economies—also emerged as a key action point in almost all of the countries. Greater transparency and government accountability, better enforcement of property rights, and improvements in the judicial systems are at the top of the agenda. Upgrading institutions would not only improve the business environment, but would also support the design and implementation of sound policies in the future. In view of the pervasive distrust of politicians, attention should be given to the alleviation of poverty and improving social inclusion, in order to build broader public support for the continuation of sound economic reform.

If the current window of opportunity is seized, the countries of this entire region, with their large markets, proximity to the United States, and rich resource endowments, could become major players in the global economy. Chile could serve as an excellent role model for future reform efforts. At this stage, it is encouraging to note that, in addition to Chile's star performance, some countries of the region already rival the competitive performance of much more developed EU economies in certain aspects assessed in this *Review*. Those success stories should be capitalized on. The challenge for policy makers will be to resist the short-term political benefits of populist policies, and instead offer both the credible vision and stable political coalitions which favor continued reform, the fruits of which will be seen by future generations.

## Notes

- 1 The World Economic Forum has worked with Professor Xavier Sala-i-Martin to develop the Global Competitiveness Index. For more details on the Index, see Chapter 1.3 of *The Global Competitiveness Report 2004–2005* and Chapter 1.1 in *The Global Competitiveness Report 2005–2006*.
- 2 Further information on the Executive Opinion Survey may be found in Chapter 4.1 of the *Global Competitiveness Report 2005–2006*, which is available from the World Economic Forum on request. Please send requests to [gcp@weforum.org](mailto:gcp@weforum.org).
- 3 Countries are separated into stages as follows. The factor-driven stage includes countries that have GDP per capita below US\$2,000. The efficiency-driven stage includes countries with per capita income between US\$3,000 and \$9,000. The innovation-driven stage includes countries with GDP per capita higher than US\$17,000. We have used income levels as the separating criterion for the stages for the following reason: "Factor-driven economies are those that compete in low prices. We proxy low wages with low income levels, which is why we assign countries with 2003 income per capita below US\$2000 to this group" (Sala-i-Martin and Artadi, 2004, p.72). The same reasoning applies to countries in stages 2 and 3: rising GDP per capita proxies for wages that are rising, pulling countries into higher stages of development, where they must compete based on more complex factors. Countries falling in between these categories are considered to be in transition between stages. For these countries, the weights change smoothly as a country develops, reflecting the smooth transition from one stage of development to another. By introducing this type of transition between stages into the model—i.e., by placing increasingly more weight on those areas that are becoming more important for the country's competitiveness as the country develops—the GCI has a built-in mechanism that begins to "penalize" those countries that are not preparing for the next stage.
- 4 For further information on the full 117-country dataset, see *The Global Competitiveness Report 2005–2006*.
- 5 See, for instance, Fischer (1993) and Rogoff (2005), as well as a number of studies done over the years at the IMF on the costs of high and variable inflation.
- 6 This average figure hides considerable variability across countries: according to the IMF (Singh and Collyns, 2005), inflation peaked in 1990 at 3080 percent in Argentina, 2948 percent in Brazil, 7486 percent in Peru, and in 1985 at 11750 percent in Bolivia. Inflation peaked at 31 percent in Chile in 1985.
- 7 Chronic inflation was defined as annual inflation ranging from 20 to 80 percent for five or more consecutive years; acute inflation was at least 80 percent for two or more years; runaway inflation was identified with rates in excess of 200 percent for one or more years.
- 8 For a fuller discussion of aspects of Chile's fiscal adjustment, see López-Claros (2004).
- 9 For in-depth analysis of the importance of institutions for the Latin American reform process, see for example Singh et al.(2005), or ECLAC (2004).
- 10 For more information on the obstacles to entrepreneurship see Kantis and Ishida (2002).
- 11 See for example the study by Borensztein et al. (1998) of the determinants of foreign direct investment, in which the authors identify the quality of a country's infrastructure, in particular transport and telecommunications, as an important consideration for foreign investors.
- 12 Countries are classified into income groups used by the World Bank, defined as GNI per capita for 2004 in the range of US\$826 to \$3,255 for lower-middle-income economies, and in the range of US\$3,256 to \$10,065 for upper-middle-income economies.
- 13 Inter-American Development Bank, 2004.
- 14 Fay and Morrison, 2005.
- 15 See Engel et al. (2000) for a detailed description of these projects.
- 16 Further information on the Plan Puebla Panama can be found at [www.iadb.org/ppp](http://www.iadb.org/ppp) Further information on the IIRSA can be found at: [www.iirsa.org](http://www.iirsa.org)
- 17 Sen, 1999, p. 284.
- 18 Sen, 2003, p. 23.

- 19 ECLAC, 2004, p. 317.
- 20 The World Bank, 2003.
- 21 OECD, 2005; the study on adult literacy skills showed that fully 57 percent of Chile's labor force has a low level of basic reading comprehension. Only 4.9 percent achieved levels 4 and 5. Contrast these results with those of Finland and New Zealand, which are precisely the reverse: roughly 50 percent of the labor force is at levels 4 and 5; a full description of the five categories used for assessing reading literacy may be found at: [http://www.pisa.oecd.org/Docs/download/pisaplus\\_eng01.pdf](http://www.pisa.oecd.org/Docs/download/pisaplus_eng01.pdf) For instance, in the area of "interpreting texts" level 5 involves "construing the meaning of nuanced language or demonstrating a full and detailed understanding of a text."
- 22 Holm-Nielsen et al., 2005. p. 39–40.
- 23 Inter-American Development Bank, 2005. p. 7.
- 24 Unfortunately, imports followed a similar but more pronounced trend, with the result that the region had developed widespread current account deficits by the end of the 1990s. Moreover, the surge in exports does not seem to have been matched by an equivalent increase in the regional rates of growth and in the generation of domestic value-added.
- 25 According to ECLAC's classification (2004), three types of export specialization seem to have emerged in the region: a) maquila-based, predominantly manufactured goods, involving Mexico, Central American, and a few Caribbean countries, b) South American, emphasizing natural resource-based products, and c) the Caribbean and Panama, consisting mainly of service exports (finance, tourism, and transport).
- 26 Note that a low score for this indicator indicates significant distortions in the goods market and vice versa.
- 27 The problem was not only that newly created jobs did not match those lost—especially considering the low growth rates and the cost of creating new jobs—but that most of the new jobs were in areas that required qualification or training which the displaced workers, especially the unskilled, did not have.
- 28 There has been rising pressure for families to be able to count on more than one salary to sustain their members, resulting in the increase in the numbers of women entering the labor market, a phenomenon helped by reduced fertility rates. This is reflected in the fairly good score the region received for women's work participation in the private sector.
- 29 The Networked Readiness Index is featured in the series of *Global Information Technology Reports* published by the World Economic Forum since 2001. The purpose of the Index is to assess the capacity of countries to use and leverage technology, with a specific focus on ICT, for development and increased prosperity; for details, please see the *Global Information Technology Report 2005–2006*.
- 30 For further analysis of the importance of business sophistication on competitiveness see Porter, 2005.
- 31 *The Economist*, 1997.
- 32 Labor costs in Mexico are three times higher than in China (Voss, 2006).
- 33 This looks even worse when compared to the corresponding percentages in the US and Korea for the same year, 27.1 and 26 percent, respectively for the government, and 68.4 and 74 percent, respectively for the private sector (ECLAC, 2004).
- 34 Public policy allocated resources for the promotion of science and technology and the development of infrastructure: 80 percent of R&D expenditures in science and technology came from the public purse, and most of the applied R&D activities were carried out by state-owned enterprises.
- 35 As a consequence of the liberalization reforms of the 1990s, governments adopted a new paradigm for R&D, restoring the market to its role as the main engine of development: in particular, FDI was expected to be the main source of technology; new, protective legislation on patents was adopted and fiscal incentives and financial instruments put in place to facilitate innovation by the private sector. Some countries, notably Costa Rica and Colombia, also adopted an integrated approach to technology and export promotion; see ECLAC, 2004, p. 205 for full details.
- 36 Funds of the subsidization type normally come from public resources, often in cooperation with international organization, with grants accorded to various actors, based on competitive procedures and evaluation.

## References

- Albaladejo, M. 2001. "Determinants and policies to foster the competitiveness of SME clusters: Evidence from Latin America." Queen Elisabeth House Working Paper Series 71. Oxford: University of Oxford.
- Almeida de P. R. 1993. *O Mercosul no contexto regional e internacional*. São Paulo: Edições Aduaneiras.
- Argenti, G. 1991. *Pequeños países en la integración: oportunidades y riesgos*. CIESU/FESUR. Montevideo: Ediciones TRILCE.
- Bekerman, M. 1994. "La integración en el Cono Sur y sus ventajas económicas potenciales para la economía brasileña." *El Trimestre Económico* LXI (2):242. 281–308.
- Bloom, N., S. Dorgan, J. Dowdy, T. Rippin, and J. Van Reenen. 2005. "Management Practices across Firms and Nations." Working Paper, Centre for Economic Performance. London: London School of Economics.
- Blyde, J. S. and E. Fernandez-Arias. 2004. *Why does Latin America Grow More Slowly?* Economic and Social Study Series. Washington: IADB.
- Borensztein, E., J. De Gregorio, J.-W. Lee. 1998. "How Does Foreign Direct Investment Affect Economic Growth?" *Journal of International Economics* 45:115–35.
- Bulmer-Thomas, V., N. Craske, and M. Serrano. 1994. *Mexico and NAFTA: Who Will Benefit?* London: MacMillan.
- Carstens, A. and L. I. Jácome H. 2005. "Taming the Monster." *Finance and Development*. December. 26–29.
- De Soto, H. 2000. *The Mystery of Capital*. New York: Basic Books.
- Economic Commission for Latin America and the Caribbean (ECLAC-CEPAL). 2004. *Productive Development in Open Economies*. Thirtieth Session of ECLAC-CEPAL: San Juan.
- Economic Intelligence Unit. 2005. Country Data Database.
- The Economist*. 1997. "Back on the pitch." 4 December.
- . 2002. "Education in Latin America: Cramming Them In." 9 May.
- . 2005. "Tackling Poverty in Latin America." 17 September.
- Engel, E., R. Fischer and A. Galetovic. 2000. "The Chilean Infrastructure Concessions Program: Evaluation, Lessons and Prospects for the Future." Working Document 60. Centro de Economía Aplicada, Universidad de Chile.
- Fay, M. and M. Morrison. 2005. "Infrastructure in Latin America and the Caribbean: Recent Developments and Key Challenges." World Bank. Available at: <http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/LACEXT/0,,contentMDK:20631899~pagePK:146736~piPK:146830~theSitePK:258554,00.html>
- Fischer, S. 1993. "The Role of Macroeconomic Factors in Growth." *Journal of Monetary Economics* 32(3): 485–512.
- Fraga, A. 2005. "A Fork in the Road." *Finance and Development*. December. 14–15.
- Hilber, M. and J. Katz. 2003. "Building an Information Society: A Latin American and Caribbean Perspective." Santiago de Chile: ECLAC.
- Holm-Nielsen, L. B., K. Thorn, J. J. Brunner, and J. Balán. 2005. "Regional and International Challenges to Higher Education in Latin America." In *Higher Education in Latin America: The International Dimension*. Washington, DC: World Bank. 39–70. Available at: [http://sitere-sources.worldbank.org/EXTLACREGTOPEDUCATION/Resources/Hig her\\_Ed\\_in\\_LAC\\_Intnl\\_Dimension.pdf](http://sitere-sources.worldbank.org/EXTLACREGTOPEDUCATION/Resources/Hig her_Ed_in_LAC_Intnl_Dimension.pdf)
- Inter-American Development Bank (IADB). 2004. "Infrastructure: The Largest Component of IDB Operations, Issue Brief." Available at: <http://www.iadb.org/news/articledetail.cfm?language=en&arttype=bp &parid=&artid=2579>

- . 2005. "Asia y America Latina y el Caribe: Vinculos Economicos, Cooperacion y Estrategia de Desarrollo." Document prepared for the Annual Governors' Meeting in Okinawa.
- . 2005. "Expanding the Knowledge Capital of Latin America and the Caribbean: An IDB Strategy for Education and Training." Draft Strategy Paper. Available at: <http://www.iadb.org/sds/doc/edu%2Dstrategy%2Dframework%5Fe.pdf>
- International Monetary Fund. 2005a. *Global Context and Regional Outlook for Latin America and the Caribbean*. Washington, DC: IMF.
- . 2005b. "Stabilization and Reform in Latin America: A Macroeconomic Perspective on the Experience Since the Early 1990s." Washington, DC: IMF.
- . 2005c. *World Economic Outlook*. Washington, DC: IMF. Winter.
- . 2005d. World Economic Outlook Database.
- . 2005e. International Finance Statistics. Washington, DC: IMF. June.
- . 2005f. Public Information Notices and Country Reports. Washington, DC: IMF.
- Instituto de Relaciones Europeo-Latinoamericanas (IRELA). 1992. *Prospects for the processes of sub-regional integration in Central and South America*. Madrid: IRELA.
- Jovanovic B. and P. L. Rosseau. 2003. "General Purpose Technology." Available at: <http://www.econ.nyu.edu/user/jovanovi/GPT.pdf>
- Kantis, H., M. Ishida. 2002. "Entrepreneurship in Emerging Economies: The Creation and Development of New Firms in Latin America and East Asia." Washington, DC: IADB.
- Kume, H. 1996. "Mercosul-1995: uma avaliação preliminar." IPEA, *La Economía Brasileira em Perspectiva* 1:157–185.
- Lall, S., M. Albaladejo and M. Mesquita Moreira. 2004. "Latin American Industrial Competitiveness and the Challenge of Globalization." IADB, Intal-ITD, Occasional Paper-SITI-05. Buenos Aires: IADB-INTAL.
- LASPAU. Higher Education and Science in Latin America. Documents available at: [http://www.laspau.harvard.edu/western\\_hem/](http://www.laspau.harvard.edu/western_hem/)
- López-Claros, A. 2003. "Varieties of Economic Experience in the Developing World." *Global Competitiveness Report 2003–2004*. New York: Oxford University Press. 73–89.
- . 2004. "Chile: The Next Stage of Development." *The Global Competitiveness Report 2004–2005*. Hampshire: Palgrave Macmillan: 111–24.
- Lora, E. 2005. "Should Latin America Fear China?" Working paper #531. Washington, DC: IADB.
- Mesquita, M. M. 2006. "Fear of China: Is There a Future for Manufacturing in Latin America?" INTAL/ITD Occasional Paper Series 35. Washington, DC: IADB.
- Multilateral Investment Fund (MIF). 2003. "Cluster Action Plan: Promoting Effective Property Rights in Latin America and the Caribbean." Washington, DC: IDB. Available at: [http://www.iadb.org/mif/v2/files/propertyactionplan\\_eng.pdf](http://www.iadb.org/mif/v2/files/propertyactionplan_eng.pdf)
- Organisation for Economic Co-operation and Development. 2005. Programme for International Student Assessment (PISA). Available at: [http://www.pisa.oecd.org/Docs/download/pisaplus\\_eng01.pdf](http://www.pisa.oecd.org/Docs/download/pisaplus_eng01.pdf)
- Porter, M. E. 2005. "Building the Microeconomic Foundations of Prosperity: Findings from the Business Competitiveness Index." *Global Competitiveness Report 2005–2005*. New York: Oxford University Press.
- Rogoff, K. 2005. "Rethinking Exchange Rate Competitiveness." *The Global Competitiveness Report 2005–2006*. Hampshire: Palgrave Macmillan: 99–105.
- Sen, A. 1999. *Development as Freedom*. Oxford: Oxford University Press.
- . 2003. "Reflections on Literacy." Literacy as Freedom: A UNESCO Roundtable. Paris: UNESCO. 32–47. Available at: <http://unesdoc.unesco.org/images/0013/001318/131823e.pdf>
- Singh, A. and C. Collyns. 2005. "Latin America's Resurgence." *Finance and Development*. December. 9–13.
- Singh, A., A. Belaisch, C. Collyns, P. De Masi, R. Krieger, G. Meredith, and R. Rennhack. 2005. "Stabilization and Reform in Latin America: A Macroeconomic Perspective on the Experience Since the Early 1990s." IMF Occasional Paper 238. Washington, DC: IMF.
- Studart, R. 2005. "The State, the Markets, and Development Financing." *Cepal Review* 85:19–32.
- Trajtenberg M. 2005a. "Uncovering General Purpose Technologies using Patent Data." (with Bronwyn Hall). Antonelli, C., D. Foray, B. H. Hall, and W. E. Steinmueller (eds.). *New Frontiers in the Economics of Innovation and New Technology*. Edward Elgar. Available at: [http://www.tau.ac.il/~manuel/pdfs/uncovering\\_GTP\\_using\\_patent\\_data.pdf](http://www.tau.ac.il/~manuel/pdfs/uncovering_GTP_using_patent_data.pdf)
- . 2005b. "Innovation Policy for Development: An Overview." Paper prepared for LAEBA 2005 Second Annual Meeting. Tel Aviv: Tel Aviv University, NBER, and CEPR.
- Transparency International. Corruption Perceptions Index. Available at: <http://www1.transparency.org/cpi/2005/cpi2005.sources.en.html>
- Voss, S. 2006. "Mexico 2020: Tequila Sunrise. A Medium Term Growth Perspective." Deutsche Bank Research. 16 February.
- World Economic Forum. 2005. *The Global Competitiveness Report 2005–2006*. Hampshire: Palgrave Macmillan.
- . 2006. *The Global Information Technology Report 2005–2006: Leveraging ICT for Development 2006*. Hampshire: Palgrave MacMillan.
- World Bank. 2003. "Inequality in Latin America and the Caribbean: Breaking with History?" Washington, DC: World Bank.
- . 2005a. *Higher Education in Latin America: The International Dimension*. Washington, DC: World Bank.
- . 2005b. *Doing Business*. Database. Available at: <http://www.doing-business.org/>

---

# Part 2

## Essays on Selected Issues





## Fiscal Policy in Latin America: Where Do We Stand?

PABLO E. GUIDOTTI, Universidad Torcuato Di Tella

In the past two years, Latin American economies grew rapidly, sustained by favorable external conditions, and anchored by low interest rates and stable capital flows. Periods of continued economic growth and low interest rates gave governments an unusual opportunity to strengthen their policy frameworks and implement reforms to reduce external vulnerabilities, without being forced to make politically unpalatable adjustments.

Indeed, most Latin American economies today appear better equipped to face external volatility and display more flexible monetary regimes as well as stronger fiscal indicators than was the case in the 1990s. For instance, the region's primary fiscal balance reached 3.4 percent of GDP in 2005—about 1.5 percent of GDP higher than at the end of the 1990s. However, significant regional differences still persist, with Brazil, Chile, and Ecuador displaying primary surpluses close to or above 5 percent of GDP, while Colombia and Peru exhibit either a primary deficit or a small surplus. In the current state of affairs, then, it is important to understand the extent to which the observed improvements are sustainable in the event that external conditions were to deteriorate—for example, if global imbalances were to persist and induce a perceptible increase in long-term US interest rates.

For most countries in Latin America, the 1990s represented a decade of enormous challenge but also of progress. An intensification of the globalization process in the early 1990s coincided with the end of a decade-long struggle with macroeconomic turmoil and default. The signing of the Brady deal allowed credit-strapped economies to renew relationships with the international capital market at a time when the supply of foreign capital to emerging market economies would surge to record levels, exceeding tenfold those observed in the previous 20 years.

One of the consequences of this process was the deterioration of the region's current account balance, which went from a balanced position in 1990 to an aggregate deficit of US\$92 billion in 1998. Globalization also translated initially into a marked improvement in macroeconomic performance and economic growth.

Part of the optimism prevailing then was related to a number of important developments in the policy arena, particularly the victory over inflation. Increased access to the international capital market brought about by globalization allowed a separation of monetary from fiscal policy. The tight connection between fiscal indiscipline and monetary financing had been at the root of chronic inflation in Latin America during the 1970s and 1980s. Therefore, the renewed access of the public sector to international credit allowed central banks in Latin America to focus on the critically important development of monetary institutions which could allow the region to reach price stability.

However, the notable success of Latin American governments in attaining price stability contrasted with their slow progress in improving fiscal performance. The result was that, while inflation decelerated sharply, both private and public external debt rose again, as budget deficits

coexisted with a significant pick-up in private sector indebtedness levels, fueled by significant recoveries in both private investment and consumption. The region's external debt increased from just above US\$400 billion in 1989 to over US\$750 billion in 1998.

When the financial crises in Asia and Russia struck, the external environment that had been benign until then turned highly volatile. The abundance of capital inflows was replaced by a sharp and sudden reduction in the supply of foreign credit to the region, along with a commensurate increase in risk spreads, exposing the weaknesses of current economic policies.

The required adjustment to the new external environment was significant, as shown by a reduction in the region's current account deficit, which dropped from US\$92 billion in 1998 to a surplus position of over US\$4 billion in 2002. The significant reduction in capital flows reflected the unwillingness of the international capital market to continue financing increasing levels of private and public debt, which, in the new market conditions, were no longer viewed as sustainable. However, the public and the private sectors did not adequately share the region's response to this new, and less favorable, external environment. In particular, the brunt of the adjustment was borne by the private sector, as evidenced by a significant improvement in the region's current account balance. However, public sector debts remained high.

One of the reasons why fiscal consolidation did not accompany the adjustment undertaken by the private sector was that, put simply, many policymakers wanted to prevent the public sector from behaving pro-cyclically in times of recession. This line of reasoning was based, on the one hand, on conventional optimal fiscal policy (tax-smoothing) principles and, on the other hand, on the belief that the international capital market would regard resulting deficits and debts as sustainable. This state of affairs reflected the fact that although IMF conditionality generally recommended reducing budget deficits in order to strengthen fiscal solvency, the conventional fiscal-policy framework used by the Fund—and by capital markets—lacked clear guidance as to what debt levels should be viewed as sustainable and which should not.

In addition, the higher risk perception placed by capital markets on the region resulted in a significant decline in FDI, especially following the Argentine crisis in 2001, raising concerns about future potential growth and, hence, about the sustainability of current public debt levels in many countries.

The 1990s experience yielded a number of important policy lessons. In particular, it became clear that defining fiscal sustainability is far more complex than would be suggested only by looking at simple definitions of intertemporal solvency. In contrast to the scenario in advanced economies, a number of factors—e.g., liquidity constraints, liability dollarization, and low government revenues—influence the judgment that investors make about

an emerging market country's future potential for repaying its liabilities.

Another difference between industrial countries and emerging market economies lies in the recent significant volatility in the capital market in the latter, often due to contagion. In such a context, the definition of fiscal sustainability becomes a particularly difficult task, as solvency and liquidity considerations become intertwined. Moreover, sudden stops in financing flows often force fiscal policy to behave pro-cyclically.

Conventional analysis associates the concept of fiscal sustainability with the ability of a government to be intertemporally solvent while maintaining continued access to the capital market. In that world, optimal policy is characterized by the well known “tax-smoothing” principle. Interestingly, solvency in and of itself is not an adequate guide to distinguishing what debt levels are sustainable from those that are not; for instance, solvency is, in principle, consistent with any debt-to-GDP ratio that is held constant over time.

In contrast, governments in emerging markets typically find themselves in a situation where their capacity to service the outstanding public debt in full is questioned by the capital market; thus, the assumption of unlimited access to the capital market within a given intertemporal budget constraint does not apply. In this case, liquidity and solvency considerations become intertwined, and, as a result, fiscal sustainability requires the adoption of adequate liquidity-management strategies. The requirement that fiscal policy, in addition to being consistent with intertemporal solvency, also satisfy a liquidity constraint—for instance, that it not exceed a maximum yearly borrowing requirement—offers a stricter notion of fiscal sustainability. In particular, it can be shown to be a realistic argument, when designing fiscal policy, for adopting debt ceilings, and for lengthening the maturity of the public debt. Empirical “safe” debt ceilings suggested by different studies lie around the 30 percent of GDP threshold, a level still exceeded by all Latin American countries except Chile, where debt levels are slightly above 10 percent of GDP.

The definition of fiscal sustainability is also made complex by dollarization, as the public sector becomes particularly exposed to the balance-sheet effects associated with large swings in the nominal—real—exchange rate. Dollarization is often policy-induced since, by dollarizing their liabilities, governments may find it easier (or cheaper) to fund themselves, or to lengthen their debt maturity. In turn, by producing dollar-denominated public debt benchmarks, the strategy of dollarizing the public debt also induces the private sector to issue dollar debt instruments. Thus, as has been extensively documented, dollarization is a process that displays persistence.

The factors discussed so far are essentially of an economic nature. Experience in a number of countries, however, suggests that non-economic factors also play a determining role in shaping the credibility of a given fiscal policy framework. For instance, election time has often

proven to be an unusually volatile period, forcing the capital market to gauge the attitude of potential presidential candidates toward meeting the service requirements on outstanding public debt. During these periods, the attention of the market shifts from the *economic* definition of debt sustainability based on the *capacity to pay*, to a *political* one based on the *willingness to pay*. The degree of a country's institutional development, the presence of checks and balances to balance the interaction between different interests in a democratic society, and the respect for, and track record of, the rule of law are all factors to be taken into consideration when determining politically sustainable debt levels. This debt level may, in fact, turn out to be significantly lower than the economically sustainable one.

I would argue that, in a democratic society, the propensity of the political establishment to endorse default when it is technically avoidable often reflects the same difficulties the government has in raising revenues, a problem rooted in citizens' perception that the state is, by definition, highly inefficient and/or corrupt. It follows that, as people question their government's use of its revenues, they tend to regard debt as "illegitimate." Tax evasion becomes rampant, as the private sector attempts to provide privately some of the public goods that should otherwise be provided by the state.

All these issues affect the role of the IMF in the region, leading me to two conclusions: first, liquidity and debt management policies should be integrated more fully into the fiscal framework. But emphasis should be given to liquidity management strategies when interest rates are low and when the external environment is favorable, since reacting under threat of crisis may be excessively costly and possibly counterproductive. Second, there should be resumed discussion of the role of facilities such as the extinct Contingent Credit Line (CCL), possibly tying access to the CCL to the adequacy of a requesting government's efforts to lengthen the maturity structure of its liabilities and strengthen its net liquidity position. Moreover, serious accounting for liquidity and institutional/political considerations calls for design of a new and enhanced IMF fiscal conditionality framework, moving away from debt sustainability analysis based mainly on medium-term projections and the associated sensitivity analysis.

In sum, the past decade has presented us with rich experience, both for the design of domestic policy, and for the role of the IMF. Clearly, many governments in the region are more conscious today of the advantages, for stability and growth, from prudent fiscal and monetary policies, lower debt levels, and high international reserves. Some have made progress in a number of these areas. At the same time, other governments—notably that of Argentina—appear to have strengthened their fiscal stance more as a result of an ideological reaction to globalization than from any real belief in market-oriented reforms. In addition, public debt in most countries remains high, despite recent fiscal improvements.

In the end, it remains to be seen how these lessons will translate into practical changes in the manner in which governments, politicians, and multilaterals carry out their business and responsibilities. In particular, with the notable exception of Chile, significantly enhancing the professionalism of the public service and of political institutions remains a region-wide challenge. Good theory without adequate management is unlikely to pull Latin America out of its recurrent cycles of boom and bust.



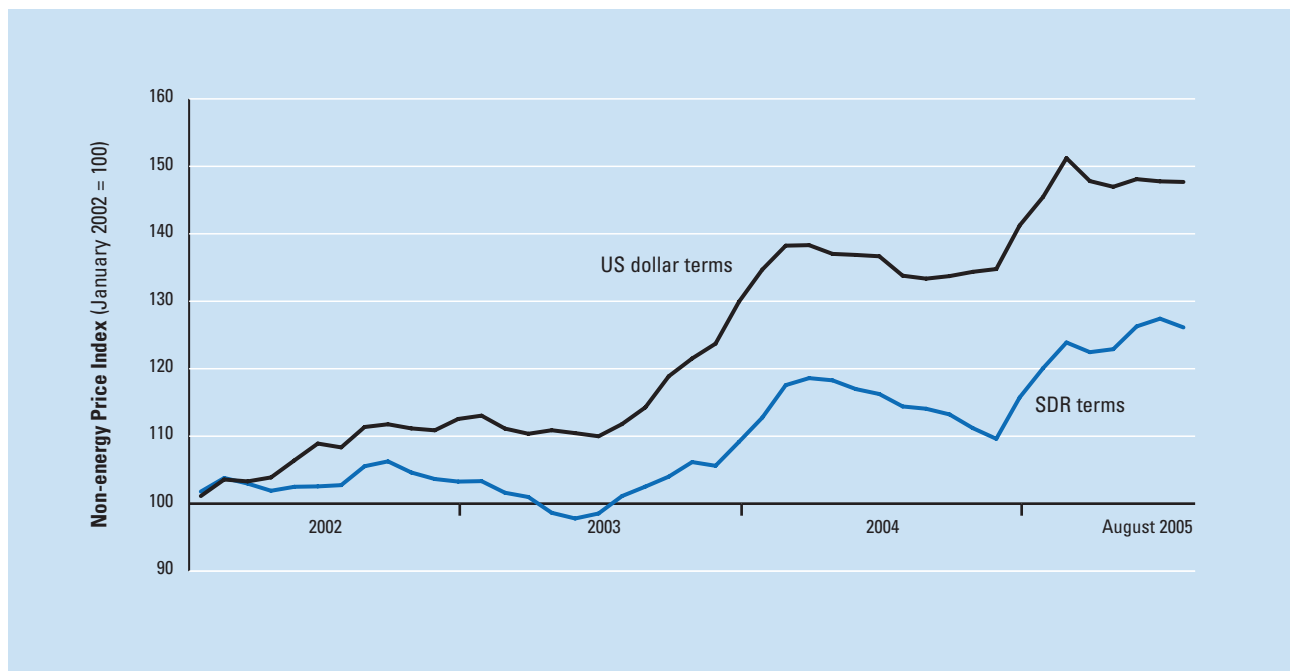
# Latin America and the External Environment: A Missed Opportunity?

MARIO I. BLEJER,<sup>1</sup> Bank of England

## The context

From the point of view of emerging markets in general, and of Latin America in particular, it is convenient to depict the international financial landscape as a constellation encompassing five critical characteristics:

1. A relatively high, persistent, and geographically well synchronized rate of world growth. The 2001–2002 recession is well behind us and most observers predict average rates of world GDP growth will be above 4 percent per annum until the end of the decade (2010). While some doubt the ability of the United States to continue to be the locomotive of growth among industrial countries, prospects for world growth are increasingly sustained by the awakening of Japan and improvements in the growth prospects of Europe. Moreover, the Asian emerging giants, China and India, are certain to continue to grow at very high rates, while many of the oil exporting countries are rapidly increasing their spending and contributing to a dynamic world economy.
2. The dynamism of world growth is occurring within an environment of low inflation, in both industrial and emerging economies. This low inflation arises from clear improvements in monetary management across many countries, but also from real factors affecting a vast array of goods and services. The incorporation of enormous numbers of unskilled workers into the market economy, mainly in China, India, and the countries of the former Soviet Union, is putting permanent downward pressure on the price of labor-intensive manufactured goods. On the other hand, the continuous and impressive gains in productivity in industrial countries, particularly in the United States, is leading to reductions in the production cost of sophisticated and technology-intensive goods and services.
3. World liquidity continues to be abundant, leading to risk taking, the search for higher yields, and nominal and real interest rates that still remain at historically low levels. Despite the important upward adjustment in policy rates in a number of countries, the long-term cost of capital is low, reflecting, in addition to liquidity, the perception of persistent low inflation.
4. Commodities and energy prices are at record highs. Rapid growth has increased demand and the very high levels of growth, particularly in Asia, have led to unprecedented price performance for a wide range of commodities, many of which are important within the production and export set of Latin American countries. Thus, for example, Venezuela, Mexico, and, to a lesser extent Ecuador, benefit from high oil prices. Chile is gaining from the copper boom, and

**Figure 1: Non-energy Price Index (January 2002 = 100)**

Source: International Monetary Fund, 2005.

Argentina and Brazil are thriving on the surge in soy-bean and other agricultural commodities (Figure 1).

5. The cost of foreign financing which Latin American countries are facing is extremely low. The average spreads over benchmark rates—measuring country risk—have not been so low in decades. While part of this reflects plentiful liquidity, it is also the result of clear improvements in macroeconomic fundamentals (including the rapid accumulation of reserves), and is evidence of more responsible policy implementation.

### Two central questions

While not all Latin American countries enjoy equally all the benefits of this buoyant external constellation,<sup>2</sup> it is not an exaggeration to assert, at least in terms of the benign nature of the external environment, that Latin America is experiencing a “golden era.” However, beyond the obvious concern regarding vulnerabilities, and the risks to the sustainability over time of this upbeat world scenario, there are two very important, related questions which must be answered in order to assess the medium- and long-term outlook for the region.

First, if one combines this bright international setting with the current regional performance, one should ponder whether this is indeed the “end of history” for Latin America. Certainly, the short-term prospects seem, at least at first sight, to be encouraging. Latin America and the Caribbean are expected to grow at an average of 4.5 percent in 2006, with South America exceeding the 6 percent mark.<sup>3</sup> Accumulated growth in GDP per capita for the

period 2003–2006 is estimated at 11 percent in an environment of generalized fiscal discipline and external surpluses. The question is, therefore, whether the region has left behind its turbulent history of cyclical fluctuations and turned the corner, entering into a new and prolonged period of growth, creating the conditions to finally tackle other, deep-seated, long-standing, and pervasive problems.

If the answer to this question is “not yet”—and I believe that to be the accurate answer—then the obvious question is whether the region is missing a unique opportunity and, if so, what are the policy implications? What are the key problems which must be addressed, and how should this challenge be tackled? How could the above set of exceptional circumstances be exploited to position the region correctly within the rapidly evolving global economy?

### Falling behind?

One possible way to correctly gauge the standing of the region, following two years of an extremely favorable external environment, is to put it in global perspective. Despite improved performance, Latin America has experienced rates of economic growth and employment creation below those registered in other regions and other emerging markets.<sup>4</sup> The region is, therefore, falling behind with respect to other parts of the global economy. Moreover, rates of investment, savings, productivity growth and technological progress, are also below those of other regions. However, the most vexing problem is that poverty remains pervasive while, as we know well, Latin America’s income distribution remains the worst in comparison with any



other region in the world. Clearly, current rates of growth are insufficient to substantially alleviate these problems and to trim down income and opportunity inequalities, without strengthening negative incentives.

How can one explain this apparent dichotomy between excellent external conditions and improved macroeconomic management, on the one hand, and long-term lackluster performance, as reflected in lagging social indicators and in relatively uninspiring GDP prospects, on the other? Perhaps an example would help to elucidate this current Latin American predicament. Most estimates project rapidly increasing regional imports for 2006.<sup>5</sup> Due to increased incomes, consumption demand is rising, and, in order to satisfy this demand, local firms have the choice either to increase investment in order to expand productive capacity or to raise the volume of imports. In remarkable numbers, entrepreneurs choose to rely on imports. It seems that rigidities in the economy—particularly lack of labor market flexibility—along with uncertainty regarding the legal framework and property rights are the reasons for the reticence on the part of producers to take decisive steps to expand productive quality and capacity. As the authors argue in the main body of this *Review*, and as can also be seen in the Country Profiles in the last section, the data delivered recently by the World Economic Forum in the 2005 Executive Opinion Survey provide compelling evidence of this trend.

While some may dispute the validity of the above example, and claim that, in the aggregate, investment figures do not look as grim, it is quite clear that the quality of investment and its composition are worrisome. Investors are more inclined to assign their savings to non-productive capital assets, such as residential and luxury construction—where property rights seem to be better protected—rather than tie their resources up in various forms of productive activity. As a consequence, many Latin American countries may be squandering the exceptional opportunity arising from the global boom.

### The challenge

To waste such a historic array of promising conditions would, indeed, be regrettable. However, it seems that the world outlook and prices have taken a highly favorable turn for Latin America after a decade of unsupportive global conditions, which coincided precisely with a period (the 1990s) of substantive structural reforms. That period, familiar to all, ended up, at best, in disappointment, and, at worst, in catastrophic crises. This, of course, is behind the much discussed “shift to the left” in the region, and is limiting the ability of policymakers to introduce the necessary competitiveness-enhancing reforms. The situation is further complicated by widespread public skepticism about the direct benefits of such reforms.

But, if pragmatism could be made to prevail over ideology and disappointment, and if part of the current benign conditions could be redirected toward the

improvement of social conditions in order to reduce political pressures and tensions, it may be possible to define and implement the mechanisms that would boost the current rates of private investment throughout the region. Increases in both domestic and foreign rates of investment are crucial to boosting productivity, the key to competitiveness.

Given that the region is producing what the world wants today, that financing is cheap, and that terms of trade are so favorable, this could be a good moment to promote private investment. However, private investment requires a better business climate which, in turn, demands both legal certainty and predictability of rules, as well as attractive levels of expected profitability.

Much has been said about the need to improve the legal framework, reduce discretion, strengthen predictability, and enforce clear and transparent rules of the game. These are all, indeed, fundamental elements, but they cannot be implemented by decree. They are part of a political and cultural environment that evolves over time. Although they should guide policy and remain always in the background, it is not easy to formulate a policy agenda based solely on those principles. However, without the widespread perception that private-sector capital is protected, no investment process is likely to be sustained long enough to make a difference in reducing poverty, redistributing income, and improving social conditions.

Enhancing profitability, on the other hand, requires tangible and clear-cut steps in a number of areas. In fact, the improvement of competitiveness and profitability is the decisive element defining the path that the region should follow.

Will Latin America finally turn the corner? Optimism should prevail. In concrete terms, however, optimism will be reflected in the answer to the question whether Latin American elected leaders will have the vision and the courage to take advantage of this unusual external configuration to steer their countries toward the path of competitiveness and productivity which would ultimately solve their economic and social deficits, or whether—in keeping with earlier history—they will be content to simply exploit the extraordinary cyclical bonanza for short-sighted and short-lived political gains.

### Notes

- 1 The views expressed are solely those of the author.
- 2 For example, countries such as Chile or Uruguay are hit by high oil prices, while Mexico and a number of Central American countries are negatively affected by Chinese competition in third markets.
- 3 This compares with an average regional growth of 2.6, percent over the period 1990–2002.
- 4 While the region is expected to end the period 2003–2006 with an average growth rate of slightly more than 4 percent, emerging markets as a whole are expected to grow, on average, over the same period, by 5.7 percent.
- 5 The same projections also predict that export growth will outpace imports; therefore, the external position will still improve, reducing the level of net indebtedness.

---

## References

- International Monetary Fund. 2005. *World Economic Outlook*. September.
- World Economic Forum. 2006. *Global Competitiveness Report 2005–2006*. Hampshire: Palgrave MacMillan.

## Chavismo vs. Chilenismo

MOISÉS NAÍM, Editor-in-Chief, *Foreign Policy Magazine*

For decades, Latin America was viewed as the backyard of the United States—a region where the United States government meddled in local politics, fought communists, and promoted its business interests. Even if the rest of the world wasn't paying attention, the United States was. Then came September 11th, and even the United States seemed to tune out. Latin America became Atlantis—the lost continent.

Now Atlantis is resurfacing as Afghanistan. Not because it is a breeding ground of Islamic terrorists but because, like Afghanistan, Latin America has become a place where, after scoring a major victory in the battle of ideas, the United States abandoned it, thus allowing the ideas it had defeated to fill the political vacuum.

Nowhere is this peculiar trajectory more spectacular than in Bolivia, whose successful adoption of market reforms in the late 1980s and early 1990s made it an international example of how to tame hyperinflation. Democratically elected governments were openly pro-American, friendly to foreign investors and undertook an aggressive, US-sponsored program of coca eradication that substantially shrank the acreage devoted to coca farming. Today, Evo Morales the leader of the coca growers and newly elected president of Bolivia recently predicted that he would become “the United States’ worst nightmare.” And then there is, of course, Hugo Chavez, who has transformed Venezuela, an historic oil-supplying ally of the United States, into one of its fiercest foes. Naturally, the world is beginning to pay attention.

### From Atlantis to Afghanistan

Latin America's newly acquired visibility stands in sharp contrast to its dimmed presence in the international scene since the mid-1990s. One commentator quipped that Latin America could not compete in any category—not even as a threat. The only weapon of mass destruction it produces is cocaine. Nor was Latin America mismanaged enough to fail spectacularly. Unlike Africa, Latin America has no regular famines, genocides, pandemics, or state implosions. Bono and Bill Gates worry about Africa, not Latin America. CEOs travel often to Shanghai and Bangalore and rather less to Mexico City and São Paulo. Journalistic fame is more likely to be attained writing from Baghdad than from Bogotá. Even Latin America's financial crashes—which in the past regularly rattled the world's markets—seemed not to matter any more. Argentina experienced a massive financial stroke in 2000–2001 and, except for a few thousand gullible bondholders abroad, no one seemed to care.

All that is changing now.

The region's heightened visibility owes much to the antics of Hugo Chavez, Venezuela's charismatic president. Many world leaders have been critical of George W. Bush's policies, but no other sitting head of state has publicly insulted Bush and his team the way Chavez has.

Until recently, many in the United States and Europe were content to dismiss Chavez as a short-term phenomenon. Early on, the US Ambassador to Venezuela soothingly said that people should not pay attention to what President Chavez said, but to what he did—and that his actions weren't cause for alarm.

That complacency is now gone. Thanks to its immense oil revenues, Venezuela has now surpassed the former Soviet Union in the financial support that it provides to Cuba's bankrupt economy. And Chavez' behavior has delighted Iran, Cuba, North Korea, Argentina, Ecuador and radical new political groups in Bolivia, Nicaragua, Peru, Brazil, or Mexico. Venezuela has joined the Arab League in denouncing the attempt to curb Iran's nuclear program and promoted the support of Hamas among its Latin neighbors. For these groups and nations, Chavez is not a dangerous populist but a generous financier, a champion for the poor, whose political innovations are showing the way for the dispossessed and powerless.

Chavez, it now appears, is more than just another of Latin America's many colonels-turned-populist. He may be the harbinger of a new wave of radical anti-market, anti-American policies in the region.

The first sign of Latin America's lurch away from its early 1990s posture was the 2002 election of union leader Luiz Inácio Lula da Silva in Brazil. But fears of his leftist radicalism turned out to be a false alarm. Lula quickly shed his reddish electoral clothing and adopted an orthodox economic policy that averted a financial crash and he is given credit for Brazil's improved economy. Yet Lula's performance has been deeply disappointing to his local leftist backers who would prefer to see their leader echoing Chavez' denunciations of capitalism, globalization, and the United States.

Then came the election of Argentina's Nestor Kirchner, who has also adopted a fiercely anti-American tone and less-than-friendly policies towards the private sector. He is also profiting handsomely from his close alliance with Chavez—Venezuela recently purchased US\$1 billion worth of high-risk Argentinean bonds. By 2004, this political wave had spread to Uruguay, which elected the leftist Tabaré Vazquez, whose orthodox economic stance is also disappointing his leftist backers. Then the victory in early 2006 of Evo Morales in Bolivia, whose postures and policies at home and abroad are almost identical to those of his supporter and ally Hugo Chavez. The only difference is Morales' policy towards coca, which is not grown in Venezuela. Morales has relaxed the policies on coca eradication and experts expect Bolivia's coca harvest to rapidly double.

### Is Latin America really turning left?

2006 is emerging as a key test period for how far this new political wave will advance. The calendar is chock full of elections in Latin America and in many of them left-leaning candidates and Chavez-imitators are strong contenders. In

Peru, Ollanta Humala, who, like Chavez, is a military-coup-leader-turned-democratic-candidate, enjoys significant popularity. In January, he showed up in Caracas for a meeting with Chavez and Evo Morales. Chavez' oil money is suspected of having given Humala a powerful boost, a suspicion that led the Peruvian government to recall its ambassador in Caracas in protest.

On the US doorstep, Mexico City mayor Andrés Manuel López Obrador—another leftist—is leading the polls and may become president. The Mexican government has also protested Chavez' meddling, and it too recalled its ambassador in Caracas.

But unlike Chavez, Lopez Obrador, as president, will face a strong and independent party system, a Congress with a powerful opposition, a military that retains some institutional independence from the executive, a more autonomous judiciary and Central Bank, and a far stronger private sector. Mexico also has a free trade treaty with the US and Canada that greatly limits the scope of the policy changes the new president can freely institute.

Still, it's remarkable to see how strong the leftist atmospherics are in Mexico. A recent New York Times dispatch reported the scene at a political rally from another leftist candidate: "The crowd of masked supporters, many of them farmers bused in that morning, held banners with slogans like "Death to the Free Trade Agreement" and "Death to Neoliberal Globalization." A red flag with hammer and sickle flew in the crowd. Nearby someone had strung up large portraits of Marx, Engels, Lenin, and Stalin." A similar spirit also informs the rallies of Daniel Ortega, Nicaragua's former strongman, and a strong contender in that country's coming presidential election.

Interestingly, one of the few Latin American countries that seems safe from the leftist trend is one with a long-standing socialist government: Chile. There, Michelle Bachelet won the election and took over from socialist Ricardo Lagos, who by all measures is one of the world's most successful chief executives. In Chile, however, one will be hard pressed to discover what is "socialist" or "leftist" about government policies, other than the label its leaders like to use for themselves, and the fact that many of them were leftist politicians persecuted by the Pinochet dictatorship. (Bachelet's father was killed, and both she and her mother were tortured and exiled.)

Chile's sound economic policies have propelled the small, remote country in the Andes to the top of the world's rankings in economic growth, inflation, poverty alleviation, low corruption, competitiveness, personal safety, democratic freedoms, respect for human rights, attractiveness as an investment location, and job creation. In fact, Chile's statistics are more similar to the East Asian miracle economies than to those of its Latin American neighbors. Without the benefit of huge oil revenues, Chile has lifted more people out of poverty and into the middle class than any other Latin American nation.

Yet, Chile does not seem to be the model that excites the imagination of the vast majority of the Latin American poor. What motivates them is not Chilenismo. It's Chavismo.

### **A paradox at the center of Latin America's current woes**

The paradox is striking and explains much of Latin America's current predicament. And in its resolution may rest the region's future prospects. Chavez, who is now the longest serving Latin American president after Castro, has enjoyed immense oil revenues which, coupled with his complete political hegemony, give him an autonomy enjoyed by no other head of state in the region. His message and his actions have certainly sparked the hope and the support of millions—not just in Venezuela.

The enthusiasm for Chavez seems to thrive, despite what all objective observers recognize as a less-than-stellar performance in terms of social gains. Venezuela's own official statistics and those of independent multilateral organizations show that Chavez' longstanding, wealthy government has yet to create much prosperity for the Venezuelan population or make a significant dent in the poverty that ravages the country. Corruption, always a problem in Venezuela, is flourishing. Still, Chavez' popularity is high and his political ascendancy does not seem to be waning.

The reasons for Chavez' political success—despite his administration's poor performance—are many and diverse. High oil prices, inept political adversaries at home and in the US created opportunities that Chavez ably exploited. The heightened intolerance with corruption and social exclusion, the anti-Americanism stoked by the Iraq war and the widespread disappointment with the promises of market reforms and globalization of the 1990s also feed the popular mood common to many Latin American countries that Chavez and others like him mine very effectively. Throughout Latin America, political messages stoking the politics of race, rage, and revenge play well in a public hopeful for change, for redress of past injustices, and punishment for the real or imagined culprits of the miserable conditions in which the great majority still live.

The problem, of course, is that many of the policies embraced by the new wave of radical Latin American politicians—policies which generate great enthusiasm among their millions of supporters—are not that different from those which their predecessors in power had already tried. Not only were these state-centered policies a failure, but they are a major cause of the region's current poverty, corruption, inequality, unemployment, and dismal international competitiveness. While the region did experiment in the 1990s with market-oriented economic reforms, in most countries they were more announced than actually adopted, and when implemented, their execution was often partial, botched, or short lived. One of the most dangerous and poverty-inducing myths shared by millions of Latin Americans and public intellectuals there and

abroad holds that market reforms were fully tested in Latin America and failed.<sup>1</sup>

Herein lies a central challenge for Latin America: how to combat the wave of learning disability that sweeps its most popular political leaders. And its corollary: how to make more acceptable the ideas that, as Chile has shown, are the best antidotes for the region's maladies.

The policies that are now popular in Latin America do not work. And those that work are widely unpopular. These realities can only be reversed by a major effort at producing political proposals capable of combining the popularity of the bad ideas with the effectiveness of the good ones. The first task ahead in Latin America is not political. It is ideological. It is to equip leaders willing to confront the popular but backward-looking politicians now in power with more potent ideas. Just extolling free markets and showing concern for the poor will not do it.

### **Note**

1 See Naím (2002).

### **Reference**

Naím, M. 2002. "The Washington Consensus: A Damaged Brand." *The Financial Times*, 28 October.





## Is Latin America Moving Left?

ARTURO VALENZUELA, Georgetown University

The end of the Cold War ushered in profound change in Latin America. In Central America decades long civil conflicts came to an end, while authoritarian regimes that were the norm throughout the Americas gave way to elected governments and the longest era of constitutional rule since independence at the beginning of the 19th century. The shift towards democratic governments was accompanied by the opening of markets and the downsizing of the state, abandoning policies that had encouraged import substitution industrialization behind protectionist barriers.

Twenty-five years after the onset of these transformations, their success is decidedly mixed. Although there has been only one classic military coup in Haiti, in 1991, weak governments have been the norm, as political leaders have struggled to implement public policies and strengthen governing institutions. Fifteen presidents have been driven from office before the end of their constitutional terms, as civil unrest and political paralysis has made their continued tenure untenable. Inchoate and fragmented political parties and divided governments, where presidents have been unable to command majorities in the legislature, made it difficult for chief executives to count on the necessary political support to effectively address economic and social crises, often aggravating the effects of internal and external shocks. Surveys show that citizenry has a skeptical view of politicians, parties and parliaments, believing that they serve their own narrow interests rather than the public at large.

Economic stabilization policies and structural reforms, including privatization of state-run industries and utilities, did bring inflation under control and spurred export growth. However, Latin America's growth rates continued to lag behind those of other developing areas. According to the *World Economic Outlook* in the 20-year period between 1985 and 2004, Latin America and the Caribbean grew an average of 2.6 percent, compared to a world average of 3.5 percent, and 7 percent for Asia. And, although trade liberalization and financial liberalization helped spur the income of educated sectors of the population, they did little to increase the wages of the poor. Low-income groups did benefit from the taming of inflation, but median household incomes lagged. In Brazil, median household incomes remained barely above the poverty line of US\$2 per person per day. Latin America and the Caribbean remains the continent with the widest gap between rich and poor of any in the world.

It is this "failure" of Latin America to measure up to the promises of democratization and economic reform, as encouraged by the United States and the international financial institutions, that has led President Hugo Chavez in Venezuela to proclaim the end of the "Washington Consensus," as he seeks to forge a new axis of nationalist governments with socialist agendas in the Western Hemisphere. With the election of Chavez' ally, Evo Morales, the new indigenous President of Bolivia, many commentators have argued that Latin America is tacking towards a populist anti-American left that could undo the

reforms of the 1980s. Morales' election came on the heels of the victory—the first in history—of the united left in Uruguay, and follows earlier electoral successes of leftist candidates in Ecuador and Brazil. And eight more countries in the Hemisphere face presidential elections during 2006.

There are three problems with the argument that Latin America is inexorably moving to the left. It ignores contradictory trends, mischaracterizes the left in Latin America, and fails to draw the proper lessons for the future. The most notable contradictory trend is the continuing support for leaders of the right and more established parties in Central America. Over the last three years elections in El Salvador, Guatemala, Honduras, and Nicaragua have given majorities to leaders of the right, and in Panama and the Dominican Republic, to centrist leaders who have embraced free market economics. In the tumultuous Andean region, Álvaro Uribe, the hardline President of Colombia—arguably Washington's closest ally in the region—has one of the highest popularity levels of any president in Latin America, and is certain to be reelected in May.

In the remaining seven elections, Costa Rica is likely to return to office in April former President Oscar Arias, leader of one of the traditional parties, and in Brazil the polls show that leftist President Lula may have a hard time defeating José Serra, his rival in the last election. In Ecuador's notoriously fragmented political system—the last three elected presidents did not finish their terms in office—it is unclear whether another anti-establishment candidate like Gutierrez will win the presidency. Sharp divisions among indigenous groups suggest that Ecuador is not likely to see a leader that is the equivalent of Morales. In Venezuela, it is certain that Chavez will be reelected in December, but it is unclear what will transpire in Mexico, Peru, and Nicaragua. Mexico City mayor Andrés Manuel López Obrador has maintained his lead in the polls, but faces a difficult challenge from Felipe Calderón of the Conservative PAN, who has been able to position himself as the “fresh” face in the race. In Peru, nationalist candidate Ollanta Humala has tied center right Lourdes Flores for the April contest, but so far appears highly unlikely to win a majority in the first round, and appears likely to lose in a second round. In Nicaragua the split of the Liberal party could very well propel the Sandinistas to the presidency in November, much to the concern of Washington.

It must be underscored, however, that no matter who wins the 2006 elections, the Chavez phenomenon is unlikely to reproduce itself. Should candidates of the left achieve the presidency, none would have majorities of their own parties in Congress, and would have to govern through accommodation and compromise, lest they face the decision-making paralysis that toppled many of their counterparts in the region. And none would have the oil resources available to Chavez to engage in populist redistributive policies at home and abroad.

This observation leads to the second point. It is a serious misnomer to consider that the “left” in Latin America

uniformly shares the Chavez vision of the world. Indeed, there is another left in Latin America, that differs sharply from Chavez' populist rhetoric and bombast. It is best exemplified by the Chilean left, which has led the center-left coalition in Chile during the past six years, and will continue to govern after March of this year (2006). Although committed to a proactive role for the state in addressing social problems and in regulating the economy, it has embraced free markets and international trade, signing far-reaching free trade agreements with the United States, Europe, South Korea, and China. From 1991 to 1997, Chile's export-led growth in real GDP averaged 8 percent. While growth rates declined in the wake of the Asian and Brazilian crises, and efforts by the government to maintain monetary discipline, the last two years have seen a significant recovery. Among Chile's most notable achievements was the reduction of poverty levels from 40 percent to about 15 percent as the country's per capita income levels doubled. President-elect Michelle Bachelet has committed to addressing further the disparities between rich and poor, and to investing more generously in education and infrastructure to increase the country's competitiveness, while reforming the tax system and ensuring that public expenditures benefit the poor. While differing with many of the objectives of US foreign policy globally, as most governments in Latin America do, Chile has clearly opted for a different strategy of engagement with the United States and the hemisphere that differs markedly from that of Chavez.

Leftist governments in Brazil and Uruguay are closer in terms of personal affinities and public policies to the “social democratic” left in Chile than to the “populist left” of Chavez or Morales. And it remains to be seen whether Morales, heavily constrained by the enormous institutional weaknesses of the poorest country in South America, will be content to accept a flood of petrodollars, or will, instead, seek to make peace with the international investor community, in order to make Bolivia's economy viable. Should Lopez Obrador be elected in Mexico, he would have few incentives to openly align himself with Chavez, while facing minority support in Congress, and having to work constructively with the United States. Finally, public opinion polls conducted by *Latinobarómetro* taken across the region, do not suggest a significant shift in the aggregate over the last ten years, as people view themselves as centrists, while wanting access to the consumer products they believe globalization should provide.

But Chile provides a third valuable lesson, quite apart from being a country led by a center-left coalition that implemented policies to maximize growth by opening markets and fostering exports. Chile's success is due not simply to its having chosen to pursue sound economic policies. Those policies were implemented in a country with strong institutions, a strong legal and judicial system, and a stable governing coalition, which enabled market reforms to actually work. The answer to growth with equity in Latin America is not a return to an era where

---

leaders seek winner-take-all triumphs, undermining institutions and the rule of law, while over-stimulating the economy for short term political gain, and thereby opening the way for the next cyclical crisis. The answer lies in strengthening institutions, the rule of law, and forging political consensus for the long-term task of constructing nations for the future.

### Reference

International Monetary Fund. 2005. *World Economic Outlook*. Washington, DC: IMF.



## ESSAY 2.5

## The Politics of Policies

ERNESTO STEIN, Inter-American Development Bank

The history of economic and social development in Latin America is dominated by the search for new paradigms: simplified ways of understanding how the economy and society function that offer governments a variety of policy alternatives. Latin America has ridden the wave of successive paradigms from the state-run, inward-looking development of the postwar era to the liberalization of the Washington Consensus in the 1990s. As with other paradigms, the region's enthusiasm for the Washington Consensus has waned, and it is now in search of a new paradigm that offers better economic results, more stability, and greater equity.

This year's Inter-American Development Bank (IDB) Report, *The Politics of Policies*, suggests a change of focus in this search.<sup>1</sup> The diverse results experienced by countries adopting similar policies suggest that, perhaps, it's not just what you do, but how you do it. Perhaps it's time to look beyond the specific content of policies to the critical processes that shape them, carry them forward from idea to implementation and sustain them over time. Perhaps it's time to focus on the policymaking process.

Policymaking processes affect the type of policies that are adopted. But these processes may also imprint some common characteristics on public policies, which may be as important as the content itself. They can contribute to policy stability, or lead to large policy swings; they may facilitate policy adaptability, or lead to excessive rigidity; they can produce public- or private-oriented policies; they can affect the quality of policy implementation and enforcement. In short, they help determine the quality of public policies.

But looking into the black box that is the policymaking process (or PMP) is not a simple task. Policymaking involves a variety of actors—the president, legislators, political parties, ministers, the bureaucracy, judges, governors, business organizations, labor unions, grassroots organizations—interacting in different arenas, from the cabinet, the legislature, to the street. The key players, their roles and incentives, the characteristics of the arenas in which the game is played and the nature of the transactions the players engage in, while having common elements, vary considerably from country to country. For this reason, the research agenda that led to “The Politics of Policies” began with a series of country studies characterizing their PMP in great detail.

The relation between the PMP and policy characteristics such as stability or adaptability is also quite complex. One key aspect which, in our view, plays an important role, however, is the ability of political actors to strike and enforce intertemporal agreements, in other words, their ability to cooperate. Reaching an agreement on some set of policy issues and enforcing it over time may lead to stable policies or “Políticas de Estado,” (state policies), as opposed to policies that shift every time a new player comes to power. Cooperation may also facilitate adaptability. A lack of trust may imply the need to choose between unstable policies, or resort to safeguards—i.e., fixed rules

which are hard to change. Such safeguards may, indeed, limit opportunism and policy volatility, but at the cost of excessive rigidity.

The ability to cooperate depends on a variety of factors: the number of actors with substantial impact on the PMP—an excessive number may hinder cooperation; time horizons—the longer the better; the degree of divergence of preferences; the availability of arenas that facilitate political exchanges—such as a well-functioning legislature, the availability of credible enforcement mechanisms—such as an independent judiciary that binds the players to their commitments, and so on. In turn, these factors are affected by political institutions, such as constitutional and electoral rules, as well as cultural and historical legacies.

Using this framework, the report looks at the link between political institutions, policymaking processes, and policy outcomes through cross-country analysis, as well as the analysis of specific countries and sectors. The cross-country analysis begins with an effort to measure the common characteristics of policies discussed above: stability, adaptability, quality of implementation and enforcement, public orientation, etc., over the last couple of decades. In building measures for each of these dimensions, as well as an overall index of the quality of public policies, we draw on some existing international comparative indicators—many of them from the World Economic Forum's Global Competitiveness Report—as well as our own survey on state capabilities conducted in 18 countries in Latin America. Chile is, not surprisingly, the country with the highest policy index, head and shoulders above the rest. Brazil, Costa Rica, and Uruguay are among a group of countries with a relatively high policy index, while Ecuador, Paraguay, and Venezuela are among the countries at the other end of the spectrum.

The report also characterizes countries in terms of a variety of dimensions related to the workings of political institutions, such as the institutionalization of the party system, the constitutional powers of the president, the policymaking capabilities of Congress, the stability of cabinets, the quality of the bureaucracy, the degree of independence of the judiciary, among others. While the sample of countries is small and the results are merely suggestive, we do find a strong association between some of these institutional dimensions and the quality of public policies.

In particular, we find that public policies tend to be better when parties are long-lasting and have deep roots in society, but are also programmatic, rather than clientelistic. Policies are also better in countries where Congress develops strong policymaking capabilities, and engages constructively in the PMP. Countries with submissive legislatures that simply rubber-stamp whatever the executive proposes do not do as well. High quality policies are also associated with independent judiciaries, as well as with capable bureaucracies.

Perhaps the part of the report that best shows the policymaking process in action is the discussion of specific country cases. One of them is Chile, an obvious choice

given its relative success. While the president in Chile has substantial powers, the Chilean system is not lacking in checks and balances. Chile has an independent judiciary, as well as an electoral system that represents the second-largest coalition in Congress. The president in Chile does not impose his or her will. Rather, policymaking involves a strong dose of consensus building, both within the government's coalition, as well as with the opposition. Policymaking in Chile is further aided by strong technical capabilities of all major players in the policymaking game, including political parties, which rely on technical input from associated think tanks.

*The Politics of Policies* also looks at policymaking within the context of fragmented party systems, using the two countries with the highest levels of fragmentation, Brazil and Ecuador, to illustrate the issue. While governing in fragmented party systems is a challenge, the example of Brazil suggests that it can be done, provided the president has the ability to build and sustain relatively stable majority coalitions. For a number of reasons discussed in detail in the report, lasting coalitions are hard to build in Ecuador, and this contributes to political instability, as well as poor public policies.

The findings of the report suggest that good policymaking does not usually involve a dominant president. Such a system can often lead to policy instability—if different parties with different ideologies alternate in power—or to policies that cater to narrow interests. Presidents do need to be able to gather support in the legislature. But countries with reasonably strong checks and balances, in which this support is built through a process of consensus building, seem to work better—and enjoy better policies—than countries in which presidents typically get their way.

While good ideas and good policies are obviously important, the report on *The Politics of Policies* suggests that policymaking processes matter a great deal as well. In fact, it is only through the combination of good ideas and good processes—which may themselves lead to good ideas—that countries are going to achieve their development goals. Latin American countries should continue their search for good ideas, carefully adapted to their own circumstances. But they should also seek to adopt good rules of engagement that allow political actors to work constructively in the policymaking game. Doing so, and strengthening the policymaking capabilities of the key institutions that participate in the PMP—legislatures, judiciaries, bureaucracies and even political parties—are important components of any development strategy with a chance of success.

## Note

- 1 This article is based on the *The Politics of Policies*, the 2006 Inter-American Development Bank Report on the Economic and Social Progress of Latin America, coordinated by Mariano Tommasi, Koldo Echebarria, Eduardo Lora, Mark Payne, and the author. Available at: <http://www.iadb.org/res/ipres/2006/index.cfm> The views expressed here are those of the author, and do not necessarily reflect the official position of the Inter-American Development Bank.



---

## Reference

Stein, E., M. Tommasi, K. Echebarría, E. Lora, M. Payne (coord.) 2006. *The Politics of Policies*. Economic and Social Progress in Latin America 2006 Report. Washington, DC: Inter-American Development Bank. Available at: <http://www.iadb.org/res/ipes/2006/index.cfm>



## Poverty Reduction and Growth in Latin America: Virtuous and Vicious Circles

GUILLERMO PERRY, HUMBERTO LÓPEZ, WILLIAM MALONEY, OMAR ARIAS, and LUIS SERVÉN, *The World Bank*

Latin American economic performance in the last 50 years has been disappointing. Growth lagged in comparison to core OECD countries, at a time when East Asia and the “madre patria” on the periphery of Europe, Spain, were catching up very quickly. To compound the problem, income inequality has remained at very high levels, limiting the effectiveness of poverty reduction.

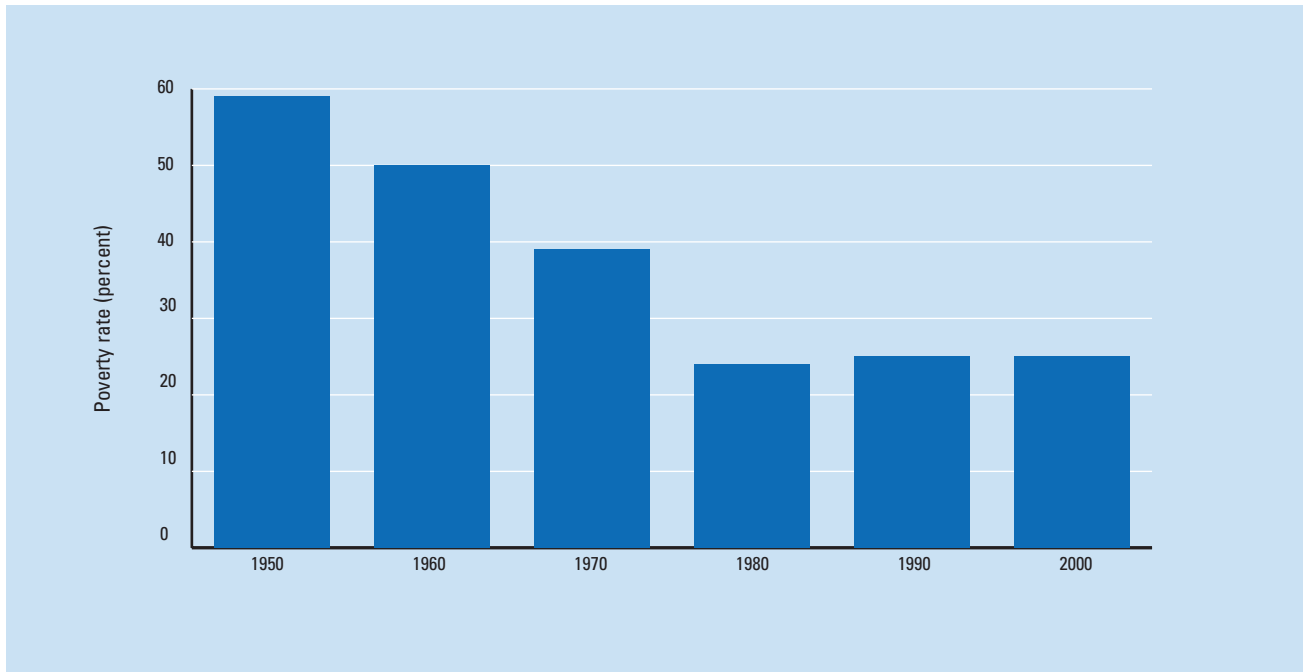
Thus, it should not be surprising that today (2006) close to a quarter of the population of Latin America lives on less than US\$2 a day. Figure 1 shows the evolution of poverty rates in the region since 1950.

How should the region address the region’s twin disappointments of relatively weak economic growth and persistent poverty and inequality? Should policy makers focus on achieving fast sustained growth as their main tool for poverty reduction, or should they concentrate instead on interventions that directly target the poor? The recent World Bank Latin American Region annual flagship publication, *Poverty Reduction and Growth: Virtuous and Vicious Circles*, argues that this is not an either/or question, and that efficient strategies need to focus both on growth and on direct attacks to poverty.

The reasoning is straightforward: on the one hand, there is no doubt that growth is crucial for poverty reduction. Countries that have historically experienced the greatest reduction in poverty are those that have experienced prolonged periods of sustained economic growth. For example, from 1981 to 2000, China’s poverty rate fell from over 50 percent to about 8 percent, owing to an impressive per capita growth rate of almost 8.5 percent per year. Similarly, between 1993 and 2002, Vietnam cut its poverty rate in half, from about 58 to about 29 percent, by growing at almost 6 percent per year. On the other hand, countries that have experienced economic stagnation or decline have typically witnessed dramatic increases in poverty. Furthermore, the existing literature indicates that there is no strong empirical evidence to suggest a general tendency that growth, per se, makes income distribution more or less equal. Growth, therefore, would be in principle as good for the poor as for everyone else in society, and this, in turn, justifies having a pro-growth package at the center of any poverty reduction strategy.

However, the existing evidence also indicates that poverty may, per se, be a barrier to growth, and, therefore, that poorer countries find it more difficult to grow than richer ones. That is, it could be the case that unless poverty is attacked directly, the chances of achieving the required high sustained growth will be significantly reduced.

To illustrate these issues, consider the following figures: today the median developing country has a per capita income of US\$3,000 (PPP), a figure that indicates only modest progress with respect to the situation 25 years ago, when income levels were about US\$2,500. In contrast, over this period of time, median per capita income in developed countries increased from about US\$15,000 to more than US\$25,000. More dramatically, in 1960, the income of the richest country at the time (Switzerland)

**Figure 1: Poverty in Latin America (1950–2000)**

Note: Using US\$2 a day poverty line; poverty rates for 1950–1980 were estimated using a log-normal approximation.  
 Source: Authors' calculations (1950–1980); Gasparini et al., 2005, for 1990 and 2000.

was about 50 times the income of the poorest country (Malawi). Today, Luxemburg has a per capita income level (PPP) almost 120 times that of Sierra Leone. In other words, the gap between the rich and the poor worlds seems to have been widening over the past decades, contrary to what neoclassical growth theory would have predicted. The World Bank report estimates that for every 10 percentage points of poverty, annual growth is about 1 percentage point lower, controlling for other determinants of growth.

The observed divergence between poorer and richer countries is also apparent when one focuses on Latin American regions within a country or on individual households. At the regional level, existing evidence for Brazil, Chile, and Mexico suggests regional income dynamics consistent with increasing polarization, little mobility among states, and the emergence of clusters of regions characterized by within-cluster convergence and between-cluster divergence. In other words, the gap between poorer and richer regions within Brazil, Chile and Mexico seems to be widening over time in a similar fashion to that observed across countries. At the household level, despite the regions' recent progress toward universal primary enrollment, the evidence for the Latin American region highlights a clear and persistent educational divide between the poor and the rich that creeps across generations: children of poorer families tend to have less and worse education than children of richer families, something which, in turn, affects their lifetime income expectations.

What factors lead to the situation where poverty at the country, region, or household level acts as a brake on

growth? The now extensive literature on poverty traps has identified a large number of factors which may perpetuate poverty, and which may prevent growth from taking place. Following is a representative list of some of these potential factors:

- Poor people often have limited access to financial markets or other necessary complements to private investment (e.g., property rights, infrastructure, etc.), essential to the accumulation of physical capital, knowledge, and participation in the growth process.
- Poor people are often in poor health, further reducing their productivity as well as compromising their ability to manage and generate knowledge.
- Poor people attend low quality schools and the low and late returns to education and diminished prospects for mobility prevent the accumulation of human capital essential for growth. Education enhances earning potential, expands labor mobility, promotes the health of parents and children, and reduces fertility and child mortality.
- Poor people may face more labor market risk, or may be less able to hedge against it, and thus find the benefits of investing in human capital, once adjusted for risk, to be less attractive. Moreover, the inability to diversify risk prevents greater specialization in agriculture or moves away from farm activities, both of which could lead to greater productivity. The poor are typically more risk averse than the rich, because losses

hurt them more severely; thus, in the absence of well-functioning insurance and credit markets, the poor will skip profitable investment opportunities that they deem too risky. Here again, societies with high poverty rates will show a tendency to under-invest.

- Poor regions and countries have fewer individuals capable of adopting, managing, and generating new technologies that would contribute to productivity.
- Poor regions may lack the infrastructure or human capital that make them attractive to extra-regional investment; neither do they have the resources to develop them, and are, therefore, unable to facilitate sectoral and territorial labor mobility in search for higher income opportunities.
- Ethnic or racial tensions in poor countries with poor regions tend to exacerbate income disparities, and this, in turn, leads to interregional tensions which render both regions and the country as a whole riskier to invest in.

This reverse direction of causality from poverty to growth would open the door to the existence of vicious (virtuous) poverty circles by which low (high) growth results in high (low) poverty and this in turn feeds back into low (high) growth. Whether these are, in fact, poverty traps which require direct intervention, or whether it simply takes much longer to make the transition to higher income states, is likely to be a distinction of secondary importance, particularly in the light of political economy issues. In fact, it could be argued that what is crucial is that smart investments in the poor can lead to virtuous circles, and that the issue of “pro-growth poverty reduction” is possibly as important as traditional concerns with “pro-poor growth.” In other words, investing in the poor is good business for society as a whole, not just for the poor.

The potential existence of vicious/virtuous circles between growth and poverty reduction enriches the debate surrounding optimal poverty reduction strategies in several dimensions.

1. The debate about whether strategies should emphasize pro-growth or pro-poor policies now appears somewhat less germane. Strategies that do not focus on growth ignore what is possibly the most potent weapon for improving human well-being at our disposal, especially in light of the limits of explicitly pro-poor policies discussed above. Yet if we fail to take account of the constraints facing the poor in participating in and contributing to growth, we undermine our capacity to generate it. For example, as discussed above, liquidity constraints, risk, and inequitable human capital investments appear to prevent the poor from making socially profitable investment in education that would enable them to escape poverty, and

fuel growth. Redressing these constraints gives rise to an under-examined dimension of policy analysis that might be called “pro-growth poverty reduction.”

2. The two-way relationship between growth and poverty reduction suggests that, ideally, policies should take into account both direct and indirect effects on growth and poverty reduction. This introduces new, but necessary levels of complexity in the evaluation of policy options on both agendas. As a simple but important example, conditional cash-transfer programs have an impact on poverty that goes beyond merely increasing the income of poor households—the usual goal of straight transfer policies. They also relieve credit constraints and provide a further incentive for improving human capital, both of which raise household income and eventually boost the economy as a whole.
3. Where pro-growth policies may have a short-term adverse impact on distribution and poverty—as appears to be the case with a number of policies, such as trade opening—this may actually inhibit growth; but when combined with complementary policies such as improved access to education and infrastructure, the short-term adverse poverty effect can be mitigated, and both the direct and indirect effects on growth will be enhanced. Moreover, compensatory actions to offset some of these effects—e.g., providing support to small farmers in non-competitive sectors during trade opening—take on added meaning, since they increase the effectiveness of reform policies, beyond those related to social protection.
4. Finally, transfer programs should always seek to directly stimulate the accumulation of assets that will advance the growth process, as do programs such as *Oportunidades* in Mexico, *Bolsa Familia* in Brazil, and *Familias en Accion* in Colombia.

## References

- Gasparini, L., F. Gutierrez, and L. Tornarolli. 2005. “Growth and Income Poverty in Latin America and the Caribbean: Evidence from Household Surveys.” Buenos Aires: Centro de Estudios Distributivos Laborales y Sociales (CEDLAS).
- Perry, G., O. S. Arias, J. H. Lopez, W. F. Maloney, and L. Servén. 2006. *Poverty Reduction and Growth: Virtuous and Vicious Circles*. Washington, DC: The World Bank Group.



## Mercosur's Identity Crisis

PAOLO ROBERTO DE ALMEIDA, University Centre of Brasilia

After decades of well-intentioned, but relatively fruitless attempts to form an integrated economic space spanning the whole region, the integration process in Latin America adopted a more limited geographical focus. Turning away from the rigidities of the past, countries adopted more flexible and gradual schemes, with a sectoral focus and shift away from the main axes of integration.

These are the features which characterize Mercosur, the most successful integration project of the 1990s. Strangely enough, Mercosur's origins can be traced to the rather *dirigiste* bilateral schemes adopted by Argentina and Brazil in the mid-1980s, and in the successive 1988 bilateral integration treaty, which aimed to establish a common market over a ten year period by means of sectoral agreements and complementary protocols of integration. In March 1991, the Asuncion Treaty expanded the bilateral treaty into a quartet, involving Uruguay and Paraguay.<sup>1</sup> Integration was made automatic, comprehensive in scope, and essentially market-based, reflecting the prevailing new liberal paradigm. The time frame was also more ambitious—in order to reach the “common market” stage by 1995—and tariff reduction became automatic and market-driven, instead of being led, as it had been previously, by a gradual process of specialization and product complementarity.

Despite the serious problems plaguing macroeconomic stabilization in Brazil and Argentina—the former still struggling to eliminate the generalized indexation of its economy, the latter recovering from two runaway inflationary outbreaks—reciprocal trade liberalization advanced rapidly, leading to a powerful surge in bilateral trade. This occurred in the context of increased trade flows with, and openness toward, the rest of the world, entailing very little trade diversion.

During the initial period, increased inflows of foreign direct investment (FDI), buttressed by the privatization processes underway in both economies, allowed Brazil and Argentina to deepen economic integration and raise intra-area FDI. Favorable terms of trade<sup>2</sup> also encouraged trade flows, with the result that Brazil became one of the few countries with which Argentina ran a trade surplus.<sup>3</sup>

However, Argentina's trade surplus did not last for long. By the late 1990s, it had turned into a deficit as Argentina entered a phase of low growth, compounded by larger budget deficits and a diminished level of FDI, all of which prompted the need for bond emissions on international financial markets. This finally provoked the subsequent serious financial crisis, which had a dramatic impact on Brazil as well. The concurrent devaluation of the real in 1999 heralded a new critical stage for Mercosur, which has lasted to the present. Despite spreading pessimism regarding its capacity to recover and face increasingly competitive Brazilian exports, Argentina struggled on for two more years, under the fiction of its convertibility plan, and the shadow of substantial external liabilities, the result of successive IMF support interventions which failed to provide a long-term solution. The crisis finally broke out at



the end of 2001, forcing Brazil to negotiate yet another agreement with the IMF, with essentially preventive effects. From this stage onward, Brazil started to attract more FDI to the industrial and service sectors, leaving Argentina in the position of “minor partner.” Structural asymmetries between Argentina and Brazil were exacerbated, as the latter set out to pursue increasing industrial specialization and sophistication, while the former remained confined to industries linked to primary products. Attempts at unilateral “macroeconomic coordination” and Argentinean threats to introduce full dollarization of its economy, did not solve the problems of Mercosur, which sank into a profound identity crisis, characterized by a sharp decrease in intra-regional trade flows.

Thus, a common market could not be established, nor even a less ambitious customs union, which had effectively been in place since 1995, but which had been hindered by too many exceptions to the Common External Tariff (CET).<sup>4</sup>

The Ouro Preto Protocol, signed in December of 1994 to “complete” the treaty of Asuncion, failed to create new institutions to manage integration. Nor did it establish mechanisms to facilitate the coordination of macroeconomic policies or deepen microeconomic integration. Despite Chile’s and Bolivia’s loose association to Mercosur as partners to the “free trade zone” since 1996, the integration of the Andean Community of Nations proved elusive. On the other hand, the perceived “threat” of the Free Trade Area of the Americas (FTAA), proposed by the United States in 1994, triggered a defensive reaction in Mercosur countries, establishing new trade liberalization commitments to counterbalance generalized opening by some of their extra-regional partners.

The electoral campaign in Brazil in 2002 coincided with an additional record US\$30 billion package from the IMF. This, coupled with concomitant political upheaval in Argentina, did not help to mitigate the crisis in Mercosur, despite promises from the new Lula da Silva administration to give priority to the special relationship with Argentina.

Argentina resorted to unilateral protectionist measures, notably unilateral safeguards and antidumping actions, in sectors supposedly threatened by “deindustrialization,” such as the automotive sector, critically important for bilateral trade and a powerful engine of growth owing to its many external linkages.

In 2002, a turbulent financial crisis in Uruguay and political troubles in Paraguay gave Mercosur a further blow. Despite a resurgence of intra-regional trade from 2003 onward, trade imbalances in favor of Brazil remained, arousing protectionist sentiment in Argentinean industry circles that were strongly backed by the new Kirchner administration. Moreover, structural asymmetries between the two countries persisted in major sectors, due to the successful modernization drive by Brazilian industry during the 1990s. While Argentinean authorities alleged that Brazil was using unfair fiscal incentives to attract FDI,

especially in the automotive sector, most of the trade imbalances were more probably the result of the failure of Argentinean industry to modernize. In 2004, Argentina responded by adopting automatic safeguards to block spikes in imports.

The doubling of Brazilian foreign trade between 1995 and 2005 diminished Mercosur’s importance as a trading partner. Peru’s association agreement with Mercosur, combined with new trade agreements with other countries of the Andean Community of Nations in 2004, further increased Brazil’s trade expansion in South America.

At the political level, both the Brazilian and Argentinean governments remained suspicious of the alleged benefits of free trade, and returned—more than once—to the old sectoral integration approach based on reciprocity. However, Brazil finally made some concessions toward its Mercosur partners. In 2006, both countries reached an agreement which allowed Argentina to apply automatic safeguards against Brazilian imports. Moreover, Brazil became the major financial contributor to an “adjustment fund for structural asymmetries,” created mainly for the two smaller Mercosur partners, and a Mercosur “parliament” was established.

Under political pressure from the Brazilian government, the continent’s integration efforts were given new impetus. With the support of Venezuela, Lula da Silva’s administration created the “South American Community of Nations,” thus furthering a similar endeavor by former President Cardoso, known as “South American Regional Integration Initiative.”

In December 2005, a political decision was taken to fully incorporate Venezuela into the bloc. Now that the “threat” of the FTAA has been diminished—a joint maneuver in 2005 by Argentina, Brazil, and Venezuela—the South American countries are finally striving to set up a new integration agenda for the region—albeit with diverse strategies and objectives—driven by political cooperation and more focused on the establishment of physical connections than on trade liberalization.

In so doing, they hope to attract enough FDI to realize much needed infrastructure projects in energy, communications, and transportation. It is not yet clear whether this can be achieved, considering that the United States remains the main pole of attraction for the region. Another major stumbling block is the political volatility of the region, as demonstrated by developments in the Andean region over the last five years.

Despite the relatively modest size of its economy, Chile has confirmed its adherence to stability and growth and is moving toward a gradual reduction of social inequalities and increased participation in the international trading system. While many other leaders in the region still insist on maintaining a defiant stance toward global interdependence, making resounding anti-imperialist speeches at international fora, Chile is furthering its liberal agenda and increasingly adopting an OECD-like profile. It seems to be the sole “Asian tiger” in a region that, with some

exceptions, still continues to exhibit the typical features of old Latin America: maintaining poverty, social inequalities, political instability, and specializing in primary goods. South America continues to move forward too slowly on the international scene.

## Notes

- 1 At the time, Chile also expressed interest in joining Mercosur. However, the main obstacle to closer association with Mercosur was, and continued to be, the linear structure of the single Chilean tariff, which at 11 percent and decreasing, was already lower than the common external tariff (CET) Brazil and Argentina intended to establish.
- 2 The Cavallo Plan of convertibility imposed a fixed exchange rate parity of the peso against the dollar, thereby reducing Argentinean competitiveness in world markets. The overvalued real of those years—resulting from the then-prevailing exchange rate policy which kept the real in a rather tight band, aligned to the dollar-favored Argentinean exports to Brazil and led to one of the few positive balances Argentina had vis-à-vis its trading partners.
- 3 By then, Brazil accounted for one third of Argentina's external trade, giving rise to a concern in Argentina about the country's "Brazil-dependency."
- 4 Indeed, some goods, such as sugar and the entire automobile industry, were kept outside the free trade zone, accounting for a large part of the bilateral trade; other commodities, such as wheat and oil, were subjected to managed trade.



# NAFTA: 12 Years of Mexico's Experience

RENÉ VILLARREAL, Centro de Capital Intelectual y Competitividad

## Introduction

The entry into force of the North American Free Trade Agreement (NAFTA) crowned Mexico's long efforts to open its economy, which began when the country acceded to the General Agreement on Tariffs and Trade (GATT). When assessing NAFTA's impact on Mexico 12 years after its entry into force, it is necessary to take into account both advances and setbacks. There are vital lessons in Mexico's NAFTA experience for other Latin American countries currently facing the prospect of joining new bilateral free trade agreements (FTAs) and the Free Trade Area of the Americas (FTAA).

This brief essay argues that, with the notable exception of agriculture, NAFTA did benefit the Mexican economy. In hindsight, however, the lack of a cohesive industrial policy of competitiveness—which we argue would have enhanced its benefits to the country—Mexico failed to take full competitive advantage of NAFTA. Instead, Mexico pursued an industrial model of assembling manufactured exports which has run into trouble over the last five years, as it derived its competitive advantage from cheap labor and import costs and an overvalued exchange rate, but without the benefit of a cohesive industrial policy.

China's entry into the World Trade Organization (WTO) and its resulting penetration of the North American market helped to wipe out Mexico's temporary competitive advantages. As a consequence, Mexico and Latin America have not yet been able to position themselves to enter an advanced stage of development, characterized by a higher value-added, knowledge-intensive industry.

The Mexican experience offers an important lesson for Latin America: namely, that in order to enjoy the full benefits of a strategy of economic openness, it is important to choose an accompanying industrial policy of competitiveness to sustain a country's competitive advantage.

## NAFTA from the Mexican perspective: 12 years later

As a strategy to deepen globalization, NAFTA had a positive impact on the Mexican economy, chiefly because it promoted exports and foreign investment, albeit only temporarily. However, it fell short of creating sustainable competitive growth of the export sector and industry as an engine of growth.

Initially, NAFTA did give the export sector a massive boost, making it more dynamic and generating positive growth: exports rose from US\$40.7 billion in 1990 to more than US\$160 billion in 2003. Almost 55 percent of manufacturing exports, totalling some 90 percent of total exports, consisted of assembled manufactures (maquila). But by 2001, Mexico's comparative advantages of cheap labor and the maquila regime had been largely eroded.

Therefore, NAFTA's effects appear to have fallen short of promoting sustainable growth and allowing the Mexican economy to mature, as was the case for Korean or Taiwanese industry. While structural change was clearly

generated, it did not have the effect of incorporating the new technologies needed to propel the country forward. This may have been due, in part, to the fact that the FTA with the United States and Canada was not exclusive. In contrast, China joined the WTO with an active strategy of competitive growth and industrialization which displaced Mexico from second place as an exporter to the US market. China's competitiveness strategy was based on regional poles, or clusters, combined with a framework of highly competitive macroeconomic growth and a supportive business environment.

It is now clear that the competitive transformation of the productive sectors of an economy does not occur as a result only of the introduction of international competition. Internal forces must also play a role. A targeted policy of industrial competitiveness is needed to transform enterprises, and must operate at both the firm (microeconomic) and the cluster-sectoral (meso-economic) level, i.e., competitive firms and clusters that generate agglomeration economies. Such a competitiveness policy, coupled with a high-growth macroeconomic environment and an adequate institutional framework, permits the development of sustainable competitive advantage.

With regard to specific sectors, such as banking, economic opening went hand in hand with financial liberalization (the first step beyond NAFTA) and foreign ownership (the second step), both of which provided Mexico with an international, world-class banking market (Citigroup, Santander, BBVA, and HSBC among others). While highly profitable at the microeconomic level, this sector suffers from inefficiencies at the financial-macroeconomic level, due to the absence of a supporting financial and exchange rate regime which allows these economic institutions to generate profits while lending more to enterprises.

In the trade and procurement sector, the multinational Wal-Mart now dominates the Mexican market, offering sizable benefits to consumers, but simultaneously squeezing out less competitive firms. It is paradoxical that, ten years after NAFTA, Mexican firms in the sector (Soriana, Comercial Mexicana, and Gigante) formed a strategic alliance (Sinergia) to boost domestic efforts to remain competitive. This experience suggests that market opening necessitates setting an international, not a local, benchmark.

Finally, with regard to the agricultural sector, the negotiations concluded under NAFTA were not suited to Mexico's particular situation, as the economy needed far more time than was initially foreseen to achieve competitiveness, due to prevailing asymmetries. Furthermore, commercial market opening and liberalization was not supported by a comprehensive competitiveness policy for agriculture, leading to heightened unemployment levels and increased poverty.

## Lessons learned

The most important lesson from the Mexican experience with NAFTA is that passive market opening through FTAs, when accompanied by a passive industrial policy, encourages an export model of dynamic manufacture assembly, but yields only temporary economic benefits. Instead, the path toward globalization should be supported by an active market opening strategy, encompassing FTAs which take into account existing asymmetries and an economy's competitive capacity, and by a strategy to achieve systemic competitiveness through an active industrial policy. Three important elements emerge as important lessons for implementing such an overarching strategy:

1. **Active vs. passive market opening.** Contrary to expectations, Mexico's market opening strategy through NAFTA and twelve other agreements signed with 42 countries did not lead to an export model characterized by mature industrialization and sustainable export growth. This outcome suggests that Mexico's passive industrial policy—in line with the government's 1990s philosophy that “the best industrial policy is the one that doesn't exist”—generated an internal disarticulation of production, low capacity of scaling in the global value chain, and minimum dragging capacity of the export-oriented model.

Rather than simply exposing its domestic markets to global hyper-competition, an active policy must focus on strengthening local firms through an enterprise competitiveness policy, promoting the “IFA” model—Intelligent organization, Flexible production and Agile commercialization. As in the cases of China and Korea, complementary public policies that strengthen and boost strategic sectors are fundamental, in order to take full advantage of an FTA. In China, public policies supported the development of highly competitive clusters, while in Korea, they produced a highly competitive telecommunications sector. And in both countries, strategic public-private alliances, private and public investment, and a well articulated national innovation system played a prominent role. Based on the philosophy that the best defense is to attack, such an active strategy of conquering international markets by defending domestic markets would seem to be the most promising.

2. **Tailoring negotiation to take account of existing asymmetries.** Mexican experience also shows that the negotiation of FTAs must take into account existing asymmetries among countries and their competitive capacities. Negotiations of NAFTA's section on agriculture are a case in point. Decisions were taken without identifying either the real scope of existing asymmetries in the sector, or the economy's competitive capacities with respect to its trading partners. As a result, Mexico's capacity to respond and

react to competition in this field was severely limited by a) the lifting of trade taxes on the majority of agricultural products—foreseen as taking place over a period of ten years (with the exception of beans, corn and powdered milk, which were granted a 14-year transition period)—and b) the ongoing large-scale transformation of agricultural institutions and policies.

3. **Policy instrument management.** An appreciating or over-valued exchange rate can act as an import subsidy which, combined with a zero or reduced tariffs on imports brought about by trade liberalization, caused negative net exposure of the national industry and resulted in a pro-import bias. In short, Mexico's experience shows that the real exchange rate has not promoted export competitiveness, because it has been used as a deflationary anchor. The systematic appreciation of the exchange rate implies a "dollar price subsidy," which not only restrains exports and promotes imports, but also blocks the national productive base that competes with those imports. In light of the above reasoning, we advocate a floating exchange rate policy, focused on maintaining a permanently competitive real exchange rate and on preventing capital incomes from pushing up the real exchange rate.





## Can Latin American Countries Win in the World Trade Stakes?

CARLOS ARRUDA, Fundación Dom Cabral

The OECD defines competitiveness as “the degree to which a country or region can, under free and fair market conditions, produce goods and services which meet the test of international markets, while simultaneously maintaining and expanding the real incomes of its people over the long term.” Over the last decades, most Latin American countries have pursued policies guided by this formula: a) improving the domestic economic environment, b) increasing trade, and c) boosting real incomes and reducing poverty and inequality.

Decades of reform in Latin America have delivered healthier economic fundamentals and accelerated economic growth. For example, Chile’s GDP has grown more than 557 percent in nominal terms since 1980. Inflation, the Latin American syndrome of the late 20th century, has been restrained by effective anti-inflationary measures, resulting from globally defined monetary policies. Protectionist barriers have been dismantled and hundreds of state-owned companies have been privatized. Several regional trade agreements, such as the Andean Community and Mercosur have led to a significant increase in trade within the region.

Perhaps because the wave of liberal reforms which swept across Latin America was neither uniform nor complete, the region has not yet seen the same increases in trade that were observed in Asian countries, and has achieved even less in the areas of high value-added products or services (Table 1).

**Table 1: Comparison of trade in seven countries, 1985–2005**

Country	Total volume of exports 2005 (US\$ billion)	Exports by type (percent)	Trade Balance (US\$ billion)	Change (percentage) (1985–2005)
Argentina	40.0	Primary: 19.8 Manufactured: 29.8 Fuel: 17.0	11.3	376
Brazil	118.3	Primary: 21.8 Manufactured: 23	44.8	361
Chile	39.5	Primary: 72 Manufactured: 26	9.2	939
Mexico	213.7	Primary: 3.4 Manufactured: 81.4 Fuel: 14.9	–7.6	696
China	772.0	—	112.0	2,723
Malaysia	136.4	—	16.4	792
Korea	284.7	—	261.1	840

Sources: UNCTAD, 2005, Brazilian Central Bank, Chilean Central Bank, INDEC Argentina, INEGI Mexico.

As in football, those who do not score goals fall behind when their adversaries score. Clearly, despite significant productivity increases, the companies in the region will have to withstand both domestic and international competition. According to an Inter-American Development Bank (IADB) study published in 2005, China has become an important import and export market for Latin America over the past 20 years. Latin American countries have addressed the growing import challenge to their domestic production with a number of defensive measures designed to keep China's products out. However, today, these policies are aligned with efforts to forge closer economic ties with China so as to benefit from ever-growing Chinese demand. Although Latin American exports to China still consist largely of raw materials and commodities—the Brazilian mining company Cia Vale do Rio Doce (CVRD) exported 36 million tons of iron ore to China in 2005, and Chinese demand for CVRD iron ore is predicted to rise to 50 million tons by 2007, representing 35 percent of global demand for iron ore—China may gradually start absorbing other types of products, from agro-industrial to other manufactured goods.

At the multilateral level, the IADB study highlights that direct competition between China and Latin America, in particular Mexico, has intensified due to their increasingly similar export baskets, especially in various manufacturing industries. In view of China's expansion of its international production and export base, however, the challenge to Latin American manufacturers may increasingly be felt across the board. In particular, the global textile and apparel sector is expected to undergo changes that are likely to enhance China's standing relative to Mexican and Central American exporters. Beyond low-skill intensive manufactures, China's leap to production and export of higher value-added manufactured goods means that Latin American countries aiming to export the same goods will face a higher competitive threshold of entry into the global marketplace.

The China effect means not only direct competition with Latin American countries, but also a decline in the prices of labor-intensive manufactured goods exported by Latin America and China, as evidenced by the drop of 30 percent in the average prices of shoes and clothing in the United States over the past ten years. Along with the increase in the average price of capital and skill-intensive goods and services imported into Latin America and China, competition for trade-related foreign direct investments has intensified. And China is winning this competition, not only in volume but also in quality. Indeed, in recent years, FDI in Latin America in technology-related industries and products has declined considerably.

A concrete example illustrates this trend: asked in a recent interview why his company was not investing in innovation in Brazil and Latin America, the CEO of a top European electronics manufacturer replied that "Latin American [has] missed the train of the digital age." In his

opinion, all potential investments which in the past were directed toward Brazil and Mexico are now going to China. The same company has invested millions of dollars in different plants in China and has moved one of its main high-tech labs and the company's global R&D network to China.

A 2005 UNCTAD study showed a more mixed picture, reporting a rise of 44 percent in the FDI inflows to Latin America and the Caribbean in 2004, after four consecutive years of decline. During this period, the largest FDI increases occurred in Mercosur member and associate member countries, especially Argentina (125 percent), Brazil (79 percent), and Chile (73 percent). The report attributed the strong growth in investment in Central America and the Caribbean primarily to a 46 percent rise in inflows to Mexico. In the Andean Community, total inflows remained unchanged from 2003. Notable exceptions were Colombia and Peru, which had clear upturns of 53 percent and 37 percent, respectively, while Venezuela, Ecuador, and Bolivia saw decreases. For 2005, the report predicted increased flows to Latin America and the Caribbean as most of the driving forces behind their expansion in 2004 appeared set to continue. After a prolonged period of economic stagnation in the region—from 1999 through 2003—investments are urgently needed to modernize and expand trade-related production capacity.

However, these predictions were not borne out in practice. In 2005, the region saw an overall decline in trade-related FDI. Brazil, for instance, received less than US\$14 billion in FDI, representing a sharp drop of 8.5 percent compared to 2004. It is important to note that the bulk of this investment was not directed to trade-related industries, but rather to consumer services (63.7 percent), especially telecommunications, retail, and utilities. Less than US\$6 billion (31.4 percent) was directed to trade-related industries, out of which less than US\$700 million went into technology-based industries.

The consequence, according to the OECD formula, will be the inevitable loss of capacity to improve real incomes and reduce poverty. Take, for example, the Gini coefficient, a statistical measure of inequality in which 0 expresses complete equality and 1 complete inequality. The average Gini Index value {Gini coefficient  $\times$  100} for Latin American countries increased from 50.5 to 51.4 over the 1990s.

In the 1980–2004 period, the following figures show that Chile was the only Latin American country to have experienced an increase in per capita wealth, at a rate approximating that of the developed world and of the leading Asian countries: Chile: 391.0 percent; Argentina: 51.9 percent; Brazil: 63.9 percent; Mexico: 64.6 percent; United States: 213.9 percent; China: 838.2 percent; India: 368.7 percent; South Korea: 602.6 percent.

The game is not over yet. Although Latin American countries possess not only significant natural resource wealth, but also the potential to increase their participation

---

in world trade, much more must be done, and at a much faster pace. There is an urgent need for investments in high quality education at all levels, but mainly at the primary, secondary, and technological levels. New investments in innovation and R&D cannot be postponed. The region does not need short-term solutions. What it does need are well defined and clearly communicated strategies for growth.

## References

Inter-American Development Bank. 2005. *The Emergence of China: Opportunities and Challenges for Latin America and the Caribbean*. Washington, DC: IADB. March

UNCTAD. 2005. Statistical databases online. Available at: [www.unctad.org](http://www.unctad.org)



## Prudential and Regulatory Challenges for Latin America

DAVID S. HOELSCHER, International Monetary Fund

Latin American economies have performed well during the first five years of the decade. Economic growth has been above historical averages and inflation has stabilized at single digit levels. This strong performance reflects a combination of policy flexibility and robust global demand.<sup>1</sup>

Indicators of financial soundness in Latin American financial systems have improved in this supportive macro-economic environment. Following on developments in the 1990s, banking systems in Latin America have undergone a substantial consolidation, together with the entry of foreign banks. Financial sector indicators have strengthened, with improvements seen in heightened profitability, reductions in nonperforming loans, and regulatory capital as a percent of risk-weighted assets in excess of regulatory minimums. Comparisons with other regions are also positive. Both average levels of regulatory capital to risk-weighted assets and average return on assets in Latin America are higher than averages in the emerging markets.

While the financial strength of Latin America's banking sector has improved, the financial system continues to play a comparatively smaller role in financial intermediation than in many other regions of the world. The depth of financial intermediation, measured as the stock of bank credit outstanding as a share of GDP remains low. At the end of 2005, bank credit to GDP stood just over 20 percent, compared to over 100 percent in Asia, and over 70 percent in Africa.<sup>2</sup>

This relatively minor role of the banking system may be a relic of the banking crises that affected many Latin American countries during the 1990s. During that period, a number of financial systems were hit by external shocks or by deterioration in balance sheets, arising from macro-economic disruption, accumulation of nonperforming loans (particularly from related parties), and weaknesses in capital adequacy. In addition, some banking systems faced both policy-induced shocks and contagion from other countries. Examples include Argentina (1989, 1995, and 2002), Bolivia (1986 and 1994), Chile (1975 and 1981), Mexico (1982 and 1995), and Uruguay (2002).<sup>3</sup> In some cases, a new genre of crises emerged, characterized by a combination of debt, currency, and banking crises, and presenting new challenges to the effectiveness of many of the typical tools for crisis management and bank resolution.

Important progress has now been made across the region in stabilizing and strengthening financial systems in the aftermath of such banking crises. However, both financial institutions and national regulatory authorities confront a number of "second generation" challenges. The balance sheets of financial systems are subject to financial vulnerabilities arising from the increasingly sophisticated global financial environment and structure. Likewise, supervisory and prudential authorities need to identify and respond to the new responsibilities arising from the instruction of Basel II.<sup>4</sup>

The risks and vulnerabilities that arise from operating in an increasingly sophisticated financial environment are well known. Resolving these issues is an important step that will lay the foundation for a stronger role of the financial system in supporting economic growth. While these risks and vulnerabilities may not be significant in all countries, they should be carefully monitored as financial systems develop and expand.

- **High concentration of assets.** The portfolios of some financial systems in Latin America are largely undiversified. High concentration (including exposures to the public sector, related parties, a few corporate clients, or regions) can expose financial institutions to enhanced credit and liquidity risks. Shocks to correlated exposures can reverse profitability and even threaten solvency. At the same time, high concentration on the liability side (where a few clients hold the majority of a bank's deposits) exposes an institution to increased liquidity risk from unexpected withdrawals.
- **Rapid credit growth.** The rapid credit growth in the region has provided the basis for business expansion and stronger profitability. In some countries, the rapid pace of credit expansion may also lead banks to accept risks that may be poorly understood, or to lower credit standards and take higher risks.
- **Financial systems of many Latin American countries are highly dollarized, which can expose the institutions to higher solvency and liquidity risks.** Unique risks result from mismatches of borrowers' balance sheets, including currency, maturity and interest rate mismatches.<sup>5</sup> The most widespread of these mismatches, albeit not the only one, results in foreign currency induced credit risk for financial institutions. Added liquidity risk in dollarized financial systems can arise as national authorities may be willing or able to provide only limited backing of banks' dollar liabilities.
- **Supervisors must monitor growing regional financial integration—as is occurring most rapidly in Central America—to contain potential new risks from cross-border contagion.** Financial integration has numerous positive effects, including the capacity to exploit economies of scale, the benefits of diversification and other synergies within the region. In addition, regulatory bodies are adopting measures to monitor and contain risks of cross-border contagion. Nevertheless, financial shocks can spread within the consolidated entity and be difficult to control. Moreover, lack of clarity about regulatory frameworks, including deposit insurance systems and lender of last resort, could introduce uncertainties in creditors including depositors. These risks can be addressed by adopting a more integrated and homo-

geneous regulatory and supervisory framework, as well as improving cooperation among supervisors in information exchange.

- **Exposure to cross-border contagion** arises in some countries, not only because of internationally active financial conglomerates, but also because some banks have a large share of operations with non-residents in their financial systems, and because of the perception of investors and creditors that financial systems within a region share common risks. For instance, a large concentration of operations with residents of a foreign country may expose a financial system to shocks originating abroad, as was the case in Uruguay in 2002.
- **A weak credit culture and weak market conduct** in some countries can affect the quality of the loan portfolio. In a weak credit culture environment, market discipline may not be effective and borrowers may not adequately manage their exposures and risks.

The growing sophistication of financial markets and the increasing interrelation among financial markets in the region suggest that traditional methods of bank supervision and regulation, while effective in the past, could be improved to meet new challenges and risks. Strengthening and updating regulatory and prudential rules, for example, could enhance the powers and authority of national regulators to identify and respond to the growing financial complexity of financial markets. Considerable progress has already been made in many countries, but further steps in some may be warranted. In particular:

- **Consolidated supervision.** Financial conglomerates in some countries have legal and corporate structures that complicate control and supervision. Examples include unsupervised parent or holding companies and parallel banks, some of them constituted in foreign countries, and protected by secrecy laws. Supervisors often have limited authority to obtain adequate information from the corporate structure. Supervisors need to develop steps to strengthen cooperation where banking groups cannot be supervised on a consolidated basis.
- **Capital requirements.** Important progress has been made in strengthening capital requirements. However, in some countries, regulations on minimum capital should still be strengthened. Problems encountered can include low weights for some asset categories and some differences in the components or definition of capital.
- **Remedial actions.** In some countries, the ability of supervisors to revoke a banking license or require timely corrective action to stop unsafe or unsound

banking practices must be strengthened. Updating banking laws and prudential regulations, as well as training of supervisors would be important steps to protect the interest of depositors and other creditors.

- **Independence of bank supervisors.** In many countries, reforms are still needed to give bank supervisors sufficient operational independence and legal protection. Lack of independence could be *de jure* or *de facto*: *de jure*, when the legal framework does not grant independence to bank supervisors, or *de facto*, when, in spite of having legal independence, there is evidence of political interference or industry capture.

Finally, looking forward, financial systems in Latin America will face challenges in adopting the revised prudential framework of Basel II. Basel II aims at introducing refinements in regulatory and supervisory practices that encourage increased attention to risk management practices and improved disclosure and market discipline. Introduction of Basel II will require a number of steps, including an important revision of prudential and regulatory frameworks and the building of expertise within the supervisory agencies. In addition, financial institutions need to rebuild their reporting and business management framework.

The countries of the region have already begun addressing these challenges and progress will continue. Once completed, Latin America will have a stronger and more resilient financial system, capable of supporting sustained and diversified economic growth.

## Notes

- 1 Singh and Collyns, 2005.
- 2 See IMF, 2004.
- 3 For a more complete list, see Lindgren et al., 1996.
- 4 For a more detailed description, see Carstens and Schwartz, 2005; also Hoelscher and Cortavarria, 2004.
- 5 Gulde et al., 2003.

## References

- Carstens, A. and M. J. Schwartz. 2005. "Financial Sector in Latin America: Time for Strengthening the Institutional Setting." Paper Presented at the seminar *Una Agenda de Desarrollo para América Latina*. Salamanca, Spain: Fundación CIDOB. October.
- Gulde, A. M., D. S. Hoelscher and A. Ize. 2003. "Dealing with Banking Crises in Dollarized Economies." C. Collyns and G. Russell Kincaid, *Managing Financial Crises: Recent Experiences and Lessons for Latin America*. Washington, DC: IMF.
- Hoelscher, D. S. and L. Cortavarria. 2004. "Issues in Bank Resolution in Central America." Central American Regional Conference, San Pedro de Sula, Honduras. 8–9 July.
- International Monetary Fund. 2004. *Global Financial Stability Report*. Washington, DC: IMF. Fall.
- Lindgren, C.-J., G. Garcia, and M. I. Saal, 1996. *Bank Soundness and Macroeconomic Policy*. Washington, DC: IMF Press.
- Singh, A. and C. Collyns. 2005. "Latin American Resurgence." *Finance and Development*. December. 9–13.





## Latin American Multinationals

LAURA ALFARO and ELIZA HAMMEL, Harvard Business School

An exciting phenomenon is taking place in Latin America. Chilean companies are operating plants in Peru and Argentina. Brazilian firms are investing not only in neighboring countries, but also in the United States and Europe. US workers who once fretted about losing jobs to Mexico are now working in Mexican-owned plants in the United States. The firms making this happen are part of an emerging group of Latin American firms many are referring to as “multilatinas”—Latin American Multinational Corporations (MNCs). The expansion of the multilatinas is generally viewed as a positive trend, part of overall growth in foreign direct investment (FDI) flows in the region over the past decade and a sign of the increasing sophistication of Latin American firms. But how important is this trend and how can it be explained? What are the implications for the region?

The benign view of FDI was not always predominant. Following World War II, strategies of import substitution for economic development spread throughout Latin America. Countries combined high tariffs with restrictions on MNC activity. FDI, regardless of its source, was regarded with suspicion. Critics argued that foreign firms exploited local markets, monopolizing rather than diffusing their know-how and repatriating exorbitant profits. Even in this environment, a first wave of multilatinas emerged in the late 1960s and 1970s, as firms established operations in mostly neighboring countries to serve local markets. Typically driven by the need to bypass tariffs, these earlier MNCs were quite different from today’s multilatinas.

Beginning in the 1980s, Latin American countries began to liberalize their economies. The 1980s debt crisis severed developing countries’ access to credit and portfolio investment and instilled the view that state intervention had failed. After decades of skepticism, a broad consensus began to emerge regarding the potential benefits of FDI to host economies through the provision of capital, technology, and know-how. Almost every country in Latin America reduced trade barriers, opened to foreign investment, and relaxed exchange controls. FDI soared worldwide in the 1990s, growing more than 25 percent per year in Latin America. While some predicted that the fall in tariffs would discourage intra-regional FDI, relaxation of capital controls and FDI restrictions enabled Latin American companies to transfer capital abroad more easily and invest in neighboring countries. At the same time, new regional pacts, such as Mercosur facilitated expansion abroad, and privatizations in neighboring countries afforded opportunities for acquisitions.

### The expansion of Latin American multinationals

While many are heralding the emergence of multilatinas, the scarcity of data on intra-Latin American FDI makes it challenging to determine how significant this trend really is. Nevertheless, the available numbers are suggestive. Annual FDI outflows from Latin America surged in the

1990s, rising from US\$1 billion in 1990 to US\$11 billion in 2004.<sup>1</sup> The growth in the number of merger and acquisition deals reported by Securities Data Corporation (SDC) also illustrates the rise of the multilatinas. Before 1993, the average number of foreign deals reported for the largest Latin American countries was about four per year. This rose to about 25 in the mid-1990s and to about 40 per year in the late 1990s and the early 2000s.

The multilatinas are a varied group. Although the leading firms tend to be headquartered in the largest countries, Brazil, Mexico, Argentina, and Chile, most other countries can boast some MNCs. Five of the top 25 multilatinas are steel companies from Brazil, Argentina, and Mexico. Many companies are leaders in their respective industries, such as the Brazilian Gerdau Group, which owns steel mills in Argentina, Canada, Colombia, the United States, and Uruguay. Several emerged from privatized companies, such as the Brazilian mining and oil companies, Companhia Vale do Rio Doce and Petrobras.

Most multilatinas tend to expand regionally before venturing farther abroad. For consumer products, this can often be due to the fact that the cultural similarity of most Latin American countries makes regional firms better able to cater to regional tastes. The El Salvadoran restaurant chain Pollo Campero and Mexican tortilla manufacturer Gruma, for instance, have facilities throughout the region, including the United States. At the same time, a firm that lacks international experience might want to acquire the skills needed to manage across borders by first learning in a country that is similar and nearby. This could explain the path of the Argentine candy manufacturer Arco, which established distribution facilities throughout the region before building a plant in the United Kingdom.

Cemex, the third-largest producer of cement in the world, captures many of these trends. Formerly Cementos Mexicanos, the company began to establish operations abroad in the late 1980s and early 1990s, by acquiring distribution facilities in Spain and the United States. The company subsequently continued its international expansion, in the Caribbean, South America, and then farther afield to Egypt. In 2000, its acquisition of Southdown in the United States transformed Cemex into the largest producer of cement in North America. In 2004, the company closed a deal worth nearly US\$6 billion in the United Kingdom. A world leader not just in terms of size, Cemex began exploiting state-of-the-art information technology even before its European rivals, enabling it to dramatically improve the operating efficiency of its acquisitions.

### Why are Latin American firms investing abroad?

Although international expansion of Latin American firms might be attributed simply to the pursuit of profits in other countries, the phenomenon is not so straightforward. Doing business in another country incurs added costs associated with communications, stationing personnel abroad, barriers related to local customs, and exclusion

from local business and government networks. Foreign firms seeking to reduce risk by diversifying geographically or to take advantage of access to cheaper capital than is available to local firms could achieve these objectives through portfolio holdings, thus avoiding the complexities of operating in a different political, legal, and cultural environment.

A generally accepted view holds that multinational activity arises from the possession of firm-specific intangible asset such as patents, technologies, brands, and organizational know-how that enable a foreign firm to outperform their local competitors.<sup>2</sup> Because high transaction costs can make selling or leasing these assets to other firms unfeasible, firms prefer to engage in foreign activity directly.

At first glance, emerging market multinationals would not seem to fit the logic of this conventional wisdom: firms in developing countries are generally not known for having the most innovative technology or access to superior human capital. Moreover, standard economic models predict that countries with relatively low supplies of skilled labor or capital—that is, emerging markets—will host foreign MNCs rather than establishing their own affiliates abroad.

How, then, can the existence of these world-class multinational firms from emerging markets, and in particular from Latin America, be explained? Taking a broader view of what constitutes intangible assets helps to explain the existence of these MNCs. In relation to their northern competitors, third-world multinationals are often closer to their host countries geographically, culturally, economically, and politically. As such, their know-how and technologies may be particularly well suited for the other emerging markets where they invest, and they may possess competitive advantages that enable them to circumvent or exploit local institutional voids.<sup>3</sup> Early work on the subject found the third-world MNCs of the 1960s to possess superior knowledge of small-scale labor-intensive technology.<sup>4</sup> The Mexican baker, Grupo Bimbo, is an example of a company that has successfully exploited institutional voids. Through backward integration into distribution, the firm developed a remarkable network capable of delivering fresh bread to millions of different points of sale, often quite small and in hard-to-reach locations. By exploiting this capability as they expanded across the region, they successfully competed with rivals relying on inefficient outside providers.

Strategic reasons can also drive a firm's decision to expand abroad. In the absence of fully developed financial markets, international expansion may help lower financing costs. Cemex has been particularly successful in this regard, channeling its financing activities through its Spanish subsidiary and securing developed-country interest rates on its debt. A buy-or-be-bought environment in some of the consolidating industries might also be driving the growth of the multilatinas. With the growth of global players and opening of markets, local firms may need to expand internationally in order to compete. While in these

cases the ownership of intangible assets does not play a direct role in explaining MNC activity, they may nevertheless be a prerequisite for successful expansion abroad.

### Is all of this good news for Latin America?

MNC activity has historically stirred strong emotions in both home and host countries, and many of the traditional arguments for and against FDI apply to regional MNC activity as well. Outward FDI may lead to lower wages and fewer jobs in the source country, while MNCs could potentially limit the growth of host country firms. Monopolization of markets by emerging giants is also a concern, especially with antitrust legislation and litigation being either non-existent or in their infancy in the region. On the positive side, the multilatinas are a potential additional source of valuable productivity externalities for Latin host countries. Perhaps the biggest gain is in the “new culture” reflected by these firms. Latin American firms are responding to global trends by restructuring, developing a variety of tangible and intangible assets—including advanced management capabilities—and switching their overall focus to global markets. Admittedly, these firms face significant constraints, not least that the costs of obtaining financial, technological, and human resources are greater than those faced by competitors in industrialized countries. Yet, after decades of protection and transition, Latin American firms are thinking and competing globally—and succeeding.

### Notes

- 1 Data taken from UNCTAD *FDI Database*.  
<http://www.unctad.org/Templates/StartPage.asp?intItemID=2921&lang=1> Accessed 18 January 2006.
- 2 See Dunning, 1981.
- 3 Khanna and Palepu, 2004.
- 4 Wells, 1983; Lall, 1983.

### References

- Dunning, J. H. 1981. *International Production and the Multinational Enterprise*. London: George Allen and Unwin.
- Khanna, T. and K. Palepu. 2004. “Emerging Giants: Building World Class Companies From Emerging Markets.” Publishing Case No. N9-703-431. Cambridge, MA: Harvard Business School Publishing.
- Lall, S. 1983. *The New Multinationals: The Spread of Third World Enterprises*. Chichester: Wiley.
- Securities Data Corporation. 2004. *Mergers and Acquisitions Database*.
- UNCTAD. 2005. *FDI Database*. New York, United Nations.
- Wells, L. 1983. *Third World Multinationals: The Rise of Foreign Investment from Developing Countries*. Cambridge, MA: MIT Press.



# Innovation in Latin America

FELIPE LARRAÍN, Universidad Católica de Chile

Growth perspectives for Latin America in 2006, though not so spectacular as the 6.2 percent posted in 2004, are still favorable at around 4 percent. The present bonanza, linked to the commodity price boom, opens a valuable window of opportunity for making progress on several important fronts. The challenges that the region faces are many: strengthening institutions, improving the quality of education, and eradicating poverty are only some of the most important. In this brief article, we explore Latin America's innovation gap and suggest possible solutions.

## The technology gap

Many parts of Latin America lag far behind in the IT revolution that has transformed several countries in Northern Europe, Asia, and North America. This fact becomes evident from the annual indexes elaborated by the World Economic Forum. According to the innovation pillar of the Global Competitiveness Index 2005, Latin America performs poorly, in comparison to Asia or the industrialized countries. This gap is a major obstacle on the road to development, because technological progress has proven to be the main source of long-term productivity growth. Empirical research has clearly identified differences in the growth of total factor productivity as the main cause of divergence in per capita income growth across nations. What can be done about this?

## Increasing technological diffusion

Countries face two main challenges on the innovation front. First, they need to increase their capacity to adapt and use foreign technologies, so these can be incorporated into production processes. Latin American economies, with few exceptions, show low levels of technological diffusion. Why? The main source of technological diffusion for developing economies is foreign direct investment (FDI) flows. Multinationals that install their branches in a country—either to supply the domestic market or to use it as an export platform to third markets—bring know-how that is transferred to the rest of the economy. Brazil, Mexico, and Chile have received significant levels of FDI relative to the size of their economies, but the region as a whole faces a massive challenge in this area, especially from China and India.

How can Latin America attract larger inflows of FDI? Sheer economic size would favor mainly Brazil and Mexico. Nonetheless, the empirical evidence shows that institutional factors—e.g., the rule of law, trade openness, the quality of existing infrastructure and of the labor force—are all key in attracting FDI. Two of these variables pose a special challenge for the economies of the region. In most Latin American countries, public institutions are of poor quality, and citizens have highly unequal access to relatively poor quality education.

Although technological diffusion is an efficient and realistic way to improve technologies in countries that are

**Table 1: R&D expenditure**

Country	GDP	R&D Expenditure	
	US\$ millions	Percent	US\$ millions
Argentina	129,596	0.41	531
Bolivia	8,089	0.26	21
Brazil	505,747	0.95	4,827
Canada	856,523	1.91	16,370
Chile	94,097	0.60	562
Colombia	81,990	0.17	137
Costa Rica	15,946	0.39	62
Czech Rep.	60,871	1.22	743
Ecuador	27,201	0.07	19
Finland	131,567	3.46	4,552
Ireland	102,679	1.13	1,160
Korea	546,713	2.53	13,832
Mexico	649,078	0.40	2,577
New Zealand	52,016	1.16	603
Netherlands	384,006	1.89	7,258
Panama	12,862	0.34	44
Paraguay	5,539	0.10	5
Peru	60,577	0.11	65
Portugal	109,889	0.84	927
Spain	838,652	1.10	9,248
Trinidad and Tobago	10,511	0.12	13
United States	10,948,550	2.58	282,473
Uruguay	12,277	0.22	27

Note: Data are for latest year available.

Sources: Red Iberoamericana de Indicadores de Ciencia y Tecnología (RICyT) and World Bank.

**Table 2: R&D by sector**

Country	Government	Firms	Universities	Private nonprofit organizations
Argentina	41.2	29.0	27.4	2.5
Bolivia	21.0	25.0	41.0	13.0
Brazil	11.0	45.5	43.5	—
Canada	11.0	53.0	35.7	0.3
Chile	12.7	37.8	33.8	15.8
Colombia	8.0	18.0	60.0	14.0
Costa Rica	19.5	23.3	36.2	21.0
Czech Rep.	25.7	64.6	9.5	0.2
Ecuador	34.9	12.9	10.8	41.4
Finland	12.6	67.0	19.6	0.8
Ireland	7.4	73.3	18.6	0.7
Korea	17.6	70.3	11.2	0.9
Mexico	41.4	29.8	28.6	0.3
New Zealand	35.4	28.2	36.4	—
Netherlands	17.1	54.6	27.3	1.0
Panama	51.8	—	5.8	42.5
Paraguay	36.0	—	40.8	23.2
Peru	35.4	9.8	44.7	10.1
Portugal	20.8	31.8	36.7	10.8
Spain	15.4	54.1	30.3	0.2
Trinidad and Tobago	70.8	10.1	19.1	—
United States	13.1	68.3	14.2	4.5
Uruguay	19.4	49.0	31.6	—

Note: Data are for latest year available; — indicates data unavailable.

Sources: Red Iberoamericana de Indicadores de Ciencia y Tecnología (RICyT) and OECD.

far from the frontier, it is also essential to foster innovation. Research and development (R&D) expenditure is the key.

### How to foster innovation?

On average, countries in Latin America spend less than 0.5 percent of GDP on R&D. As shown in Table 1, R&D spending in the countries of the region is far below the US\$282 billion spent in the United States (2.6 percent of GDP) or the US\$14 billion invested by Korea (2.5 percent of GDP). Admittedly, there is a clear income effect at work: when economies become richer, they are able to spend more on R&D. Nonetheless, Lederman and Maloney (2003) show that even controlling for income levels, R&D expenditure is still very low in Latin America.

Although the magnitude of R&D expenditure is a key indicator of the innovation effort that countries make, the way in which those expenditures are financed is also important. International evidence shows that in the vast majority of developed countries, the lion's share of R&D spending is financed and executed by the private sector. This is shown in Table 2.

Whereas some 70 percent of R&D expenditure is financed and executed by private companies in those countries which are leaders in innovation, such as Korea, the United States, Finland, and Ireland, the situation is the reverse in Latin America. On average, less than 30 percent of R&D is financed by the private sector, with the bulk

financed by the government, universities, and nonprofit agencies.

Finally, the R&D effort can be aimed at research in the basic or applied sciences. Empirical evidence supports the view that applied research is more conducive to economic growth. Once again, Latin America is lacking in this area. While successful innovators like Korea, the United States, and Israel devote less than 20 percent to basic science research, R&D in Latin America is weighted more heavily toward the basic sciences, as shown in Table 3.

### Improving the innovation effort

Thus, not only is the level of R&D expenditure in Latin America low, but it is inappropriately biased toward basic science research, with relatively low participation of the private sector. What can be done to improve the region's efforts toward innovation? The promotion of R&D in Latin America should include a combination of direct instruments, such as public research funding competitions, and indirect instruments, such as tax incentives. The superiority of one over the other will depend on the situation in each country. For example, a proposal to implement tax credits for R&D activities has been proposed in Chile. This benefit would allow companies to deduct 40 percent of the funds spent on R&D directly against their corporate income tax. This incentive would complement the public funding competitions which Chile currently offers.



**Table 3. Research in basic sciences**

Country	Research in basic sciences (percent of total)
Argentina	25.6
Bolivia	45.9
Chile	55.3
Colombia	24.0
Cuba	10.0
Ecuador	22.0
El Salvador	58.9
Honduras	34.5
Israel	19.6
Korea	12.7
Mexico	34.5
New Zealand	20.2
Panama	34.0
Paraguay	11.8
Peru	38.3
Portugal	24.1
Spain	24.0
United States	19.1
Uruguay	18.7

Note: Data are for latest year available.

Sources: Red Iberoamericana de Indicadores de Ciencia y Tecnología (RICyT) and OECD.

promotion of innovation. These are important pending challenges for Latin America. The current economic bonanza of the region presents a propitious moment to fight the battle for innovation.

### References

Lederman, D. and W. F. Maloney. 2003. "R&D and Development." World Bank Policy Research Working Paper No. 3024. April. Available at SSRN: <http://ssrn.com/abstract=402480>

Successful innovators such as Ireland have successfully used the tax credit mechanism for some time.

Additionally, and as a complement to this proposal, it would be advantageous to devote more public resources as an incentive to successful innovation. The ultimate measure of the success of innovations could be the extent to which they are patentable.

Adoption of these measures would increase funds for R&D activities and, thus, resolve market failures that are inherent in this type of activity. However, in addition to market failures, there are institutional failures in the innovation process. In most countries of the region, the approach to innovation has been fragmented and uncoordinated, with many players and programs operating in virtual isolation from one another. The creation of an innovation coordinator for the different efforts made by many public sector agents is essential. Successful innovator countries have created councils or ministries specifically for this purpose. For example, Israel has managed its technological innovation policy since 1969 through the Office of the Chief Scientist. Korea uses its Ministry of Science and Technology, and Finland, a Science and Technology Policy Council. Latin America could well follow these models.

Finally, improving the protection of intellectual property rights, expanding trade openness, and raising the quality of labor force—all of which complement the new technologies—also constitute key elements in the



---

# Part 3

## Country Profiles



# How country profiles work

Argentina	
<h2>Argentina</h2>	
<b>1 Key Indicators</b>	<b>Human Development Indicators</b>
Total population (millions), 2005 ..... 36.7	Gross primary enrollment (percent of relevant age group), 2003 ..... 118.4
Gross Domestic Product (US\$ billion), 2005 ..... 177.3	Gross secondary enrollment (percent of relevant age group), 2003 ..... 100.0
Gross Domestic Product per capita (PPP, US\$), 2005 ..... 13,162.4	Gross tertiary enrollment (percent of relevant age group), 2003 ..... 59.8
Real growth in GDP (percent), 2005 ..... 7.5	Adult literacy rate (percent of population aged 15 and above), 2002 ..... 97.0
Growth of output (average annual percent change), 1993–2004 ..... 1.6	Life expectancy at birth, 2003 ..... 74.0
Agriculture ..... 2.4	1WV prevalence rate (percent of population aged 15 to 49), 2003 ..... 0.7
Industry ..... 1.3	Public expenditure on health (percent of GDP), 2002 ..... 4.5
Manufacturing ..... 0.7	
Services ..... 1.7	
Inflation (annual percent change), 2005 ..... 6.5	
Budget balance (percent of GDP), 2005 ..... 1.6	
Gross fixed capital formation (percent of GDP), 2004 ..... 19.1	
National average rate (percent of GDP), 2004 ..... 21.2	
Interest rate spread (percent), 2005 ..... 2.2	
Real effective exchange rate (percent)*, 2004 ..... -49.4	
Exports of goods and services (percent of GDP), 2004 ..... 26.3	
Imports of goods and services (percent of GDP), 2004 ..... 18.2	
Current account balance (percent of GDP), 2005 ..... 1.3	
Gross official reserves in months of imports, 2004 ..... 8.5	
Government debt (percent of GDP), 2005 ..... 74.5	
Unemployment (percent of total labor force), 2004 ..... 13.6	
Gini index** ..... 0.5	
	<b>Infrastructure and Technology Diffusion Indicators</b>
	Paved roads (percent of total roads) ..... 29.4
	Main telephone lines per 100 inhabitants, 2003 ..... 22.6
	Cellular mobile telephone subscribers per 100 inhabitants, 2003 ..... 21.2
	Personal computers per 100 inhabitants, 2002 ..... 6.2
	Internet users per 100 inhabitants, 2002 ..... 11.2

\* Real effective exchange rate 2005 relative to the 1997–2002 average. Values greater than 0 indicate appreciation (depreciation).  
 \*\* The Gini index is a number between 0 and 1 that is a measure of inequality, with lower (higher) values representing less (more) inequality.  
 Sources: UNFPA, *State of World Population 2005*; IMF, *World Economic Outlook Database*, September 2005; EIU, *CountryData Database*, September 2005; IMF, *International Financial Statistics Database*, December 2005; IMF, *Information Notice System*; IMF, *IMF Country Report No. 05/228*, July 2005; UNDP, *Human Development Report 2005*; UNESCO Institute for Statistics, *World Bank, World Development Indicators 2005* (2005); World Health Statistics 2005 (WHS); World Telecommunication Indicators 2005 (WIT) Database and ITU estimates

This section includes four-page country profiles for each of the 21 countries covered in this *Review*. Each profile displays major economic, financial, social, and trade data from published sources and from the World Economic Forum's Executive Opinion Survey (Survey). Country profiles are laid out as follows: the first page presents key indicators for the country in the spirit of giving a general overview of its present situation in terms of economic and social development; the second page includes charts presenting gross domestic product, budget, and trade data; the third and fourth pages present selected data from the World Economic Forum's Global Competitiveness Index and Survey and from the World Bank.

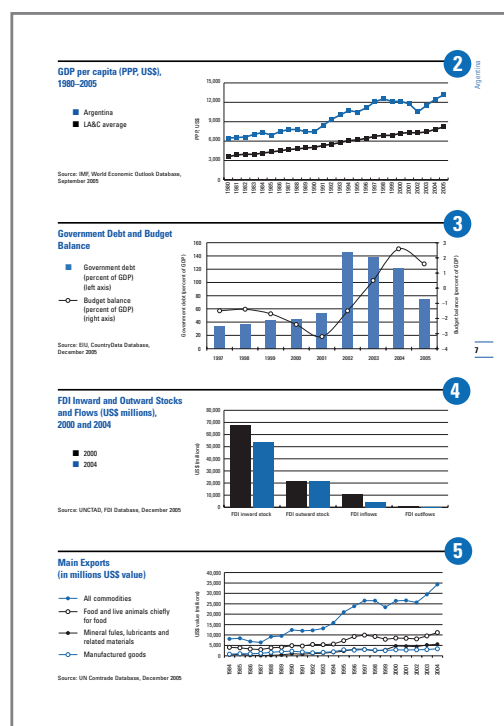
## Page 1

### 1 Key Indicators, Human Development Indicators and Infrastructure and Technology Diffusion Indicators

These three sections present recent data to provide a sense of (1) the size and structure of the economy and the stability of the macroeconomic environment, (2) the state of social development, and (3) the level of development of infrastructure and technology within the country in question.

The data sources include the Economist Intelligence Unit (EIU); the International Monetary Fund (IMF), in particular IMF Country Reports, Public Information Notices, the September 2005 edition of the *World Economic Outlook Database*, the December 2005 edition of *International Financial Statistics*, and the Information Notice System; the International Telecommunication Union (ITU)'s *World Telecommunication Indicators 2004*; the United Nations Development Programme (UNDP)'s *Human Development Report 2005*; the United Nations Educational, Scientific and Cultural Organization (UNESCO)'s Institute for Statistics; the United Nations Population Fund (UNFPA)'s *State of World Population 2005*; the World Bank's *World Development Indicators 2005* (print and CD-Rom editions); the World Health Organization (WHO)'s *World Health Statistics 2005*; and the Central Intelligence Agency (CIA)'s *World Factbook*.

Note that for using 2005 data, the value is usually an estimate or a projection.



## Page 2

### 2 GDP per capita (PPP, US\$), 1980–2005

The chart shows the evolution of the economy's gross domestic product (GDP) in US dollars and at Purchasing Power Parity (PPP) over the period 1980–2005, and, for comparison, the average of the Latin America and Caribbean (LA&C) region, as calculated by the International Monetary Fund (IMF). Note that IMF's LA&C definition covers 33 countries, including the 21 covered by this Review.

### 3 Government Debt and Budget Balance

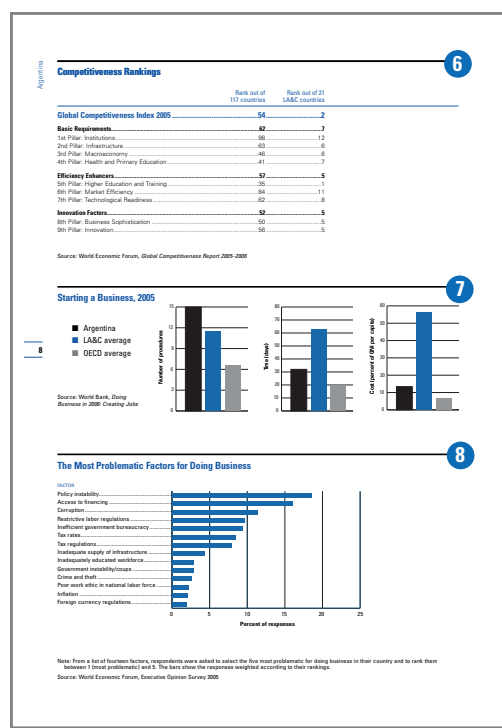
The chart presents the evolution of the country's government debt and budget balance, each expressed as a percentage of GDP. With regard to the budget, a positive (negative) number indicates a surplus (deficit). Data are from the EIU and the IMF. The period under review varies from country to country, based on data availability.

### 4 FDI Inward and Outward Stocks and Flows (US\$ millions), 2000 and 2004

The chart provides a comparison of foreign direct investment inward and outward stocks and flows for two years, 2000 and 2004. The data are from the United Nations Conference on Trade and Development (UNCTAD)'s *Foreign Direct Investment Database*.

### 5 Main Exports (in millions US\$ value)

The chart aims at capturing the composition of the country's export trade. It shows the total value in US dollars for all exports, as well as for the top three categories of exports. These top three are identified by taking the three main export categories in 2004 (or the most recent year available), using the Standard International Trade Classification (SITC). Data come from United Nations Statistics Division's *Comtrade Database*.



## Page 3

### 6 Competitiveness Rankings

The table shows the country's rankings in the Global Competitiveness Index as presented in *The Global Competitiveness Report 2005–2006* (GCR). Performance is measured against (1) the 117 countries covered by the GCR, and (2) the 21 Latin America & Caribbean (LA&C) countries covered by this *Review*.

### 7 Starting a Business, 2005

The chart provides an indication of the ease with which a business can be started in each country, compared with the average for both the LA&C countries and the OECD countries. It shows (1) the number of procedures required, (2) the number of days required, and (3) the cost of setting up a business as a percentage of gross national income per capita. The data come from the World Bank's report *Doing Business in 2006: Creating Jobs*. Note that Trinidad and Tobago is not covered in that report.

### 8 The Most Problematic Factors for Doing Business

This chart summarizes those factors considered by CEOs and top executives as the most problematic for doing business in their country. The information is drawn from a question in the Executive Opinion Survey 2005 in which respondents were presented with fourteen factors and asked to rank from 1 to 5 those five factors considered the most problematic. The responses were tabulated and weighted according to the rank assigned by the respondents.

## Page 4

### 9 National Competitiveness Balance Sheet

This page forms a country competitiveness balance sheet, providing detailed information on the relative strengths and weaknesses of each economy. The balance sheet presents all the variables included in the calculation of the Global Competitiveness Index (Global CI), organized under the different specific issue areas (the nine "Pillars" of the Global CI), such as infrastructure, macroeconomy, and business sophistication. Each variable is ranked out of the entire group of 117 countries included in the GCR.

The decision rule for selecting variables as advantages or disadvantages is based on the methodology employed in the GCR: for the top 10 countries in the Global CI, variables that are ranked between 1 and 10 are considered to be advantages. For those countries ranked from 11 to 50 overall in the Global CI, variables that ranked better than the country's own rank are considered to be advantages. For those countries with an overall Global CI rank lower than 50, any variables ranked equal to or higher than 50 are considered to be advantages.

The numbers to the left of the variables refer to the numbering of the Data Tables presented in the GCR.

The year for the variables is 2005 unless specified otherwise.

**Argentina**

### National Competitiveness Balance Sheet

Based on the Global Competitiveness Index 2005

NOTABLE COMPETITIVE ADVANTAGES	RANK (1/17)	NOTABLE COMPETITIVE DISADVANTAGES	RANK (1/17)
<b>Institutions</b>		<b>Institutions</b>	
2.03 Business courts of terrorism	21	6.09 Property rights	110
2.17 Interest rate spread, 2004	2	6.24 Diversion of public funds	95
2.15 Real effective exchange rate, 2004	36	6.29 Fiscal cost of politicians	107
<b>Macroeconomy</b>		6.01 Judicial independence	105
4.04 Health and primary education	12	6.08 Favorable to decisions of government officials	91
4.05 Medium-term business impact of tuberculosis	20	6.08 Wastefulness of government spending	91
4.06 Medium-term business impact of HIV/AIDS	44	6.07 Burden of government regulation	101
4.11 Life expectancy, 2003	40	6.14 Reliability of police services	88
4.12 Technological readiness, 2003	50	6.10 Business costs of crime and violence	102
4.10 Primary enrollment, 2003	50	6.18 Organized crime	71
<b>Higher education and training</b>		6.19 Ethical behavior of firms	80
4.13 Secondary enrollment	25	6.21 Efficiency of corporate boards	80
6.10 Quality of management schools	22	6.21 Protection of minority shareholders' interests	80
7.05 Local availability of specialized research and training services	33	6.23 Strength of auditing and accounting standards	74
<b>Market efficiency</b>		<b>Infrastructure</b>	
2.12 Agricultural policy costs	20	5.01 Overall infrastructure quality	59
7.11 Time required to start a business	39	5.02 Railroad infrastructure development	60
GDP, exports + imports	23	5.03 Port infrastructure quality	59
8.14 Reliance on professional management	39	5.04 Air transport infrastructure quality	67
<b>Technological readiness</b>		5.05 Quality of electricity supply	67
3.01 Technological readiness	45	5.08 Telephone lines, 2003	54
<b>Business sophistication</b>		<b>Macroeconomy</b>	
7.05 Local supplier quality	45	2.13 Government expenditure, 2004	78
8.05 Production process sophistication	48	2.16 National saving rate, 2004	83
8.06 Extent of marketing	31	2.18 Inflation, 2004	83
<b>Innovation</b>		2.28 Government debt, 2004	111
3.05 Quality of scientific research institutions	44	4.10 Infant mortality	63
3.08 Availability of scientists and engineers	47	4.12 Malaria prevalence	59
3.17 Utility patents, 2004	40	4.14 HIV prevalence, 2003	80
		<b>Higher education and training</b>	
		4.01 Quality of the educational system	77
		4.02 Quality of math and science education	75
		6.11 Extent of staff training	64
		<b>Market efficiency</b>	
		6.02 Efficiency of legal framework	98
		6.11 Extent and effect of taxation	101
		7.10 Number of procedures required to start a business	87
		7.01 Intensity of local competition	81
		7.02 Effectiveness of antitrust policy	79
		2.18 Exports, 2004	97
		6.12 Pricing and fixing practices	107
		6.18 Flexibility of wage determination	99
		6.10 Cooperation in labor-employer relations	81
		8.20 Pay and productivity	91
		4.08 Brain drain	72
		4.09 Private sector employment of women	88
		2.03 Financial market sophistication	59
		2.06 Ease of access to loans	111
		2.08 Venture capital availability	59
		2.04 Soundness of banks	118
		2.08 Local equity market access	94
		<b>Technological readiness</b>	
		3.02 Firm-level technology absorption	89
		3.16 Laws relating to ICT	71
		3.04 FDI and technology transfer	84
		3.16 Cellular telephones, 2003	76
		3.13 Internet users, 2002	84
		3.21 Personnel computers, 2002	83
		<b>Business sophistication</b>	
		8.09 Control of international distribution	74
		8.12 Willingness to delegate authority	81
		8.07 Effectiveness of competitive advantage	86
		8.02 Value chain presence	84

(Disadvantages cont'd. from bottom of right column)

<<< (Cont'd. on bottom of left column)



# Argentina

## Key Indicators

Total population (millions), 2005 .....	38.7
Gross Domestic Product (US\$ billions), 2005 .....	177.3
Gross Domestic Product per capita (PPP, US\$), 2005 .....	13,153.4
Real growth in GDP (percent), 2005.....	7.5
Growth of output (average annual percent change), 1993–2004 .....	1.6
Agriculture.....	2.4
Industry .....	1.3
Manufacturing .....	0.7
Services .....	1.7
Inflation (annual percent change), 2005 .....	9.5
Budget balance (percent of GDP), 2005.....	1.6
Gross fixed capital formation (percent of GDP), 2004.....	19.1
National savings rate (percent of GDP), 2004 .....	21.2
Interest rate spread (percent), 2005.....	2.2
Real effective exchange rate (percent)*, 2004.....	–49.4
Exports of goods and services (percent of GDP), 2004 .....	25.3
Imports of goods and services (percent of GDP), 2004.....	18.2
Current account balance (percent of GDP), 2005.....	1.3
Gross official reserves in months of imports, 2004 .....	8.5
Government debt (percent of GDP), 2005 .....	74.5
Unemployment (percent of total labor force), 2004 .....	13.6
Gini index** .....	0.5

## Human Development Indicators

Gross primary enrollment (percent of relevant age group), 2003 .....	119.4
Gross secondary enrollment (percent of relevant age group), 2003 .....	100.0
Gross tertiary enrollment (percent of relevant age group), 2003 .....	59.8
Adult literacy rate (percent of population aged 15 and above), 2002 .....	97.0
Life expectancy at birth, 2003 .....	74.0
HIV prevalence rate (percent of population aged 15 to 49), 2003 .....	0.7
Public expenditure on health (percent of GDP), 2002 .....	4.5

## Infrastructure and Technology Diffusion Indicators

Paved roads (percent of total roads).....	29.4
Main telephone lines per 100 inhabitants, 2003 .....	22.6
Cellular mobile telephone subscribers per 100 inhabitants, 2003 ..	21.2
Personal computers per 100 inhabitants, 2002 .....	8.2
Internet users per 100 inhabitants, 2002 .....	11.2

\* Real effective exchange rate 2004 relative to the 1997–2003 average. Values greater (less) than 0 indicate appreciation (depreciation).

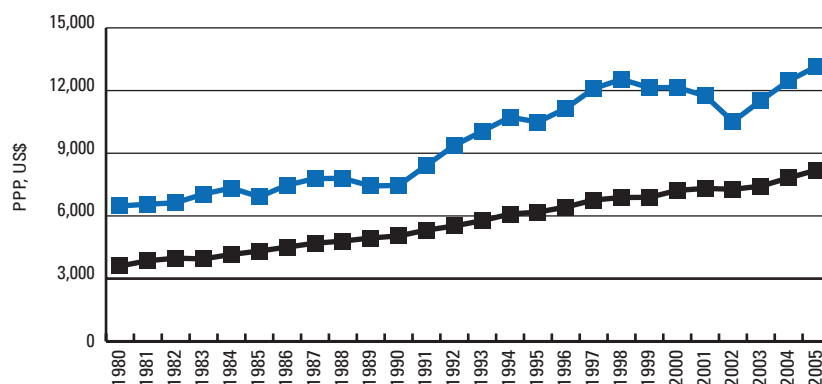
\*\* The Gini index is a number between 0 and 1 that is a measure of inequality, with lower (higher) values representing less (more) inequality.

Sources: UNFPA, *State of World Population 2005*; IMF, *World Economic Outlook Database*, September 2005; EIU, *CountryData Database*, December 2005; IMF, *International Financial Statistics Database*, December 2005; IMF, Information Notice System; IMF, *IMF Country Report No. 05/236*, July 2005; UNDP, *Human Development Report 2005*; UNESCO Institute for Statistics; World Bank, *World Development Indicators 2005*; WHO, *World Health Statistics 2005*; ITU, *World Telecommunication Indicators 2004*; UN Statistics Division and ITU estimates

## GDP per capita (PPP, US\$), 1980–2005

- Argentina
- LA&C average

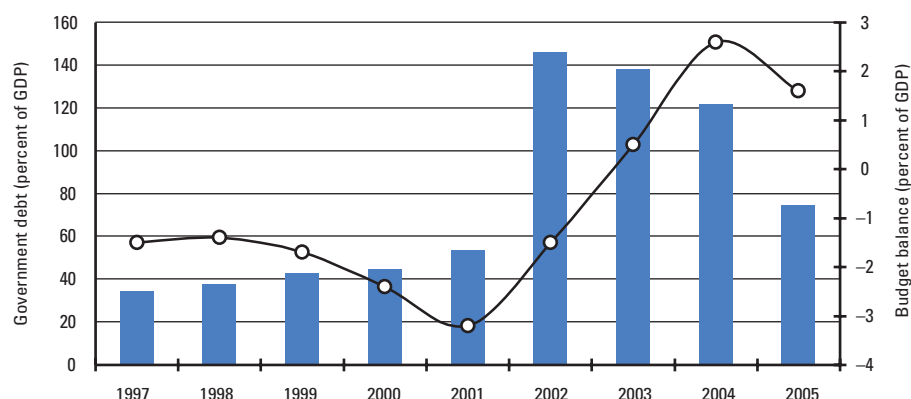
Source: IMF, World Economic Outlook Database, September 2005



## Government Debt and Budget Balance

- Government debt (percent of GDP) (left axis)
- Budget balance (percent of GDP) (right axis)

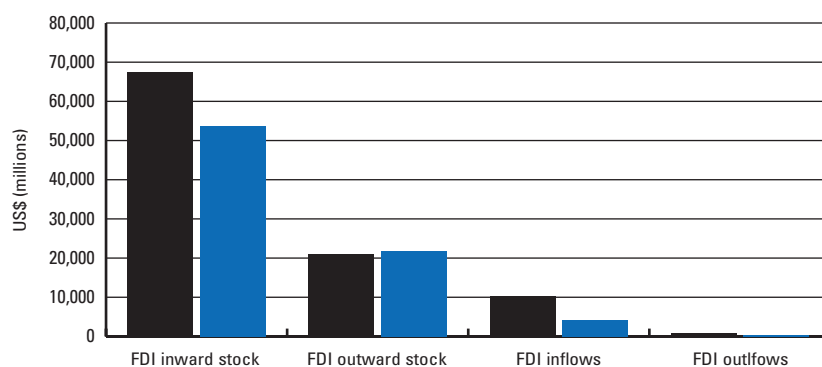
Source: EIU, CountryData Database, December 2005



## FDI Inward and Outward Stocks and Flows (US\$ millions), 2000 and 2004

- 2000
- 2004

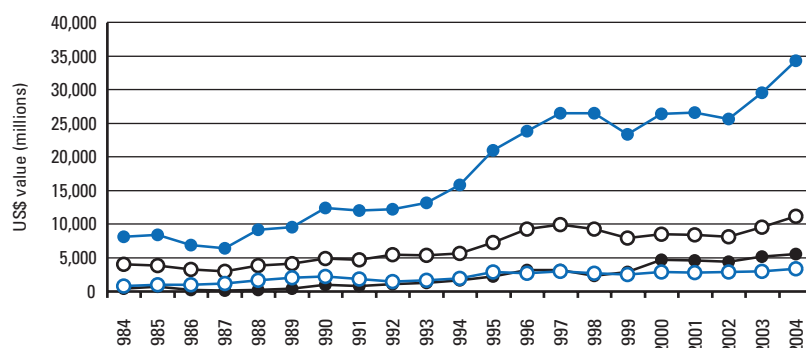
Source: UNCTAD, FDI Database, December 2005



## Main Exports (in millions US\$ value)

- All commodities
- Food and live animals chiefly for food
- Mineral fuels, lubricants and related materials
- Manufactured goods classified chiefly by materials

Source: UN Comtrade Database, December 2005



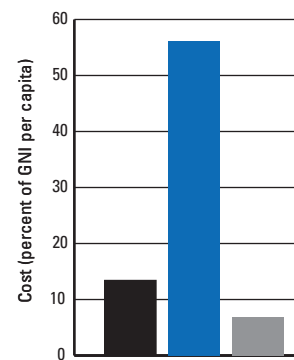
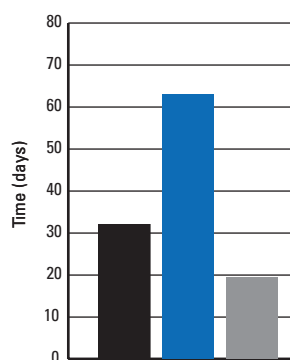
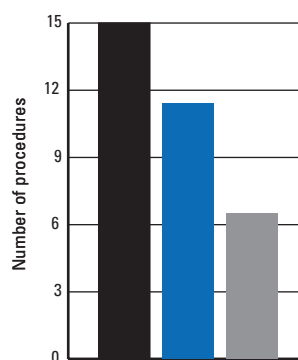
## Competitiveness Rankings

	Rank out of 117 countries	Rank out of 21 LA&C countries
<b>Global Competitiveness Index 2005 .....</b>	<b>54</b>	<b>2</b>
<b>Basic Requirements.....</b>	<b>62</b>	<b>7</b>
1st Pillar: Institutions .....	98	12
2nd Pillar: Infrastructure .....	63	6
3rd Pillar: Macroeconomy .....	46	6
4th Pillar: Health and Primary Education .....	41	7
<b>Efficiency Enhancers.....</b>	<b>57</b>	<b>5</b>
5th Pillar: Higher Education and Training.....	35	1
6th Pillar: Market Efficiency .....	84	11
7th Pillar: Technological Readiness .....	62	8
<b>Innovation Factors.....</b>	<b>52</b>	<b>5</b>
8th Pillar: Business Sophistication .....	50	5
9th Pillar: Innovation.....	56	5

Source: World Economic Forum, *Global Competitiveness Report 2005–2006*

## Starting a Business, 2005

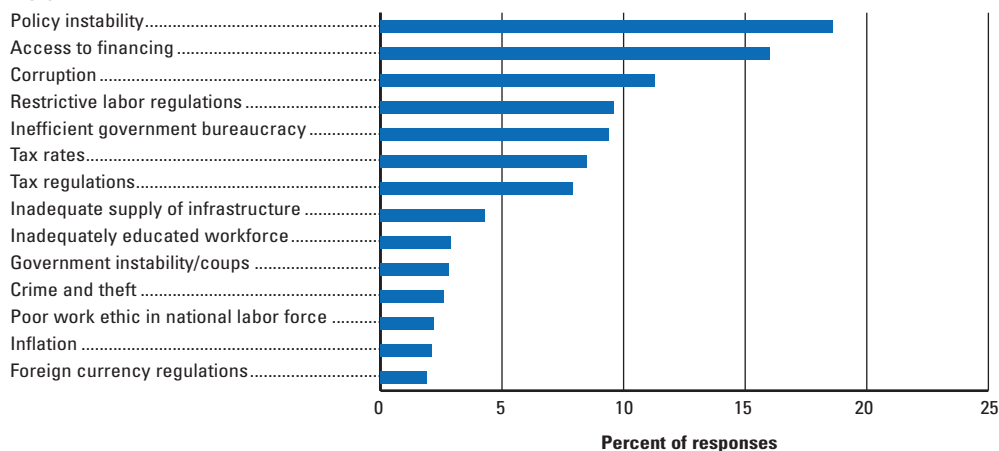
■ Argentina  
■ LA&C average  
■ OECD average



Source: World Bank, *Doing Business in 2006: Creating Jobs*

## The Most Problematic Factors for Doing Business

### FACTOR



Note: From a list of fourteen factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars show the responses weighted according to their rankings.

Source: World Economic Forum, Executive Opinion Survey 2005

# National Competitiveness Balance Sheet Based on the Global Competitiveness Index 2005

NOTABLE COMPETITIVE ADVANTAGES		RANK/117
<b>Institutions</b>		
2.02	Business costs of terrorism .....	21
<b>Macroeconomy</b>		
2.17	Interest rate spread, 2004 .....	36
2.15	Real effective exchange rate, 2004 .....	2
<b>Health and primary education</b>		
4.04	Medium-term business impact of malaria .....	12
4.05	Medium-term business impact of tuberculosis .....	20
4.06	Medium-term business impact of HIV/AIDS .....	44
4.11	Life expectancy, 2003 .....	40
4.12	Tuberculosis prevalence, 2003 .....	50
4.15	Primary enrollment, 2003 .....	10
<b>Higher education and training</b>		
4.16	Secondary enrollment .....	25
4.17	Tertiary enrollment .....	22
8.15	Quality of management schools .....	22
7.09	Local availability of specialized research and training services .....	33
<b>Market efficiency</b>		
2.12	Agricultural policy costs .....	20
7.11	Time required to start a business .....	39
	GDP – exports + imports .....	23
8.14	Reliance on professional management .....	39
<b>Technological readiness</b>		
3.01	Technological readiness .....	45
<b>Business sophistication</b>		
7.05	Local supplier quantity .....	43
7.06	Local supplier quality .....	46
8.05	Production process sophistication .....	46
8.06	Extent of marketing .....	31
<b>Innovation</b>		
3.05	Quality of scientific research institutions .....	44
3.09	Availability of scientists and engineers .....	47
3.17	Utility patents, 2004 .....	40

(Disadvantages cont'd. from bottom of right column)

NOTABLE COMPETITIVE DISADVANTAGES		RANK/117
<b>Innovation</b>		
3.06	Company spending on research and development .....	58
3.07	University/industry research collaboration .....	52
3.08	Government procurement of advanced technology products .....	85
6.04	Intellectual property protection .....	71
8.03	Capacity for innovation .....	63

NOTABLE COMPETITIVE DISADVANTAGES		RANK/117
<b>Institutions</b>		
6.03	Property rights .....	110
6.24	Diversion of public funds .....	95
6.26	Public trust of politicians .....	107
6.01	Judicial independence .....	105
6.08	Favoritism in decisions of government officials .....	97
6.06	Wastefulness of government spending .....	91
6.07	Burden of government regulation .....	101
6.14	Reliability of police services .....	86
6.15	Business costs of crime and violence .....	102
6.16	Organized crime .....	71
8.04	Ethical behavior of firms .....	80
8.16	Efficacy of corporate boards .....	60
8.21	Protection of minority shareholders' interests .....	80
8.23	Strength of auditing and accounting standards .....	74
<b>Infrastructure</b>		
5.01	Overall infrastructure quality .....	59
5.02	Railroad infrastructure development .....	60
5.03	Port infrastructure quality .....	59
5.04	Air transport infrastructure quality .....	67
5.05	Quality of electricity supply .....	67
5.08	Telephone lines, 2003 .....	54
<b>Macroeconomy</b>		
2.13	Government surplus/deficit, 2004 .....	78
2.14	National saving rate, 2004 .....	61
2.16	Inflation, 2004 .....	63
2.20	Government debt, 2004 .....	111
<b>Health and primary education</b>		
4.10	Infant mortality .....	63
4.13	Malaria prevalence .....	59
4.14	HIV prevalence, 2003 .....	80
<b>Higher education and training</b>		
4.01	Quality of the educational system .....	77
4.03	Quality of math and science education .....	73
8.11	Extent of staff training .....	64
<b>Market efficiency</b>		
6.02	Efficiency of legal framework .....	98
6.11	Extent and effect of taxation .....	101
7.10	Number of procedures required to start a business .....	97
7.01	Intensity of local competition .....	81
7.02	Effectiveness of antitrust policy .....	79
2.18	Exports, 2004 .....	97
8.17	Hiring and firing practices .....	107
8.18	Flexibility of wage determination .....	99
8.19	Cooperation in labor-employer relations .....	87
8.20	Pay and productivity .....	91
4.08	Brain drain .....	72
4.09	Private sector employment of women .....	88
2.03	Financial market sophistication .....	59
2.05	Ease of access to loans .....	111
2.06	Venture capital availability .....	90
2.04	Soundness of banks .....	116
2.08	Local equity market access .....	84
<b>Technological readiness</b>		
3.02	Firm-level technology absorption .....	89
3.15	Laws relating to ICT .....	71
3.04	FDI and technology transfer .....	54
3.18	Cellular telephones, 2003 .....	70
3.19	Internet users, 2002 .....	54
3.21	Personal computers, 2002 .....	53
<b>Business sophistication</b>		
8.08	Control of international distribution .....	74
8.12	Willingness to delegate authority .....	51
8.01	Nature of competitive advantage .....	95
8.02	Value chain presence .....	84

<<< (Cont'd. on bottom of left column)

# Bolivia

## Key Indicators

Total population (millions), 2005 .....	9.2
Gross Domestic Product (US\$ billions), 2005 .....	9.3
Gross Domestic Product per capita (PPP, US\$), 2005 .....	2,839.5
Real growth in GDP (percent), 2005.....	3.9

Growth of output (average annual percent change), 1990–2004 .....	4.0
Agriculture.....	3.4
Industry .....	3.9
Manufacturing .....	3.9
Services .....	4.5

Inflation (annual percent change), 2005 .....	5.5
Budget balance (percent of GDP), 2005 .....	–3.3
Gross fixed capital formation (percent of GDP), 2004.....	12.6
National savings rate (percent of GDP), 2004 .....	15.6
Interest rate spread (percent), 2005.....	8.5

Real effective exchange rate (percent)*, 2004.....	–17.3
Exports of goods and services (percent of GDP), 2004 .....	30.7
Imports of goods and services (percent of GDP), 2004.....	26.4
Current account balance (percent of GDP), 2005.....	2.6
Gross official reserves in months of imports, 2004 .....	6.7
Government debt (percent of GDP), 2005 .....	72.1
Unemployment (percent of total labor force), 2004 .....	7.0
Gini index** .....	0.4

## Human Development Indicators

Gross primary enrollment (percent of relevant age group), 2003 .....	115.3
Gross secondary enrollment (percent of relevant age group), 2003 .....	86.4
Gross tertiary enrollment (percent of relevant age group), 2003 .....	39.4
Adult literacy rate (percent of population aged 15 and above), 2001 .....	86.5
Life expectancy at birth, 2003 .....	65.0
HIV prevalence rate (percent of population aged 15 to 49), 2003 .....	0.1
Public expenditure on health (percent of GDP), 2002 .....	4.2

## Infrastructure and Technology Diffusion Indicators

Paved roads (percent of total roads).....	6.6
Main telephone lines per 100 inhabitants, 2003 .....	7.3
Cellular mobile telephone subscribers per 100 inhabitants, 2003 ..	13.1
Personal computers per 100 inhabitants, 2002 .....	2.3
Internet users per 100 inhabitants, 2003 .....	3.7

\* Real effective exchange rate 2004 relative to the 1997–2003 average. Values greater (less) than 0 indicate appreciation (depreciation).

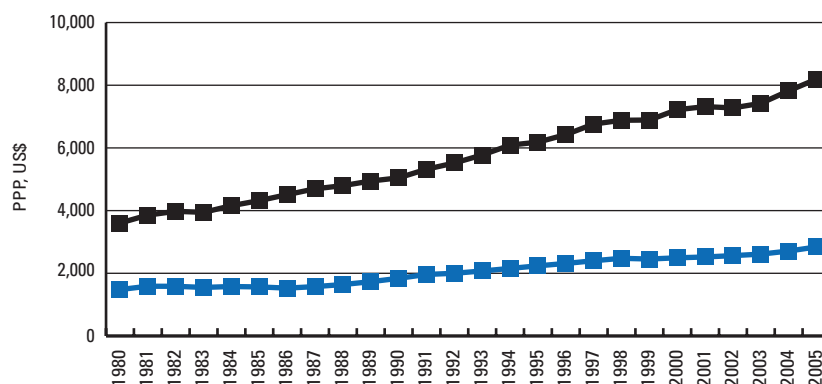
\*\* The Gini index is a number between 0 and 1 that is a measure of inequality, with lower (higher) values representing less (more) inequality.

Sources: UNFPA, *State of World Population 2005*; IMF, *World Economic Outlook Database*, September 2005; EIU, *CountryData Database*, December 2005; IMF, *International Financial Statistics Database*, December 2005; IMF, Information Notice System; IMF, Public Information Notice No. 05/53, April 2005; UNDP, *Human Development Report 2005*; UNESCO Institute for Statistics; WHO, *World Health Statistics 2005*; World Bank, *World Development Indicators 2005*; ITU, *World Telecommunication Indicators 2004*; UN Statistics Division and ITU estimates

## GDP per capita (PPP, US\$), 1980–2005

- Bolivia
- LA&C average

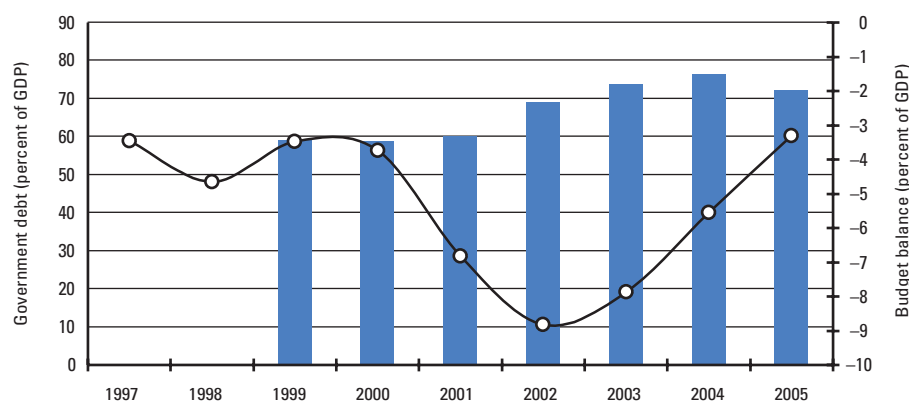
Source: IMF, World Economic Outlook Database, September 2005



## Government Debt and Budget Balance

- Government debt (percent of GDP) (left axis)
- Budget balance (percent of GDP) (right axis)

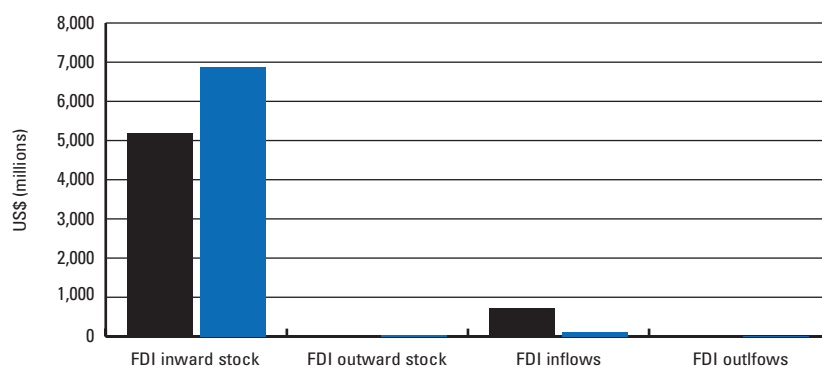
Sources: Economist Intelligence Unit; IMF, Country Report



## FDI Inward and Outward Stocks and Flows (US\$ millions), 2000 and 2004

- 2000
- 2004

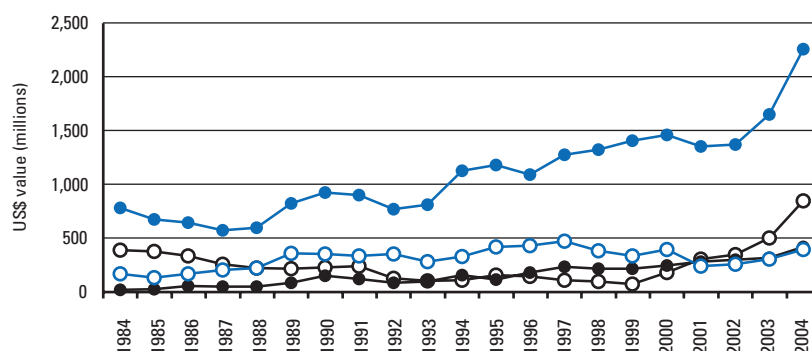
Source: UNCTAD, FDI Database, December 2005



## Main Exports (in millions US\$ value)

- All commodities
- Mineral fuels, lubricants and related materials
- Food and live animals chiefly for food
- Crude materials, inedible except fuels

Source: UN Comtrade Database, December 2005

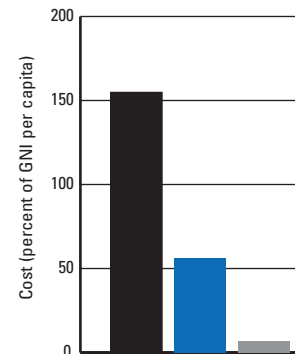
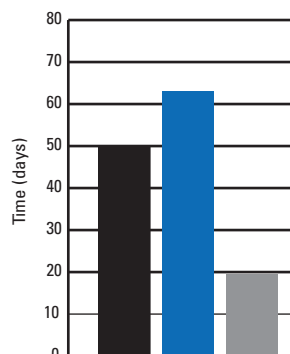
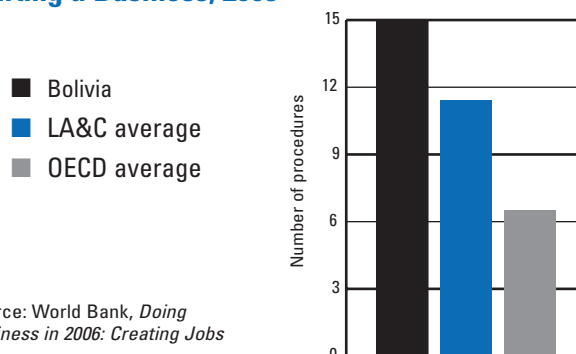


## Competitiveness Rankings

	Rank out of 117 countries	Rank out of 21 LA&C countries
<b>Global Competitiveness Index 2005 .....</b>	<b>101 .....</b>	<b>19 .....</b>
<b>Basic Requirements.....</b>	<b>99 .....</b>	<b>20 .....</b>
1st Pillar: Institutions .....	112 .....	17 .....
2nd Pillar: Infrastructure .....	98 .....	18 .....
3rd Pillar: Macroeconomy .....	94 .....	16 .....
4th Pillar: Health and Primary Education .....	82 .....	21 .....
<b>Efficiency Enhancers.....</b>	<b>98 .....</b>	<b>16 .....</b>
5th Pillar: Higher Education and Training.....	84 .....	13 .....
6th Pillar: Market Efficiency .....	113 .....	20 .....
7th Pillar: Technological Readiness .....	111 .....	20 .....
<b>Innovation Factors.....</b>	<b>114 .....</b>	<b>20 .....</b>
8th Pillar: Business Sophistication .....	116 .....	21 .....
9th Pillar: Innovation.....	112 .....	20 .....

Source: World Economic Forum, *Global Competitiveness Report 2005–2006*

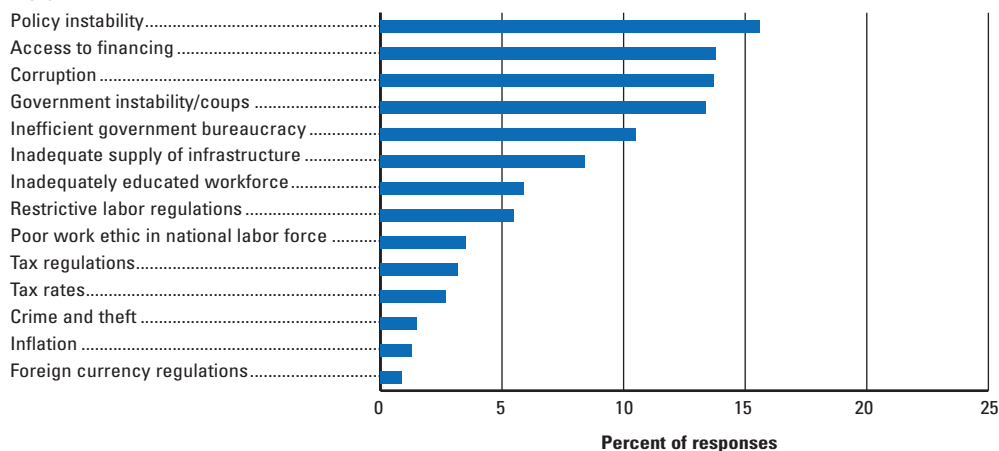
## Starting a Business, 2005



Source: World Bank, *Doing Business in 2006: Creating Jobs*

## The Most Problematic Factors for Doing Business

### FACTOR



Note: From a list of fourteen factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars show the responses weighted according to their rankings.

Source: World Economic Forum, Executive Opinion Survey 2005



# National Competitiveness Balance Sheet Based on the Global Competitiveness Index 2005

NOTABLE COMPETITIVE ADVANTAGES		RANK/117
<b>Macroeconomy</b>		
2.15	Real effective exchange rate, 2004 .....	21
<b>Health and primary education</b>		
4.14	HIV prevalence, 2003 .....	5
4.15	Primary enrollment, 2003 .....	14
<b>Higher education and training</b>		
4.17	Tertiary enrollment .....	41
<b>Market efficiency</b>		
2.12	Agricultural policy costs .....	48
8.18	Flexibility of wage determination .....	45

NOTABLE COMPETITIVE DISADVANTAGES		RANK/117
<b>Institutions</b>		
6.03	Property rights .....	107
6.24	Diversion of public funds .....	105
6.26	Public trust of politicians .....	111
6.01	Judicial independence .....	106
6.08	Favoritism in decisions of government officials .....	108
6.06	Wastefulness of government spending .....	97
6.07	Burden of government regulation .....	103
2.02	Business costs of terrorism .....	69
6.14	Reliability of police services .....	106
6.15	Business costs of crime and violence .....	84
6.16	Organized crime .....	59
8.04	Ethical behavior of firms .....	113
8.16	Efficacy of corporate boards .....	115
8.21	Protection of minority shareholders' interests .....	109
8.23	Strength of auditing and accounting standards .....	109
<b>Infrastructure</b>		
5.01	Overall infrastructure quality .....	112
5.02	Railroad infrastructure development .....	78
5.03	Port infrastructure quality .....	113
5.04	Air transport infrastructure quality .....	87
5.05	Quality of electricity supply .....	66
5.08	Telephone lines, 2003 .....	84
<b>Macroeconomy</b>		
2.13	Government surplus/deficit, 2004 .....	109
2.14	National saving rate, 2004 .....	103
2.16	Inflation, 2004 .....	63
2.17	Interest rate spread, 2004 .....	74
2.20	Government debt, 2004 .....	92
<b>Health and primary education</b>		
4.04	Medium-term business impact of malaria .....	65
4.05	Medium-term business impact of tuberculosis .....	67
4.06	Medium-term business impact of HIV/AIDS .....	52
4.10	Infant mortality .....	100
4.11	Life expectancy, 2003 .....	87
4.12	Tuberculosis prevalence, 2003 .....	98
4.13	Malaria prevalence .....	92
<b>Higher education and training</b>		
4.16	Secondary enrollment .....	56
4.01	Quality of the educational system .....	111
4.03	Quality of math and science education .....	97
8.15	Quality of management schools .....	95
7.09	Local availability of specialized research and training services .....	103
8.11	Extent of staff training .....	112
<b>Market efficiency</b>		
6.02	Efficiency of legal framework .....	100
6.11	Extent and effect of taxation .....	65
7.10	Number of procedures required to start a business .....	97
7.11	Time required to start a business .....	82
7.01	Intensity of local competition .....	92
7.02	Effectiveness of antitrust policy .....	104
	GDP – exports + imports .....	86
2.18	Exports, 2004 .....	91
8.17	Hiring and firing practices .....	92
8.19	Cooperation in labor-employer relations .....	107
8.14	Reliance on professional management .....	115
8.20	Pay and productivity .....	100
4.08	Brain drain .....	99
4.09	Private sector employment of women .....	113
2.03	Financial market sophistication .....	95
2.05	Ease of access to loans .....	113
2.06	Venture capital availability .....	110
2.04	Soundness of banks .....	100
2.08	Local equity market access .....	98

(Disadvantages cont'd. from bottom of right column)

NOTABLE COMPETITIVE DISADVANTAGES		RANK/117
<b>Technological readiness</b>		
3.01	Technological readiness .....	94
3.02	Firm-level technology absorption .....	109
3.15	Laws relating to ICT .....	115
3.04	FDI and technology transfer .....	100
3.18	Cellular telephones, 2003 .....	81
3.19	Internet users, 2002 .....	85
3.21	Personal computers, 2003 .....	84
<b>Business sophistication</b>		
7.05	Local supplier quantity .....	114
7.06	Local supplier quality .....	106
8.05	Production process sophistication .....	104
8.06	Extent of marketing .....	103
8.08	Control of international distribution .....	114
8.12	Willingness to delegate authority .....	115
8.01	Nature of competitive advantage .....	116
8.02	Value chain presence .....	112
<b>Innovation</b>		
3.05	Quality of scientific research institutions .....	108
3.06	Company spending on research and development .....	110
3.07	University/industry research collaboration .....	109
3.08	Government procurement of advanced technology products .....	114
6.04	Intellectual property protection .....	116
3.09	Availability of scientists and engineers .....	102
8.03	Capacity for innovation .....	113
3.17	Utility patents, 2004 .....	81

<<< (Cont'd. on bottom of left column)

# Brazil

## Key Indicators

Total population (millions), 2005 .....	186.4
Gross Domestic Product (US\$ billions), 2005 .....	789.3
Gross Domestic Product per capita (PPP, US\$), 2005 .....	8,452.7
Real growth in GDP (percent), 2005.....	3.3
Growth of output (average annual percent change), 1990–2004 .....	2.6
Agriculture.....	4.3
Industry .....	2.1
Manufacturing .....	2.4
Services .....	2.5
Inflation (annual percent change), 2005 .....	6.8
Budget balance (percent of GDP), 2005 .....	–2.8
Gross fixed capital formation (percent of GDP), 2004.....	19.6
National savings rate (percent of GDP), 2004 .....	22.0
Interest rate spread (percent), 2005.....	38.3
Real effective exchange rate (percent)*, 2004.....	–26.8
Exports of goods and services (percent of GDP), 2004 .....	18.0
Imports of goods and services (percent of GDP), 2004.....	13.4
Current account balance (percent of GDP), 2005.....	1.7
Gross official reserves in months of imports, 2004 .....	n/a
Government debt (percent of GDP), 2005 .....	50.6
Unemployment (percent of total labor force), 2004 .....	11.5
Gini index** .....	0.6

## Human Development Indicators

Gross primary enrollment (percent of relevant age group), 2003 .....	147.0
Gross secondary enrollment (percent of relevant age group), 2003 .....	110.0
Gross tertiary enrollment (percent of relevant age group), 2003 .....	20.6
Adult literacy rate (percent of population aged 15 and above), 2003 .....	88.4
Life expectancy at birth, 2003 .....	69.0
HIV prevalence rate (percent of population aged 15 to 49), 2003 .....	0.7
Public expenditure on health (percent of GDP), 2002 .....	3.6

## Infrastructure and Technology Diffusion Indicators

Paved roads (percent of total roads).....	5.5
Main telephone lines per 100 inhabitants, 2003 .....	22.3
Cellular mobile telephone subscribers per 100 inhabitants, 2003 ..	26.4
Personal computers per 100 inhabitants, 2002 .....	7.5
Internet users per 100 inhabitants, 2003 .....	10.2

\* Real effective exchange rate 2004 relative to the 1997–2003 average. Values greater (less) than 0 indicate appreciation (depreciation).

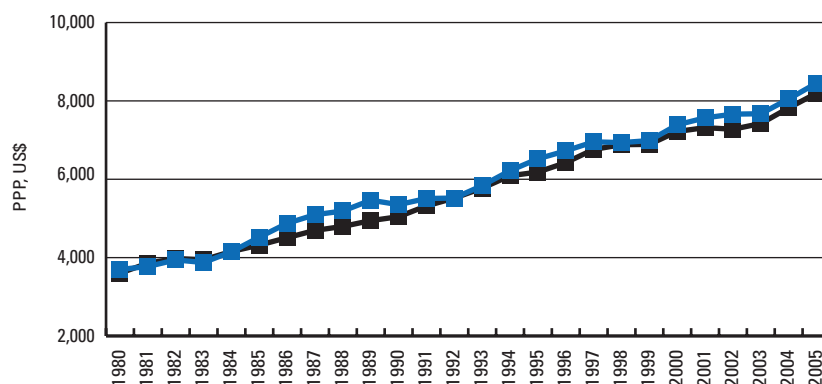
\*\* The Gini index is a number between 0 and 1 that is a measure of inequality, with lower (higher) values representing less (more) inequality.

Sources: UNFPA, *State of World Population 2005*; IMF, *World Economic Outlook Database*, September 2005; EIU, *CountryData Database*, December 2005; IMF, *International Financial Statistics Database*, December 2005; IMF, Information Notice System; UNDP, *Human Development Report 2005*; UNESCO Institute for Statistics; WHO, *World Health Statistics 2005*; World Bank, *World Development Indicators 2005*; ITU, *World Telecommunication Indicators 2004*; UN Statistics Division and ITU estimates

## GDP per capita (PPP, US\$), 1980–2005

- Brazil
- LA&C average

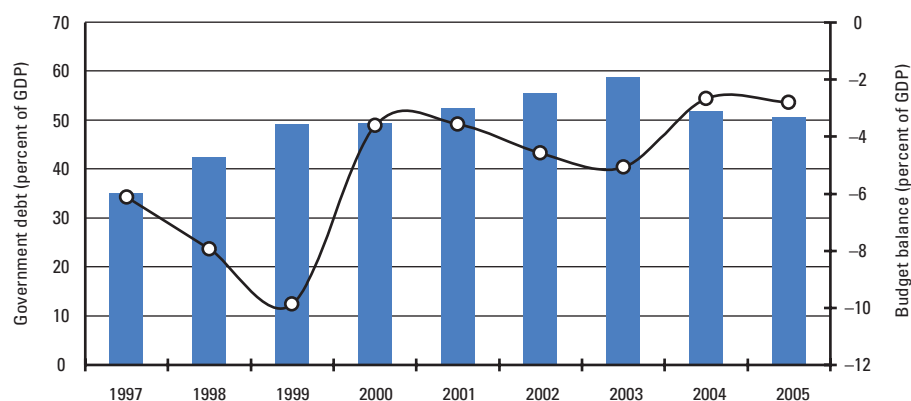
Source: IMF, World Economic Outlook Database, September 2005



## Government Debt and Budget Balance

- Government debt (percent of GDP) (left axis)
- Budget balance (percent of GDP) (right axis)

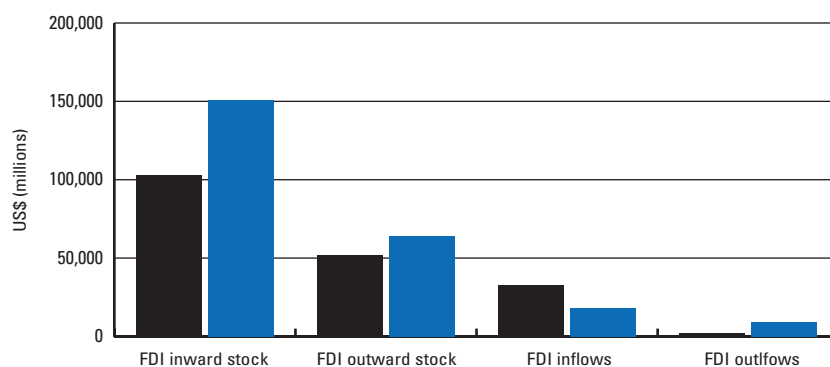
Sources: Economist Intelligence Unit; IMF, Public Information Notice No. 00/94



## FDI Inward and Outward Stocks and Flows (US\$ millions), 2000 and 2004

- 2000
- 2004

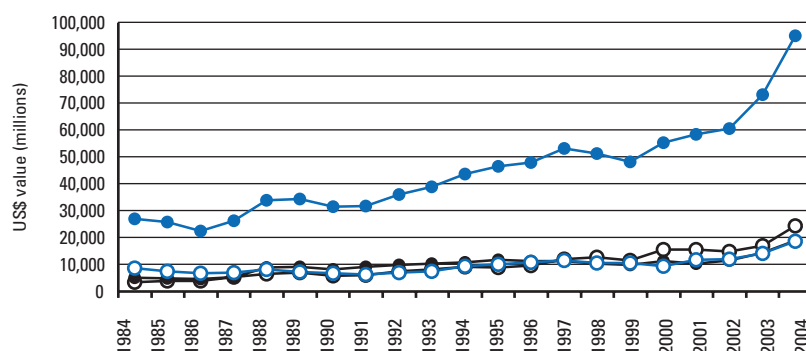
Source: UNCTAD, FDI Database, December 2005



## Main Exports (in millions US\$ value)

- All commodities
- Machinery and transport equipment
- Manufactured goods classified chiefly by materials
- Food and live animals chiefly for food

Source: UN Comtrade Database, December 2005



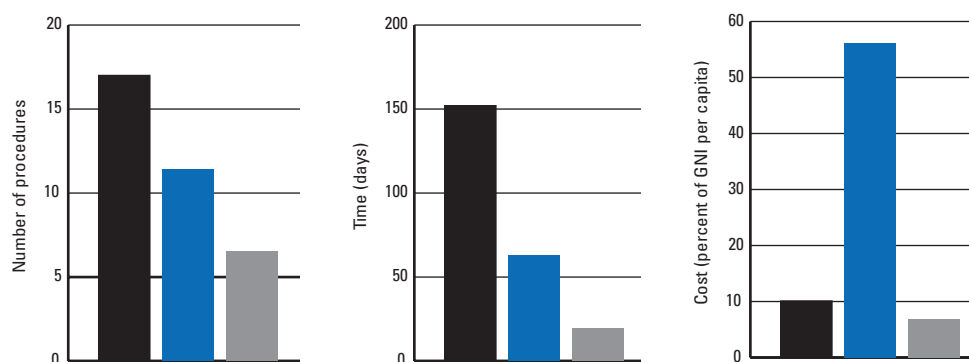
## Competitiveness Rankings

	Rank out of 117 countries	Rank out of 21 LA&C countries
<b>Global Competitiveness Index 2005 .....</b>	<b>57 .....</b>	<b>4 .....</b>
<b>Basic Requirements.....</b>	<b>77 .....</b>	<b>12 .....</b>
1st Pillar: Institutions .....	79 .....	10 .....
2nd Pillar: Infrastructure .....	70 .....	8 .....
3rd Pillar: Macroeconomy .....	91 .....	14 .....
4th Pillar: Health and Primary Education .....	52 .....	13 .....
<b>Efficiency Enhancers.....</b>	<b>51 .....</b>	<b>3 .....</b>
5th Pillar: Higher Education and Training.....	50 .....	3 .....
6th Pillar: Market Efficiency .....	55 .....	5 .....
7th Pillar: Technological Readiness .....	51 .....	4 .....
<b>Innovation Factors.....</b>	<b>36 .....</b>	<b>2 .....</b>
8th Pillar: Business Sophistication .....	33 .....	2 .....
9th Pillar: Innovation.....	39 .....	2 .....

Source: World Economic Forum, *Global Competitiveness Report 2005–2006*

## Starting a Business, 2005

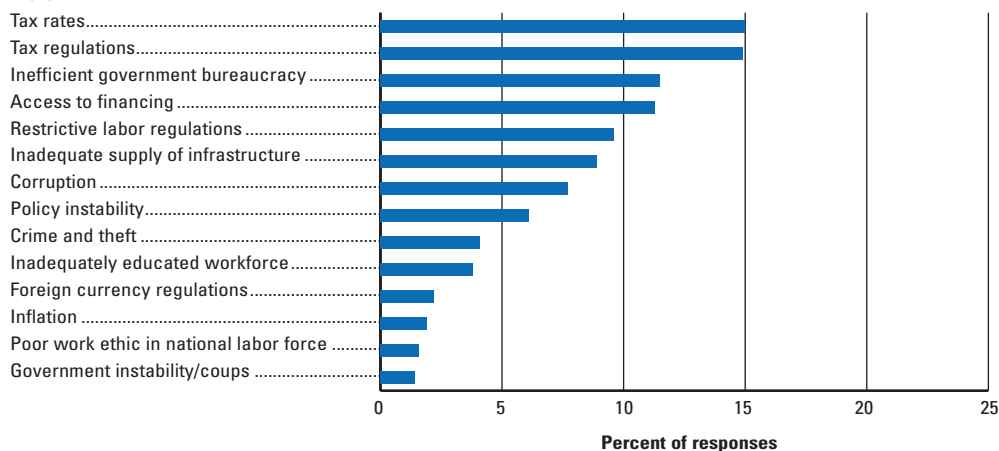
■ Brazil  
■ LA&C average  
■ OECD average



Source: World Bank, *Doing Business in 2006: Creating Jobs*

## The Most Problematic Factors for Doing Business

FACTOR



Note: From a list of fourteen factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars show the responses weighted according to their rankings.

Source: World Economic Forum, Executive Opinion Survey 2005

NOTABLE COMPETITIVE ADVANTAGES		RANK/117
<b>Institutions</b>		
2.02	Business costs of terrorism .....	13
<b>Macroeconomy</b>		
2.14	National saving rate, 2004 .....	43
2.15	Real effective exchange rate, 2004 .....	8
<b>Health and primary education</b>		
4.15	Primary enrollment, 2003 .....	1
<b>Higher education and training</b>		
4.16	Secondary enrollment .....	13
8.15	Quality of management schools .....	41
7.09	Local availability of specialized research and training services .....	24
8.11	Extent of staff training .....	34
<b>Market efficiency</b>		
2.12	Agricultural policy costs .....	27
7.02	Effectiveness of antitrust policy .....	38
	GDP – exports + imports .....	9
8.14	Reliance on professional management .....	43
4.08	Brain drain .....	39
2.03	Financial market sophistication .....	27
2.04	Soundness of banks .....	45
<b>Technological readiness</b>		
3.02	Firm-level technology absorption .....	46
3.15	Laws relating to ICT .....	44
3.04	FDI and technology transfer .....	31
<b>Business sophistication</b>		
7.05	Local supplier quantity .....	27
7.06	Local supplier quality .....	36
8.05	Production process sophistication .....	32
8.06	Extent of marketing .....	25
8.08	Control of international distribution .....	39
8.12	Willingness to delegate authority .....	36
<b>Innovation</b>		
3.05	Quality of scientific research institutions .....	39
3.06	Company spending on research and development .....	29
3.07	University/industry research collaboration .....	40
3.08	Government procurement of advanced technology products .....	44
8.03	Capacity for innovation .....	32
3.17	Utility patents, 2004 .....	50

NOTABLE COMPETITIVE DISADVANTAGES		RANK/117
<b>Institutions</b>		
6.03	Property rights .....	60
6.24	Diversion of public funds .....	99
6.26	Public trust of politicians .....	93
6.01	Judicial independence .....	72
6.08	Favoritism in decisions of government officials .....	69
6.06	Wastefulness of government spending .....	111
6.07	Burden of government regulation .....	115
6.14	Reliability of police services .....	89
6.15	Business costs of crime and violence .....	107
6.16	Organized crime .....	99
8.04	Ethical behavior of firms .....	51
8.16	Efficacy of corporate boards .....	59
8.21	Protection of minority shareholders' interests .....	51
8.23	Strength of auditing and accounting standards .....	62
<b>Infrastructure</b>		
5.01	Overall infrastructure quality .....	85
5.02	Railroad infrastructure development .....	77
5.03	Port infrastructure quality .....	92
5.04	Air transport infrastructure quality .....	55
5.05	Quality of electricity supply .....	60
5.08	Telephone lines, 2003 .....	55
<b>Macroeconomy</b>		
2.13	Government surplus/deficit, 2004 .....	68
2.16	Inflation, 2004 .....	83
2.17	Interest rate spread, 2004 .....	115
2.20	Government debt, 2004 .....	59
<b>Health and primary education</b>		
4.04	Medium-term business impact of malaria .....	75
4.05	Medium-term business impact of tuberculosis .....	55
4.06	Medium-term business impact of HIV/AIDS .....	65
4.10	Infant mortality .....	68
4.11	Life expectancy, 2003 .....	77
4.12	Tuberculosis prevalence, 2003 .....	61
4.13	Malaria prevalence .....	91
4.14	HIV prevalence, 2003 .....	80
<b>Higher education and training</b>		
4.17	Tertiary enrollment .....	74
4.01	Quality of the educational system .....	94
4.03	Quality of math and science education .....	100
<b>Market efficiency</b>		
6.02	Efficiency of legal framework .....	74
6.11	Extent and effect of taxation .....	117
7.10	Number of procedures required to start a business .....	102
7.11	Time required to start a business .....	104
7.01	Intensity of local competition .....	56
2.18	Exports, 2004 .....	104
8.17	Hiring and firing practices .....	89
8.18	Flexibility of wage determination .....	98
8.19	Cooperation in labor-employer relations .....	78
8.20	Pay and productivity .....	77
4.09	Private sector employment of women .....	85
2.05	Ease of access to loans .....	71
2.06	Venture capital availability .....	91
2.08	Local equity market access .....	59
<b>Technological readiness</b>		
3.01	Technological readiness .....	56
3.18	Cellular telephones, 2003 .....	64
3.19	Internet users, 2003 .....	57
3.21	Personal computers, 2002 .....	57
<b>Business sophistication</b>		
8.01	Nature of competitive advantage .....	76
8.02	Value chain presence .....	56
<b>Innovation</b>		
6.04	Intellectual property protection .....	65
3.09	Availability of scientists and engineers .....	72

# Chile

## Key Indicators

Total population (millions), 2005 .....	16.3
Gross Domestic Product (US\$ billions), 2005 .....	100.7
Gross Domestic Product per capita (PPP, US\$), 2005 .....	11,536.5
Real growth in GDP (percent), 2005.....	5.9
Growth of output (average annual percent change), 1996–2004 .....	4.5
Agriculture.....	5.0
Industry .....	5.3
Manufacturing .....	6.8
Services .....	3.7
Inflation (annual percent change), 2005 .....	2.9
Budget balance (percent of GDP), 2005.....	4.0
Gross fixed capital formation (percent of GDP), 2004.....	20.6
National savings rate (percent of GDP), 2004 .....	23.2
Interest rate spread (percent), 2005.....	2.8
Real effective exchange rate (percent)*, 2004.....	–13.4
Exports of goods and services (percent of GDP), 2004 .....	41.0
Imports of goods and services (percent of GDP), 2004.....	31.9
Current account balance (percent of GDP), 2005.....	0.3
Gross official reserves in months of imports, 2004 .....	–6.5
Government debt (percent of GDP), 2005 .....	8.0
Unemployment (percent of total labor force), 2004 .....	8.8
Gini index** .....	0.6

## Human Development Indicators

Gross primary enrollment (percent of relevant age group), 2003 .....	100.0
Gross secondary enrollment (percent of relevant age group), 2003 .....	88.9
Gross tertiary enrollment (percent of relevant age group), 2003 .....	42.4
Adult literacy rate (percent of population aged 15 and above), 2002 .....	95.7
Life expectancy at birth, 2003 .....	77.0
HIV prevalence rate (percent of population aged 15 to 49), 2003 .....	0.3
Public expenditure on health (percent of GDP), 2002 .....	2.6

## Infrastructure and Technology Diffusion Indicators

Paved roads (percent of total roads).....	20.1
Main telephone lines per 100 inhabitants, 2003 .....	22.1
Cellular mobile telephone subscribers per 100 inhabitants, 2003 ..	51.1
Personal computers per 100 inhabitants, 2002 .....	11.9
Internet users per 100 inhabitants, 2003 .....	27.2

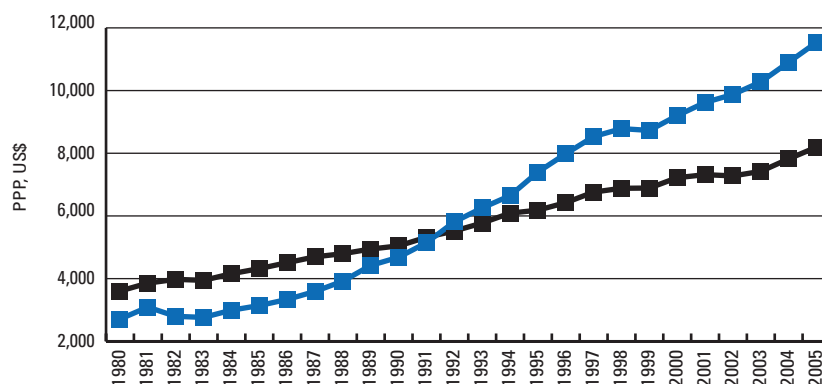
\* Real effective exchange rate 2004 relative to the 1997–2003 average. Values greater (less) than 0 indicate appreciation (depreciation).

\*\* The Gini index is a number between 0 and 1 that is a measure of inequality, with lower (higher) values representing less (more) inequality.

Sources: UNFPA, *State of World Population 2005*; IMF, *World Economic Outlook Database*, September 2005; EIU, *CountryData Database*, December 2005; IMF, *International Financial Statistics Database*, December 2005; IMF, Information Notice System; IMF, IMF Country Report No. 05/315, September 2005; UNDP, *Human Development Report 2005*; UNESCO Institute for Statistics; WHO, *World Health Statistics 2005*; World Bank, *World Development Indicators 2005*; ITU, *World Telecommunication Indicators 2004*; UN Statistics Division and ITU estimates

## GDP per capita (PPP, US\$), 1980–2005

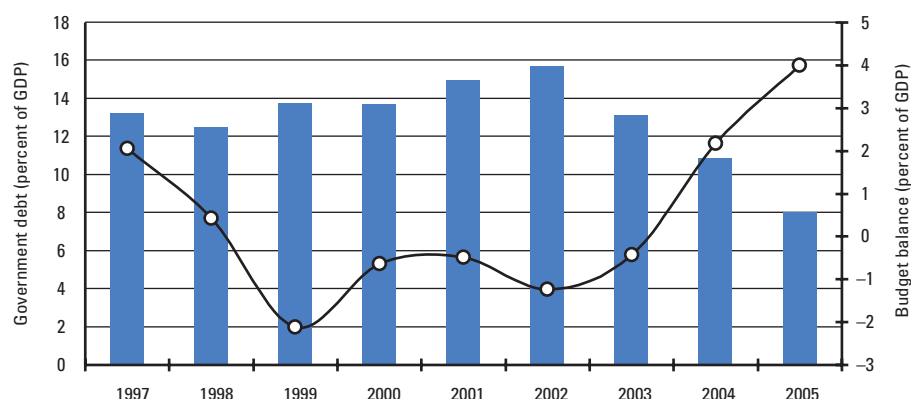
- Chile
- LA&C average



Source: IMF, World Economic Outlook Database, September 2005

## Government Debt and Budget Balance

- Government debt (percent of GDP) (left axis)
- Budget balance (percent of GDP) (right axis)

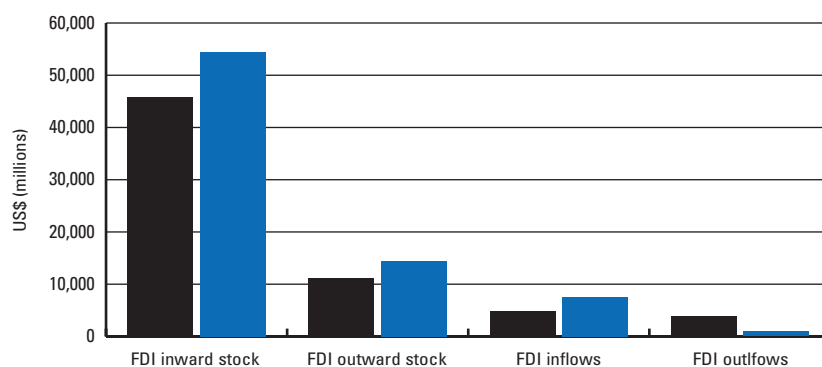


Source: EIU, CountryData Database, December 2005

105

## FDI Inward and Outward Stocks and Flows (US\$ millions), 2000 and 2004

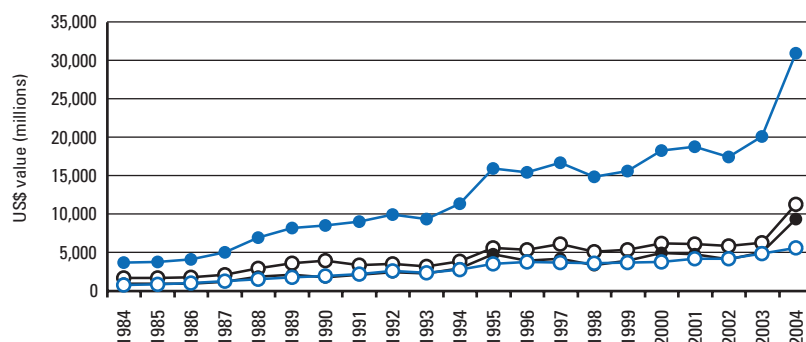
- 2000
- 2004



Source: UNCTAD, FDI Database, December 2005

## Main Exports (in millions US\$ value)

- All commodities
- Manufactured goods chiefly by materials
- Crude materials, inedible, except fuels
- Food and live animals chiefly for food



Source: UN Comtrade Database, December 2005



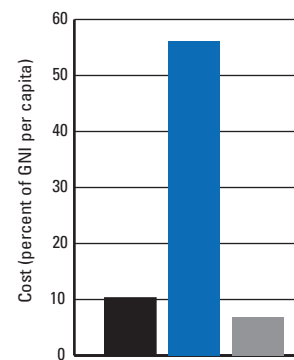
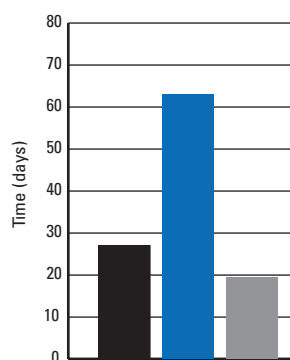
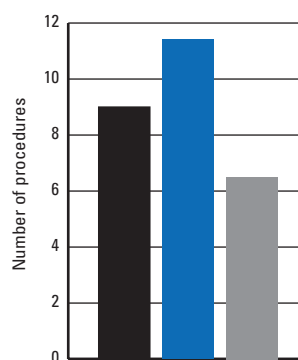
## Competitiveness Rankings

	Rank out of 117 countries	Rank out of 21 LA&C countries
<b>Global Competitiveness Index 2005 .....</b>	<b>27 .....</b>	<b>1 .....</b>
<b>Basic Requirements.....</b>	<b>24 .....</b>	<b>1 .....</b>
1st Pillar: Institutions .....	27 .....	1 .....
2nd Pillar: Infrastructure .....	34 .....	1 .....
3rd Pillar: Macroeconomy .....	1 .....	1 .....
4th Pillar: Health and Primary Education .....	25 .....	1 .....
<b>Efficiency Enhancers.....</b>	<b>31 .....</b>	<b>1 .....</b>
5th Pillar: Higher Education and Training.....	42 .....	2 .....
6th Pillar: Market Efficiency .....	24 .....	1 .....
7th Pillar: Technological Readiness .....	36 .....	1 .....
<b>Innovation Factors.....</b>	<b>32 .....</b>	<b>1 .....</b>
8th Pillar: Business Sophistication .....	31 .....	1 .....
9th Pillar: Innovation.....	41 .....	3 .....

Source: World Economic Forum, *Global Competitiveness Report 2005–2006*

## Starting a Business, 2005

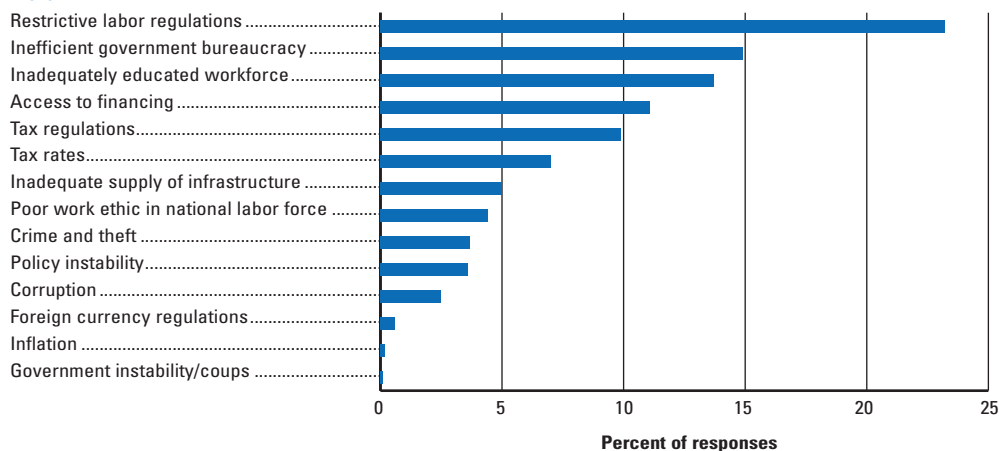
■ Chile  
■ LA&C average  
■ OECD average



Source: World Bank, *Doing Business in 2006: Creating Jobs*

## The Most Problematic Factors for Doing Business

### FACTOR



Note: From a list of fourteen factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars show the responses weighted according to their rankings.

Source: World Economic Forum, Executive Opinion Survey 2005

NOTABLE COMPETITIVE ADVANTAGES		RANK/117	NOTABLE COMPETITIVE DISADVANTAGES		RANK/117
<b>Institutions</b>			<b>Institutions</b>		
6.26	Public trust of politicians .....	23	6.03	Property rights.....	31
6.08	Favoritism in decisions of government officials.....	20	6.24	Diversion of public funds .....	32
6.06	Wastefulness of government spending .....	19	6.01	Judicial independence.....	47
6.07	Burden of government regulation .....	18	6.14	Reliability of police services .....	27
2.02	Business costs of terrorism .....	18	6.15	Business costs of crime and violence .....	50
6.16	Organized crime .....	22	8.23	Strength of auditing and accounting standards .....	38
8.04	Ethical behavior of firms .....	20	<b>Infrastructure</b>		
8.16	Efficacy of corporate boards .....	23	5.01	Overall infrastructure quality .....	32
8.21	Protection of minority shareholders' interests .....	23	5.02	Railroad infrastructure development .....	58
<b>Infrastructure</b>			5.03	Port infrastructure quality .....	27
5.04	Air transport infrastructure quality .....	22	5.05	Quality of electricity supply .....	35
<b>Macroeconomy</b>			5.08	Telephone lines, 2003 .....	56
2.13	Government surplus/deficit, 2004.....	13	<b>Macroeconomy</b>		
2.16	Inflation, 2004 .....	13	2.14	National saving rate, 2004.....	45
2.17	Interest rate spread, 2004.....	20	<b>Health and primary education</b>		
2.20	Government debt, 2004 .....	7	4.06	Medium-term business impact of HIV/AIDS.....	33
2.15	Real effective exchange rate, 2004 .....	26	4.10	Infant mortality .....	32
<b>Health and primary education</b>			4.12	Tuberculosis prevalence, 2003 .....	28
4.04	Medium-term business impact of malaria .....	8	4.13	Malaria prevalence .....	55
4.05	Medium-term business impact of tuberculosis .....	14	4.14	HIV prevalence, 2003 .....	61
4.11	Life expectancy, 2003 .....	26	4.15	Primary enrollment, 2003.....	78
<b>Higher education and training</b>			<b>Higher education and training</b>		
8.15	Quality of management schools .....	15	4.16	Secondary enrollment .....	52
<b>Market efficiency</b>			4.17	Tertiary enrollment .....	38
2.12	Agricultural policy costs .....	8	4.01	Quality of the educational system .....	73
6.11	Extent and effect of taxation.....	26	4.03	Quality of math and science education.....	88
7.01	Intensity of local competition.....	7	7.09	Local availability of specialized research and training services .....	39
7.02	Effectiveness of antitrust policy.....	22	8.11	Extent of staff training .....	33
8.18	Flexibility of wage determination .....	7	<b>Market efficiency</b>		
8.14	Reliance on professional management .....	26	6.02	Efficiency of legal framework .....	35
8.20	Pay and productivity .....	18	7.10	Number of procedures required to start a business.....	37
4.08	Brain drain .....	8	7.11	Time required to start a business.....	31
2.03	Financial market sophistication .....	26		GDP – exports + imports .....	44
2.04	Soundness of banks.....	22	2.18	Exports, 2004 .....	56
<b>Technological readiness</b>			8.17	Hiring and firing practices .....	82
3.01	Technological readiness .....	26	8.19	Cooperation in labor-employer relations.....	31
3.15	Laws relating to ICT .....	26	4.09	Private sector employment of women .....	101
3.04	FDI and technology transfer.....	18	2.05	Ease of access to loans .....	32
<b>Business sophistication</b>			2.06	Venture capital availability .....	43
7.05	Local supplier quantity .....	20	2.08	Local equity market access.....	33
8.06	Extent of marketing.....	23	<b>Technological readiness</b>		
			3.02	Firm-level technology absorption .....	40
			3.18	Cellular telephones, 2003.....	43
			3.19	Internet users, 2003.....	34
			3.21	Personal computers, 2003 .....	42
			<b>Business sophistication</b>		
			7.06	Local supplier quality.....	29
			8.05	Production process sophistication .....	29
			8.08	Control of international distribution.....	43
			8.12	Willingness to delegate authority.....	34
			8.01	Nature of competitive advantage .....	69
			8.02	Value chain presence .....	65
			<b>Innovation</b>		
			3.05	Quality of scientific research institutions .....	48
			3.06	Company spending on research and development .....	47
			3.07	University/industry research collaboration .....	45
			3.08	Government procurement of advanced technology products .....	43
			6.04	Intellectual property protection .....	45
			3.09	Availability of scientists and engineers .....	52
			8.03	Capacity for innovation.....	40
			3.17	Utility patents, 2004 .....	41

# Colombia

## Key Indicators

Total population (millions), 2005 .....	45.6
Gross Domestic Product (US\$ billions), 2005 .....	112.3
Gross Domestic Product per capita (PPP, US\$), 2005 .....	7,309.4
Real growth in GDP (percent), 2005.....	4.0
Growth of output (average annual percent change), 1990–2004 .....	3.0
Agriculture.....	1.6
Industry .....	2.0
Manufacturing .....	1.3
Services .....	4.2
Inflation (annual percent change), 2005 .....	5.2
Budget balance (percent of GDP), 2005.....	–1.6
Gross fixed capital formation (percent of GDP), 2004.....	14.8
National savings rate (percent of GDP), 2004 .....	17.2
Interest rate spread (percent), 2005.....	7.5
Real effective exchange rate (percent)*, 2004.....	–15.3
Exports of goods and services (percent of GDP), 2004 .....	21.2
Imports of goods and services (percent of GDP), 2004.....	22.3
Current account balance (percent of GDP), 2005.....	–1.8
Gross official reserves in months of imports, 2004 .....	6.7
Government debt (percent of GDP), 2005 .....	45.3
Unemployment (percent of total labor force), 2004 .....	13.6
Gini index** .....	0.6

## Human Development Indicators

Gross primary enrollment (percent of relevant age group), 2003 .....	110.3
Gross secondary enrollment (percent of relevant age group), 2003 .....	70.8
Gross tertiary enrollment (percent of relevant age group), 2003 .....	24.3
Adult literacy rate (percent of population aged 15 and above), 2003 .....	94.2
Life expectancy at birth, 2003 .....	72.0
HIV prevalence rate (percent of population aged 15 to 49), 2003 .....	0.7
Public expenditure on health (percent of GDP), 2002 .....	6.7

## Infrastructure and Technology Diffusion Indicators

Paved roads (percent of total roads).....	14.4
Main telephone lines per 100 inhabitants, 2003 .....	17.9
Cellular mobile telephone subscribers per 100 inhabitants, 2003 ..	14.1
Personal computers per 100 inhabitants, 2002 .....	4.9
Internet users per 100 inhabitants, 2003 .....	5.3

\* Real effective exchange rate 2004 relative to the 1997–2003 average. Values greater (less) than 0 indicate appreciation (depreciation).

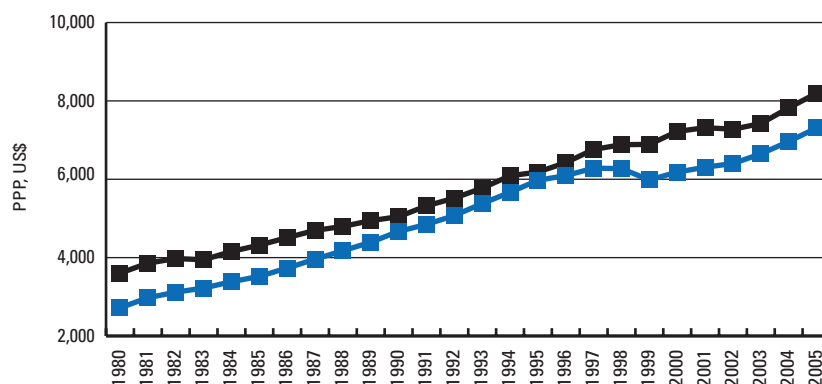
\*\* The Gini index is a number between 0 and 1 that is a measure of inequality, with lower (higher) values representing less (more) inequality.

Sources: UNFPA, *State of World Population 2005*; IMF, *World Economic Outlook Database*, September 2005; EIU, *CountryData Database*, December 2005; IMF, *International Financial Statistics Database*, December 2005; IMF, Information Notice System; IMF, IMF Country Report No. 05/392, November 2005; UNDP, *Human Development Report 2005*; UNESCO Institute for Statistics; WHO, *World Health Statistics 2005*; World Bank, *World Development Indicators 2005*; ITU, *World Telecommunication Indicators 2004*; UN Statistics Division and ITU estimates

## GDP per capita (PPP, US\$), 1980–2005

- Colombia
- LA&C average

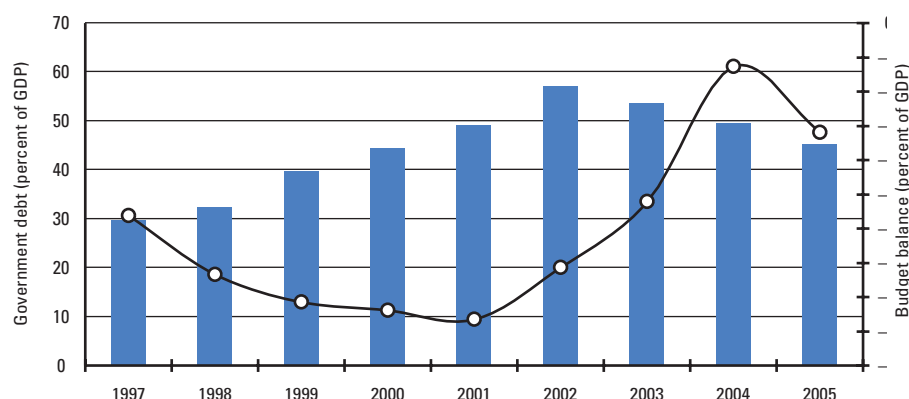
Source: IMF, World Economic Outlook Database, September 2005



## Government Debt and Budget Balance

- Government debt (percent of GDP) (left axis)
- Budget balance (percent of GDP) (right axis)

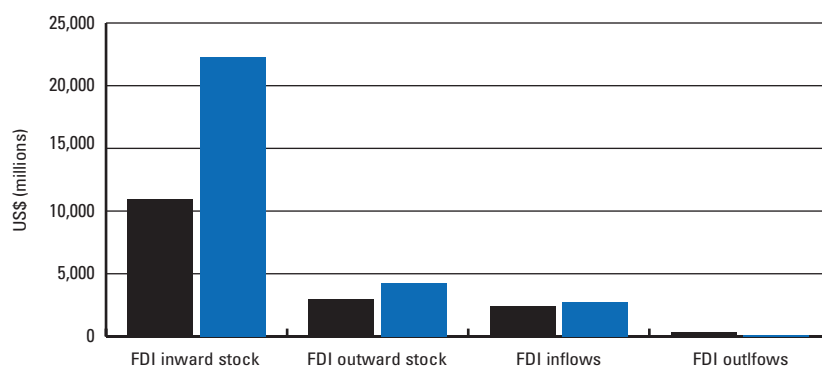
Source: EIU, CountryData Database, December 2005



## FDI Inward and Outward Stocks and Flows (US\$ millions), 2000 and 2004

- 2000
- 2004

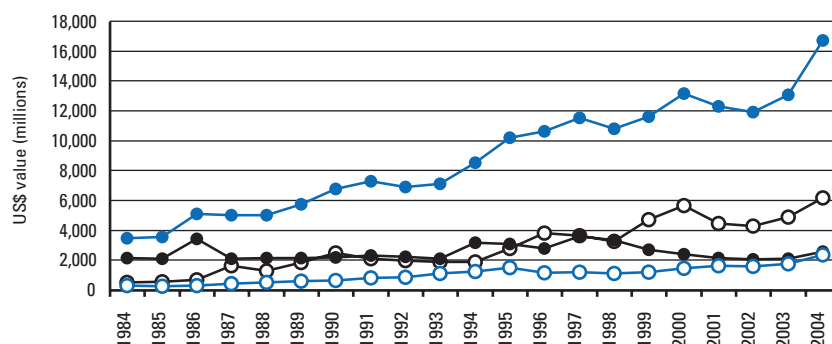
Source: UNCTAD, FDI Database, December 2005



## Main Exports (in millions US\$ value)

- All commodities
- Mineral fuels, lubricants and related materials
- Food and live animals chiefly for food
- Manufactured goods classified chiefly by materials

Source: UN Comtrade Database, December 2005



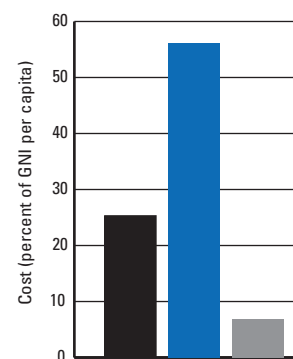
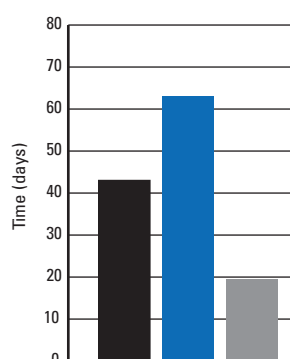
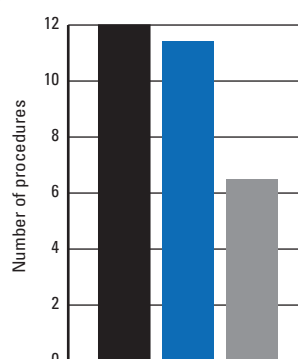
## Competitiveness Rankings

	Rank out of 117 countries	Rank out of 21 LA&C countries
<b>Global Competitiveness Index 2005 .....</b>	<b>58 .....</b>	<b>5 .....</b>
<b>Basic Requirements.....</b>	<b>63 .....</b>	<b>8 .....</b>
1st Pillar: Institutions .....	69 .....	6 .....
2nd Pillar: Infrastructure .....	71 .....	9 .....
3rd Pillar: Macroeconomy .....	51 .....	7 .....
4th Pillar: Health and Primary Education .....	48 .....	11 .....
<b>Efficiency Enhancers.....</b>	<b>67 .....</b>	<b>9 .....</b>
5th Pillar: Higher Education and Training.....	64 .....	6 .....
6th Pillar: Market Efficiency .....	53 .....	3 .....
7th Pillar: Technological Readiness .....	75 .....	14 .....
<b>Innovation Factors.....</b>	<b>49 .....</b>	<b>4 .....</b>
8th Pillar: Business Sophistication .....	48 .....	4 .....
9th Pillar: Innovation.....	58 .....	6 .....

Source: World Economic Forum, *Global Competitiveness Report 2005–2006*

## Starting a Business, 2005

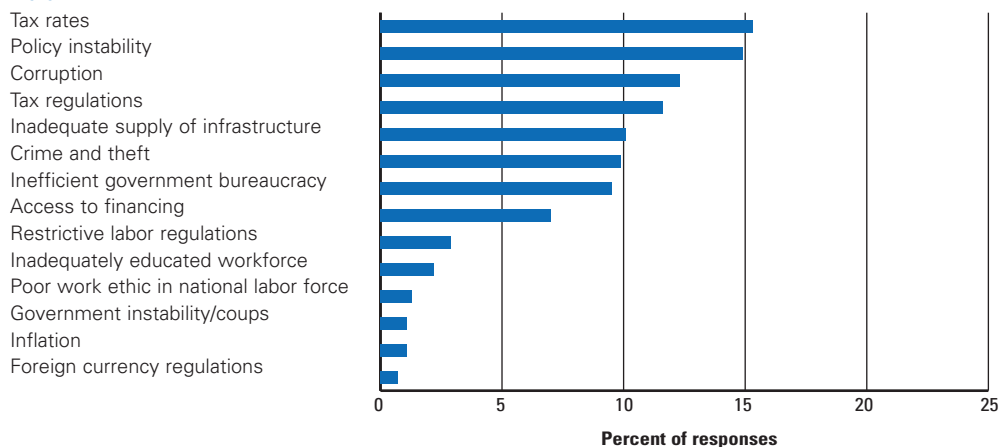
■ Colombia  
■ LA&C average  
■ OECD average



Source: World Bank, *Doing Business in 2006: Creating Jobs*

## The Most Problematic Factors for Doing Business

### FACTOR



Note: From a list of fourteen factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars show the responses weighted according to their rankings.

Source: World Economic Forum, Executive Opinion Survey 2005

# National Competitiveness Balance Sheet Based on the Global Competitiveness Index 2005

NOTABLE COMPETITIVE ADVANTAGES		RANK/117
<b>Institutions</b>		
8.04	Ethical behavior of firms .....	34
8.16	Efficacy of corporate boards .....	26
<b>Infrastructure</b>		
5.05	Quality of electricity supply .....	50
<b>Macroeconomy</b>		
2.13	Government surplus/deficit, 2004 .....	49
2.15	Real effective exchange rate, 2004 .....	23
<b>Health and primary education</b>		
4.04	Medium-term business impact of malaria .....	49
4.05	Medium-term business impact of tuberculosis .....	32
4.15	Primary enrollment, 2003 .....	27
<b>Higher education and training</b>		
8.15	Quality of management schools .....	39
<b>Market efficiency</b>		
7.02	Effectiveness of antitrust policy .....	43
	GDP – exports + imports .....	26
8.18	Flexibility of wage determination .....	38
8.19	Cooperation in labor-employer relations .....	28
8.14	Reliance on professional management .....	45
4.09	Private sector employment of women .....	36
2.03	Financial market sophistication .....	44
2.04	Soundness of banks .....	42
<b>Business sophistication</b>		
7.05	Local supplier quantity .....	45
7.06	Local supplier quality .....	49
8.06	Extent of marketing .....	46
8.12	Willingness to delegate authority .....	45
8.02	Value chain presence .....	43
<b>Innovation</b>		
3.06	Company spending on research and development .....	39
3.07	University/industry research collaboration .....	30
8.03	Capacity for innovation .....	49

NOTABLE COMPETITIVE DISADVANTAGES		RANK/117
<b>Institutions</b>		
6.03	Property rights .....	51
6.24	Diversion of public funds .....	81
6.26	Public trust of politicians .....	77
6.01	Judicial independence .....	66
6.08	Favoritism in decisions of government officials .....	80
6.06	Wastefulness of government spending .....	66
6.07	Burden of government regulation .....	71
2.02	Business costs of terrorism .....	117
6.14	Reliability of police services .....	52
6.15	Business costs of crime and violence .....	97
6.16	Organized crime .....	115
8.21	Protection of minority shareholders' interests .....	59
8.23	Strength of auditing and accounting standards .....	57
<b>Infrastructure</b>		
5.01	Overall infrastructure quality .....	82
5.02	Railroad infrastructure development .....	102
5.03	Port infrastructure quality .....	85
5.04	Air transport infrastructure quality .....	52
5.08	Telephone lines, 2003 .....	62
<b>Macroeconomy</b>		
2.14	National saving rate, 2004 .....	81
2.16	Inflation, 2004 .....	76
2.17	Interest rate spread, 2004 .....	76
2.20	Government debt, 2004 .....	56
<b>Health and primary education</b>		
4.06	Medium-term business impact of HIV/AIDS .....	57
4.10	Infant mortality .....	69
4.11	Life expectancy, 2003 .....	51
4.12	Tuberculosis prevalence, 2003 .....	55
4.13	Malaria prevalence .....	96
4.14	HIV prevalence, 2003 .....	80
<b>Higher education and training</b>		
4.16	Secondary enrollment .....	82
4.17	Tertiary enrollment .....	70
4.01	Quality of the educational system .....	61
4.03	Quality of math and science education .....	72
7.09	Local availability of specialized research and training services .....	65
8.11	Extent of staff training .....	66
<b>Market efficiency</b>		
2.12	Agricultural policy costs .....	85
6.02	Efficiency of legal framework .....	58
6.11	Extent and effect of taxation .....	100
7.10	Number of procedures required to start a business .....	92
7.11	Time required to start a business .....	61
7.01	Intensity of local competition .....	54
2.18	Exports, 2004 .....	102
8.17	Hiring and firing practices .....	52
8.20	Pay and productivity .....	90
4.08	Brain drain .....	58
2.05	Ease of access to loans .....	87
2.06	Venture capital availability .....	106
2.08	Local equity market access .....	58
<b>Technological readiness</b>		
3.01	Technological readiness .....	70
3.02	Firm-level technology absorption .....	92
3.15	Laws relating to ICT .....	55
3.04	FDI and technology transfer .....	70
3.18	Cellular telephones, 2003 .....	78
3.19	Internet users, 2003 .....	74
3.21	Personal computers, 2002 .....	65
<b>Business sophistication</b>		
8.05	Production process sophistication .....	58
8.08	Control of international distribution .....	59
8.01	Nature of competitive advantage .....	52

(Disadvantages cont'd. from bottom of right column)

NOTABLE COMPETITIVE DISADVANTAGES		RANK/117
<b>Innovation</b>		
3.05	Quality of scientific research institutions .....	76
3.08	Government procurement of advanced technology products .....	61
6.04	Intellectual property protection .....	57
3.09	Availability of scientists and engineers .....	87
3.17	Utility patents, 2004 .....	63

<<< (Cont'd. on bottom of left column)

# Costa Rica

## Key Indicators

Total population (millions), 2005 .....	4.3
Gross Domestic Product (US\$ billions), 2005 .....	19.6
Gross Domestic Product per capita (PPP, US\$), 2005 .....	10,316.3
Real growth in GDP (percent), 2005.....	3.2
Growth of output (average annual percent change), 1991–2004 .....	6.1
Agriculture.....	3.5
Industry .....	6.7
Manufacturing .....	6.8
Services .....	6.4
Inflation (annual percent change), 2005 .....	12.6
Budget balance (percent of GDP), 2005.....	–2.4
Gross fixed capital formation (percent of GDP), 2004.....	19.1
National savings rate (percent of GDP), 2004 .....	17.8
Interest rate spread (percent), 2005.....	14.6
Real effective exchange rate (percent)*, 2004.....	–8.3
Exports of goods and services (percent of GDP), 2004 .....	46.5
Imports of goods and services (percent of GDP), 2004.....	49.3
Current account balance (percent of GDP), 2005.....	–6.8
Gross official reserves in months of imports, 2004 .....	2.2
Government debt (percent of GDP), 2005 .....	55.8
Unemployment (percent of total labor force), 2004 .....	6.5
Gini index** .....	0.5

## Human Development Indicators

Gross primary enrollment (percent of relevant age group), 2003 .....	107.6
Gross secondary enrollment (percent of relevant age group), 2003 .....	66.5
Gross tertiary enrollment (percent of relevant age group), 2003 .....	19.4
Adult literacy rate (percent of population aged 15 and above), 2002 .....	95.8
Life expectancy at birth, 2003 .....	77.0
HIV prevalence rate (percent of population aged 15 to 49), 2003 .....	0.6
Public expenditure on health (percent of GDP), 2002 .....	6.1

## Infrastructure and Technology Diffusion Indicators

Paved roads (percent of total roads).....	12.0
Main telephone lines per 100 inhabitants, 2003 .....	27.8
Cellular mobile telephone subscribers per 100 inhabitants, 2003 ..	18.1
Personal computers per 100 inhabitants, 2003.....	21.8
Internet users per 100 inhabitants, 2003 .....	21.6

\* Real effective exchange rate 2004 relative to the 1997–2003 average. Values greater (less) than 0 indicate appreciation (depreciation).

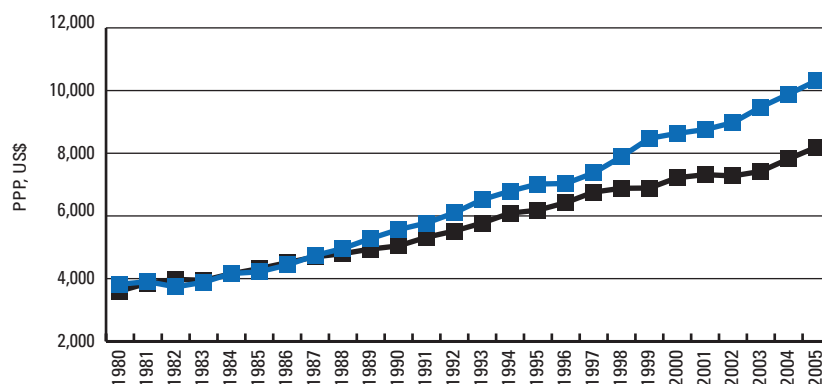
\*\* The Gini index is a number between 0 and 1 that is a measure of inequality, with lower (higher) values representing less (more) inequality.

Sources: UNFPA, *State of World Population 2005*; IMF, *World Economic Outlook Database*, September 2005; EIU, *CountryData Database*, December 2005; IMF, *International Financial Statistics Database*, December 2005; IMF, Information Notice System; IMF, Public Information Notice, No. 04/94, August 2004; UNDP, *Human Development Report 2005*; UNESCO Institute for Statistics; WHO, *World Health Statistics 2005*; World Bank, *World Development Indicators 2005*; ITU, *World Telecommunication Indicators 2004*; UN Statistics Division and ITU estimates



## GDP per capita (PPP, US\$), 1980–2005

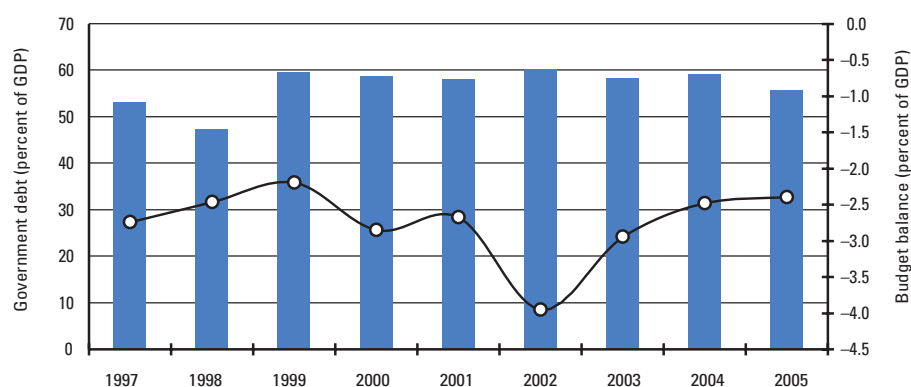
- Costa Rica
- LA&C average



Source: IMF, World Economic Outlook Database, September 2005

## Government Debt and Budget Balance

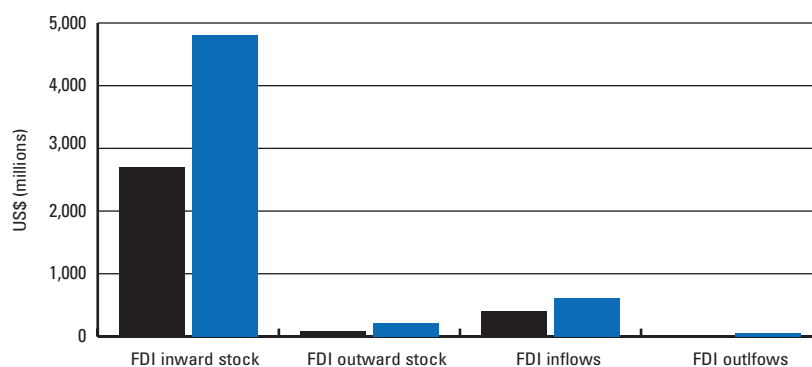
- Government debt (percent of GDP) (left axis)
- Budget balance (percent of GDP) (right axis)



Source: EIU, CountryData Database, December 2005

## FDI Inward and Outward Stocks and Flows (US\$ millions), 2000 and 2004

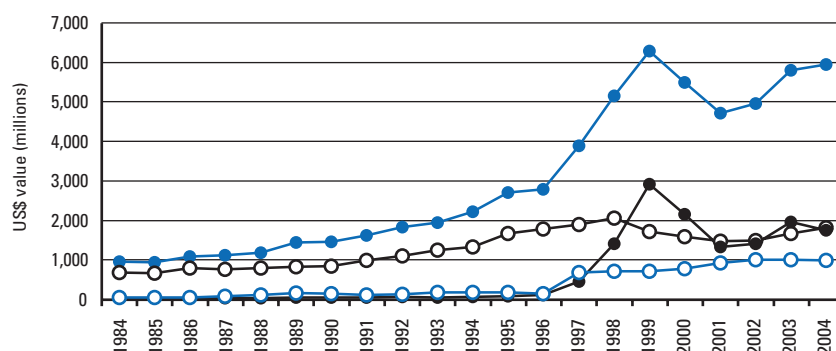
- 2000
- 2004



Source: UNCTAD, FDI Database, December 2005

## Main Exports (in millions US\$ value)

- All commodities
- Food and live animals chiefly for food
- Machinery and transport equipment
- Miscellaneous manufactured articles



Source: UN Comtrade Database, December 2005

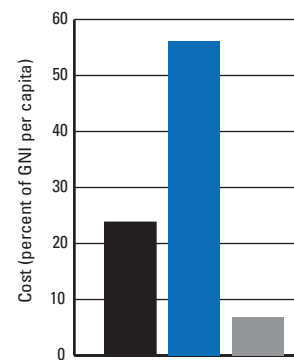
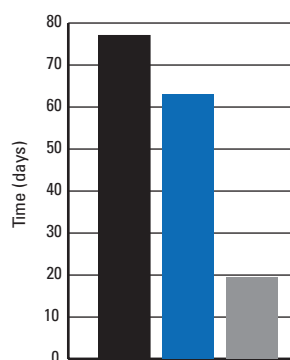
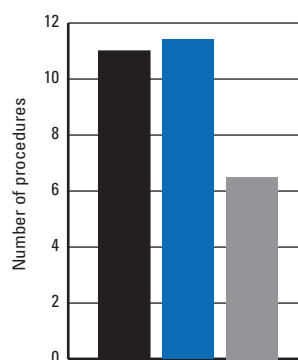
## Competitiveness Rankings

	Rank out of 117 countries	Rank out of 21 LA&C countries
<b>Global Competitiveness Index 2005 .....</b>	<b>56</b>	<b>3</b>
<b>Basic Requirements.....</b>	<b>73</b>	<b>10</b>
1st Pillar: Institutions .....	59	4
2nd Pillar: Infrastructure .....	73	11
3rd Pillar: Macroeconomy .....	109	19
4th Pillar: Health and Primary Education .....	28	2
<b>Efficiency Enhancers.....</b>	<b>50</b>	<b>2</b>
5th Pillar: Higher Education and Training.....	56	5
6th Pillar: Market Efficiency .....	66	8
7th Pillar: Technological Readiness .....	47	3
<b>Innovation Factors.....</b>	<b>37</b>	<b>3</b>
8th Pillar: Business Sophistication .....	38	3
9th Pillar: Innovation.....	37	1

Source: World Economic Forum, *Global Competitiveness Report 2005–2006*

## Starting a Business, 2005

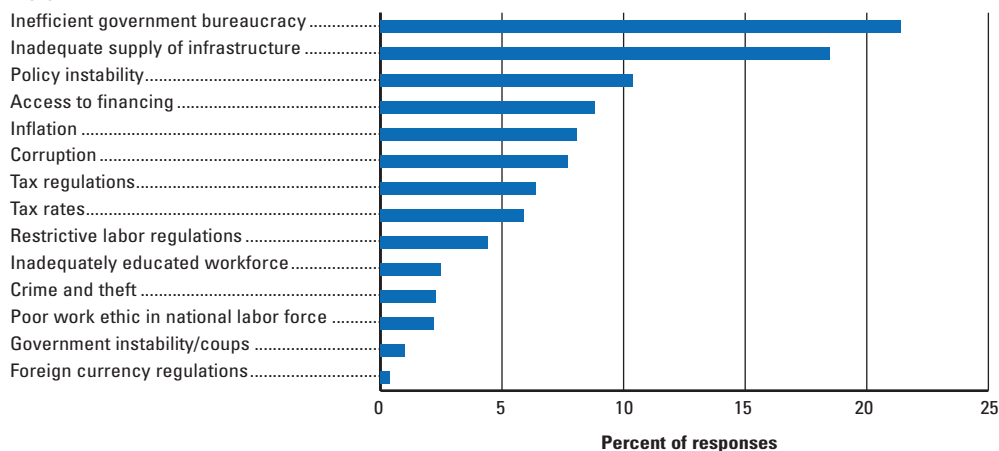
■ Costa Rica  
■ LA&C average  
■ OECD average



Source: World Bank, *Doing Business in 2006: Creating Jobs*

## The Most Problematic Factors for Doing Business

### FACTOR



Note: From a list of fourteen factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars show the responses weighted according to their rankings.

Source: World Economic Forum, Executive Opinion Survey 2005

NOTABLE COMPETITIVE DISADVANTAGES		RANK/117
<b>Institutions</b>		
6.03	Property rights.....	54
6.24	Diversion of public funds .....	69
6.26	Public trust of politicians .....	85
6.08	Favoritism in decisions of government officials.....	60
6.06	Wastefulness of government spending .....	83
6.07	Burden of government regulation .....	87
6.14	Reliability of police services .....	64
6.15	Business costs of crime and violence .....	92
6.16	Organized crime .....	75
8.04	Ethical behavior of firms .....	52
8.16	Efficacy of corporate boards .....	54
8.21	Protection of minority shareholders' interests.....	68
8.23	Strength of auditing and accounting standards .....	72
<b>Infrastructure</b>		
5.01	Overall infrastructure quality .....	93
5.02	Railroad infrastructure development .....	108
5.03	Port infrastructure quality.....	100
5.04	Air transport infrastructure quality .....	56
<b>Macroeconomy</b>		
2.13	Government surplus/deficit, 2004.....	88
2.14	National saving rate, 2004.....	83
2.16	Inflation, 2004 .....	108
2.17	Interest rate spread, 2004.....	105
2.20	Government debt, 2004 .....	70
<b>Health and primary education</b>		
4.04	Medium-term business impact of malaria .....	55
4.06	Medium-term business impact of HIV/AIDS.....	70
4.13	Malaria prevalence .....	75
4.14	HIV prevalence, 2003.....	76
<b>Higher education and training</b>		
4.16	Secondary enrollment .....	87
4.17	Tertiary enrollment .....	76
4.03	Quality of math and science education.....	66
<b>Market efficiency</b>		
2.12	Agricultural policy costs .....	59
6.11	Extent and effect of taxation.....	52
7.10	Number of procedures required to start a business.....	61
7.11	Time required to start a business.....	88
7.01	Intensity of local competition.....	65
7.02	Effectiveness of antitrust policy.....	77
	GDP – exports + imports .....	71
8.18	Flexibility of wage determination .....	88
8.14	Reliance on professional management.....	54
4.09	Private sector employment of women .....	65
2.03	Financial market sophistication .....	67
2.05	Ease of access to loans .....	80
2.06	Venture capital availability .....	56
2.04	Soundness of banks.....	62
2.08	Local equity market access.....	81
<b>Technological readiness</b>		
3.02	Firm-level technology absorption .....	56
3.15	Laws relating to ICT .....	69
3.18	Cellular telephones, 2003.....	73
<b>Business sophistication</b>		
8.08	Control of international distribution.....	64
<b>Innovation</b>		
3.08	Government procurement of advanced technology products .....	86
3.17	Utility patents, 2004 .....	81

# Dominican Republic

## Key Indicators

Total population (millions), 2005 .....	8.9
Gross Domestic Product (US\$ billions), 2005 .....	21.9
Gross Domestic Product per capita (PPP, US\$), 2005 .....	7,042.5
Real growth in GDP (percent), 2005.....	4.5
Growth of output (average annual percent change), 1990–2004 .....	6.0
Agriculture.....	4.3
Industry .....	5.5
Manufacturing .....	4.3
Services .....	6.7
Inflation (annual percent change), 2005 .....	3.7
Budget balance (percent of GDP), 2005.....	–1.0
Gross fixed capital formation (percent of GDP), 2004.....	24.0
National savings rate (percent of GDP), 2004 .....	31.9
Interest rate spread (percent), 2005.....	9.0
Real effective exchange rate (percent)*, 2004.....	–17.5
Exports of goods and services (percent of GDP), 2004 .....	49.3
Imports of goods and services (percent of GDP), 2004.....	49.0
Current account balance (percent of GDP), 2005.....	1.6
Gross official reserves in months of imports, 2004 .....	1.2
Government debt (percent of GDP), 2005 .....	50.0
Unemployment (percent of total labor force), 2004 .....	18.4
Gini index** .....	0.5

## Human Development Indicators

Gross primary enrollment (percent of relevant age group), 2003 .....	124.3
Gross secondary enrollment (percent of relevant age group), 2003 .....	58.7
Gross tertiary enrollment (percent of relevant age group), 2003 .....	34.5
Adult literacy rate (percent of population aged 15 and above), 2002 .....	87.0
Life expectancy at birth, 2003 .....	68.0
HIV prevalence rate (percent of population aged 15 to 49), 2003 .....	1.7
Public expenditure on health (percent of GDP), 2002 .....	2.2

## Infrastructure and Technology Diffusion Indicators

Paved roads (percent of total roads).....	49.4
Main telephone lines per 100 inhabitants, 2003 .....	11.5
Cellular mobile telephone subscribers per 100 inhabitants, 2003 ..	27.2
Personal computers per 100 inhabitants, 2004.....	11.0
Internet users per 100 inhabitants, 2003 .....	8.3

\* Real effective exchange rate 2004 relative to the 1997–2003 average. Values greater (less) than 0 indicate appreciation (depreciation).

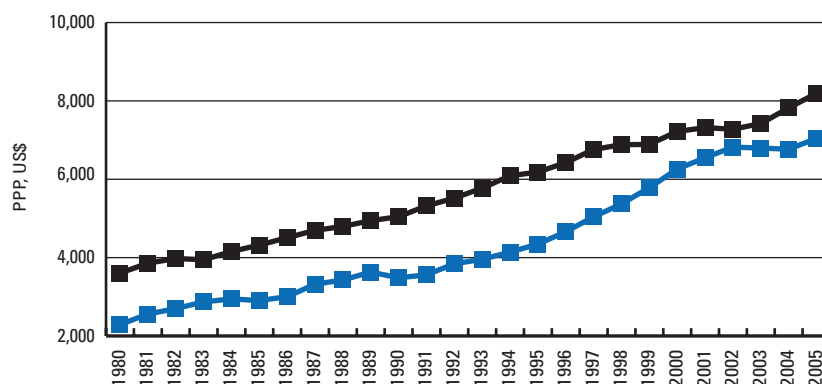
\*\* The Gini index is a number between 0 and 1 that is a measure of inequality, with lower (higher) values representing less (more) inequality.

Sources: UNFPA, *State of World Population 2005*; IMF, *World Economic Outlook Database*, September 2005; EIU, *CountryData Database*, December 2005; IMF, *International Financial Statistics Database*, December 2005; IMF, Information Notice System; IMF, Public Information Notice No. 05/162, December 2005; UNDP, *Human Development Report 2005*; UNESCO Institute for Statistics; WHO, *World Health Statistics 2005*; World Bank, *World Development Indicators 2005*; ITU, *World Telecommunication Indicators 2004*; National source and UNFPA

## GDP per capita (PPP, US\$), 1980–2005

- Dominican Republic
- LA&C average

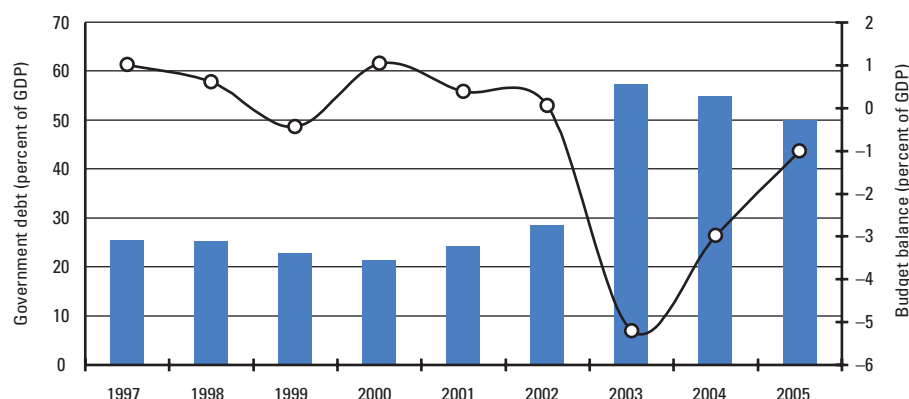
Source: IMF, World Economic Outlook Database, September 2005



## Government Debt and Budget Balance

- Government debt (percent of GDP) (left axis)
- Budget balance (percent of GDP) (right axis)

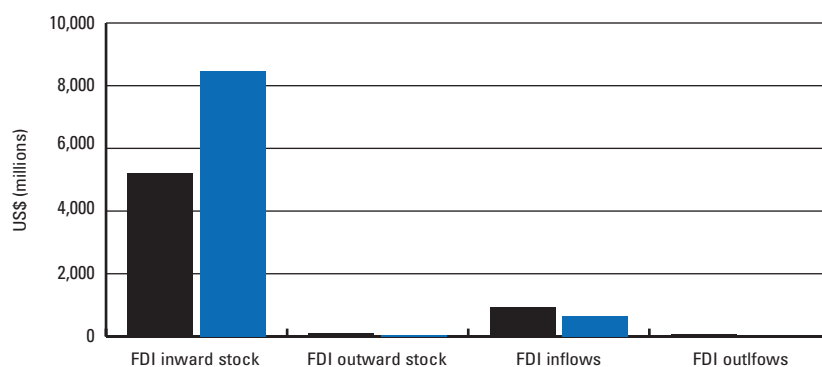
Source: EIU, CountryData Database, December 2005



## FDI Inward and Outward Stocks and Flows (US\$ millions), 2000 and 2004

- 2000
- 2004

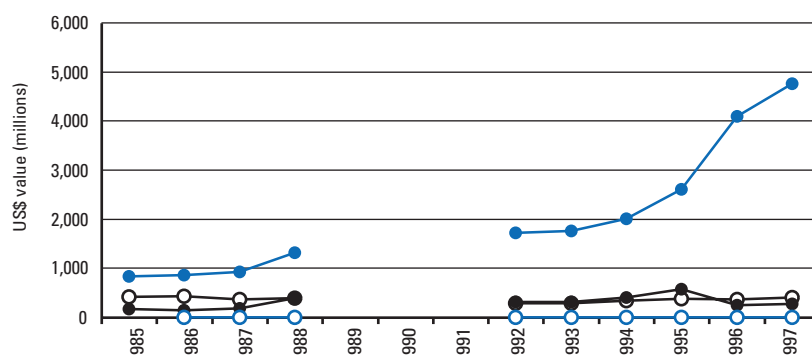
Source: UNCTAD, FDI Database, December 2005



## Main Exports (in millions US\$ value)

- All commodities
- Food and live animals chiefly for food
- Manufactured goods classified chiefly by materials
- Mineral fuels, lubricants and related materials

Source: UN Comtrade Database, December 2005



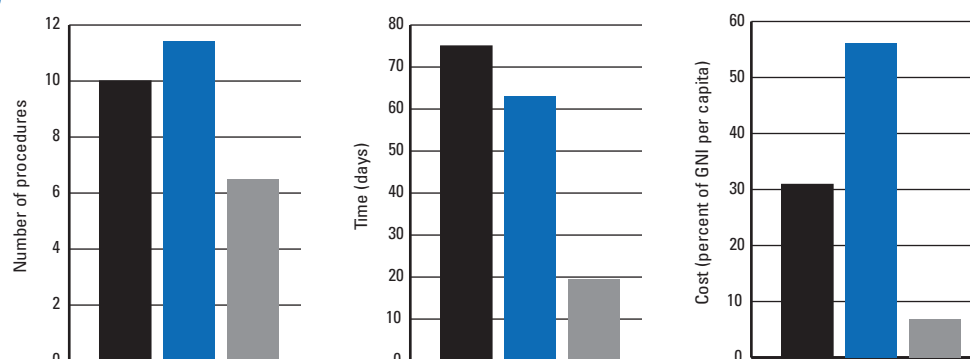
## Competitiveness Rankings

	Rank out of 117 countries	Rank out of 21 LA&C countries
<b>Global Competitiveness Index 2005 .....</b>	<b>91</b>	<b>15</b>
<b>Basic Requirements.....</b>	<b>97</b>	<b>19</b>
1st Pillar: Institutions .....	111	16
2nd Pillar: Infrastructure .....	94	17
3rd Pillar: Macroeconomy .....	107	18
4th Pillar: Health and Primary Education .....	65	17
<b>Efficiency Enhancers.....</b>	<b>85</b>	<b>14</b>
5th Pillar: Higher Education and Training.....	94	16
6th Pillar: Market Efficiency .....	96	13
7th Pillar: Technological Readiness .....	63	9
<b>Innovation Factors.....</b>	<b>93</b>	<b>14</b>
8th Pillar: Business Sophistication .....	80	13
9th Pillar: Innovation.....	107	18

Source: World Economic Forum, *Global Competitiveness Report 2005–2006*

## Starting a Business, 2005

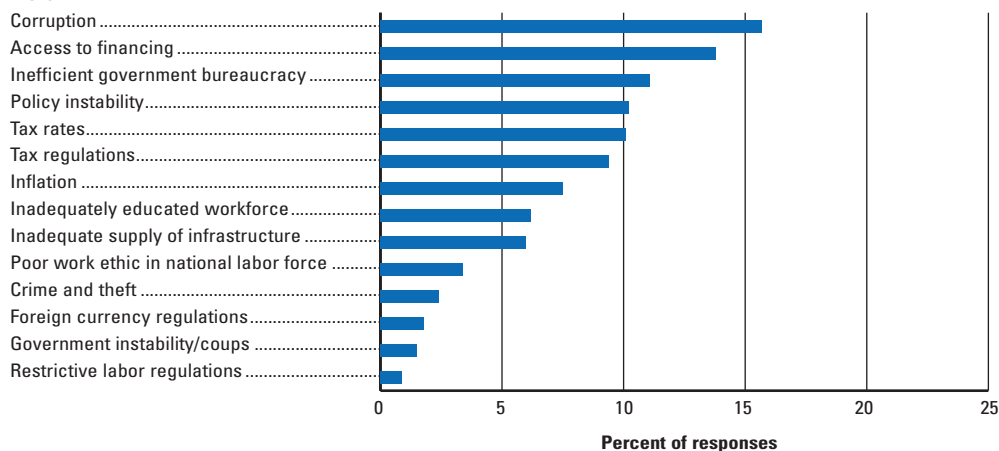
■ Dominican Republic  
■ LA&C average  
■ OECD average



Source: World Bank, *Doing Business in 2006: Creating Jobs*

## The Most Problematic Factors for Doing Business

### FACTOR



Note: From a list of fourteen factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars show the responses weighted according to their rankings.

Source: World Economic Forum, Executive Opinion Survey 2005

NOTABLE COMPETITIVE ADVANTAGES		RANK/117
<b>Institutions</b>		
6.07	Burden of government regulation .....	41
2.02	Business costs of terrorism .....	24
<b>Infrastructure</b>		
5.04	Air transport infrastructure quality .....	49
<b>Macroeconomy</b>		
2.14	National saving rate, 2004 .....	30
2.15	Real effective exchange rate, 2004 .....	19
<b>Health and primary education</b>		
4.15	Primary enrollment, 2003 .....	6
<b>Market efficiency</b>		
7.10	Number of procedures required to start a business .....	49
8.17	Hiring and firing practices .....	50
8.19	Cooperation in labor-employer relations .....	30
<b>Technological readiness</b>		
3.04	FDI and technology transfer .....	48
3.21	Personal computers, 2004 .....	46

NOTABLE COMPETITIVE DISADVANTAGES		RANK/117
<b>Institutions</b>		
6.03	Property rights .....	95
6.24	Diversion of public funds .....	109
6.26	Public trust of politicians .....	114
6.01	Judicial independence .....	98
6.08	Favoritism in decisions of government officials .....	117
6.06	Wastefulness of government spending .....	115
6.14	Reliability of police services .....	110
6.15	Business costs of crime and violence .....	98
6.16	Organized crime .....	86
8.04	Ethical behavior of firms .....	110
8.16	Efficacy of corporate boards .....	111
8.21	Protection of minority shareholders' interests .....	103
8.23	Strength of auditing and accounting standards .....	104
<b>Infrastructure</b>		
5.01	Overall infrastructure quality .....	74
5.02	Railroad infrastructure development .....	114
5.03	Port infrastructure quality .....	66
5.05	Quality of electricity supply .....	117
5.08	Telephone lines, 2003 .....	72
<b>Macroeconomy</b>		
2.13	Government surplus/deficit, 2004 .....	68
2.16	Inflation, 2004 .....	116
2.17	Interest rate spread, 2004 .....	95
2.20	Government debt, 2004 .....	60
<b>Health and primary education</b>		
4.04	Medium-term business impact of malaria .....	74
4.05	Medium-term business impact of tuberculosis .....	62
4.06	Medium-term business impact of HIV/AIDS .....	80
4.10	Infant mortality .....	77
4.11	Life expectancy, 2003 .....	78
4.12	Tuberculosis prevalence, 2003 .....	77
4.13	Malaria prevalence .....	74
4.14	HIV prevalence, 2003 .....	95
<b>Higher education and training</b>		
4.16	Secondary enrollment .....	94
4.17	Tertiary enrollment .....	53
4.01	Quality of the educational system .....	113
4.03	Quality of math and science education .....	115
8.15	Quality of management schools .....	91
7.09	Local availability of specialized research and training services .....	82
8.11	Extent of staff training .....	99
<b>Market efficiency</b>		
2.12	Agricultural policy costs .....	84
6.02	Efficiency of legal framework .....	102
6.11	Extent and effect of taxation .....	85
7.11	Time required to start a business .....	89
7.01	Intensity of local competition .....	100
7.02	Effectiveness of antitrust policy .....	117
	GDP – exports + imports .....	63
2.18	Exports, 2004 .....	58
8.18	Flexibility of wage determination .....	58
8.14	Reliance on professional management .....	110
8.20	Pay and productivity .....	75
4.08	Brain drain .....	69
4.09	Private sector employment of women .....	80
2.03	Financial market sophistication .....	83
2.05	Ease of access to loans .....	86
2.06	Venture capital availability .....	96
2.04	Soundness of banks .....	97
2.08	Local equity market access .....	111

(Disadvantages cont'd. from bottom of right column)

NOTABLE COMPETITIVE DISADVANTAGES		RANK/117
<b>Technological readiness</b>		
3.01	Technological readiness .....	53
3.02	Firm-level technology absorption .....	71
3.15	Laws relating to ICT .....	91
3.18	Cellular telephones, 2003 .....	61
3.19	Internet users, 2003 .....	61
<b>Business sophistication</b>		
7.05	Local supplier quantity .....	57
7.06	Local supplier quality .....	78
8.05	Production process sophistication .....	91
8.06	Extent of marketing .....	61
8.08	Control of international distribution .....	81
8.12	Willingness to delegate authority .....	94
8.01	Nature of competitive advantage .....	107
8.02	Value chain presence .....	87
<b>Innovation</b>		
3.05	Quality of scientific research institutions .....	114
3.06	Company spending on research and development .....	97
3.07	University/industry research collaboration .....	108
3.08	Government procurement of advanced technology products .....	98
6.04	Intellectual property protection .....	82
3.09	Availability of scientists and engineers .....	103
8.03	Capacity for innovation .....	103
3.17	Utility patents, 2004 .....	81

<<< (Cont'd. on bottom of left column)

# Ecuador

## Key Indicators

Total population (millions), 2005 .....	13.2
Gross Domestic Product (US\$ billions), 2005 .....	32.1
Gross Domestic Product per capita (PPP, US\$), 2005 .....	4,296.5
Real growth in GDP (percent), 2005.....	2.7
Growth of output (average annual percent change), 1990–2004 .....	2.8
Agriculture.....	1.5
Industry .....	3.0
Manufacturing .....	0.8
Services .....	3.1
Inflation (annual percent change), 2005 .....	2.0
Budget balance (percent of GDP), 2005.....	2.3
Gross fixed capital formation (percent of GDP), 2004.....	21.7
National savings rate (percent of GDP), 2004 .....	26.8
Interest rate spread (percent), 2005.....	5.3
Real effective exchange rate (percent)*, 2004.....	7.6
Exports of goods and services (percent of GDP), 2004 .....	26.5
Imports of goods and services (percent of GDP), 2004.....	28.2
Current account balance (percent of GDP), 2005.....	0.2
Gross official reserves in months of imports, 2004 .....	n/a
Government debt (percent of GDP), 2005 .....	44.2
Unemployment (percent of total labor force), 2004 .....	11.0
Gini index** .....	0.4

## Human Development Indicators

Gross primary enrollment (percent of relevant age group), 2003 .....	116.9
Gross secondary enrollment (percent of relevant age group), 2003 .....	59.2
Gross tertiary enrollment (percent of relevant age group), 2003 .....	17.6
Adult literacy rate (percent of population aged 15 and above), 2001 .....	91.0
Life expectancy at birth, 2003 .....	71.0
HIV prevalence rate (percent of population aged 15 to 49), 2003 .....	0.3
Public expenditure on health (percent of GDP), 2002 .....	1.7

## Infrastructure and Technology Diffusion Indicators

Paved roads (percent of total roads).....	18.9
Main telephone lines per 100 inhabitants, 2003 .....	12.2
Cellular mobile telephone subscribers per 100 inhabitants, 2003 ..	19.0
Personal computers per 100 inhabitants, 2002 .....	3.2
Internet users per 100 inhabitants, 2003 .....	4.5

\* Real effective exchange rate 2004 relative to the 1997–2003 average. Values greater (less) than 0 indicate appreciation (depreciation).

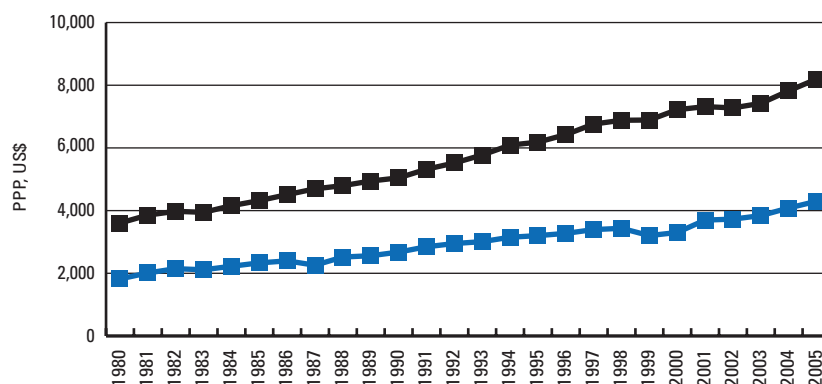
\*\* The Gini index is a number between 0 and 1 that is a measure of inequality, with lower (higher) values representing less (more) inequality.

Sources: UNFPA, *State of World Population 2005*; IMF, *World Economic Outlook Database*, September 2005; EIU, *CountryData Database*, December 2005; IMF, *International Financial Statistics Database*, December 2005; IMF, Information Notice System; UNDP, *Human Development Report 2005*; UNESCO Institute for Statistics; WHO, *World Health Statistics 2005*; World Bank, *World Development Indicators 2005*; ITU, *World Telecommunication Indicators 2004*; UN Statistics Division and ITU estimates



## GDP per capita (PPP, US\$), 1980–2005

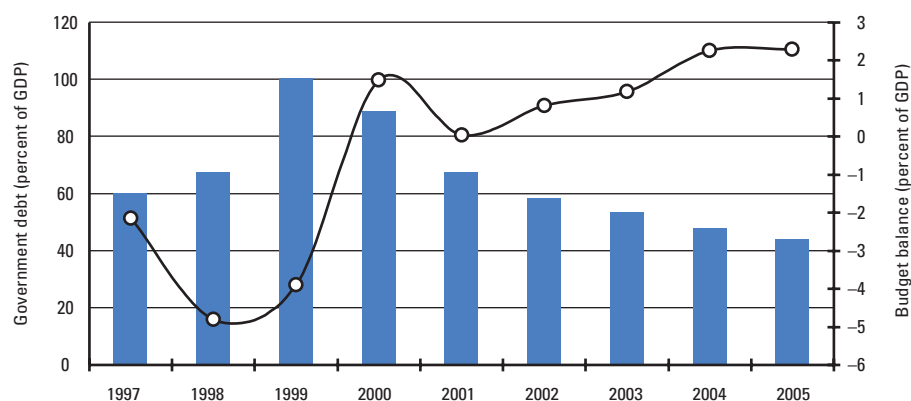
- Ecuador
- LA&C average



Source: IMF, World Economic Outlook Database, September 2005

## Government Debt and Budget Balance

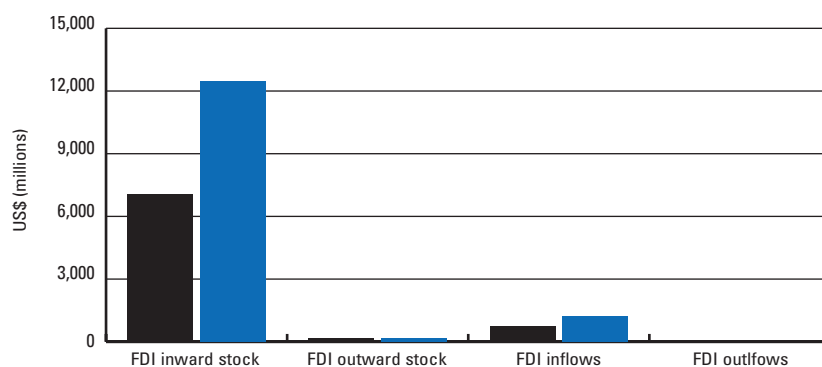
- Government debt (percent of GDP) (left axis)
- Budget balance (percent of GDP) (right axis)



Source: Economist Intelligence Unit

## FDI Inward and Outward Stocks and Flows (US\$ millions), 2000 and 2004

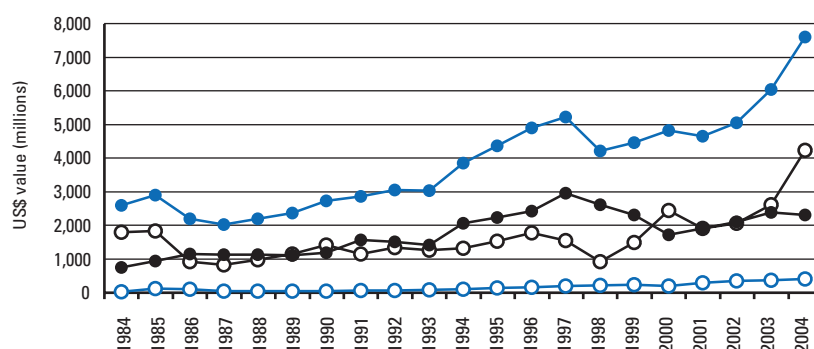
- 2000
- 2004



Source: UNCTAD, FDI Database, December 2005

## Main Exports (in millions US\$ value)

- All commodities
- Mineral fuels, lubricants and related materials
- Food and live animals chiefly for food
- Crude materials, inedible, except fuels



Source: UN Comtrade Database, December 2005

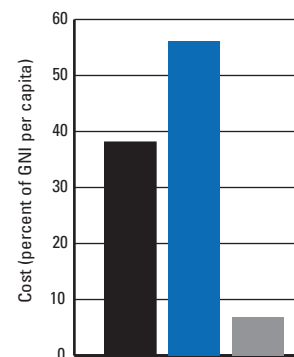
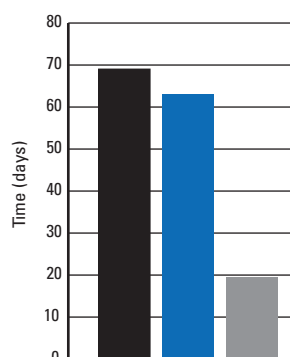
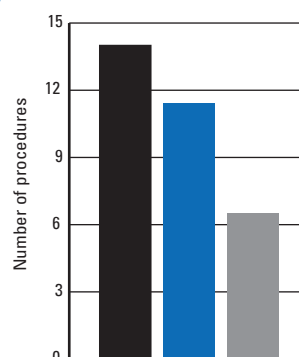
## Competitiveness Rankings

	Rank out of 117 countries	Rank out of 21 LA&C countries
<b>Global Competitiveness Index 2005 .....</b>	<b>87 .....</b>	<b>14 .....</b>
<b>Basic Requirements.....</b>	<b>75 .....</b>	<b>11 .....</b>
1st Pillar: Institutions .....	114 .....	19 .....
2nd Pillar: Infrastructure .....	84 .....	14 .....
3rd Pillar: Macroeconomy .....	19 .....	2 .....
4th Pillar: Health and Primary Education .....	51 .....	12 .....
<b>Efficiency Enhancers.....</b>	<b>104 .....</b>	<b>19 .....</b>
5th Pillar: Higher Education and Training.....	98 .....	18 .....
6th Pillar: Market Efficiency .....	112 .....	19 .....
7th Pillar: Technological Readiness .....	93 .....	16 .....
<b>Innovation Factors.....</b>	<b>101 .....</b>	<b>16 .....</b>
8th Pillar: Business Sophistication .....	91 .....	15 .....
9th Pillar: Innovation.....	106 .....	17 .....

Source: World Economic Forum, *Global Competitiveness Report 2005–2006*

## Starting a Business, 2005

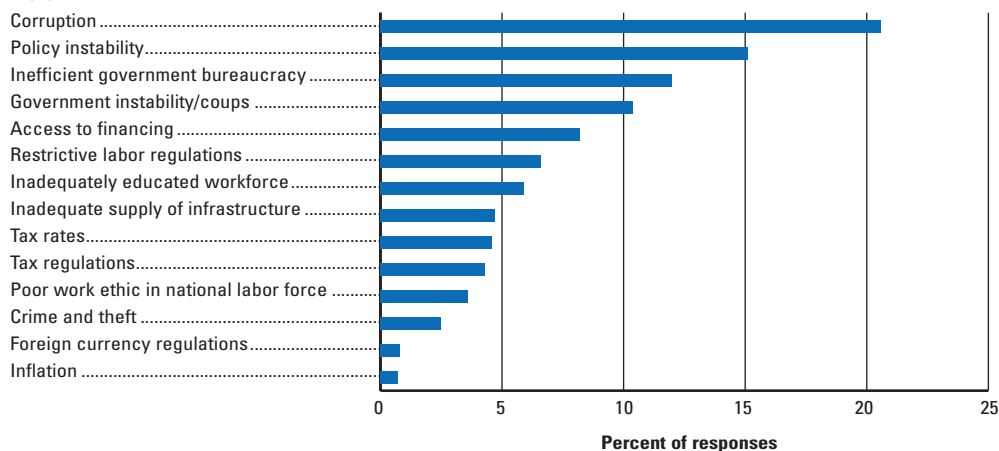
■ Ecuador  
■ LA&C average  
■ OECD average



Source: World Bank, *Doing Business in 2006: Creating Jobs*

## The Most Problematic Factors for Doing Business

FACTOR



Note: From a list of fourteen factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars show the responses weighted according to their rankings.

Source: World Economic Forum, Executive Opinion Survey 2005

# National Competitiveness Balance Sheet Based on the Global Competitiveness Index 2005

## NOTABLE COMPETITIVE ADVANTAGES RANK/117

<b>Macroeconomy</b>		
2.13	Government surplus/deficit, 2004.....	12
2.14	National saving rate, 2004.....	26
2.16	Inflation, 2004.....	40
<b>Health and primary education</b>		
4.15	Primary enrollment, 2003.....	13

(Disadvantages cont'd. from bottom of right column)

## NOTABLE COMPETITIVE DISADVANTAGES RANK/117

<b>Technological readiness</b>		
3.01	Technological readiness.....	84
3.02	Firm-level technology absorption.....	107
3.15	Laws relating to ICT.....	89
3.04	FDI and technology transfer.....	95
3.18	Cellular telephones, 2003.....	72
3.19	Internet users, 2003.....	76
3.21	Personal computers, 2002.....	76
<b>Business sophistication</b>		
7.05	Local supplier quantity.....	94
7.06	Local supplier quality.....	94
8.05	Production process sophistication.....	96
8.06	Extent of marketing.....	70
8.08	Control of international distribution.....	88
8.12	Willingness to delegate authority.....	92
8.01	Nature of competitive advantage.....	102
8.02	Value chain presence.....	101
<b>Innovation</b>		
3.05	Quality of scientific research institutions.....	105
3.06	Company spending on research and development.....	90
3.07	University/industry research collaboration.....	98
3.08	Government procurement of advanced technology products.....	113
6.04	Intellectual property protection.....	97
3.09	Availability of scientists and engineers.....	101
8.03	Capacity for innovation.....	101
3.17	Utility patents, 2004.....	62

## NOTABLE COMPETITIVE DISADVANTAGES RANK/117

<b>Institutions</b>		
6.03	Property rights.....	109
6.24	Diversion of public funds.....	114
6.26	Public trust of politicians.....	116
6.01	Judicial independence.....	115
6.08	Favoritism in decisions of government officials.....	114
6.06	Wastefulness of government spending.....	113
6.07	Burden of government regulation.....	105
2.02	Business costs of terrorism.....	91
6.14	Reliability of police services.....	101
6.15	Business costs of crime and violence.....	112
6.16	Organized crime.....	107
8.04	Ethical behavior of firms.....	95
8.16	Efficacy of corporate boards.....	106
8.21	Protection of minority shareholders' interests.....	105
8.23	Strength of auditing and accounting standards.....	96
<b>Infrastructure</b>		
5.01	Overall infrastructure quality.....	86
5.02	Railroad infrastructure development.....	110
5.03	Port infrastructure quality.....	80
5.04	Air transport infrastructure quality.....	62
5.05	Quality of electricity supply.....	95
5.08	Telephone lines, 2003.....	69
<b>Macroeconomy</b>		
2.17	Interest rate spread, 2004.....	58
2.20	Government debt, 2004.....	53
2.15	Real effective exchange rate, 2004.....	96
<b>Health and primary education</b>		
4.04	Medium-term business impact of malaria.....	85
4.05	Medium-term business impact of tuberculosis.....	75
4.06	Medium-term business impact of HIV/AIDS.....	85
4.10	Infant mortality.....	60
4.11	Life expectancy, 2003.....	60
4.12	Tuberculosis prevalence, 2003.....	84
4.13	Malaria prevalence.....	98
4.14	HIV prevalence, 2003.....	61
<b>Higher education and training</b>		
4.16	Secondary enrollment.....	92
4.17	Tertiary enrollment.....	78
4.01	Quality of the educational system.....	112
4.03	Quality of math and science education.....	90
8.15	Quality of management schools.....	83
7.09	Local availability of specialized research and training services.....	95
8.11	Extent of staff training.....	101
<b>Market efficiency</b>		
2.12	Agricultural policy costs.....	89
6.02	Efficiency of legal framework.....	115
6.11	Extent and effect of taxation.....	79
7.10	Number of procedures required to start a business.....	92
7.11	Time required to start a business.....	94
7.01	Intensity of local competition.....	110
7.02	Effectiveness of antitrust policy.....	115
	GDP – exports + imports.....	66
2.18	Exports, 2004.....	94
8.17	Hiring and firing practices.....	95
8.18	Flexibility of wage determination.....	82
8.19	Cooperation in labor-employer relations.....	93
8.14	Reliance on professional management.....	103
8.20	Pay and productivity.....	110
4.08	Brain drain.....	70
4.09	Private sector employment of women.....	81
2.03	Financial market sophistication.....	79
2.05	Ease of access to loans.....	104
2.06	Venture capital availability.....	102
2.04	Soundness of banks.....	106
2.08	Local equity market access.....	102

<<< (Cont'd. on bottom of left column)

# El Salvador

## Key Indicators

Total population (millions), 2005 .....	6.9
Gross Domestic Product (US\$ billions), 2005 .....	16.5
Gross Domestic Product per capita (PPP, US\$), 2005 .....	4,525.1
Real growth in GDP (percent), 2005.....	2.0
Growth of output (average annual percent change), 1990–2004 .....	4.5
Agriculture.....	1.0
Industry .....	5.3
Manufacturing .....	5.5
Services .....	5.2
Inflation (annual percent change), 2005 .....	4.0
Budget balance (percent of GDP), 2005 .....	–2.1
Gross fixed capital formation (percent of GDP), 2004.....	15.6
National savings rate (percent of GDP), 2004 .....	11.7
Interest rate spread (percent), 2005.....	3.2
Real effective exchange rate (percent)*, 2004.....	–2.4
Exports of goods and services (percent of GDP), 2004 .....	27.2
Imports of goods and services (percent of GDP), 2004.....	44.2
Current account balance (percent of GDP), 2005.....	–4.7
Gross official reserves in months of imports, 2004 .....	4.5
Government debt (percent of GDP), 2005 .....	45.8
Unemployment (percent of total labor force), 2004 .....	6.3
Gini index** .....	0.5

## Human Development Indicators

Gross primary enrollment (percent of relevant age group), 2003 .....	112.5
Gross secondary enrollment (percent of relevant age group), 2003 .....	59.0
Gross tertiary enrollment (percent of relevant age group), 2003 .....	17.4
Adult literacy rate (percent of population aged 15 and above), 2002 .....	79.7
Life expectancy at birth, 2003 .....	70.0
HIV prevalence rate (percent of population aged 15 to 49), 2003 .....	0.7
Public expenditure on health (percent of GDP), 2002 .....	3.6

## Infrastructure and Technology Diffusion Indicators

Paved roads (percent of total roads).....	19.8
Main telephone lines per 100 inhabitants, 2003 .....	11.3
Cellular mobile telephone subscribers per 100 inhabitants, 2003 ..	17.3
Personal computers per 100 inhabitants, 2003.....	3.3
Internet users per 100 inhabitants, 2003 .....	8.3

\* Real effective exchange rate 2004 relative to the 1997–2003 average. Values greater (less) than 0 indicate appreciation (depreciation).

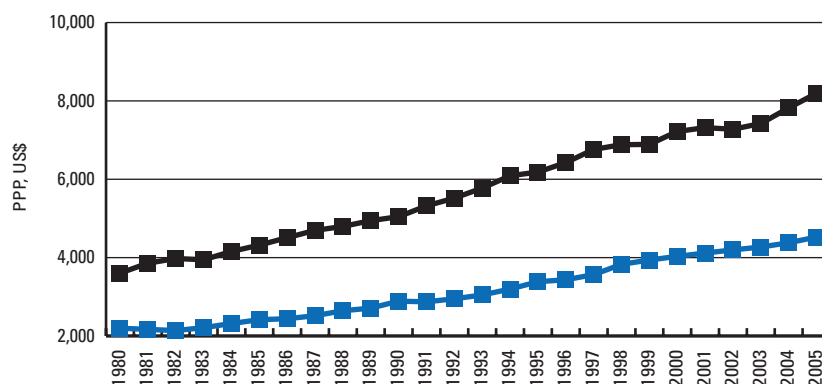
\*\* The Gini index is a number between 0 and 1 that is a measure of inequality, with lower (higher) values representing less (more) inequality.

Sources: UNFPA, *State of World Population 2005*; IMF, *World Economic Outlook Database*, September 2005; EIU, *CountryData Database*, December 2005; IMF, *International Financial Statistics Database*, December 2005; IMF, Information Notice System; IMF, IMF Country Report No. 05/271, August 2005; UNDP, *Human Development Report 2005*; UNESCO Institute for Statistics; WHO, *World Health Statistics 2005*; World Bank, *World Development Indicators 2005*; ITU, *World Telecommunication Indicators 2004*; UN Statistics Division and ITU estimates

## GDP per capita (PPP, US\$), 1980–2005

- El Salvador
- LA&C average

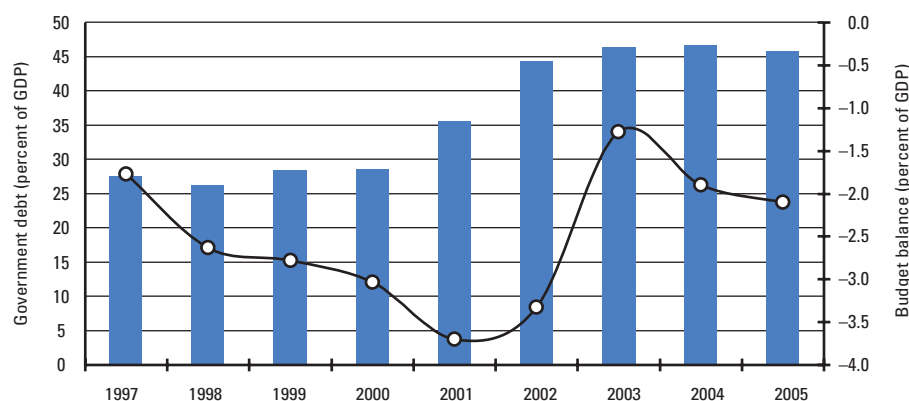
Source: IMF, World Economic Outlook Database, September 2005



## Government Debt and Budget Balance

- Government debt (percent of GDP) (left axis)
- Budget balance (percent of GDP) (right axis)

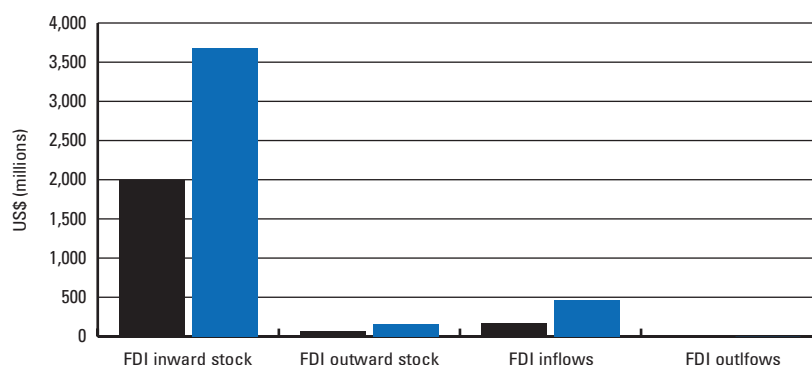
Source: EIU, CountryData Database, December 2005



## FDI Inward and Outward Stocks and Flows (US\$ millions), 2000 and 2004

- 2000
- 2004

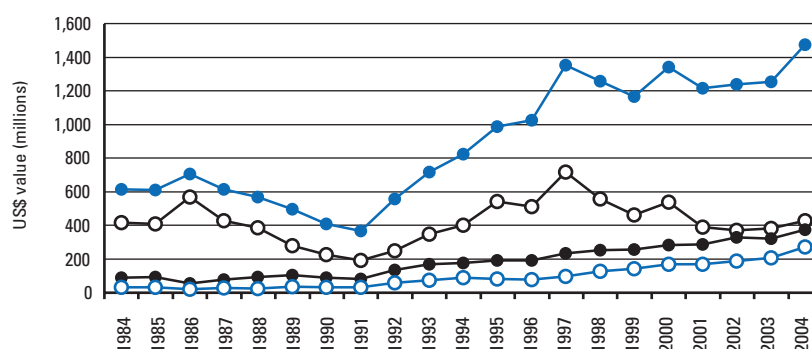
Source: UNCTAD, FDI Database, December 2005



## Main Exports (in millions US\$ value)

- All commodities
- Food and live animals chiefly for food
- Manufactured goods classified chiefly by materials
- Miscellaneous manufactured articles

Source: UN Comtrade Database, December 2005



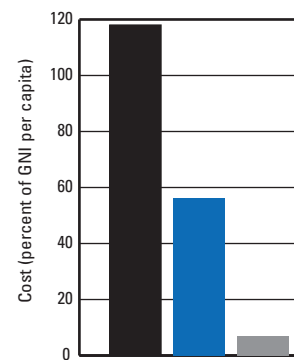
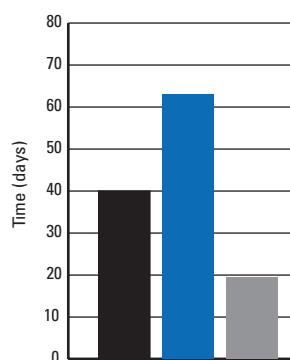
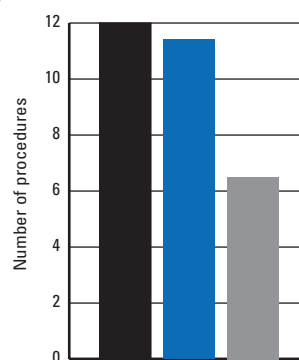
## Competitiveness Rankings

	Rank out of 117 countries	Rank out of 21 LA&C countries
<b>Global Competitiveness Index 2005 .....</b>	<b>60 .....</b>	<b>7 .....</b>
<b>Basic Requirements.....</b>	<b>50 .....</b>	<b>2 .....</b>
1st Pillar: Institutions .....	57 .....	3 .....
2nd Pillar: Infrastructure .....	52 .....	2 .....
3rd Pillar: Macroeconomy .....	59 .....	10 .....
4th Pillar: Health and Primary Education .....	46 .....	10 .....
<b>Efficiency Enhancers.....</b>	<b>73 .....</b>	<b>12 .....</b>
5th Pillar: Higher Education and Training.....	86 .....	14 .....
6th Pillar: Market Efficiency .....	50 .....	2 .....
7th Pillar: Technological Readiness .....	69 .....	13 .....
<b>Innovation Factors.....</b>	<b>73 .....</b>	<b>10 .....</b>
8th Pillar: Business Sophistication .....	51 .....	6 .....
9th Pillar: Innovation.....	96 .....	12 .....

Source: World Economic Forum, *Global Competitiveness Report 2005–2006*

## Starting a Business, 2005

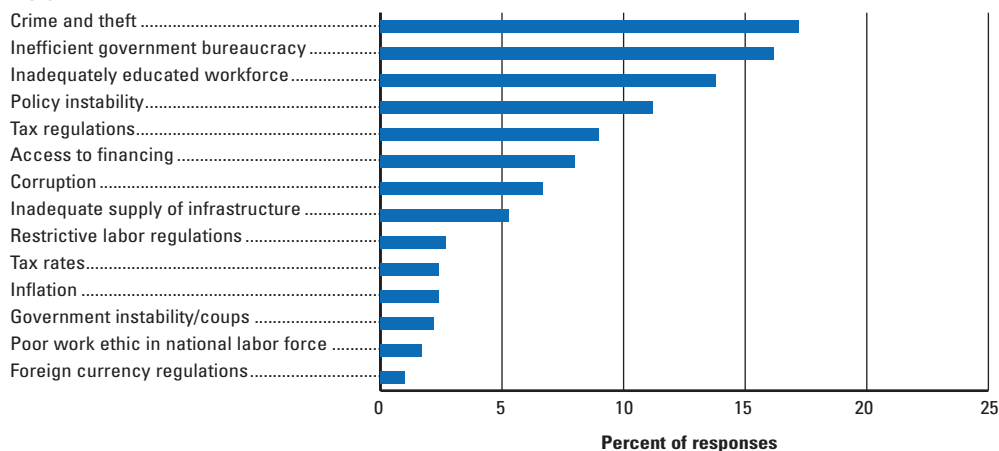
■ El Salvador  
■ LA&C average  
■ OECD average



Source: World Bank, *Doing Business in 2006: Creating Jobs*

## The Most Problematic Factors for Doing Business

### FACTOR



Note: From a list of fourteen factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars show the responses weighted according to their rankings.

Source: World Economic Forum, Executive Opinion Survey 2005

# National Competitiveness Balance Sheet Based on the Global Competitiveness Index 2005

NOTABLE COMPETITIVE ADVANTAGES		RANK/117
<b>Institutions</b>		
6.24	Diversion of public funds .....	42
6.08	Favoritism in decisions of government officials .....	38
6.06	Wastefulness of government spending .....	35
6.07	Burden of government regulation .....	46
8.04	Ethical behavior of firms .....	48
8.16	Efficacy of corporate boards .....	49
<b>Infrastructure</b>		
5.01	Overall infrastructure quality .....	36
5.04	Air transport infrastructure quality .....	23
<b>Macroeconomy</b>		
2.17	Interest rate spread, 2004 .....	15
2.20	Government debt, 2004 .....	44
<b>Health and primary education</b>		
4.10	Infant mortality .....	47
4.15	Primary enrollment, 2003 .....	17
<b>Market efficiency</b>		
2.12	Agricultural policy costs .....	30
6.11	Extent and effect of taxation .....	20
7.01	Intensity of local competition .....	28
8.17	Hiring and firing practices .....	13
8.18	Flexibility of wage determination .....	39
8.19	Cooperation in labor-employer relations .....	24
8.20	Pay and productivity .....	30
4.08	Brain drain .....	49
2.03	Financial market sophistication .....	42
2.05	Ease of access to loans .....	49
2.04	Soundness of banks .....	35
<b>Business sophistication</b>		
8.12	Willingness to delegate authority .....	50
8.01	Nature of competitive advantage .....	32

(Disadvantages cont'd. from bottom of right column)

NOTABLE COMPETITIVE DISADVANTAGES		RANK/117
<b>Innovation</b>		
3.05	Quality of scientific research institutions .....	110
3.06	Company spending on research and development .....	75
3.07	University/industry research collaboration .....	100
3.08	Government procurement of advanced technology products .....	70
6.04	Intellectual property protection .....	59
3.09	Availability of scientists and engineers .....	112
8.03	Capacity for innovation .....	57
3.17	Utility patents, 2004 .....	68

NOTABLE COMPETITIVE DISADVANTAGES		RANK/117
<b>Institutions</b>		
6.03	Property rights .....	67
6.26	Public trust of politicians .....	60
6.01	Judicial independence .....	69
2.02	Business costs of terrorism .....	79
6.14	Reliability of police services .....	56
6.15	Business costs of crime and violence .....	105
6.16	Organized crime .....	100
8.21	Protection of minority shareholders' interests .....	76
8.23	Strength of auditing and accounting standards .....	61
<b>Infrastructure</b>		
5.02	Railroad infrastructure development .....	96
5.03	Port infrastructure quality .....	52
5.05	Quality of electricity supply .....	56
5.08	Telephone lines, 2003 .....	75
<b>Macroeconomy</b>		
2.13	Government surplus/deficit, 2004 .....	75
2.14	National saving rate, 2004 .....	106
2.16	Inflation, 2004 .....	66
2.15	Real effective exchange rate, 2004 .....	60
<b>Health and primary education</b>		
4.04	Medium-term business impact of malaria .....	57
4.05	Medium-term business impact of tuberculosis .....	52
4.06	Medium-term business impact of HIV/AIDS .....	87
4.11	Life expectancy, 2003 .....	70
4.12	Tuberculosis prevalence, 2003 .....	58
4.13	Malaria prevalence .....	64
4.14	HIV prevalence, 2003 .....	80
<b>Higher education and training</b>		
4.16	Secondary enrollment .....	93
4.17	Tertiary enrollment .....	80
4.01	Quality of the educational system .....	76
4.03	Quality of math and science education .....	93
8.15	Quality of management schools .....	59
7.09	Local availability of specialized research and training services .....	73
8.11	Extent of staff training .....	69
<b>Market efficiency</b>		
6.02	Efficiency of legal framework .....	78
7.10	Number of procedures required to start a business .....	74
7.11	Time required to start a business .....	100
7.02	Effectiveness of antitrust policy .....	71
	GDP – exports + imports .....	75
2.18	Exports, 2004 .....	86
8.14	Reliance on professional management .....	73
4.09	Private sector employment of women .....	75
2.06	Venture capital availability .....	61
2.08	Local equity market access .....	83
<b>Technological readiness</b>		
3.01	Technological readiness .....	63
3.02	Firm-level technology absorption .....	68
3.15	Laws relating to ICT .....	54
3.04	FDI and technology transfer .....	74
3.18	Cellular telephones, 2003 .....	74
3.19	Internet users, 2003 .....	62
3.21	Personal computers, 2003 .....	75
<b>Business sophistication</b>		
7.05	Local supplier quantity .....	53
7.06	Local supplier quality .....	55
8.05	Production process sophistication .....	64
8.06	Extent of marketing .....	57
8.08	Control of international distribution .....	80
8.02	Value chain presence .....	54

<<< (Cont'd. on bottom of left column)

# Guatemala

## Key Indicators

Total population (millions), 2005 .....	12.6
Gross Domestic Product (US\$ billions), 2005 .....	27.4
Gross Domestic Product per capita (PPP, US\$), 2005 .....	4,135.5
Real growth in GDP (percent), 2005.....	3.2
Growth of output (average annual percent change), 1990–2004 .....	4.3
Agriculture.....	3.0
Industry .....	3.8
Manufacturing .....	2.5
Services .....	5.1
Inflation (annual percent change), 2005 .....	7.6
Budget balance (percent of GDP), 2005 .....	–2.2
Gross fixed capital formation (percent of GDP), 2004.....	15.2
National savings rate (percent of GDP), 2004 .....	15.0
Interest rate spread (percent), 2005.....	9.6
Real effective exchange rate (percent)*, 2004.....	1.0
Exports of goods and services (percent of GDP), 2004 .....	17.1
Imports of goods and services (percent of GDP), 2004.....	31.1
Current account balance (percent of GDP), 2005.....	–4.7
Gross official reserves in months of imports, 2004 .....	4.4
Government debt (percent of GDP), 2005 .....	26.7
Unemployment (percent of total labor force), 2003 .....	7.5
Gini index** .....	0.6

## Human Development Indicators

Gross primary enrollment (percent of relevant age group), 2003 .....	106.1
Gross secondary enrollment (percent of relevant age group), 2003 .....	42.7
Gross tertiary enrollment (percent of relevant age group), 2003 .....	9.3
Adult literacy rate (percent of population aged 15 and above), 2002 .....	69.1
Life expectancy at birth, 2003 .....	66.0
HIV prevalence rate (percent of population aged 15 to 49), 2003 .....	1.1
Public expenditure on health (percent of GDP), 2002 .....	2.3

## Infrastructure and Technology Diffusion Indicators

Paved roads (percent of total roads).....	34.5
Main telephone lines per 100 inhabitants, 2003 .....	7.7
Cellular mobile telephone subscribers per 100 inhabitants, 2003 ..	16.5
Personal computers per 100 inhabitants, 2002 .....	1.4
Internet users per 100 inhabitants, 2002 .....	3.3

\* Real effective exchange rate 2004 relative to the 1997–2003 average. Values greater (less) than 0 indicate appreciation (depreciation).

\*\* The Gini index is a number between 0 and 1 that is a measure of inequality, with lower (higher) values representing less (more) inequality.

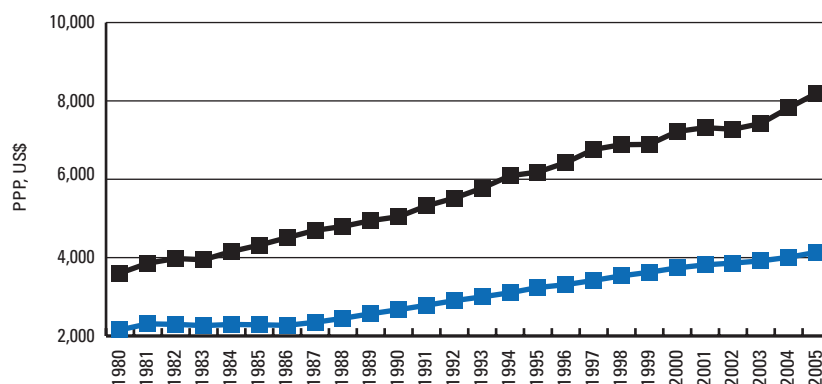
Sources: UNFPA, *State of World Population 2005*; IMF, *World Economic Outlook Database*, September 2005; EIU, *CountryData Database*, December 2005; IMF, *International Financial Statistics Database*, December 2005; IMF, Information Notice System; IMF, IMF Country Report No. 05/362, October 2005; UNDP, *Human Development Report 2005*; UNESCO Institute for Statistics; WHO, *World Health Statistics 2005*; World Bank, *World Development Indicators 2005*; ITU, *World Telecommunication Indicators 2004*; UN Statistics Division and ITU estimates



## GDP per capita (PPP, US\$), 1980–2005

- Guatemala
- LA&C average

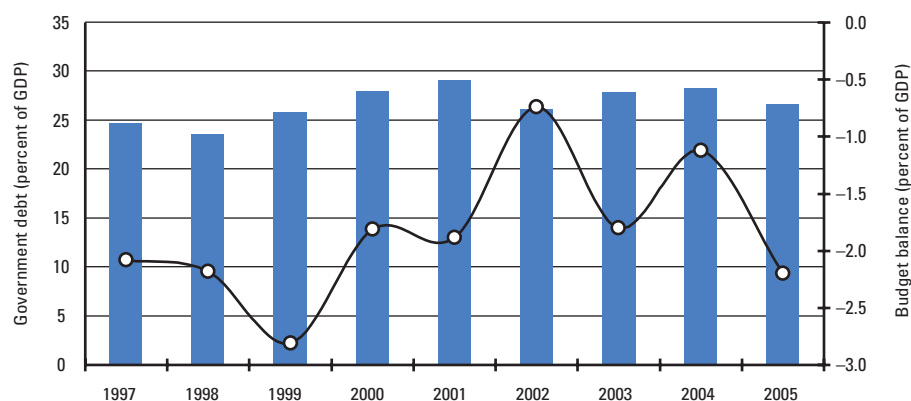
Source: IMF, World Economic Outlook Database, September 2005



## Government Debt and Budget Balance

- Government debt (percent of GDP) (left axis)
- Budget balance (percent of GDP) (right axis)

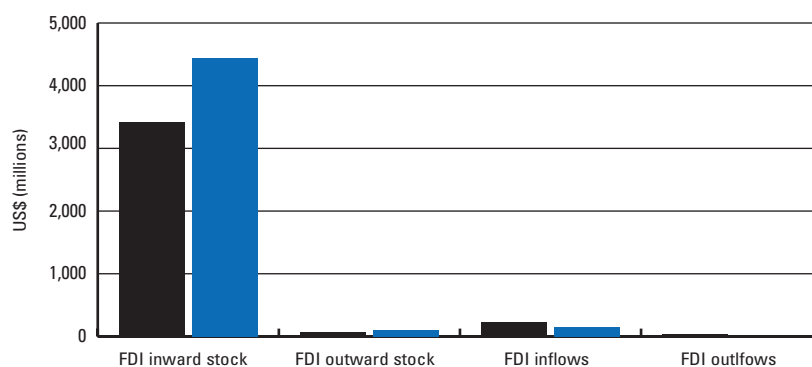
Source: EIU, CountryData Database, December 2005



## FDI Inward and Outward Stocks and Flows (US\$ millions), 2000 and 2004

- 2000
- 2004

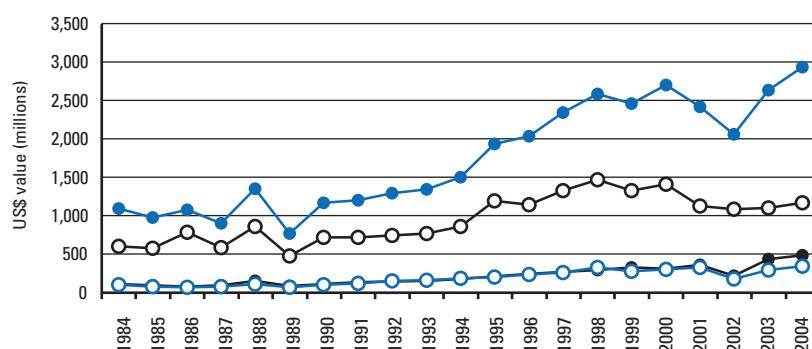
Source: UNCTAD, FDI Database, December 2005



## Main Exports (in millions US\$ value)

- All commodities
- Food and live animals chiefly for food
- Chemicals and related products, nes
- Manufactured goods classified chiefly by materials

Source: UN Comtrade Database, December 2005



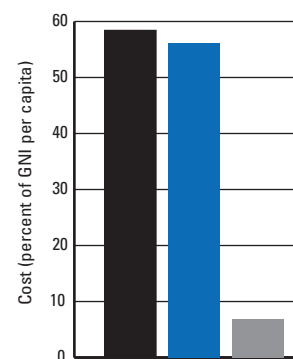
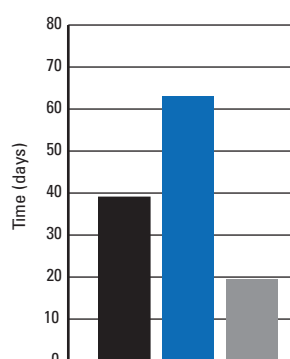
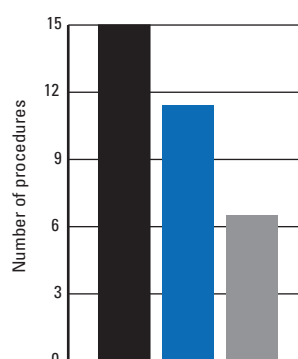
## Competitiveness Rankings

	Rank out of 117 countries	Rank out of 21 LA&C countries
<b>Global Competitiveness Index 2005 .....</b>	<b>95</b>	<b>16</b>
<b>Basic Requirements.....</b>	<b>90</b>	<b>16</b>
1st Pillar: Institutions .....	113	18
2nd Pillar: Infrastructure .....	93	16
3rd Pillar: Macroeconomy .....	64	11
4th Pillar: Health and Primary Education .....	73	19
<b>Efficiency Enhancers.....</b>	<b>103</b>	<b>18</b>
5th Pillar: Higher Education and Training.....	102	20
6th Pillar: Market Efficiency .....	107	16
7th Pillar: Technological Readiness .....	83	15
<b>Innovation Factors.....</b>	<b>94</b>	<b>15</b>
8th Pillar: Business Sophistication .....	83	14
9th Pillar: Innovation.....	103	14

Source: World Economic Forum, *Global Competitiveness Report 2005–2006*

## Starting a Business, 2005

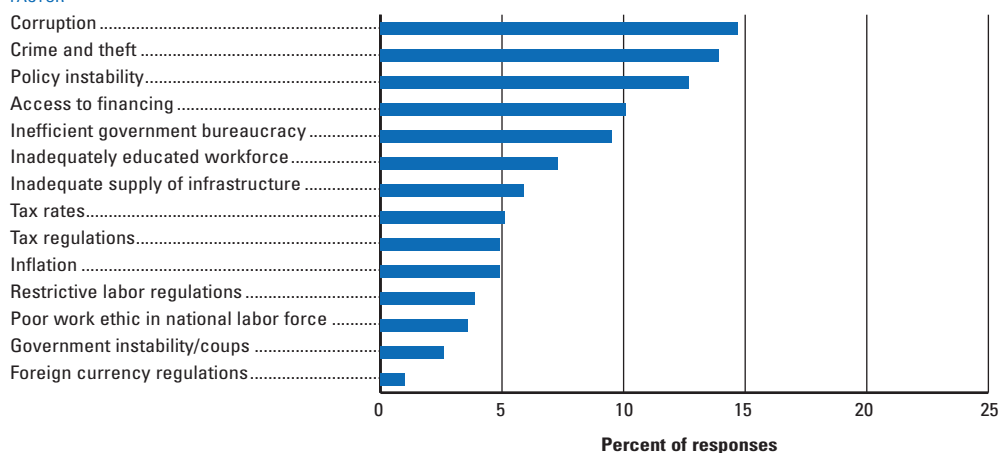
■ Guatemala  
■ LA&C average  
■ OECD average



Source: World Bank, *Doing Business in 2006: Creating Jobs*

## The Most Problematic Factors for Doing Business

FACTOR



Note: From a list of fourteen factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars show the responses weighted according to their rankings.

Source: World Economic Forum, Executive Opinion Survey 2005

# National Competitiveness Balance Sheet Based on the Global Competitiveness Index 2005

## NOTABLE COMPETITIVE ADVANTAGES RANK/117

<b>Macroeconomy</b>		
2.13	Government surplus/deficit, 2004.....	42
2.20	Government debt, 2004.....	21
<b>Health and primary education</b>		
4.15	Primary enrollment, 2003.....	42

(Disadvantages cont'd. from bottom of right column)

## NOTABLE COMPETITIVE DISADVANTAGES RANK/117

<b>Technological readiness</b>		
3.01	Technological readiness.....	75
3.02	Firm-level technology absorption.....	93
3.15	Laws relating to ICT.....	96
3.04	FDI and technology transfer.....	58
3.18	Cellular telephones, 2003.....	75
3.19	Internet users, 2002.....	88
3.21	Personal computers, 2002.....	91
<b>Business sophistication</b>		
7.05	Local supplier quantity.....	86
7.06	Local supplier quality.....	82
8.05	Production process sophistication.....	86
8.06	Extent of marketing.....	76
8.08	Control of international distribution.....	87
8.12	Willingness to delegate authority.....	85
8.01	Nature of competitive advantage.....	70
8.02	Value chain presence.....	74
<b>Innovation</b>		
3.05	Quality of scientific research institutions.....	99
3.06	Company spending on research and development.....	88
3.07	University/industry research collaboration.....	92
3.08	Government procurement of advanced technology products.....	111
6.04	Intellectual property protection.....	107
3.09	Availability of scientists and engineers.....	110
8.03	Capacity for innovation.....	65
3.17	Utility patents, 2004.....	81

## NOTABLE COMPETITIVE DISADVANTAGES RANK/117

<b>Institutions</b>		
6.03	Property rights.....	105
6.24	Diversion of public funds.....	108
6.26	Public trust of politicians.....	105
6.01	Judicial independence.....	90
6.08	Favoritism in decisions of government officials.....	105
6.06	Wastefulness of government spending.....	106
6.07	Burden of government regulation.....	91
2.02	Business costs of terrorism.....	95
6.14	Reliability of police services.....	117
6.15	Business costs of crime and violence.....	117
6.16	Organized crime.....	117
8.04	Ethical behavior of firms.....	96
8.16	Efficacy of corporate boards.....	97
8.21	Protection of minority shareholders' interests.....	112
8.23	Strength of auditing and accounting standards.....	111
<b>Infrastructure</b>		
5.01	Overall infrastructure quality.....	90
5.02	Railroad infrastructure development.....	106
5.03	Port infrastructure quality.....	91
5.04	Air transport infrastructure quality.....	82
5.05	Quality of electricity supply.....	87
5.08	Telephone lines, 2003.....	81
<b>Macroeconomy</b>		
2.14	National saving rate, 2004.....	92
2.16	Inflation, 2004.....	87
2.17	Interest rate spread, 2004.....	85
2.15	Real effective exchange rate, 2004.....	74
<b>Health and primary education</b>		
4.04	Medium-term business impact of malaria.....	82
4.05	Medium-term business impact of tuberculosis.....	80
4.06	Medium-term business impact of HIV/AIDS.....	91
4.10	Infant mortality.....	89
4.11	Life expectancy, 2003.....	86
4.12	Tuberculosis prevalence, 2003.....	68
4.13	Malaria prevalence.....	93
4.14	HIV prevalence, 2003.....	88
<b>Higher education and training</b>		
4.16	Secondary enrollment.....	98
4.17	Tertiary enrollment.....	94
4.01	Quality of the educational system.....	115
4.03	Quality of math and science education.....	116
8.15	Quality of management schools.....	69
7.09	Local availability of specialized research and training services.....	74
8.11	Extent of staff training.....	96
<b>Market efficiency</b>		
2.12	Agricultural policy costs.....	88
6.02	Efficiency of legal framework.....	110
6.11	Extent and effect of taxation.....	76
7.10	Number of procedures required to start a business.....	97
7.11	Time required to start a business.....	57
7.01	Intensity of local competition.....	98
7.02	Effectiveness of antitrust policy.....	106
	GDP – exports + imports.....	62
2.18	Exports, 2004.....	107
8.17	Hiring and firing practices.....	72
8.18	Flexibility of wage determination.....	85
8.19	Cooperation in labor-employer relations.....	88
8.14	Reliance on professional management.....	104
8.20	Pay and productivity.....	101
4.08	Brain drain.....	66
4.09	Private sector employment of women.....	111
2.03	Financial market sophistication.....	80
2.05	Ease of access to loans.....	93
2.06	Venture capital availability.....	92
2.04	Soundness of banks.....	94
2.08	Local equity market access.....	105

<<< (Cont'd. on bottom of left column)

# Guyana

## Key Indicators

Total population (millions), 2005 .....	0.8
Gross Domestic Product (US\$ billions), 2005 .....	0.8
Gross Domestic Product per capita (PPP, US\$), 2005 .....	4,680.5
Real growth in GDP (percent), 2005 .....	-2.6
Growth of output (average annual percent change), 1990–2004 .....	4.6
Agriculture .....	5.5
Industry .....	6.9
Manufacturing .....	n/a
Services .....	2.9
Inflation (annual percent change), 2005 .....	6.0
Budget balance (percent of GDP), 2005 .....	-6.3
Gross fixed capital formation (percent of GDP), 2004 .....	n/a
National savings rate (percent of GDP), 2004 .....	24.1
Interest rate spread (percent), 2005 .....	11.8
Real effective exchange rate (percent)*, 2004 .....	-9.1
Exports of goods and services (percent of GDP), 2004 .....	113.5
Imports of goods and services (percent of GDP), 2004 .....	127.8
Current account balance (percent of GDP), 2005 .....	-24.8
Gross official reserves in months of imports, 2004 .....	3.3
Government debt (percent of GDP), 2004 .....	172.3
Unemployment (percent of total labor force), 2004 .....	n/a
Gini index** .....	n/a

## Human Development Indicators

Gross primary enrollment (percent of relevant age group), 2003 .....	124.8
Gross secondary enrollment (percent of relevant age group), 2003 .....	94.7
Gross tertiary enrollment (percent of relevant age group), 2003 .....	6.1
Adult literacy rate (percent of population aged 15 to 49) .....	n/a
Life expectancy at birth, 2003 .....	62.0
HIV prevalence rate (percent of population aged 15 to 49), 2003 .....	2.5
Public expenditure on health (percent of GDP), 2002 .....	4.3

## Infrastructure and Technology Diffusion Indicators

Paved roads (percent of total roads) .....	7.4
Main telephone lines per 100 inhabitants, 2002 .....	9.2
Cellular mobile telephone subscribers per 100 inhabitants, 2002 .....	9.9
Personal computers per 100 inhabitants, 2002 .....	2.7
Internet users per 100 inhabitants, 2002 .....	14.2

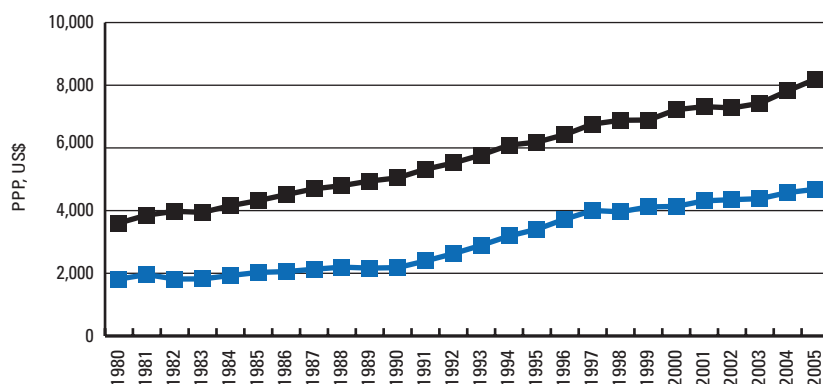
\* Real effective exchange rate 2004 relative to the 1997–2003 average. Values greater (less) than 0 indicate appreciation (depreciation).

\*\* The Gini index is a number between 0 and 1 that is a measure of inequality, with lower (higher) values representing less (more) inequality.

Sources: CIA, The World Factbook, November 2005; IMF, World Economic Outlook Database, September 2005; EIU, *CountryData Database*, December 2005; IMF, Information Notice System; IMF, Public Information Notice No. 05/32, March 2005; UNESCO Institute for Statistics; WHO, *World Health Statistics 2005*; World Bank, *World Development Indicators 2005*; ITU, *World Telecommunication Indicators 2004*; UN Statistics Division and ITU estimates

## GDP per capita (PPP, US\$), 1980–2005

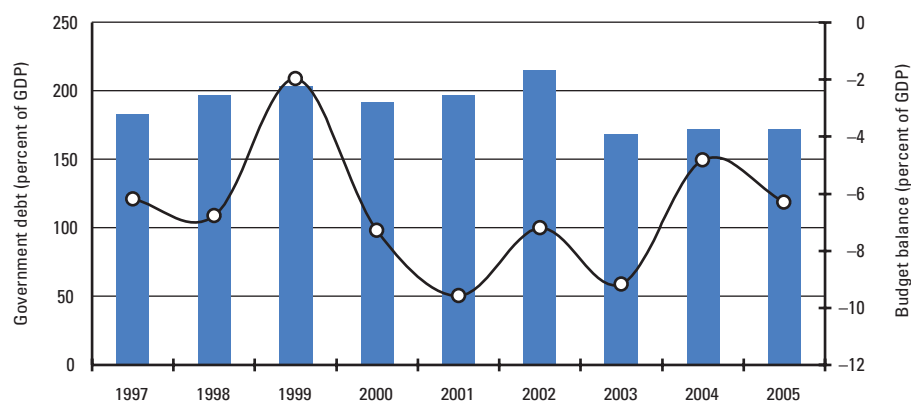
- Guyana
- LA&C average



Source: IMF, World Economic Outlook Database, September 2005

## Government Debt and Budget Balance

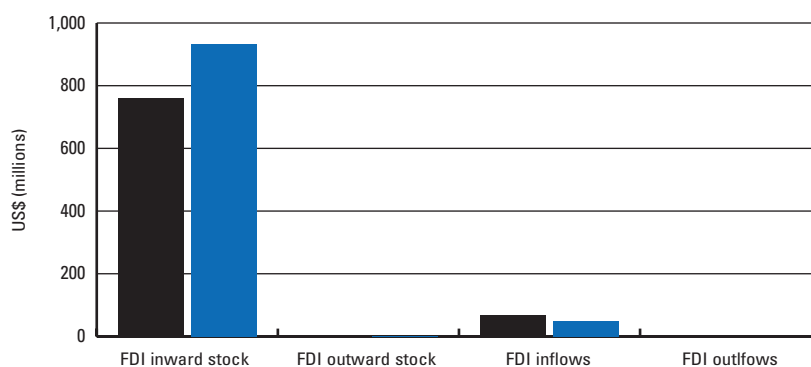
- Government debt (percent of GDP) (left axis)
- Budget balance (percent of GDP) (right axis)



Source: EIU, CountryData Database, December 2005

## FDI Inward and Outward Stocks and Flows (US\$ millions), 2000 and 2004

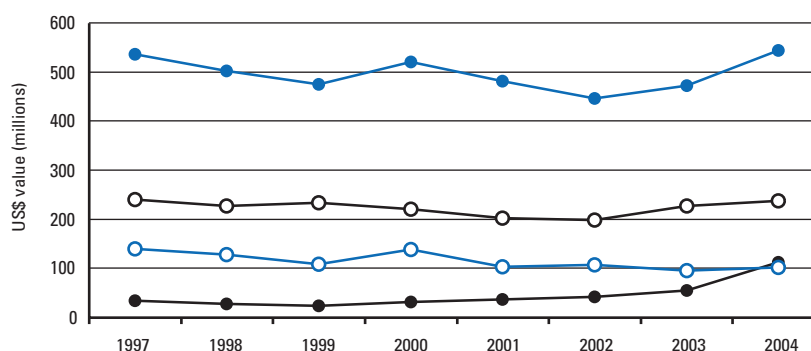
- 2000
- 2004



Source: UNCTAD, FDI Database, December 2005

## Main Exports (in millions US\$ value)

- All commodities
- Food and live animals chiefly for food
- Manufactured goods classified chiefly by materials
- Commodities and transactions not classified elsewhere in the SITC



Source: UN Comtrade Database, December 2005

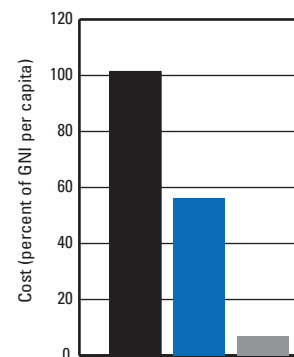
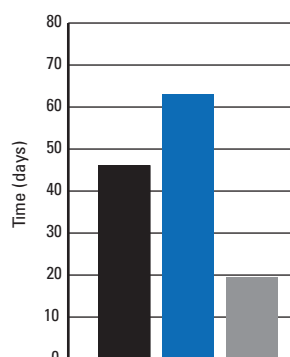
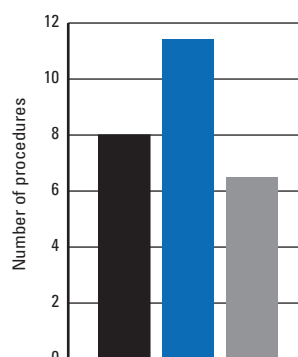
## Competitiveness Rankings

	Rank out of 117 countries	Rank out of 21 LA&C countries
<b>Global Competitiveness Index 2005 .....</b>	<b>108 .....</b>	<b>21</b>
<b>Basic Requirements.....</b>	<b>111 .....</b>	<b>21</b>
1st Pillar: Institutions .....	110 .....	15
2nd Pillar: Infrastructure .....	109 .....	21
3rd Pillar: Macroeconomy .....	113 .....	21
4th Pillar: Health and Primary Education .....	78 .....	20
<b>Efficiency Enhancers.....</b>	<b>102 .....</b>	<b>17</b>
5th Pillar: Higher Education and Training.....	95 .....	17
6th Pillar: Market Efficiency .....	105 .....	14
7th Pillar: Technological Readiness .....	112 .....	21
<b>Innovation Factors.....</b>	<b>110 .....</b>	<b>19</b>
8th Pillar: Business Sophistication .....	104 .....	18
9th Pillar: Innovation.....	111 .....	19

Source: World Economic Forum, *Global Competitiveness Report 2005–2006*

## Starting a Business, 2005

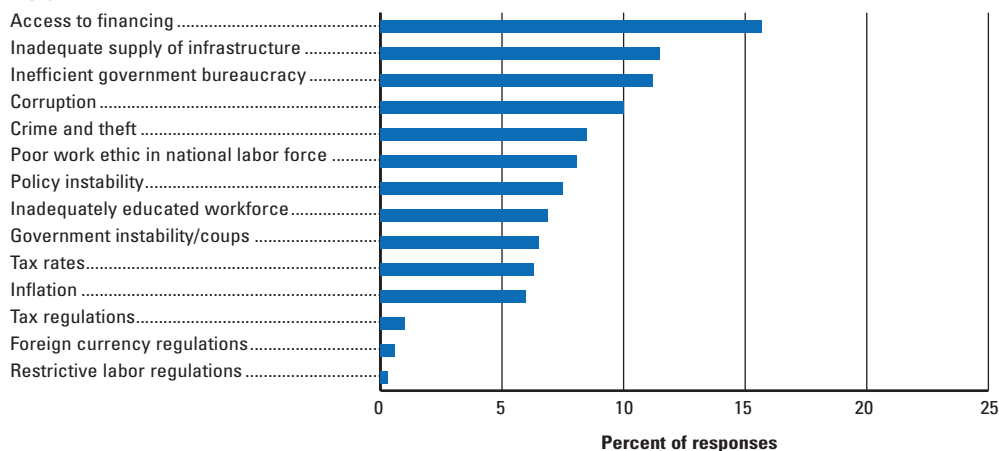
■ Guyana  
■ LA&C average  
■ OECD average



Source: World Bank, *Doing Business in 2006: Creating Jobs*

## The Most Problematic Factors for Doing Business

### FACTOR



Note: From a list of fourteen factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars show the responses weighted according to their rankings.

Source: World Economic Forum, Executive Opinion Survey 2005

# National Competitiveness Balance Sheet Based on the Global Competitiveness Index 2005

NOTABLE COMPETITIVE ADVANTAGES		RANK/117
<b>Macroeconomy</b>		
2.14	National saving rate, 2004.....	43
2.15	Real effective exchange rate, 2004 .....	36
<b>Health and primary education</b>		
4.15	Primary enrollment, 2003.....	5
<b>Higher education and training</b>		
4.16	Secondary enrollment .....	41
<b>Market efficiency</b>		
2.12	Agricultural policy costs .....	42
2.18	Exports, 2004 .....	5
8.17	Hiring and firing practices .....	27
2.04	Soundness of banks.....	49

NOTABLE COMPETITIVE DISADVANTAGES		RANK/117
<b>Institutions</b>		
6.03	Property rights.....	99
6.24	Diversion of public funds .....	102
6.26	Public trust of politicians .....	104
6.01	Judicial independence .....	96
6.08	Favoritism in decisions of government officials.....	113
6.06	Wastefulness of government spending .....	86
6.07	Burden of government regulation .....	93
2.02	Business costs of terrorism .....	65
6.14	Reliability of police services .....	116
6.15	Business costs of crime and violence .....	113
6.16	Organized crime .....	102
8.04	Ethical behavior of firms .....	112
8.16	Efficacy of corporate boards .....	87
8.21	Protection of minority shareholders' interests.....	100
8.23	Strength of auditing and accounting standards .....	86
<b>Infrastructure</b>		
5.01	Overall infrastructure quality .....	108
5.02	Railroad infrastructure development .....	113
5.03	Port infrastructure quality.....	99
5.04	Air transport infrastructure quality .....	102
5.05	Quality of electricity supply.....	108
5.08	Telephone lines, 2003 .....	79
<b>Macroeconomy</b>		
2.13	Government surplus/deficit, 2004.....	115
2.16	Inflation, 2004 .....	68
2.17	Interest rate spread, 2004.....	96
2.20	Government debt, 2004 .....	115
<b>Health and primary education</b>		
4.04	Medium-term business impact of malaria .....	109
4.05	Medium-term business impact of tuberculosis .....	105
4.06	Medium-term business impact of HIV/AIDS.....	111
4.10	Infant mortality .....	73
4.11	Life expectancy, 2003 .....	93
4.12	Tuberculosis prevalence, 2003 .....	83
4.13	Malaria prevalence .....	104
4.14	HIV prevalence, 2003 .....	100
<b>Higher education and training</b>		
4.17	Tertiary enrollment .....	99
4.01	Quality of the educational system .....	92
4.03	Quality of math and science education.....	101
8.15	Quality of management schools .....	114
7.09	Local availability of specialized research and training services .....	111
8.11	Extent of staff training .....	100
<b>Market efficiency</b>		
6.02	Efficiency of legal framework .....	113
6.11	Extent and effect of taxation.....	88
7.10	Number of procedures required to start a business .....	n/a
7.11	Time required to start a business.....	n/a
7.01	Intensity of local competition .....	93
7.02	Effectiveness of antitrust policy.....	100
	GDP – exports + imports .....	115
8.18	Flexibility of wage determination .....	60
8.19	Cooperation in labor-employer relations.....	113
8.14	Reliance on professional management.....	88
8.20	Pay and productivity .....	112
4.08	Brain drain .....	117
4.09	Private sector employment of women .....	69
2.03	Financial market sophistication .....	115
2.05	Ease of access to loans .....	98
2.06	Venture capital availability .....	103
2.08	Local equity market access.....	73

(Disadvantages cont'd. from bottom of right column)

NOTABLE COMPETITIVE DISADVANTAGES		RANK/117
<b>Technological readiness</b>		
3.01	Technological readiness .....	111
3.02	Firm-level technology absorption .....	113
3.15	Laws relating to ICT .....	117
3.04	FDI and technology transfer.....	101
3.18	Cellular telephones, 2003.....	86
3.19	Internet users, 2002.....	51
3.21	Personal computers, 2002 .....	81
<b>Business sophistication</b>		
7.05	Local supplier quantity .....	100
7.06	Local supplier quality.....	104
8.05	Production process sophistication .....	111
8.06	Extent of marketing.....	104
8.08	Control of international distribution .....	79
8.12	Willingness to delegate authority.....	100
8.01	Nature of competitive advantage.....	78
8.02	Value chain presence .....	102
<b>Innovation</b>		
3.05	Quality of scientific research institutions .....	102
3.06	Company spending on research and development .....	103
3.07	University/industry research collaboration .....	111
3.08	Government procurement of advanced technology products .....	91
6.04	Intellectual property protection .....	117
3.09	Availability of scientists and engineers .....	111
8.03	Capacity for innovation.....	105

<<< (Cont'd. on bottom of left column)

# Honduras

## Key Indicators

Total population (millions), 2005 .....	7.2
Gross Domestic Product (US\$ billions), 2005 .....	8.0
Gross Domestic Product per capita (PPP, US\$), 2005 .....	2,793.1
Real growth in GDP (percent), 2005.....	4.2
Growth of output (average annual percent change), 1990–2004 .....	4.1
Agriculture.....	3.8
Industry .....	4.1
Manufacturing .....	4.8
Services .....	4.2
Inflation (annual percent change), 2005 .....	8.1
Budget balance (percent of GDP), 2005.....	–3.0
Gross fixed capital formation (percent of GDP), 2004.....	26.0
National savings rate (percent of GDP), 2004 .....	25.2
Interest rate spread (percent), 2005.....	12.4
Real effective exchange rate (percent)*, 2004.....	–0.8
Exports of goods and services (percent of GDP), 2004 .....	40.7
Imports of goods and services (percent of GDP), 2004.....	60.2
Current account balance (percent of GDP), 2005.....	–2.5
Gross official reserves in months of imports, 2004 .....	4.8
Government debt (percent of GDP), 2005 .....	70.7
Unemployment (percent of total labor force), 2004 .....	28.5
Gini index** .....	0.6

## Human Development Indicators

Gross primary enrollment (percent of relevant age group), 2001 .....	106.0
Gross secondary enrollment (percent of relevant age group), 2003 .....	31.9
Gross tertiary enrollment (percent of relevant age group), 2001 .....	15.0
Adult literacy rate (percent of population aged 15 and above), 2001 .....	80.0
Life expectancy at birth, 2003 .....	67.0
HIV prevalence rate (percent of population aged 15 to 49), 2003 .....	1.8
Public expenditure on health (percent of GDP), 2002 .....	3.2

## Infrastructure and Technology Diffusion Indicators

Paved roads (percent of total roads).....	20.4
Main telephone lines per 100 inhabitants, 2003 .....	4.9
Cellular mobile telephone subscribers per 100 inhabitants, 2003.....	5.5
Personal computers per 100 inhabitants, 2003.....	1.5
Internet users per 100 inhabitants, 2003 .....	4.0

\* Real effective exchange rate 2004 relative to the 1997–2003 average. Values greater (less) than 0 indicate appreciation (depreciation).

\*\* The Gini index is a number between 0 and 1 that is a measure of inequality, with lower (higher) values representing less (more) inequality.

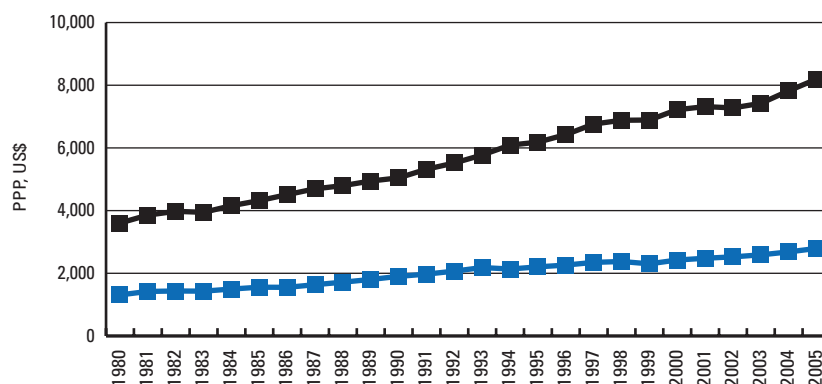
Sources: UNFPA, *State of World Population 2005*; IMF, *World Economic Outlook Database*, September 2005; EIU, *CountryData Database*, December 2005; IMF, *International Financial Statistics Database*, December 2005; IMF, Information Notice System; IMF, Public Information Notice No. 05/51, April 2005; UNDP, *Human Development Report 2005*; UNESCO Institute for Statistics; WHO, *World Health Statistics 2005*; World Bank, *World Development Indicators 2005*; ITU, *World Telecommunication Indicators 2004*; UN Statistics Division and ITU estimates



## GDP per capita (PPP, US\$), 1980–2005

- Honduras
- LA&C average

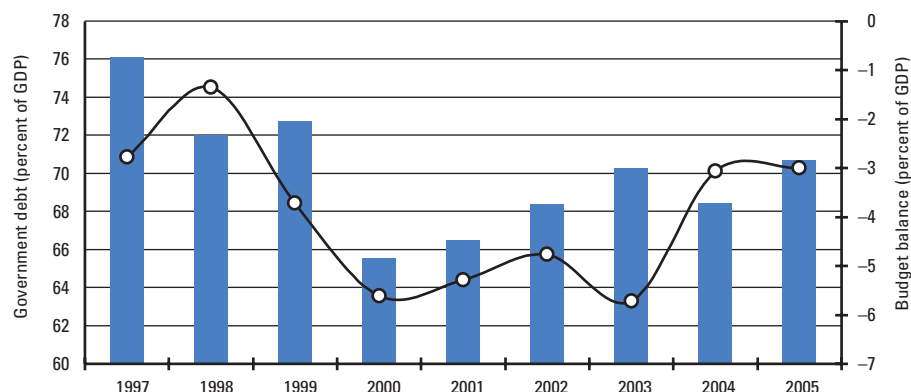
Source: IMF, World Economic Outlook Database, September 2005



## Government Debt and Budget Balance

- Government debt (percent of GDP) (left axis)
- Budget balance (percent of GDP) (right axis)

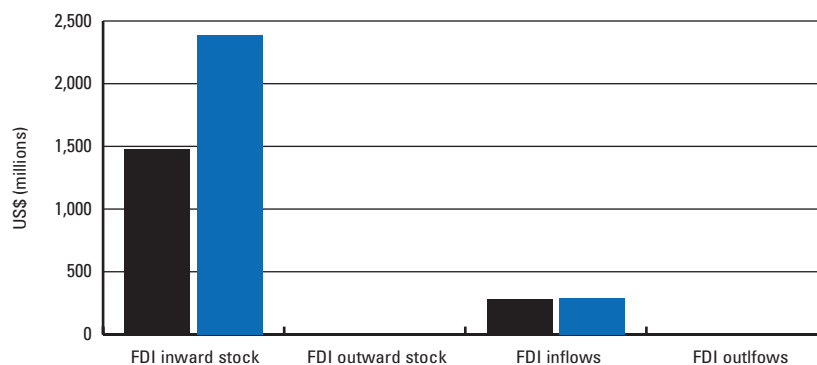
Source: EIU, CountryData Database, December 2005



## FDI Inward and Outward Stocks and Flows (US\$ millions), 2000 and 2004

- 2000
- 2004

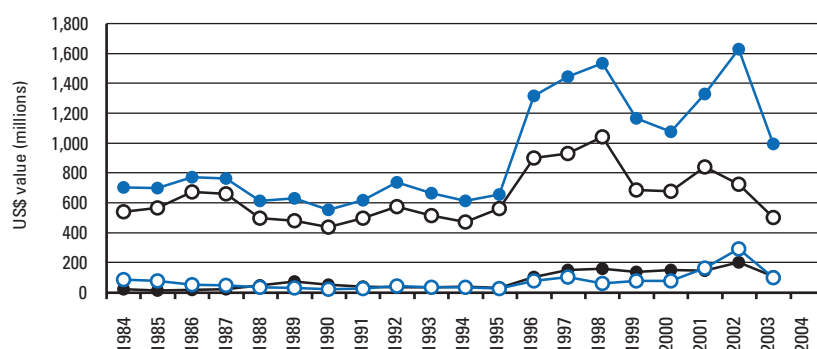
Source: UNCTAD, FDI Database, December 2005



## Main Exports (in millions US\$ value)

- All commodities
- Food and live animals chiefly for food
- Manufactured goods classified chiefly by materials
- Crude materials, inedible, except fuel

Source: UN Comtrade Database, December 2005



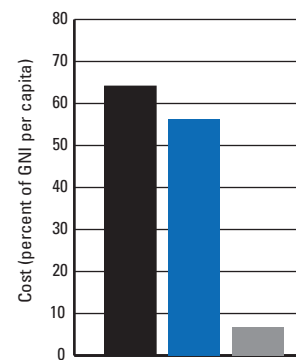
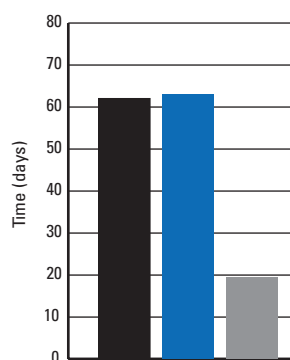
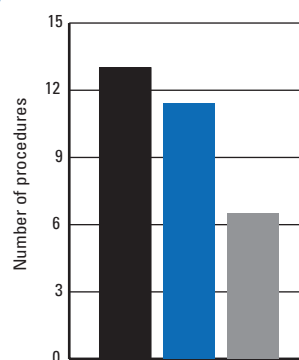
## Competitiveness Rankings

	Rank out of 117 countries	Rank out of 21 LA&C countries
<b>Global Competitiveness Index 2005 .....</b>	<b>97 .....</b>	<b>18 .....</b>
<b>Basic Requirements.....</b>	<b>83 .....</b>	<b>15 .....</b>
1st Pillar: Institutions .....	103 .....	14 .....
2nd Pillar: Infrastructure .....	82 .....	13 .....
3rd Pillar: Macroeconomy .....	82 .....	13 .....
4th Pillar: Health and Primary Education .....	62 .....	16 .....
<b>Efficiency Enhancers.....</b>	<b>110 .....</b>	<b>21 .....</b>
5th Pillar: Higher Education and Training.....	107 .....	21 .....
6th Pillar: Market Efficiency .....	111 .....	18 .....
7th Pillar: Technological Readiness .....	95 .....	17 .....
<b>Innovation Factors.....</b>	<b>104 .....</b>	<b>17 .....</b>
8th Pillar: Business Sophistication .....	93 .....	17 .....
9th Pillar: Innovation.....	105 .....	16 .....

Source: World Economic Forum, *Global Competitiveness Report 2005–2006*

## Starting a Business, 2005

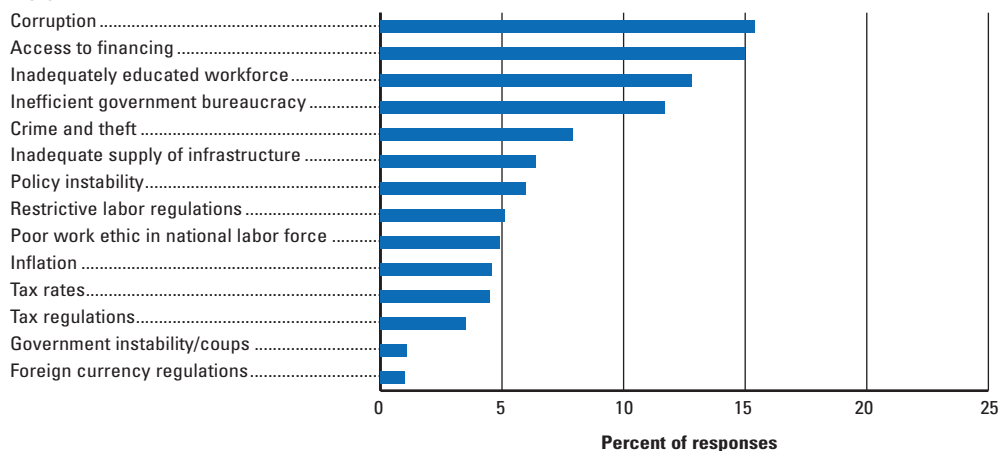
■ Honduras  
■ LA&C average  
■ OECD average



Source: World Bank, *Doing Business in 2006: Creating Jobs*

## The Most Problematic Factors for Doing Business

FACTOR



Note: From a list of fourteen factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars show the responses weighted according to their rankings.

Source: World Economic Forum, Executive Opinion Survey 2005

# National Competitiveness Balance Sheet Based on the Global Competitiveness Index 2005

## NOTABLE COMPETITIVE ADVANTAGES RANK/117

<b>Macroeconomy</b>		
2.14	National saving rate, 2004.....	33
<b>Health and primary education</b>		
4.15	Primary enrollment, 2002.....	43

(Disadvantages cont'd. from bottom of right column)

## NOTABLE COMPETITIVE DISADVANTAGES RANK/117

<b>Technological readiness</b>		
3.01	Technological readiness .....	89
3.02	Firm-level technology absorption .....	102
3.15	Laws relating to ICT .....	104
3.04	FDI and technology transfer.....	53
3.18	Cellular telephones, 2002.....	94
3.19	Internet users, 2003.....	81
3.21	Personal computers, 2003 .....	90
<b>Business sophistication</b>		
7.05	Local supplier quantity .....	102
7.06	Local supplier quality.....	90
8.05	Production process sophistication .....	89
8.06	Extent of marketing.....	87
8.08	Control of international distribution .....	105
8.12	Willingness to delegate authority.....	101
8.01	Nature of competitive advantage.....	87
8.02	Value chain presence .....	81
<b>Innovation</b>		
3.05	Quality of scientific research institutions .....	107
3.06	Company spending on research and development .....	107
3.07	University/industry research collaboration .....	99
3.08	Government procurement of advanced technology products .....	109
6.04	Intellectual property protection .....	81
3.09	Availability of scientists and engineers .....	107
8.03	Capacity for innovation.....	86
3.17	Utility patents, 2004.....	81

## NOTABLE COMPETITIVE DISADVANTAGES RANK/117

<b>Institutions</b>		
6.03	Property rights.....	94
6.24	Diversion of public funds .....	101
6.26	Public trust of politicians .....	84
6.01	Judicial independence .....	97
6.08	Favoritism in decisions of government officials.....	103
6.06	Wastefulness of government spending .....	94
6.07	Burden of government regulation .....	70
2.02	Business costs of terrorism .....	102
6.14	Reliability of police services .....	74
6.15	Business costs of crime and violence .....	108
6.16	Organized crime .....	106
8.04	Ethical behavior of firms .....	108
8.16	Efficacy of corporate boards .....	92
8.21	Protection of minority shareholders' interests.....	96
8.23	Strength of auditing and accounting standards .....	99
<b>Infrastructure</b>		
5.01	Overall infrastructure quality .....	76
5.02	Railroad infrastructure development .....	112
5.03	Port infrastructure quality.....	51
5.04	Air transport infrastructure quality .....	88
5.05	Quality of electricity supply.....	85
5.08	Telephone lines, 2003 .....	91
<b>Macroeconomy</b>		
2.13	Government surplus/deficit, 2004.....	51
2.16	Inflation, 2004 .....	94
2.17	Interest rate spread, 2004.....	82
2.20	Government debt, 2004 .....	83
2.15	Real effective exchange rate, 2004 .....	67
<b>Health and primary education</b>		
4.04	Medium-term business impact of malaria .....	92
4.05	Medium-term business impact of tuberculosis .....	88
4.06	Medium-term business impact of HIV/AIDS.....	96
4.10	Infant mortality .....	72
4.11	Life expectancy, 2003 .....	81
4.12	Tuberculosis prevalence, 2003.....	72
4.13	Malaria prevalence .....	89
4.14	HIV prevalence, 2003 .....	97
<b>Higher education and training</b>		
4.16	Secondary enrollment .....	106
4.17	Tertiary enrollment .....	88
4.01	Quality of the educational system .....	114
4.03	Quality of math and science education.....	117
8.15	Quality of management schools .....	98
7.09	Local availability of specialized research and training services .....	91
8.11	Extent of staff training .....	97
<b>Market efficiency</b>		
2.12	Agricultural policy costs .....	91
6.02	Efficiency of legal framework .....	90
6.11	Extent and effect of taxation.....	61
7.10	Number of procedures required to start a business.....	84
7.11	Time required to start a business.....	84
7.01	Intensity of local competition .....	109
7.02	Effectiveness of antitrust policy.....	114
	GDP – exports + imports .....	87
2.18	Exports, 2004 .....	57
8.17	Hiring and firing practices .....	91
8.18	Flexibility of wage determination .....	92
8.19	Cooperation in labor-employer relations.....	82
8.14	Reliance on professional management.....	113
8.20	Pay and productivity .....	93
4.08	Brain drain .....	71
4.09	Private sector employment of women .....	95
2.03	Financial market sophistication .....	77
2.05	Ease of access to loans .....	97
2.06	Venture capital availability .....	89
2.04	Soundness of banks.....	88
2.08	Local equity market access.....	115

<<< (Cont'd. on bottom of left column)

# Jamaica

## Key Indicators

Total population (millions), 2005 .....	2.7
Gross Domestic Product (US\$ billions), 2005 .....	9.6
Gross Domestic Product per capita (PPP, US\$), 2005 .....	4,470.8
Real growth in GDP (percent), 2005.....	0.7
Growth of output (average annual percent change), 1990–2004 .....	1.0
Agriculture.....	–0.1
Industry .....	–0.1
Manufacturing .....	–1.2
Services .....	1.9
Inflation (annual percent change), 2005 .....	12.5
Budget balance (percent of GDP), 2005.....	–1.4
Gross fixed capital formation (percent of GDP), 2004.....	29.9
National savings rate (percent of GDP), 2004 .....	24.9
Interest rate spread (percent), 2005.....	10.0
Real effective exchange rate (percent)*, 2004.....	–11.9
Exports of goods and services (percent of GDP), 2004 .....	41.6
Imports of goods and services (percent of GDP), 2004.....	60.5
Current account balance (percent of GDP), 2005.....	–9.3
Gross official reserves in months of imports, 2004 .....	5.8
Government debt (percent of GDP), 2005 .....	129.9
Unemployment (percent of total labor force), 2004 .....	11.7
Gini index** .....	0.4

## Human Development Indicators

Gross primary enrollment (percent of relevant age group), 2003 .....	99.8
Gross secondary enrollment (percent of relevant age group), 2003 .....	84.1
Gross tertiary enrollment (percent of relevant age group), 2003 .....	17.5
Adult literacy rate (percent of population aged 15 and above), 2002 .....	87.6
Life expectancy at birth, 2003 .....	73.0
HIV prevalence rate (percent of population aged 15 to 49), 2003 .....	1.2
Public expenditure on health (percent of GDP), 2002 .....	3.4

## Infrastructure and Technology Diffusion Indicators

Paved roads (percent of total roads).....	70.1
Main telephone lines per 100 inhabitants, 2002 .....	16.9
Cellular mobile telephone subscribers per 100 inhabitants, 2003 ..	68.0
Personal computers per 100 inhabitants, 2002 .....	5.4
Internet users per 100 inhabitants, 2002 .....	22.8

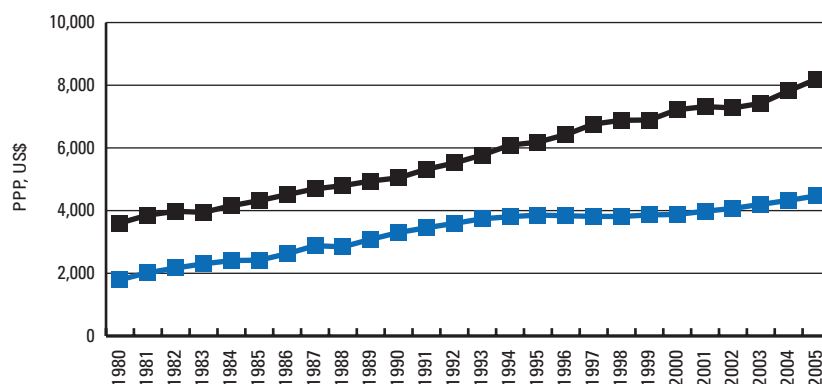
\* Real effective exchange rate 2004 relative to the 1997–2003 average. Values greater (less) than 0 indicate appreciation (depreciation).

\*\* The Gini index is a number between 0 and 1 that is a measure of inequality, with lower (higher) values representing less (more) inequality.

Sources: UNFPA, *State of World Population 2005*; IMF, *World Economic Outlook Database*, September 2005; EIU, *CountryData Database*, December 2005; IMF, *International Financial Statistics Database*, December 2005; IMF, Information Notice System; IMF, IMF Country Report No. 05/219, June 2005 and Forum's calculation; UNDP, *Human Development Report 2005*; UNESCO Institute for Statistics; WHO, *World Health Statistics 2005*; World Bank, *World Development Indicators 2005*; ITU, *World Telecommunication Indicators 2004*; UN Statistics Division and ITU estimates

## GDP per capita (PPP, US\$), 1980–2005

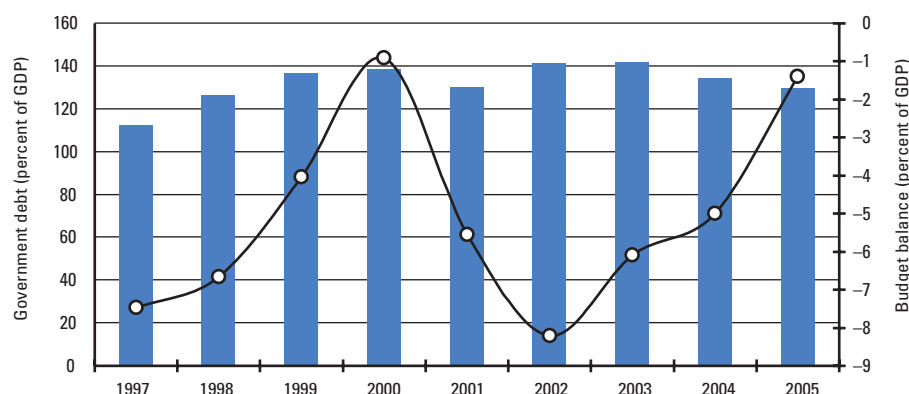
- Jamaica
- LA&C average



Source: IMF, World Economic Outlook Database, September 2005

## Government Debt and Budget Balance

- Government debt (percent of GDP) (left axis)
- Budget balance (percent of GDP) (right axis)

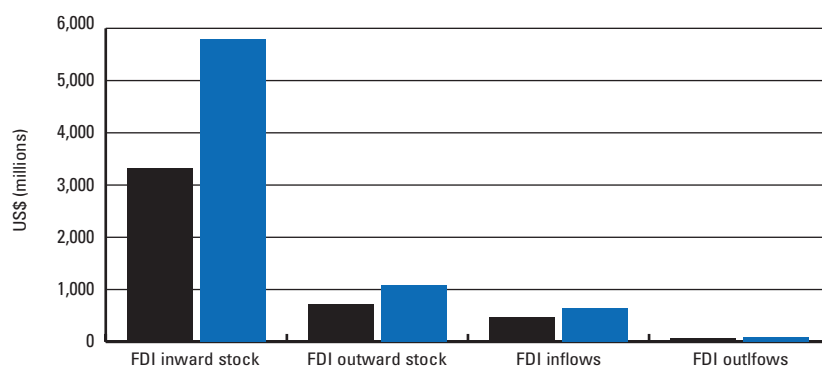


Source: EIU, CountryData Database, December 2005

141

## FDI Inward and Outward Stocks and Flows (US\$ millions), 2000 and 2004

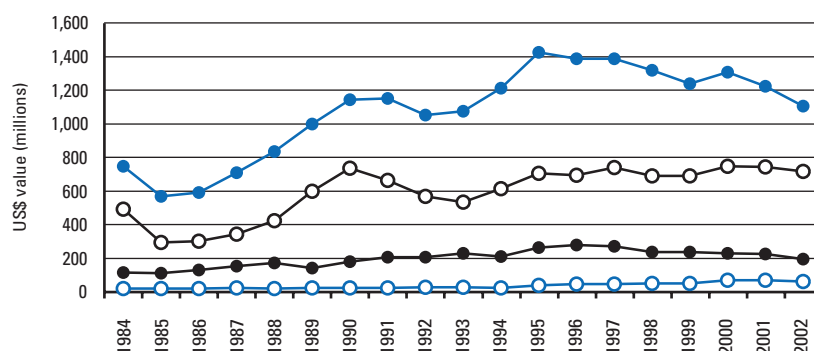
- 2000
- 2004



Source: UNCTAD, FDI Database, December 2005

## Main Exports (in millions US\$ value)

- All commodities
- Crude materials, inedible, except fuels
- Food and live animals chiefly for food
- Chemicals and related products, nes



Source: UN Comtrade Database, December 2005

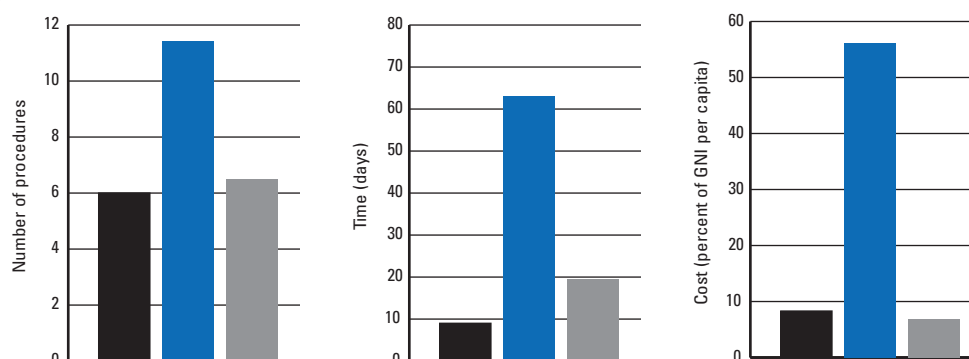
## Competitiveness Rankings

	Rank out of 117 countries	Rank out of 21 LA&C countries
<b>Global Competitiveness Index 2005 .....</b>	<b>63 .....</b>	<b>8 .....</b>
<b>Basic Requirements.....</b>	<b>72 .....</b>	<b>9 .....</b>
1st Pillar: Institutions .....	68 .....	5 .....
2nd Pillar: Infrastructure .....	56 .....	3 .....
3rd Pillar: Macroeconomy .....	112 .....	20 .....
4th Pillar: Health and Primary Education .....	35 .....	4 .....
<b>Efficiency Enhancers.....</b>	<b>52 .....</b>	<b>4 .....</b>
5th Pillar: Higher Education and Training.....	71 .....	9 .....
6th Pillar: Market Efficiency .....	54 .....	4 .....
7th Pillar: Technological Readiness .....	42 .....	2 .....
<b>Innovation Factors.....</b>	<b>59 .....</b>	<b>8 .....</b>
8th Pillar: Business Sophistication .....	66 .....	10 .....
9th Pillar: Innovation.....	55 .....	4 .....

Source: World Economic Forum, *Global Competitiveness Report 2005–2006*

## Starting a Business, 2005

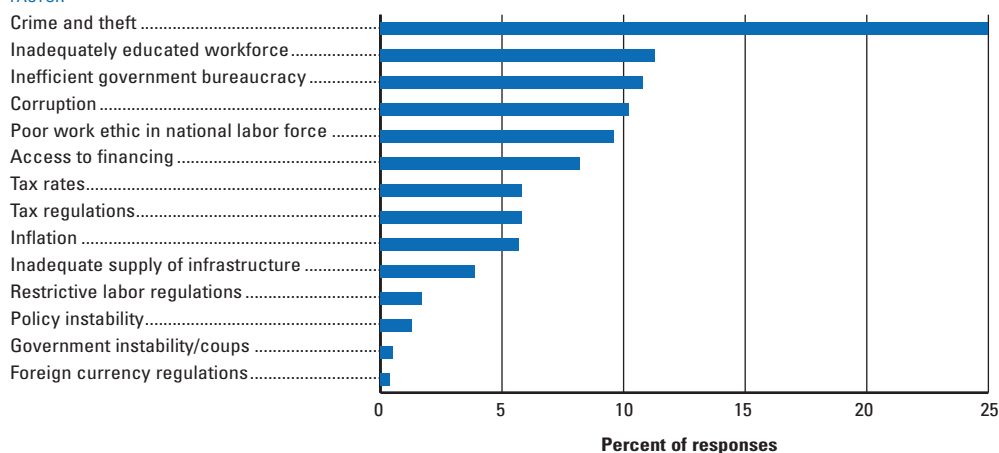
■ Jamaica  
■ LA&C average  
■ OECD average



Source: World Bank, *Doing Business in 2006: Creating Jobs*

## The Most Problematic Factors for Doing Business

FACTOR



Note: From a list of fourteen factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars show the responses weighted according to their rankings.

Source: World Economic Forum, Executive Opinion Survey 2005

# National Competitiveness Balance Sheet Based on the Global Competitiveness Index 2005

NOTABLE COMPETITIVE ADVANTAGES		RANK/117	NOTABLE COMPETITIVE DISADVANTAGES		RANK/117
<b>Institutions</b>			<b>Institutions</b>		
6.03	Property rights.....	47	6.24	Diversion of public funds .....	63
6.01	Judicial independence.....	49	6.26	Public trust of politicians .....	70
8.04	Ethical behavior of firms .....	50	6.08	Favoritism in decisions of government officials.....	79
8.21	Protection of minority shareholders' interests.....	50	6.06	Wastefulness of government spending.....	88
8.23	Strength of auditing and accounting standards .....	31	6.07	Burden of government regulation .....	89
<b>Infrastructure</b>			2.02	Business costs of terrorism .....	81
5.03	Port infrastructure quality.....	25	6.14	Reliability of police services .....	100
5.04	Air transport infrastructure quality .....	35	6.15	Business costs of crime and violence .....	116
<b>Macroeconomy</b>			6.16	Organized crime .....	116
2.15	Real effective exchange rate, 2004 .....	30	8.16	Efficacy of corporate boards .....	56
<b>Health and primary education</b>			<b>Infrastructure</b>		
4.10	Infant mortality .....	26	5.01	Overall infrastructure quality .....	55
4.11	Life expectancy, 2003 .....	46	5.02	Railroad infrastructure development .....	111
4.12	Tuberculosis prevalence, 2003.....	12	5.05	Quality of electricity supply .....	64
4.13	Malaria prevalence .....	1	5.08	Telephone lines, 2003 .....	63
<b>Higher education and training</b>			<b>Macroeconomy</b>		
8.15	Quality of management schools .....	50	2.13	Government surplus/deficit, 2004.....	103
8.11	Extent of staff training .....	50	2.14	National saving rate, 2004.....	56
<b>Market efficiency</b>			2.16	Inflation, 2004 .....	104
2.12	Agricultural policy costs .....	45	2.17	Interest rate spread, 2004.....	89
6.02	Efficiency of legal framework .....	46	2.20	Government debt, 2004 .....	113
7.10	Number of procedures required to start a business.....	20	<b>Health and primary education</b>		
7.11	Time required to start a business.....	36	4.04	Medium-term business impact of malaria .....	66
7.01	Intensity of local competition.....	40	4.05	Medium-term business impact of tuberculosis .....	64
7.02	Effectiveness of antitrust policy.....	49	4.06	Medium-term business impact of HIV/AIDS.....	98
8.17	Hiring and firing practices .....	46	4.14	HIV prevalence, 2003 .....	91
8.18	Flexibility of wage determination .....	43	4.15	Primary enrollment, 2003.....	79
8.14	Reliance on professional management.....	36	<b>Higher education and training</b>		
4.09	Private sector employment of women .....	16	4.16	Secondary enrollment .....	63
2.03	Financial market sophistication .....	35	4.17	Tertiary enrollment .....	79
2.08	Local equity market access.....	17	4.01	Quality of the educational system .....	84
<b>Technological readiness</b>			4.03	Quality of math and science education.....	96
3.01	Technological readiness .....	49	7.09	Local availability of specialized research and training services .....	68
3.04	FDI and technology transfer.....	17	<b>Market efficiency</b>		
3.18	Cellular telephones, 2003.....	33	6.11	Extent and effect of taxation.....	69
3.19	Internet users, 2002.....	41		GDP – exports + imports .....	102
<b>Business sophistication</b>			2.18	Exports, 2004 .....	54
8.06	Extent of marketing.....	41	8.19	Cooperation in labor-employer relations.....	77
8.01	Nature of competitive advantage .....	25	8.20	Pay and productivity .....	72
<b>Innovation</b>			4.08	Brain drain .....	85
3.05	Quality of scientific research institutions .....	38	2.05	Ease of access to loans .....	82
3.06	Company spending on research and development .....	50	2.06	Venture capital availability .....	84
3.07	University/industry research collaboration .....	43	2.04	Soundness of banks.....	55
6.04	Intellectual property protection .....	48	<b>Technological readiness</b>		
8.03	Capacity for innovation.....	50	3.02	Firm-level technology absorption .....	65
			3.15	Laws relating to ICT .....	61
			3.21	Personal computers, 2003 .....	62
			<b>Business sophistication</b>		
			7.05	Local supplier quantity .....	96
			7.06	Local supplier quality.....	61
			8.05	Production process sophistication .....	71
			8.08	Control of international distribution.....	75
			8.12	Willingness to delegate authority.....	74
			8.02	Value chain presence .....	62
			<b>Innovation</b>		
			3.08	Government procurement of advanced technology products .....	81
			3.09	Availability of scientists and engineers .....	89
			3.17	Utility patents, 2004 .....	55

# Mexico

## Key Indicators

Total population (millions), 2005 .....	107.0
Gross Domestic Product (US\$ billions), 2005 .....	758.1
Gross Domestic Product per capita (PPP, US\$), 2005 .....	10,090.4
Real growth in GDP (percent), 2005.....	3.0
Growth of output (average annual percent change), 1990–2004 .....	3.3
Agriculture.....	1.8
Industry .....	3.2
Manufacturing .....	3.4
Services .....	3.5
Inflation (annual percent change), 2005 .....	4.3
Budget balance (percent of GDP), 2005.....	–0.3
Gross fixed capital formation (percent of GDP), 2004.....	20.2
National savings rate (percent of GDP), 2004 .....	20.7
Interest rate spread (percent), 2005.....	6.3
Real effective exchange rate (percent)*, 2004.....	–6.3
Exports of goods and services (percent of GDP), 2004 .....	30.1
Imports of goods and services (percent of GDP), 2004.....	31.9
Current account balance (percent of GDP), 2005.....	–1.1
Gross official reserves in months of imports, 2004 .....	4.6
Government debt (percent of GDP), 2005 .....	20.4
Unemployment (percent of total labor force), 2004 .....	3.9
Gini index** .....	0.5

## Human Development Indicators

Gross primary enrollment (percent of relevant age group), 2003 .....	110.4
Gross secondary enrollment (percent of relevant age group), 2003 .....	79.0
Gross tertiary enrollment (percent of relevant age group), 2003 .....	22.4
Adult literacy rate (percent of population aged 15 and above), 2002 .....	90.3
Life expectancy at birth, 2003 .....	74.0
HIV prevalence rate (percent of population aged 15 to 49), 2003 .....	0.3
Public expenditure on health (percent of GDP), 2002 .....	2.7

## Infrastructure and Technology Diffusion Indicators

Paved roads (percent of total roads).....	32.8
Main telephone lines per 100 inhabitants, 2003 .....	16.0
Cellular mobile telephone subscribers per 100 inhabitants, 2003 ..	29.5
Personal computers per 100 inhabitants, 2003.....	9.8
Internet users per 100 inhabitants, 2003 .....	12.0

\* Real effective exchange rate 2004 relative to the 1997–2003 average. Values greater (less) than 0 indicate appreciation (depreciation).

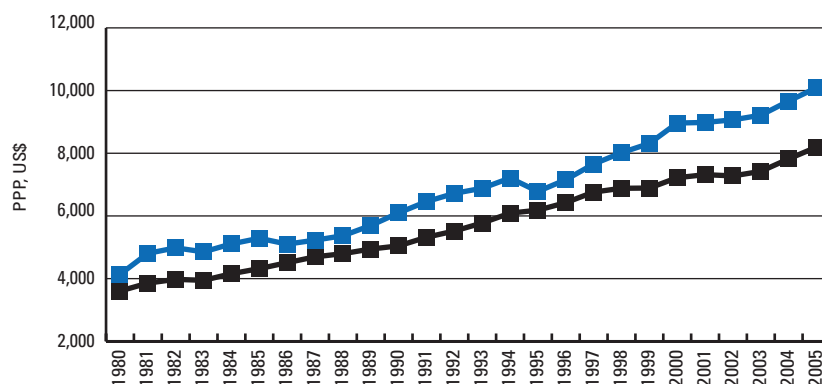
\*\* The Gini index is a number between 0 and 1 that is a measure of inequality, with lower (higher) values representing less (more) inequality.

Sources: UNFPA, *State of World Population 2005*; IMF, *World Economic Outlook Database*, September 2005; EIU, *CountryData Database*, December 2005; IMF, *International Financial Statistics Database*, December 2005; IMF, Information Notice System; IMF, IMF Country Report No. 05/427, December 2005; UNDP, *Human Development Report 2005*; UNESCO Institute for Statistics; WHO, *World Health Statistics 2005*; World Bank, *World Development Indicators 2005*; ITU, *World Telecommunication Indicators 2004*



## GDP per capita (PPP, US\$), 1980–2005

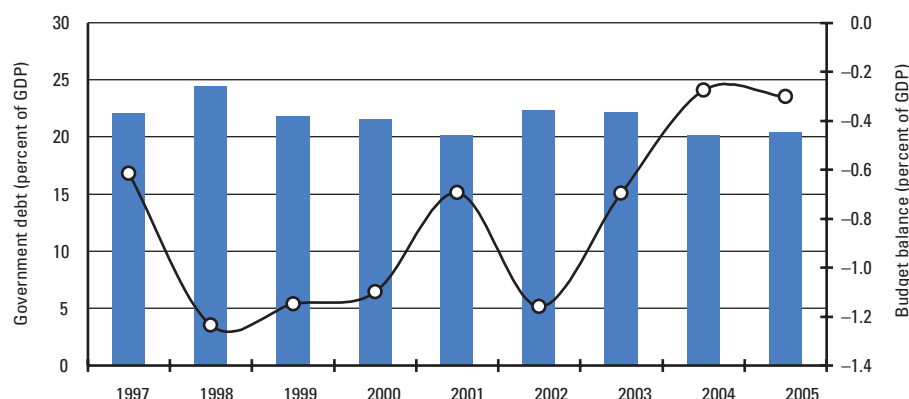
- Mexico
- LA&C average



Source: IMF, World Economic Outlook Database, September 2005

## Government Debt and Budget Balance

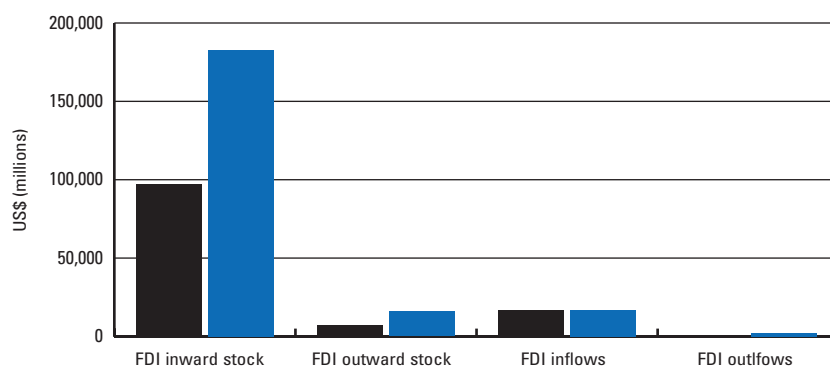
- Government debt (percent of GDP) (left axis)
- Budget balance (percent of GDP) (right axis)



Source: EIU, CountryData Database, December 2005

## FDI Inward and Outward Stocks and Flows (US\$ millions), 2000 and 2004

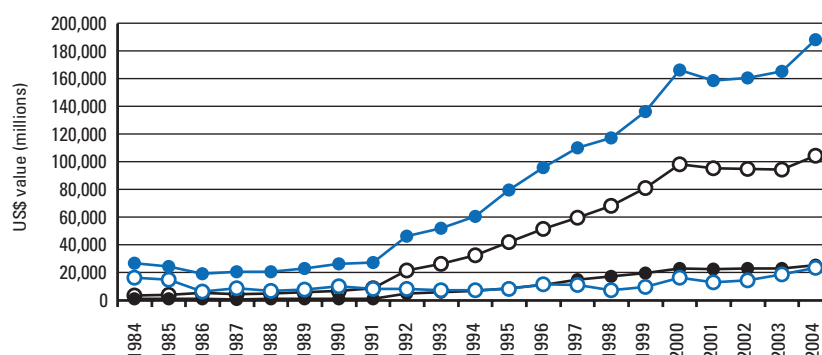
- 2000
- 2004



Source: UNCTAD, FDI Database, December 2005

## Main Exports (in millions US\$ value)

- All commodities
- Machinery and transport equipment
- Miscellaneous manufactured articles
- Mineral fuels, lubricants and related materials



Source: UN Comtrade Database, December 2005

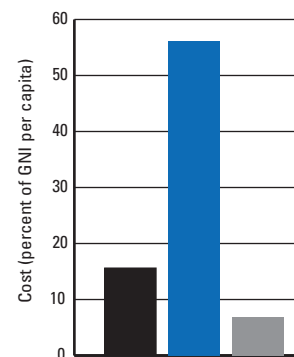
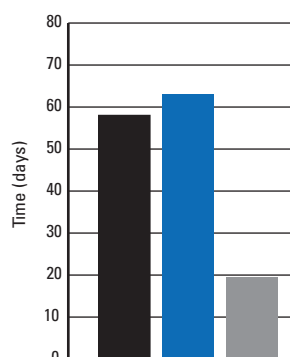
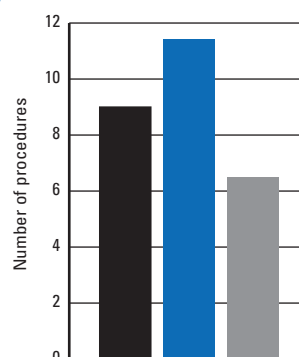
## Competitiveness Rankings

	Rank out of 117 countries	Rank out of 21 LA&C countries
<b>Global Competitiveness Index 2005 .....</b>	<b>59 .....</b>	<b>6 .....</b>
<b>Basic Requirements.....</b>	<b>55 .....</b>	<b>4 .....</b>
1st Pillar: Institutions .....	73 .....	8 .....
2nd Pillar: Infrastructure .....	67 .....	7 .....
3rd Pillar: Macroeconomy .....	34 .....	4 .....
4th Pillar: Health and Primary Education .....	37 .....	5 .....
<b>Efficiency Enhancers.....</b>	<b>61 .....</b>	<b>6 .....</b>
5th Pillar: Higher Education and Training.....	68 .....	7 .....
6th Pillar: Market Efficiency .....	62 .....	6 .....
7th Pillar: Technological Readiness .....	53 .....	5 .....
<b>Innovation Factors.....</b>	<b>57 .....</b>	<b>7 .....</b>
8th Pillar: Business Sophistication .....	56 .....	8 .....
9th Pillar: Innovation.....	67 .....	8 .....

Source: World Economic Forum, *Global Competitiveness Report 2005–2006*

## Starting a Business, 2005

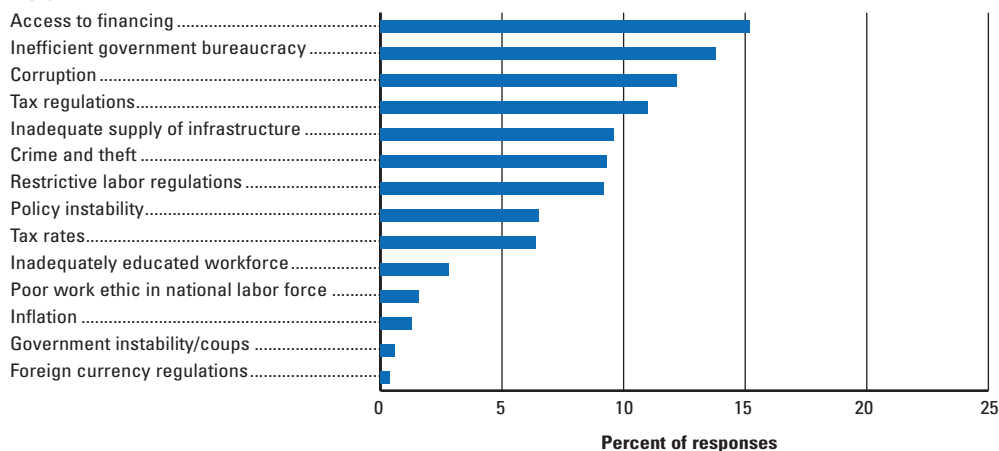
■ Mexico  
■ LA&C average  
■ OECD average



Source: World Bank, *Doing Business in 2006: Creating Jobs*

## The Most Problematic Factors for Doing Business

FACTOR



Note: From a list of fourteen factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars show the responses weighted according to their rankings.

Source: World Economic Forum, Executive Opinion Survey 2005

# National Competitiveness Balance Sheet Based on the Global Competitiveness Index 2005

NOTABLE COMPETITIVE ADVANTAGES		RANK/117
<b>Institutions</b>		
2.02	Business costs of terrorism .....	34
<b>Infrastructure</b>		
5.04	Air transport infrastructure quality .....	46
<b>Macroeconomy</b>		
2.13	Government surplus/deficit, 2004 .....	49
2.17	Interest rate spread, 2004 .....	43
2.20	Government debt, 2004 .....	15
2.15	Real effective exchange rate, 2004 .....	50
<b>Health and primary education</b>		
4.04	Medium-term business impact of malaria .....	45
4.05	Medium-term business impact of tuberculosis .....	39
4.11	Life expectancy, 2003 .....	40
4.12	Tuberculosis prevalence, 2003 .....	44
4.15	Primary enrollment, 2003 .....	26
<b>Higher education and training</b>		
8.15	Quality of management schools .....	36
<b>Market efficiency</b>		
7.10	Number of procedures required to start a business .....	27
	GDP – exports + imports .....	11
2.03	Financial market sophistication .....	40
<b>Technological readiness</b>		
3.15	Laws relating to ICT .....	49
3.04	FDI and technology transfer .....	29
3.21	Personal computers, 2003 .....	50
<b>Business sophistication</b>		
8.02	Value chain presence .....	50
<b>Innovation</b>		
3.07	University/industry research collaboration .....	50
3.17	Utility patents, 2004 .....	44

(Disadvantages cont'd. from bottom of right column)

NOTABLE COMPETITIVE DISADVANTAGES		RANK/117
<b>Business sophistication</b>		
7.05	Local supplier quantity .....	63
7.06	Local supplier quality .....	56
8.05	Production process sophistication .....	60
8.06	Extent of marketing .....	55
8.08	Control of international distribution .....	71
8.12	Willingness to delegate authority .....	62
8.01	Nature of competitive advantage .....	51
<b>Innovation</b>		
3.05	Quality of scientific research institutions .....	57
3.06	Company spending on research and development .....	63
3.08	Government procurement of advanced technology products .....	73
6.04	Intellectual property protection .....	60
3.09	Availability of scientists and engineers .....	92
8.03	Capacity for innovation .....	54

NOTABLE COMPETITIVE DISADVANTAGES		RANK/117
<b>Institutions</b>		
6.03	Property rights .....	66
6.24	Diversion of public funds .....	85
6.26	Public trust of politicians .....	86
6.01	Judicial independence .....	60
6.08	Favoritism in decisions of government officials .....	71
6.06	Wastefulness of government spending .....	55
6.07	Burden of government regulation .....	96
6.14	Reliability of police services .....	102
6.15	Business costs of crime and violence .....	115
6.16	Organized crime .....	113
8.04	Ethical behavior of firms .....	56
8.16	Efficacy of corporate boards .....	73
8.21	Protection of minority shareholders' interests .....	74
8.23	Strength of auditing and accounting standards .....	66
<b>Infrastructure</b>		
5.01	Overall infrastructure quality .....	61
5.02	Railroad infrastructure development .....	68
5.03	Port infrastructure quality .....	69
5.05	Quality of electricity supply .....	78
5.08	Telephone lines, 2003 .....	64
<b>Macroeconomy</b>		
2.14	National saving rate, 2004 .....	62
2.16	Inflation, 2004 .....	68
<b>Health and primary education</b>		
4.06	Medium-term business impact of HIV/AIDS .....	66
4.10	Infant mortality .....	52
4.13	Malaria prevalence .....	69
4.14	HIV prevalence, 2003 .....	61
<b>Higher education and training</b>		
4.16	Secondary enrollment .....	75
4.17	Tertiary enrollment .....	71
4.01	Quality of the educational system .....	79
4.03	Quality of math and science education .....	92
7.09	Local availability of specialized research and training services .....	52
8.11	Extent of staff training .....	72
<b>Market efficiency</b>		
2.12	Agricultural policy costs .....	107
6.02	Efficiency of legal framework .....	62
6.11	Extent and effect of taxation .....	80
7.11	Time required to start a business .....	81
7.01	Intensity of local competition .....	62
7.02	Effectiveness of antitrust policy .....	56
2.18	Exports, 2004 .....	75
8.17	Hiring and firing practices .....	97
8.18	Flexibility of wage determination .....	68
8.19	Cooperation in labor-employer relations .....	53
8.14	Reliance on professional management .....	78
8.20	Pay and productivity .....	68
4.08	Brain drain .....	61
4.09	Private sector employment of women .....	108
2.05	Ease of access to loans .....	81
2.06	Venture capital availability .....	93
2.04	Soundness of banks .....	61
2.08	Local equity market access .....	72
<b>Technological readiness</b>		
3.01	Technological readiness .....	58
3.02	Firm-level technology absorption .....	75
3.18	Cellular telephones, 2003 .....	58
3.19	Internet users, 2003 .....	53

<<< (Cont'd. on bottom of left column)

# Nicaragua

## Key Indicators

Total population (millions), 2005 .....	5.5
Gross Domestic Product (US\$ billions), 2005 .....	5.0
Gross Domestic Product per capita (PPP, US\$), 2005 .....	2,778.9
Real growth in GDP (percent), 2005.....	3.5
Growth of output (average annual percent change), 1994–2004 .....	4.9
Agriculture.....	5.1
Industry .....	5.5
Manufacturing .....	5.6
Services .....	4.5
Inflation (annual percent change), 2005 .....	9.0
Budget balance (percent of GDP), 2005.....	–5.0
Gross fixed capital formation (percent of GDP), 2004.....	26.0
National savings rate (percent of GDP), 2004 .....	11.8
Interest rate spread (percent), 2005.....	8.0
Real effective exchange rate (percent)*, 2004.....	–12.9
Exports of goods and services (percent of GDP), 2004 .....	26.3
Imports of goods and services (percent of GDP), 2004.....	53.8
Current account balance (percent of GDP), 2005.....	–16.7
Gross official reserves in months of imports, 2004 .....	2.8
Government debt (percent of GDP), 2005 .....	81.0
Unemployment (percent of total labor force), 2004 .....	6.5
Gini index** .....	0.4

## Human Development Indicators

Gross primary enrollment (percent of relevant age group), 2003 .....	108.5
Gross secondary enrollment (percent of relevant age group), 2003 .....	60.7
Gross tertiary enrollment (percent of relevant age group), 2003 .....	18.3
Adult literacy rate (percent of population aged 15 and above), 2001 .....	76.7
Life expectancy at birth, 2003 .....	70.0
HIV prevalence rate (percent of population aged 15 to 49), 2003 .....	0.2
Public expenditure on health (percent of GDP), 2002 .....	3.9

## Infrastructure and Technology Diffusion Indicators

Paved roads (percent of total roads).....	11.4
Main telephone lines per 100 inhabitants, 2003 .....	3.7
Cellular mobile telephone subscribers per 100 inhabitants, 2003.....	8.5
Personal computers per 100 inhabitants, 2002.....	2.9
Internet users per 100 inhabitants, 2002 .....	1.7

\* Real effective exchange rate 2004 relative to the 1997–2003 average. Values greater (less) than 0 indicate appreciation (depreciation).

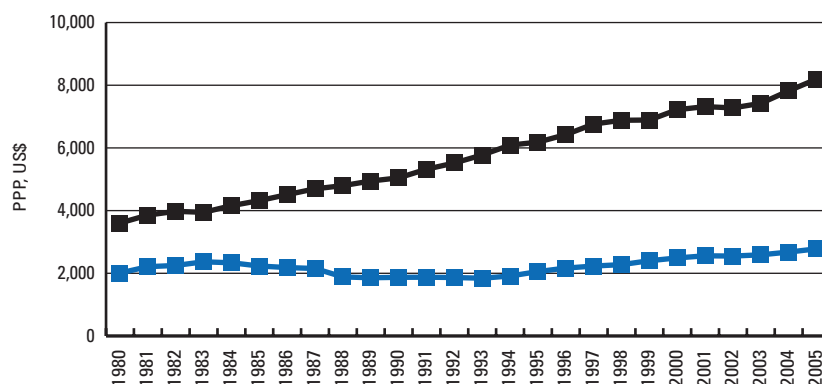
\*\* The Gini index is a number between 0 and 1 that is a measure of inequality, with lower (higher) values representing less (more) inequality.

Sources: UNFPA, *State of World Population 2005*; IMF, *World Economic Outlook Database*, September 2005; EIU, *CountryData Database*, December 2005; IMF, *International Financial Statistics Database*, December 2005; IMF, Information Notice System; IMF, IMF Country Report No. 04/347, November 2004; UNDP, *Human Development Report 2005*; UNESCO Institute for Statistics; WHO, *World Health Statistics 2005*; World Bank, *World Development Indicators 2005*; ITU, *World Telecommunication Indicators 2004*; UN Statistics Division and ITU estimates

## GDP per capita (PPP, US\$), 1980–2005

- Nicaragua
- LA&C average

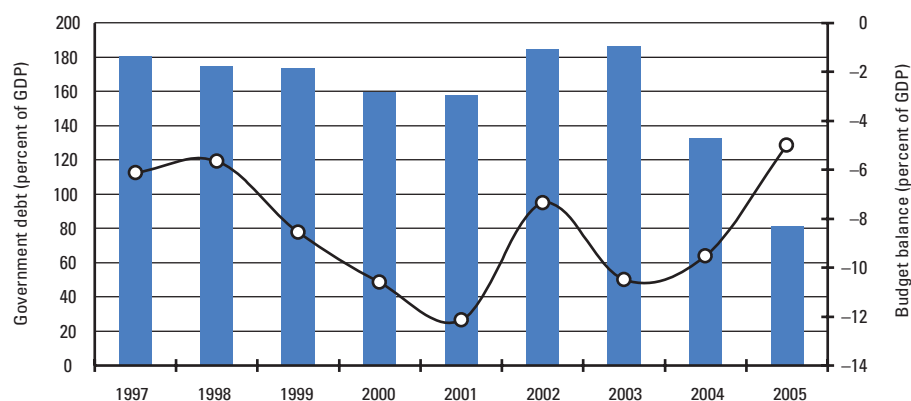
Source: IMF, World Economic Outlook Database, September 2005



## Government Debt and Budget Balance

- Government debt (percent of GDP) (left axis)
- Budget balance (percent of GDP) (right axis)

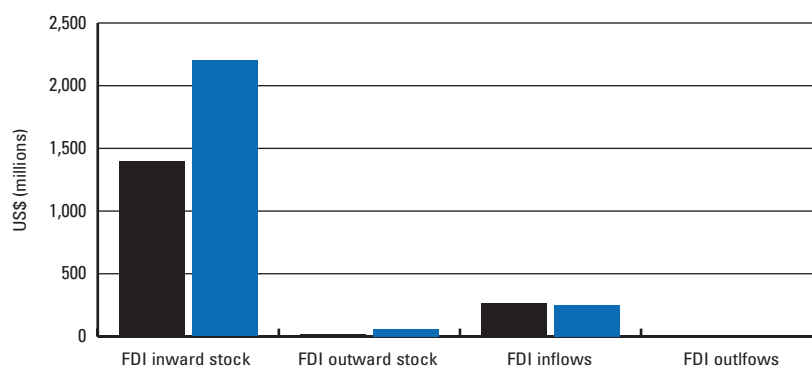
Source: EIU, CountryData Database, December 2005



## FDI Inward and Outward Stocks and Flows (US\$ millions), 2000 and 2004

- 2000
- 2004

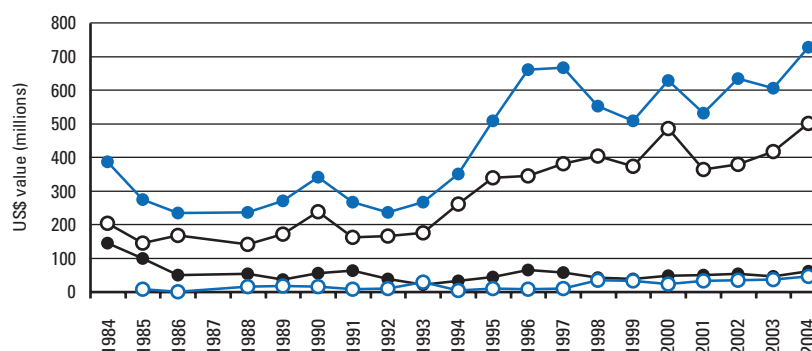
Source: UNCTAD, FDI Database, December 2005



## Main Exports (in millions US\$ value)

- All commodities
- Food and live animals chiefly for food
- Crude materials, inedible, except fuels
- Commodities and transactions not classified elsewhere in the SITC

Source: UN Comtrade Database, December 2005



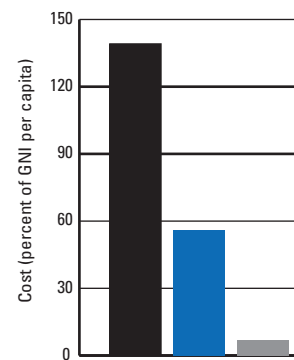
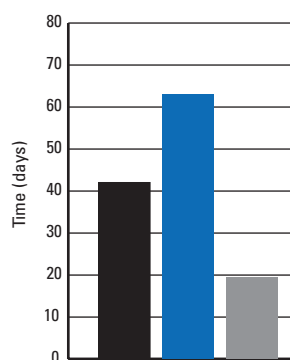
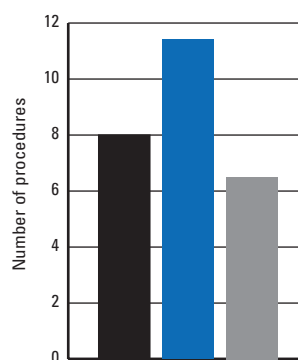
## Competitiveness Rankings

	Rank out of 117 countries	Rank out of 21 LA&C countries
<b>Global Competitiveness Index 2005 .....</b>	<b>96</b>	<b>17</b>
<b>Basic Requirements.....</b>	<b>91</b>	<b>17</b>
1st Pillar: Institutions .....	97	11
2nd Pillar: Infrastructure .....	102	19
3rd Pillar: Macroeconomy .....	92	15
4th Pillar: Health and Primary Education .....	56	15
<b>Efficiency Enhancers.....</b>	<b>97</b>	<b>15</b>
5th Pillar: Higher Education and Training.....	91	15
6th Pillar: Market Efficiency .....	108	17
7th Pillar: Technological Readiness .....	99	18
<b>Innovation Factors.....</b>	<b>107</b>	<b>18</b>
8th Pillar: Business Sophistication .....	110	20
9th Pillar: Innovation.....	104	15

Source: World Economic Forum, *Global Competitiveness Report 2005–2006*

## Starting a Business, 2005

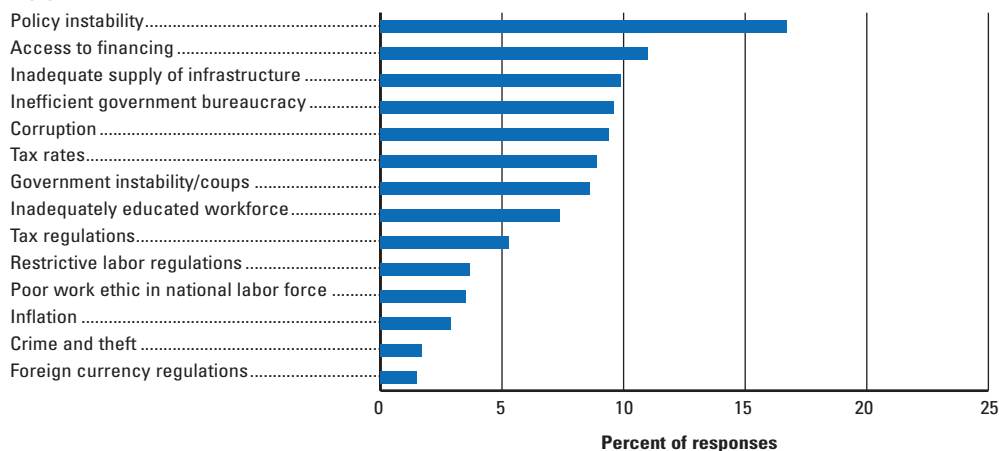
■ Nicaragua  
■ LA&C average  
■ OECD average



Source: World Bank, *Doing Business in 2006: Creating Jobs*

## The Most Problematic Factors for Doing Business

FACTOR



Note: From a list of fourteen factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars show the responses weighted according to their rankings.

Source: World Economic Forum, Executive Opinion Survey 2005

# National Competitiveness Balance Sheet Based on the Global Competitiveness Index 2005

NOTABLE COMPETITIVE ADVANTAGES		RANK/117
<b>Institutions</b>		
6.14	Reliability of police services .....	47
<b>Macroeconomy</b>		
2.15	Real effective exchange rate, 2004 .....	27
<b>Health and primary education</b>		
4.14	HIV prevalence, 2003 .....	47
4.15	Primary enrollment, 2003 .....	33
<b>Market efficiency</b>		
7.10	Number of procedures required to start a business .....	37
8.18	Flexibility of wage determination .....	41

(Disadvantages cont'd. from bottom of right column)

NOTABLE COMPETITIVE DISADVANTAGES		RANK/117
<b>Technological readiness</b>		
3.01	Technological readiness .....	86
3.02	Firm-level technology absorption .....	106
3.15	Laws relating to ICT .....	94
3.04	FDI and technology transfer .....	81
3.18	Cellular telephones, 2003 .....	88
3.19	Internet users, 2002 .....	96
3.21	Personal computers, 2002 .....	78
<b>Business sophistication</b>		
7.05	Local supplier quantity .....	106
7.06	Local supplier quality .....	105
8.05	Production process sophistication .....	103
8.06	Extent of marketing .....	97
8.08	Control of international distribution .....	115
8.12	Willingness to delegate authority .....	106
8.01	Nature of competitive advantage .....	102
8.02	Value chain presence .....	105
<b>Innovation</b>		
3.05	Quality of scientific research institutions .....	103
3.06	Company spending on research and development .....	108
3.07	University/industry research collaboration .....	90
3.08	Government procurement of advanced technology products .....	107
6.04	Intellectual property protection .....	93
3.09	Availability of scientists and engineers .....	100
8.03	Capacity for innovation .....	98
3.17	Utility patents, 2004 .....	81

NOTABLE COMPETITIVE DISADVANTAGES		RANK/117
<b>Institutions</b>		
6.03	Property rights .....	93
6.24	Diversion of public funds .....	89
6.26	Public trust of politicians .....	113
6.01	Judicial independence .....	116
6.08	Favoritism in decisions of government officials .....	82
6.06	Wastefulness of government spending .....	101
6.07	Burden of government regulation .....	61
2.02	Business costs of terrorism .....	59
6.15	Business costs of crime and violence .....	68
6.16	Organized crime .....	56
8.04	Ethical behavior of firms .....	85
8.16	Efficacy of corporate boards .....	102
8.21	Protection of minority shareholders' interests .....	115
8.23	Strength of auditing and accounting standards .....	98
<b>Infrastructure</b>		
5.01	Overall infrastructure quality .....	98
5.02	Railroad infrastructure development .....	116
5.03	Port infrastructure quality .....	98
5.04	Air transport infrastructure quality .....	73
5.05	Quality of electricity supply .....	96
5.08	Telephone lines, 2003 .....	98
<b>Macroeconomy</b>		
2.13	Government surplus/deficit, 2004 .....	56
2.14	National saving rate, 2004 .....	107
2.16	Inflation, 2004 .....	97
2.17	Interest rate spread, 2004 .....	81
2.20	Government debt, 2004 .....	97
<b>Health and primary education</b>		
4.04	Medium-term business impact of malaria .....	91
4.05	Medium-term business impact of tuberculosis .....	65
4.06	Medium-term business impact of HIV/AIDS .....	79
4.10	Infant mortality .....	77
4.11	Life expectancy, 2003 .....	70
4.12	Tuberculosis prevalence, 2003 .....	63
4.13	Malaria prevalence .....	88
<b>Higher education and training</b>		
4.16	Secondary enrollment .....	91
4.17	Tertiary enrollment .....	77
4.01	Quality of the educational system .....	104
4.03	Quality of math and science education .....	99
8.15	Quality of management schools .....	51
7.09	Local availability of specialized research and training services .....	89
8.11	Extent of staff training .....	106
<b>Market efficiency</b>		
2.12	Agricultural policy costs .....	76
6.02	Efficiency of legal framework .....	116
6.11	Extent and effect of taxation .....	93
7.11	Time required to start a business .....	65
7.01	Intensity of local competition .....	107
7.02	Effectiveness of antitrust policy .....	112
	GDP – exports + imports .....	92
2.18	Exports, 2004 .....	91
8.17	Hiring and firing practices .....	61
8.19	Cooperation in labor-employer relations .....	69
8.14	Reliance on professional management .....	106
8.20	Pay and productivity .....	74
4.08	Brain drain .....	89
4.09	Private sector employment of women .....	110
2.03	Financial market sophistication .....	85
2.05	Ease of access to loans .....	110
2.06	Venture capital availability .....	114
2.04	Soundness of banks .....	86
2.08	Local equity market access .....	96

<<< (Cont'd. on bottom of left column)

# Panama

## Key Indicators

Total population (millions), 2005 .....	3.2
Gross Domestic Product (US\$ billions), 2005 .....	14.5
Gross Domestic Product per capita (PPP, US\$), 2005 .....	7,052.1
Real growth in GDP (percent), 2005.....	3.5
Growth of output (average annual percent change), 1990–2004 .....	6.7
Agriculture.....	4.3
Industry .....	6.3
Manufacturing .....	1.4
Services .....	7.1
Inflation (annual percent change), 2005 .....	2.6
Budget balance (percent of GDP), 2005 .....	–3.7
Gross fixed capital formation (percent of GDP), 2004.....	17.2
National savings rate (percent of GDP), 2004 .....	20.0
Interest rate spread (percent), 2005.....	6.5
Real effective exchange rate (percent)*, 2004.....	–8.2
Exports of goods and services (percent of GDP), 2004 .....	64.9
Imports of goods and services (percent of GDP), 2004.....	59.6
Current account balance (percent of GDP), 2005.....	–1.5
Gross official reserves in months of imports, 2004 .....	1.8
Government debt (percent of GDP), 2005 .....	72.4
Unemployment (percent of total labor force), 2004 .....	9.2
Gini index** .....	0.6

## Human Development Indicators

Gross primary enrollment (percent of relevant age group), 2003 .....	112.0
Gross secondary enrollment (percent of relevant age group), 2003 .....	70.6
Gross tertiary enrollment (percent of relevant age group), 2003 .....	43.2
Adult literacy rate (percent of population aged 15 and above), 2000 .....	91.9
Life expectancy at birth, 2003 .....	75.0
HIV prevalence rate (percent of population aged 15 to 49), 2003 .....	0.9
Public expenditure on health (percent of GDP), 2002 .....	6.4

## Infrastructure and Technology Diffusion Indicators

Paved roads (percent of total roads).....	34.6
Main telephone lines per 100 inhabitants, 2003 .....	12.2
Cellular mobile telephone subscribers per 100 inhabitants, 2003 ..	22.2
Personal computers per 100 inhabitants, 2003.....	3.8
Internet users per 100 inhabitants, 2003 .....	8.3

\* Real effective exchange rate 2004 relative to the 1997–2003 average. Values greater (less) than 0 indicate appreciation (depreciation).

\*\* The Gini index is a number between 0 and 1 that is a measure of inequality, with lower (higher) values representing less (more) inequality.

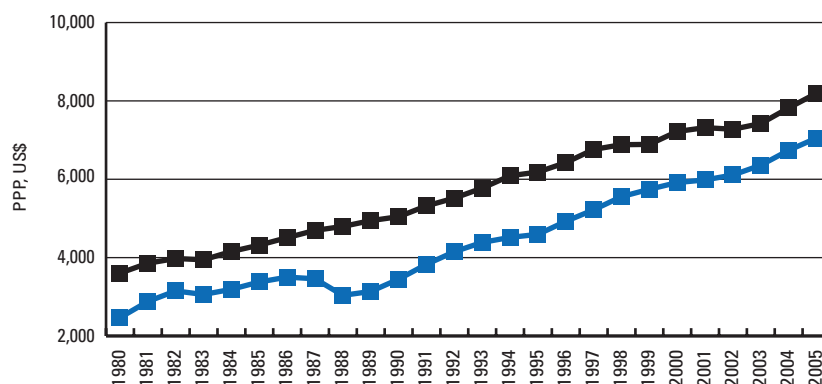
Sources: UNFPA, *State of World Population 2005*; IMF, *World Economic Outlook Database*, September 2005; EIU, *CountryData Database*, December 2005; IMF, *International Financial Statistics Database*, December 2005; IMF, Information Notice System; IMF, IMF Country Report No. 06/7, January 2006; UNDP, *Human Development Report 2005*; UNESCO Institute for Statistics; WHO, *World Health Statistics 2005*; World Bank, *World Development Indicators 2005*; ITU, *World Telecommunication Indicators 2004*; UN Statistics Division and ITU estimates



## GDP per capita (PPP, US\$), 1980–2005

- Panama
- LA&C average

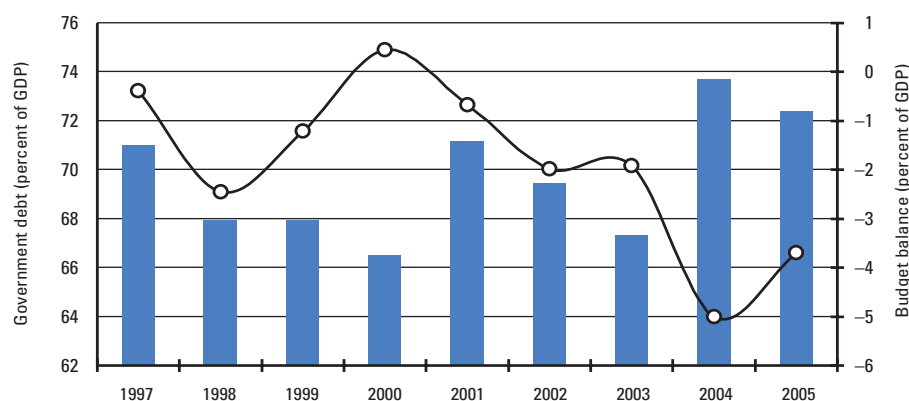
Source: IMF, World Economic Outlook Database, September 2005



## Government Debt and Budget Balance

- Government debt (percent of GDP) (left axis)
- Budget balance (percent of GDP) (right axis)

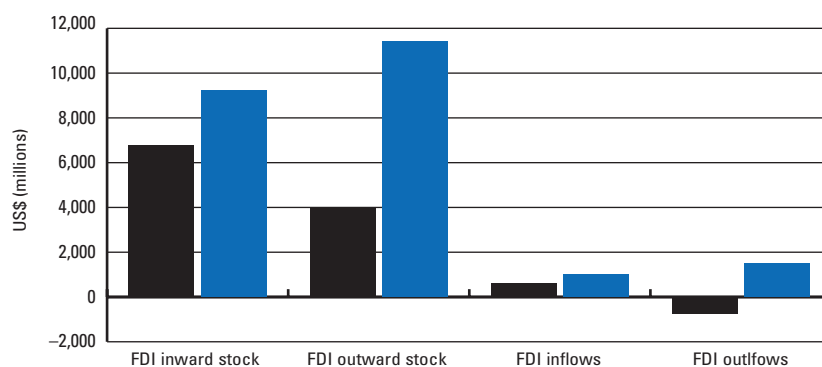
Source: EIU, CountryData Database, December 2005



## FDI Inward and Outward Stocks and Flows (US\$ millions), 2000 and 2004

- 2000
- 2004

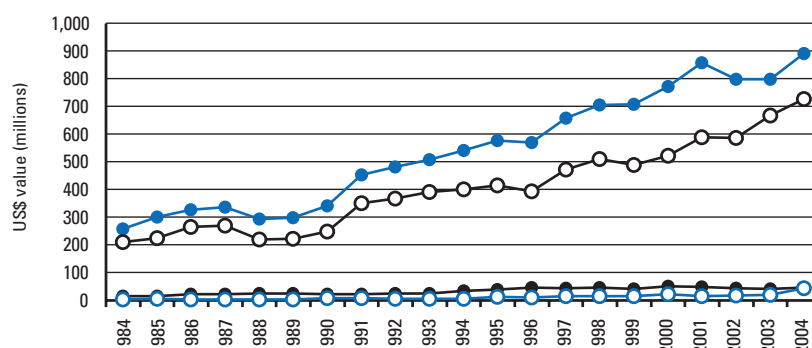
Source: UNCTAD, FDI Database, December 2005



## Main Exports (in millions US\$ value)

- All commodities
- Food and live animals chiefly for food
- Manufactured goods classified chiefly by materials
- Crude materials, inedible, except fuels

Source: UN Comtrade Database, December 2005



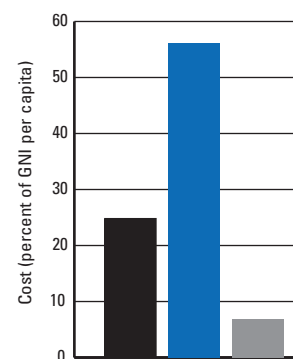
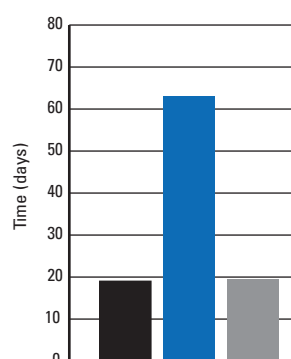
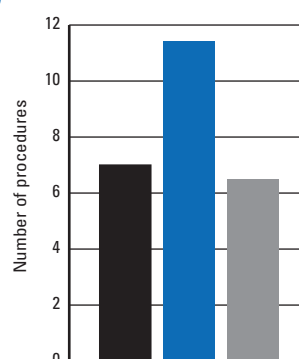
## Competitiveness Rankings

	Rank out of 117 countries	Rank out of 21 LA&C countries
<b>Global Competitiveness Index 2005 .....</b>	<b>65</b>	<b>9</b>
<b>Basic Requirements.....</b>	<b>59</b>	<b>6</b>
1st Pillar: Institutions .....	71	7
2nd Pillar: Infrastructure .....	61	5
3rd Pillar: Macroeconomy .....	72	12
4th Pillar: Health and Primary Education .....	39	6
<b>Efficiency Enhancers.....</b>	<b>65</b>	<b>7</b>
5th Pillar: Higher Education and Training.....	70	8
6th Pillar: Market Efficiency .....	63	7
7th Pillar: Technological Readiness .....	64	10
<b>Innovation Factors.....</b>	<b>54</b>	<b>6</b>
8th Pillar: Business Sophistication .....	52	7
9th Pillar: Innovation.....	62	7

Source: World Economic Forum, *Global Competitiveness Report 2005–2006*

## Starting a Business, 2005

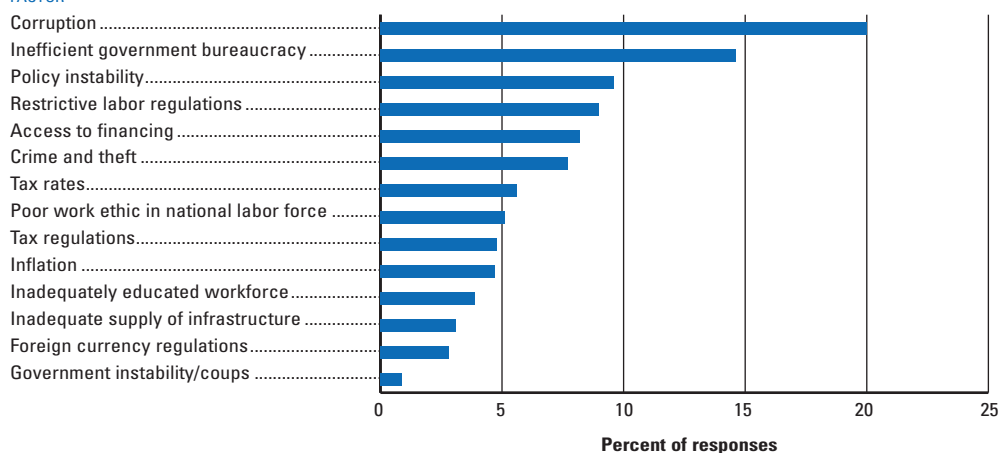
■ Panama  
■ LA&C average  
■ OECD average



Source: World Bank, *Doing Business in 2006: Creating Jobs*

## The Most Problematic Factors for Doing Business

FACTOR



Note: From a list of fourteen factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars show the responses weighted according to their rankings.

Source: World Economic Forum, Executive Opinion Survey 2005

# National Competitiveness Balance Sheet Based on the Global Competitiveness Index 2005

NOTABLE COMPETITIVE ADVANTAGES		RANK/117
<b>Institutions</b>		
6.03	Property rights.....	46
6.08	Favoritism in decisions of government officials.....	41
6.14	Reliability of police services.....	49
8.21	Protection of minority shareholders' interests.....	45
<b>Infrastructure</b>		
5.03	Port infrastructure quality.....	38
<b>Macroeconomy</b>		
2.16	Inflation, 2004.....	10
2.15	Real effective exchange rate, 2004.....	42
<b>Health and primary education</b>		
4.11	Life expectancy, 2003.....	35
4.15	Primary enrollment, 2003.....	21
<b>Higher education and training</b>		
4.17	Tertiary enrollment.....	37
7.09	Local availability of specialized research and training services.....	46
<b>Market efficiency</b>		
7.10	Number of procedures required to start a business.....	20
7.11	Time required to start a business.....	18
2.18	Exports, 2004.....	21
4.08	Brain drain.....	44
4.09	Private sector employment of women.....	28
2.03	Financial market sophistication.....	38
2.05	Ease of access to loans.....	35
2.06	Venture capital availability.....	20
2.04	Soundness of banks.....	32
<b>Technological readiness</b>		
3.04	FDI and technology transfer.....	35
<b>Business sophistication</b>		
8.06	Extent of marketing.....	35
8.08	Control of international distribution.....	22
8.01	Nature of competitive advantage.....	41
8.02	Value chain presence.....	30
<b>Innovation</b>		
8.03	Capacity for innovation.....	27
3.17	Utility patents, 2004.....	49

(Disadvantages cont'd. from bottom of right column)

NOTABLE COMPETITIVE DISADVANTAGES		RANK/117
<b>Innovation</b>		
3.05	Quality of scientific research institutions.....	93
3.06	Company spending on research and development.....	51
3.07	University/industry research collaboration.....	54
3.08	Government procurement of advanced technology products.....	90
6.04	Intellectual property protection.....	58
3.09	Availability of scientists and engineers.....	81

NOTABLE COMPETITIVE DISADVANTAGES		RANK/117
<b>Institutions</b>		
6.24	Diversion of public funds.....	73
6.26	Public trust of politicians.....	90
6.01	Judicial independence.....	89
6.06	Wastefulness of government spending.....	99
6.07	Burden of government regulation.....	56
2.02	Business costs of terrorism.....	104
6.15	Business costs of crime and violence.....	86
6.16	Organized crime.....	78
8.04	Ethical behavior of firms.....	84
8.16	Efficacy of corporate boards.....	103
8.23	Strength of auditing and accounting standards.....	77
<b>Infrastructure</b>		
5.01	Overall infrastructure quality.....	54
5.02	Railroad infrastructure development.....	66
5.04	Air transport infrastructure quality.....	69
5.05	Quality of electricity supply.....	57
5.08	Telephone lines, 2003.....	70
<b>Macroeconomy</b>		
2.13	Government surplus/deficit, 2004.....	96
2.14	National saving rate, 2004.....	64
2.17	Interest rate spread, 2004.....	72
2.20	Government debt, 2004.....	86
<b>Health and primary education</b>		
4.04	Medium-term business impact of malaria.....	81
4.05	Medium-term business impact of tuberculosis.....	73
4.06	Medium-term business impact of HIV/AIDS.....	78
4.10	Infant mortality.....	54
4.12	Tuberculosis prevalence, 2003.....	53
4.13	Malaria prevalence.....	94
4.14	HIV prevalence, 2003.....	86
<b>Higher education and training</b>		
4.16	Secondary enrollment.....	83
4.01	Quality of the educational system.....	107
4.03	Quality of math and science education.....	98
8.15	Quality of management schools.....	84
8.11	Extent of staff training.....	62
<b>Market efficiency</b>		
2.12	Agricultural policy costs.....	63
6.02	Efficiency of legal framework.....	83
6.11	Extent and effect of taxation.....	73
7.01	Intensity of local competition.....	111
7.02	Effectiveness of antitrust policy.....	60
	GDP – exports + imports.....	91
8.17	Hiring and firing practices.....	94
8.18	Flexibility of wage determination.....	100
8.19	Cooperation in labor-employer relations.....	114
8.14	Reliance on professional management.....	69
8.20	Pay and productivity.....	62
2.08	Local equity market access.....	63
<b>Technological readiness</b>		
3.01	Technological readiness.....	57
3.02	Firm-level technology absorption.....	73
3.15	Laws relating to ICT.....	63
3.18	Cellular telephones, 2003.....	68
3.19	Internet users, 2003.....	60
3.21	Personal computers, 2003.....	72
<b>Business sophistication</b>		
7.05	Local supplier quantity.....	62
7.06	Local supplier quality.....	75
8.05	Production process sophistication.....	55
8.12	Willingness to delegate authority.....	90

<<< (Cont'd. on bottom of left column)

# Paraguay

## Key Indicators

Total population (millions), 2005 .....	6.2
Gross Domestic Product (US\$ billions), 2005 .....	7.0
Gross Domestic Product per capita (PPP, US\$), 2005 .....	4,663.2
Real growth in GDP (percent), 2005.....	3.0
Growth of output (average annual percent change), 1990–2004 .....	1.9
Agriculture.....	3.3
Industry .....	1.9
Manufacturing .....	0.5
Services .....	1.1
Inflation (annual percent change), 2005 .....	4.8
Budget balance (percent of GDP), 2005.....	0.1
Gross fixed capital formation (percent of GDP), 2004.....	19.0
National savings rate (percent of GDP), 2004 .....	20.9
Interest rate spread (percent), 2005.....	33.5
Real effective exchange rate (percent)*, 2004.....	–22.0
Exports of goods and services (percent of GDP), 2004 .....	37.6
Imports of goods and services (percent of GDP), 2004.....	54.8
Current account balance (percent of GDP), 2005.....	–1.4
Gross official reserves in months of imports, 2004 .....	4.5
Government debt (percent of GDP), 2005 .....	36.2
Unemployment (percent of total labor force), 2004 .....	16.2
Gini index** .....	0.6

## Human Development Indicators

Gross primary enrollment (percent of relevant age group), 2003 .....	110.1
Gross secondary enrollment (percent of relevant age group), 2003 .....	65.1
Gross tertiary enrollment (percent of relevant age group), 2003 .....	27.0
Adult literacy rate (percent of population aged 15 and above), 2001 .....	91.6
Life expectancy at birth, 2003 .....	72.0
HIV prevalence rate (percent of population aged 15 to 49), 2003 .....	0.5
Public expenditure on health (percent of GDP), 2002 .....	3.2

## Infrastructure and Technology Diffusion Indicators

Paved roads (percent of total roads).....	50.8
Main telephone lines per 100 inhabitants, 2003 .....	4.7
Cellular mobile telephone subscribers per 100 inhabitants, 2003 ..	29.9
Personal computers per 100 inhabitants, 2002.....	3.5
Internet users per 100 inhabitants, 2003 .....	2.0

\* Real effective exchange rate 2004 relative to the 1997–2003 average. Values greater (less) than 0 indicate appreciation (depreciation).

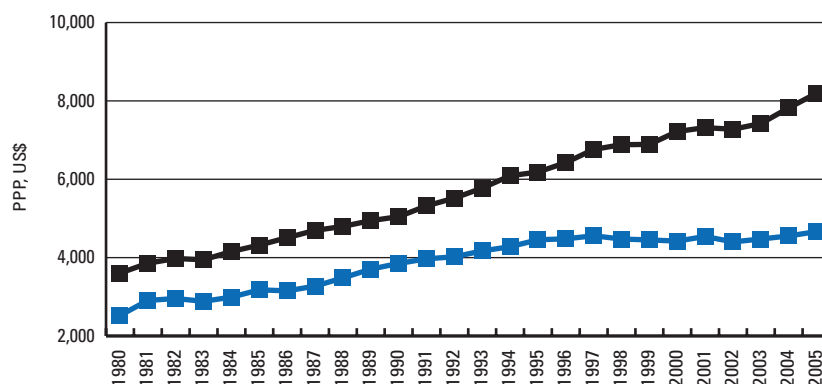
\*\* The Gini index is a number between 0 and 1 that is a measure of inequality, with lower (higher) values representing less (more) inequality.

Sources: UNFPA, *State of World Population 2005*; IMF, *World Economic Outlook Database*, September 2005; EIU, *CountryData Database*, December 2005; IMF, *International Financial Statistics Database*, December 2005; IMF, Information Notice System; IMF, IMF Country Report No. 05/59, February 2005; UNDP, *Human Development Report 2005*; UNESCO Institute for Statistics; WHO, *World Health Statistics 2005*; World Bank, *World Development Indicators 2005*; ITU, *World Telecommunication Indicators 2004*; UN Statistics Division and ITU estimates

## GDP per capita (PPP, US\$), 1980–2005

- Paraguay
- LA&C average

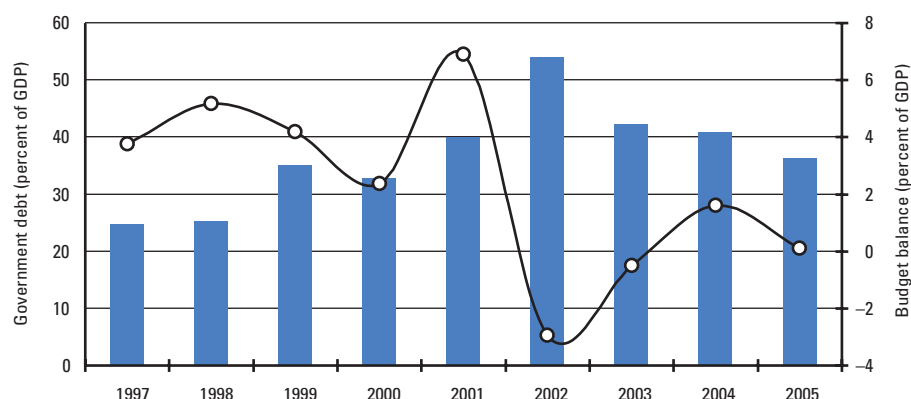
Source: IMF, World Economic Outlook Database, September 2005



## Government Debt and Budget Balance

- Government debt (percent of GDP) (left axis)
- Budget balance (percent of GDP) (right axis)

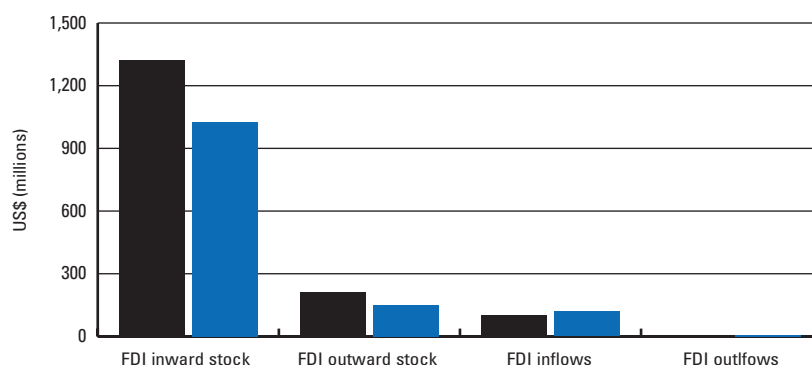
Source: EIU, CountryData Database, December 2005



## FDI Inward and Outward Stocks and Flows (US\$ millions), 2000 and 2004

- 2000
- 2004

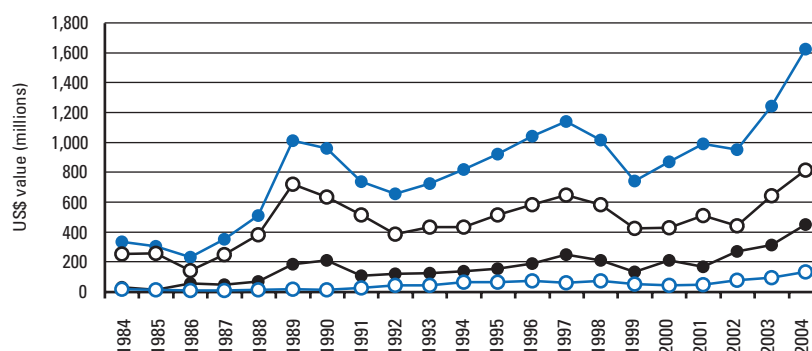
Source: UNCTAD, FDI Database, December 2005



## Main Exports (in millions US\$ value)

- All commodities
- Crude materials, inedible, except fuels
- Food and live animals chiefly for food
- Animal and vegetable oils, fats and waxes

Source: UN Comtrade Database, December 2005



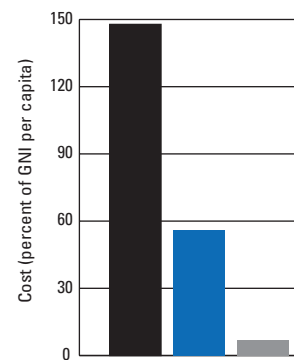
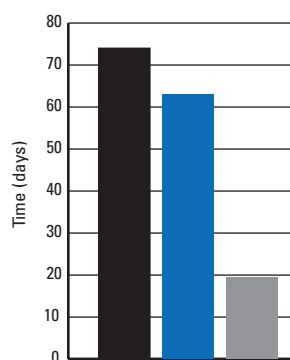
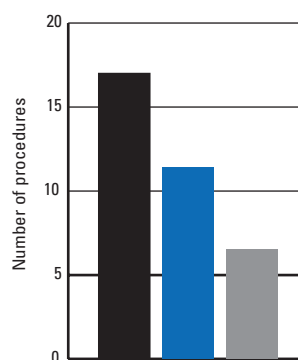
## Competitiveness Rankings

	Rank out of 117 countries	Rank out of 21 LA&C countries
<b>Global Competitiveness Index 2005 .....</b>	<b>102</b>	<b>20</b>
<b>Basic Requirements.....</b>	<b>94</b>	<b>18</b>
1st Pillar: Institutions .....	117	21
2nd Pillar: Infrastructure .....	108	20
3rd Pillar: Macroeconomy .....	56	9
4th Pillar: Health and Primary Education .....	44	9
<b>Efficiency Enhancers.....</b>	<b>107</b>	<b>20</b>
5th Pillar: Higher Education and Training.....	101	19
6th Pillar: Market Efficiency .....	115	21
7th Pillar: Technological Readiness .....	104	19
<b>Innovation Factors.....</b>	<b>115</b>	<b>21</b>
8th Pillar: Business Sophistication .....	109	19
9th Pillar: Innovation.....	117	21

Source: World Economic Forum, *Global Competitiveness Report 2005–2006*

## Starting a Business, 2005

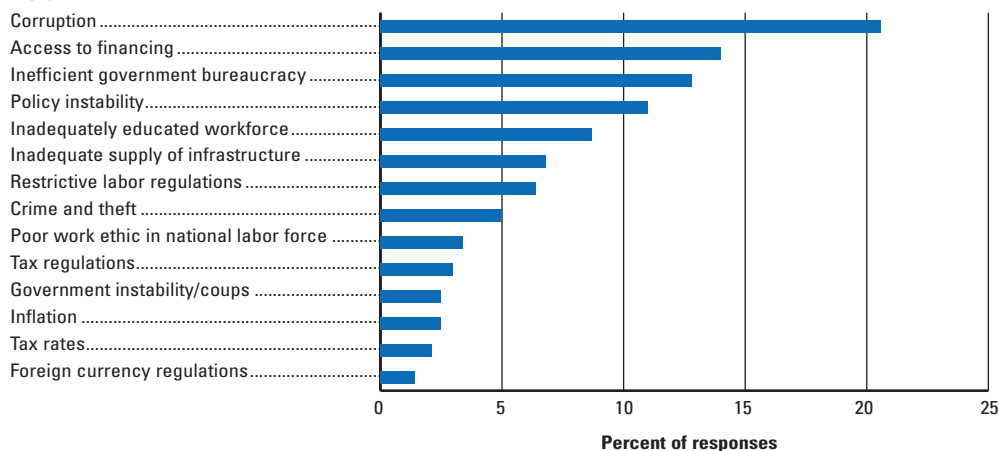
■ Paraguay  
■ LA&C average  
■ OECD average



Source: World Bank, *Doing Business in 2006: Creating Jobs*

## The Most Problematic Factors for Doing Business

FACTOR



Note: From a list of fourteen factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars show the responses weighted according to their rankings.

Source: World Economic Forum, Executive Opinion Survey 2005

# National Competitiveness Balance Sheet Based on the Global Competitiveness Index 2005

NOTABLE COMPETITIVE ADVANTAGES		RANK/117
<b>Macroeconomy</b>		
2.13	Government surplus/deficit, 2004.....	23
2.20	Government debt, 2004.....	39
2.15	Real effective exchange rate, 2004.....	11
<b>Health and primary education</b>		
4.10	Infant mortality.....	44
4.15	Primary enrollment, 2003.....	28
<b>Market efficiency</b>		
6.11	Extent and effect of taxation.....	47

NOTABLE COMPETITIVE DISADVANTAGES		RANK/117
<b>Institutions</b>		
6.03	Property rights.....	116
6.24	Diversion of public funds.....	116
6.26	Public trust of politicians.....	115
6.01	Judicial independence.....	113
6.08	Favoritism in decisions of government officials.....	115
6.06	Wastefulness of government spending.....	117
6.07	Burden of government regulation.....	67
2.02	Business costs of terrorism.....	93
6.14	Reliability of police services.....	114
6.15	Business costs of crime and violence.....	109
6.16	Organized crime.....	112
8.04	Ethical behavior of firms.....	117
8.16	Efficacy of corporate boards.....	113
8.21	Protection of minority shareholders' interests.....	107
8.23	Strength of auditing and accounting standards.....	115
<b>Infrastructure</b>		
5.01	Overall infrastructure quality.....	114
5.02	Railroad infrastructure development.....	115
5.03	Port infrastructure quality.....	97
5.04	Air transport infrastructure quality.....	109
5.05	Quality of electricity supply.....	82
5.08	Telephone lines, 2003.....	92
<b>Macroeconomy</b>		
2.14	National saving rate, 2004.....	55
2.16	Inflation, 2004.....	72
2.17	Interest rate spread, 2004.....	114
<b>Health and primary education</b>		
4.04	Medium-term business impact of malaria.....	72
4.05	Medium-term business impact of tuberculosis.....	71
4.06	Medium-term business impact of HIV/AIDS.....	82
4.11	Life expectancy, 2003.....	51
4.12	Tuberculosis prevalence, 2003.....	65
4.13	Malaria prevalence.....	76
4.14	HIV prevalence, 2003.....	73
<b>Higher education and training</b>		
4.16	Secondary enrollment.....	88
4.17	Tertiary enrollment.....	67
4.01	Quality of the educational system.....	116
4.03	Quality of math and science education.....	109
8.15	Quality of management schools.....	104
7.09	Local availability of specialized research and training services.....	108
8.11	Extent of staff training.....	109
<b>Market efficiency</b>		
2.12	Agricultural policy costs.....	70
6.02	Efficiency of legal framework.....	114
7.10	Number of procedures required to start a business.....	102
7.11	Time required to start a business.....	86
7.01	Intensity of local competition.....	104
7.02	Effectiveness of antitrust policy.....	111
	GDP – exports + imports.....	78
2.18	Exports, 2004.....	62
8.17	Hiring and firing practices.....	105
8.18	Flexibility of wage determination.....	103
8.19	Cooperation in labor-employer relations.....	83
8.14	Reliance on professional management.....	116
8.20	Pay and productivity.....	117
4.08	Brain drain.....	82
4.09	Private sector employment of women.....	116
2.03	Financial market sophistication.....	108
2.05	Ease of access to loans.....	95
2.06	Venture capital availability.....	113
2.04	Soundness of banks.....	108
2.08	Local equity market access.....	95

(Disadvantages cont'd. from bottom of right column)

NOTABLE COMPETITIVE DISADVANTAGES		RANK/117
<b>Technological readiness</b>		
3.01	Technological readiness.....	99
3.02	Firm-level technology absorption.....	115
3.15	Laws relating to ICT.....	112
3.04	FDI and technology transfer.....	105
3.18	Cellular telephones, 2003.....	56
3.19	Internet users, 2003.....	92
3.21	Personal computers, 2002.....	74
<b>Business sophistication</b>		
7.05	Local supplier quantity.....	97
7.06	Local supplier quality.....	102
8.05	Production process sophistication.....	105
8.06	Extent of marketing.....	96
8.08	Control of international distribution.....	112
8.12	Willingness to delegate authority.....	117
8.01	Nature of competitive advantage.....	112
8.02	Value chain presence.....	115
<b>Innovation</b>		
3.05	Quality of scientific research institutions.....	117
3.06	Company spending on research and development.....	114
3.07	University/industry research collaboration.....	116
3.08	Government procurement of advanced technology products.....	115
6.04	Intellectual property protection.....	115
3.09	Availability of scientists and engineers.....	113
8.03	Capacity for innovation.....	115
3.17	Utility patents, 2004.....	81

<<< (Cont'd. on bottom of left column)

# Peru

## Key Indicators

Total population (millions), 2005 .....	28.0
Gross Domestic Product (US\$ billions), 2005 .....	77.2
Gross Domestic Product per capita (PPP, US\$), 2005 .....	5,872.2
Real growth in GDP (percent), 2005.....	5.5
Growth of output (average annual percent change), 1990–2004 .....	4.6
Agriculture.....	5.3
Industry .....	5.6
Manufacturing .....	4.1
Services .....	6.0
Inflation (annual percent change), 2005 .....	1.8
Budget balance (percent of GDP), 2005 .....	–0.8
Gross fixed capital formation (percent of GDP), 2004.....	18.0
National savings rate (percent of GDP), 2004 .....	18.5
Interest rate spread (percent), 2005.....	11.7
Real effective exchange rate (percent)*, 2004.....	–8.8
Exports of goods and services (percent of GDP), 2004 .....	20.9
Imports of goods and services (percent of GDP), 2004.....	18.3
Current account balance (percent of GDP), 2005.....	0.3
Gross official reserves in months of imports, 2004 .....	10.1
Government debt (percent of GDP), 2005 .....	41.9
Unemployment (percent of total labor force), 2004 .....	8.8
Gini index** .....	0.5

## Human Development Indicators

Gross primary enrollment (percent of relevant age group), 2003 .....	118.4
Gross secondary enrollment (percent of relevant age group), 2003 .....	89.7
Gross tertiary enrollment (percent of relevant age group), 2003 .....	31.9
Adult literacy rate (percent of population aged 15 and above), 2004 .....	87.7
Life expectancy at birth, 2003 .....	70.0
HIV prevalence rate (percent of population aged 15 to 49), 2003 .....	0.5
Public expenditure on health (percent of GDP), 2002 .....	2.2

## Infrastructure and Technology Diffusion Indicators

Paved roads (percent of total roads).....	13.4
Main telephone lines per 100 inhabitants, 2003 .....	6.7
Cellular mobile telephone subscribers per 100 inhabitants, 2003 ..	10.6
Personal computers per 100 inhabitants, 2002 .....	4.3
Internet users per 100 inhabitants, 2003 .....	10.4

\* Real effective exchange rate 2004 relative to the 1997–2003 average. Values greater (less) than 0 indicate appreciation (depreciation).

\*\* The Gini index is a number between 0 and 1 that is a measure of inequality, with lower (higher) values representing less (more) inequality.

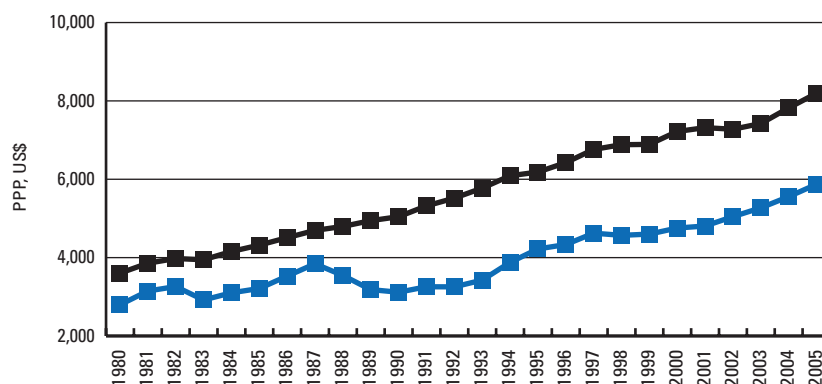
Sources: UNFPA, *State of World Population 2005*; IMF, *World Economic Outlook Database*, September 2005; EIU, *CountryData Database*, December 2005; IMF, *International Financial Statistics Database*, December 2005; IMF, Information Notice System; IMF, Press Release No. 04/112, June 2004; UNDP, *Human Development Report 2005*; UNESCO Institute for Statistics; WHO, *World Health Statistics 2005*; World Bank, *World Development Indicators 2005*; ITU, *World Telecommunication Indicators 2004*; UN Statistics Division and ITU estimates



## GDP per capita (PPP, US\$), 1980–2005

- Peru
- LA&C average

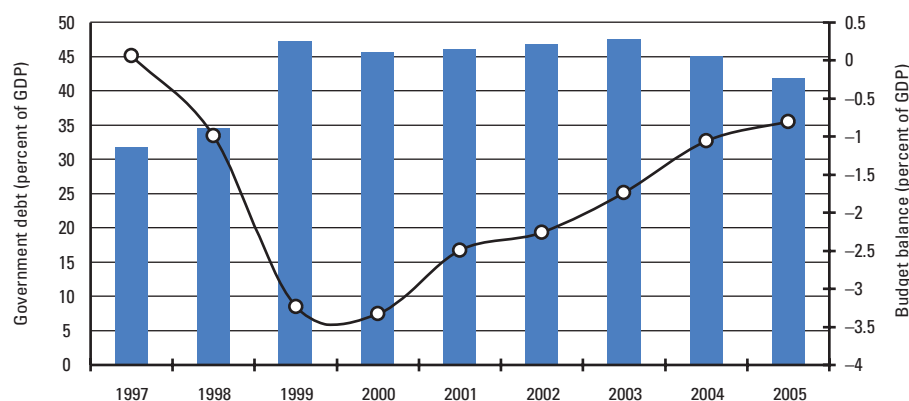
Source: IMF, World Economic Outlook Database, September 2005



## Government Debt and Budget Balance

- Government debt (percent of GDP) (left axis)
- Budget balance (percent of GDP) (right axis)

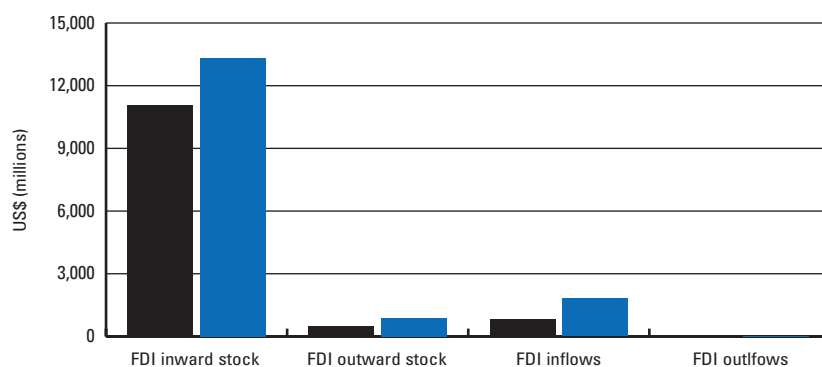
Source: EIU, CountryData Database, December 2005



## FDI Inward and Outward Stocks and Flows (US\$ millions), 2000 and 2004

- 2000
- 2004

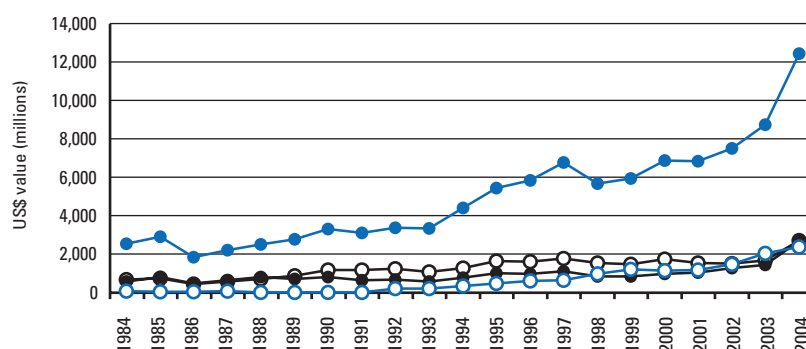
Source: UNCTAD, FDI Database, December 2005



## Main Exports (in millions US\$ value)

- All commodities
- Manufactured goods classified chiefly by materials
- Crude materials, inedible, except fuels
- Commodities and transactions not classified elsewhere in the SITC

Source: UN Comtrade Database, December 2005



## Competitiveness Rankings

Rank out of  
117 countriesRank out of 21  
LA&C countries

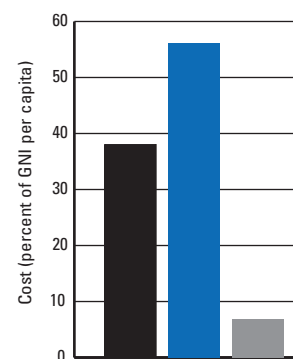
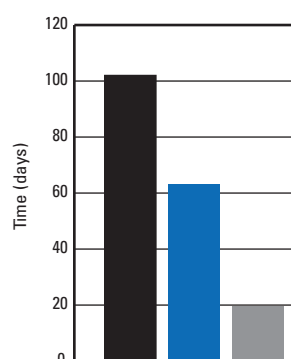
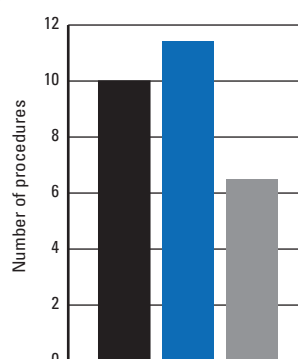
### Global Competitiveness Index 2005 .....77 .....12

<b>Basic Requirements.....</b>	<b>82.....</b>	<b>14</b>
1st Pillar: Institutions .....	99.....	13
2nd Pillar: Infrastructure .....	88.....	15
3rd Pillar: Macroeconomy .....	55.....	8
4th Pillar: Health and Primary Education .....	68.....	18
<b>Efficiency Enhancers.....</b>	<b>70.....</b>	<b>10</b>
5th Pillar: Higher Education and Training.....	74.....	11
6th Pillar: Market Efficiency .....	69.....	10
7th Pillar: Technological Readiness .....	68.....	12
<b>Innovation Factors.....</b>	<b>82.....</b>	<b>12</b>
8th Pillar: Business Sophistication .....	69.....	11
9th Pillar: Innovation.....	99.....	13

Source: World Economic Forum, *Global Competitiveness Report 2005–2006*

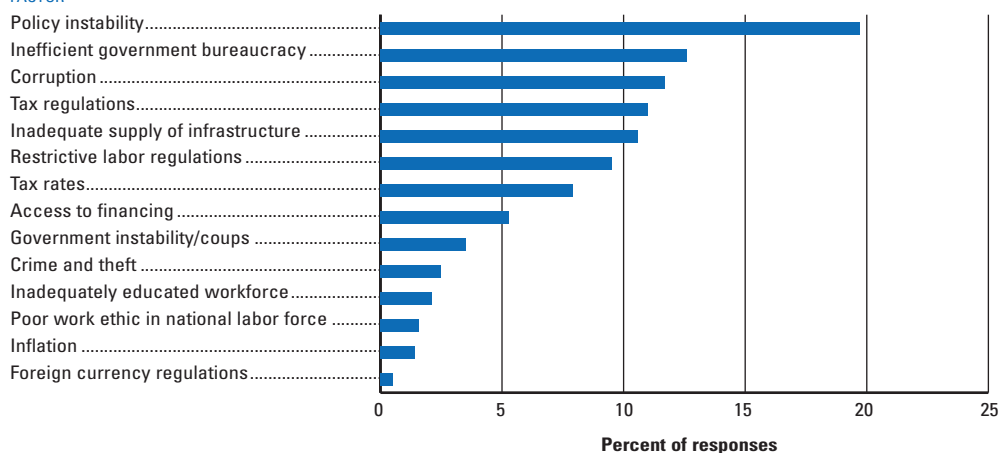
## Starting a Business, 2005

■ Peru  
■ LA&C average  
■ OECD average

Source: World Bank, *Doing Business in 2006: Creating Jobs*

## The Most Problematic Factors for Doing Business

### FACTOR



Note: From a list of fourteen factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars show the responses weighted according to their rankings.

Source: World Economic Forum, Executive Opinion Survey 2005

# National Competitiveness Balance Sheet Based on the Global Competitiveness Index 2005

NOTABLE COMPETITIVE ADVANTAGES		RANK/117
<b>Macroeconomy</b>		
2.13	Government surplus/deficit, 2004 .....	40
2.20	Government debt, 2004 .....	45
2.15	Real effective exchange rate, 2004 .....	39
<b>Health and primary education</b>		
4.15	Primary enrollment, 2003 .....	11
<b>Higher education and training</b>		
4.16	Secondary enrollment .....	50
8.15	Quality of management schools .....	44
<b>Market efficiency</b>		
7.10	Number of procedures required to start a business .....	49
	GDP – exports + imports .....	47
8.18	Flexibility of wage determination .....	28
2.03	Financial market sophistication .....	50
<b>Technological readiness</b>		
3.04	FDI and technology transfer .....	30

NOTABLE COMPETITIVE DISADVANTAGES		RANK/117
<b>Institutions</b>		
6.03	Property rights .....	98
6.24	Diversion of public funds .....	82
6.26	Public trust of politicians .....	110
6.01	Judicial independence .....	110
6.08	Favoritism in decisions of government officials .....	89
6.06	Wastefulness of government spending .....	103
6.07	Burden of government regulation .....	114
2.02	Business costs of terrorism .....	83
6.14	Reliability of police services .....	97
6.15	Business costs of crime and violence .....	104
6.16	Organized crime .....	84
8.04	Ethical behavior of firms .....	75
8.16	Efficacy of corporate boards .....	66
8.21	Protection of minority shareholders' interests .....	67
8.23	Strength of auditing and accounting standards .....	68
<b>Infrastructure</b>		
5.01	Overall infrastructure quality .....	97
5.02	Railroad infrastructure development .....	92
5.03	Port infrastructure quality .....	102
5.04	Air transport infrastructure quality .....	103
5.05	Quality of electricity supply .....	55
5.08	Telephone lines, 2003 .....	86
<b>Macroeconomy</b>		
2.14	National saving rate, 2004 .....	74
2.16	Inflation, 2004 .....	56
2.17	Interest rate spread, 2004 .....	94
<b>Health and primary education</b>		
4.04	Medium-term business impact of malaria .....	64
4.05	Medium-term business impact of tuberculosis .....	82
4.06	Medium-term business impact of HIV/AIDS .....	61
4.10	Infant mortality .....	79
4.11	Life expectancy, 2003 .....	70
4.12	Tuberculosis prevalence, 2003 .....	94
4.13	Malaria prevalence .....	95
4.14	HIV prevalence, 2003 .....	73
<b>Higher education and training</b>		
4.17	Tertiary enrollment .....	57
4.01	Quality of the educational system .....	110
4.03	Quality of math and science education .....	110
7.09	Local availability of specialized research and training services .....	84
8.11	Extent of staff training .....	75
<b>Market efficiency</b>		
2.12	Agricultural policy costs .....	98
6.02	Efficiency of legal framework .....	107
6.11	Extent and effect of taxation .....	90
7.11	Time required to start a business .....	97
7.01	Intensity of local competition .....	57
7.02	Effectiveness of antitrust policy .....	59
2.18	Exports, 2004 .....	101
8.17	Hiring and firing practices .....	85
8.19	Cooperation in labor-employer relations .....	89
8.14	Reliance on professional management .....	56
8.20	Pay and productivity .....	61
4.08	Brain drain .....	86
4.09	Private sector employment of women .....	62
2.05	Ease of access to loans .....	59
2.06	Venture capital availability .....	64
2.04	Soundness of banks .....	57
2.08	Local equity market access .....	70
<b>Technological readiness</b>		
3.01	Technological readiness .....	62
3.02	Firm-level technology absorption .....	84
3.15	Laws relating to ICT .....	60
3.18	Cellular telephones, 2003 .....	85
3.19	Internet users, 2003 .....	56
3.21	Personal computers, 2002 .....	68

(Disadvantages cont'd. from bottom of right column)

NOTABLE COMPETITIVE DISADVANTAGES		RANK/117
<b>Business sophistication</b>		
7.05	Local supplier quantity .....	68
7.06	Local supplier quality .....	67
8.05	Production process sophistication .....	65
8.06	Extent of marketing .....	51
8.08	Control of international distribution .....	60
8.12	Willingness to delegate authority .....	64
8.01	Nature of competitive advantage .....	67
8.02	Value chain presence .....	79
<b>Innovation</b>		
3.05	Quality of scientific research institutions .....	104
3.06	Company spending on research and development .....	93
3.07	University/industry research collaboration .....	89
3.08	Government procurement of advanced technology products .....	104
6.04	Intellectual property protection .....	87
3.09	Availability of scientists and engineers .....	96
8.03	Capacity for innovation .....	81
3.17	Utility patents, 2004 .....	64

<<< (Cont'd. on bottom of left column)

# Trinidad and Tobago

## Key Indicators

Total population (millions), 2005 .....	1.3
Gross Domestic Product (US\$ billions), 2005 .....	14.0
Gross Domestic Product per capita (PPP, US\$), 2005 .....	13,957.6
Real growth in GDP (percent), 2005.....	6.3
Growth of output (average annual percent change), 1990–2004 .....	5.7
Agriculture.....	–0.6
Industry .....	8.1
Manufacturing .....	7.8
Services .....	3.7
Inflation (annual percent change), 2005 .....	5.3
Budget balance (percent of GDP), 2005.....	3.4
Gross fixed capital formation (percent of GDP), 2004.....	n/a
National savings rate (percent of GDP), 2004 .....	35.0
Interest rate spread (percent), 2005.....	6.6
Real effective exchange rate (percent)*, 2004.....	0.7
Exports of goods and services (percent of GDP), 2004 .....	61.9
Imports of goods and services (percent of GDP), 2004.....	45.1
Current account balance (percent of GDP), 2005.....	16.4
Gross official reserves in months of imports, 2004 .....	6.3
Government debt (percent of GDP), 2005 .....	42.6
Unemployment (percent of total labor force), 2004 .....	8.4
Gini index** .....	0.4

## Human Development Indicators

Gross primary enrollment (percent of relevant age group), 2003 .....	100.1
Gross secondary enrollment (percent of relevant age group), 2003 .....	82.4
Gross tertiary enrollment (percent of relevant age group), 2003 .....	8.9
Adult literacy rate (percent of population aged 15 and above), 2002 .....	98.5
Life expectancy at birth, 2003 .....	70.0
HIV prevalence rate (percent of population aged 15 to 49), 2003 .....	3.2
Public expenditure on health (percent of GDP), 2002 .....	1.4

## Infrastructure and Technology Diffusion Indicators

Paved roads (percent of total roads).....	51.1
Main telephone lines per 100 inhabitants, 2002 .....	25.0
Cellular mobile telephone subscribers per 100 inhabitants, 2003 ..	39.9
Personal computers per 100 inhabitants, 2002 .....	8.0
Internet users per 100 inhabitants, 2002 .....	10.6

\* Real effective exchange rate 2004 relative to the 1997–2003 average. Values greater (less) than 0 indicate appreciation (depreciation).

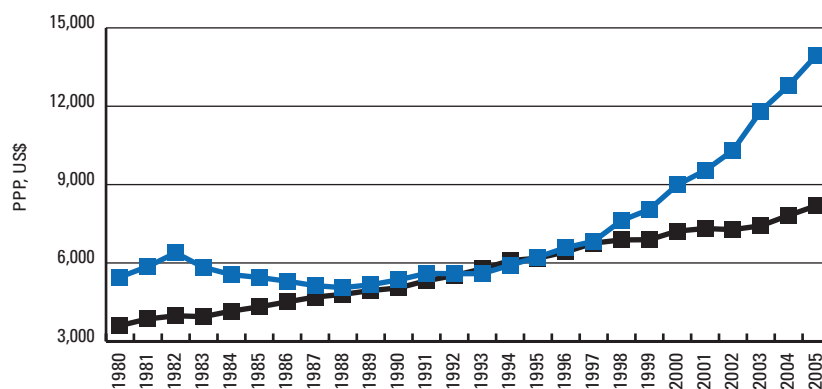
\*\* The Gini index is a number between 0 and 1 that is a measure of inequality, with lower (higher) values representing less (more) inequality.

Sources: UNFPA, *State of World Population 2005*; IMF, *World Economic Outlook Database*, September 2005; EIU, *CountryData Database*, December 2005; IMF, Information Notice System; IMF, IMF Country Report No. 05/4, January 2005; UNDP, *Human Development Report 2005*; UNESCO Institute for Statistics; WHO, *World Health Statistics 2005*; World Bank, *World Development Indicators 2005*; ITU, *World Telecommunication Indicators 2004*; UN Statistics Division and ITU estimates

## GDP per capita (PPP, US\$), 1980–2005

- Trinidad and Tobago
- LA&C average

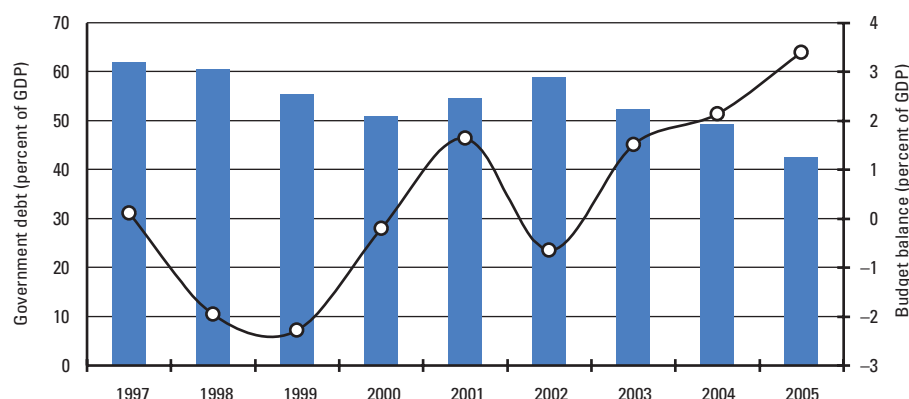
Source: IMF, World Economic Outlook Database, September 2005



## Government Debt and Budget Balance

- Government debt (percent of GDP) (left axis)
- Budget balance (percent of GDP) (right axis)

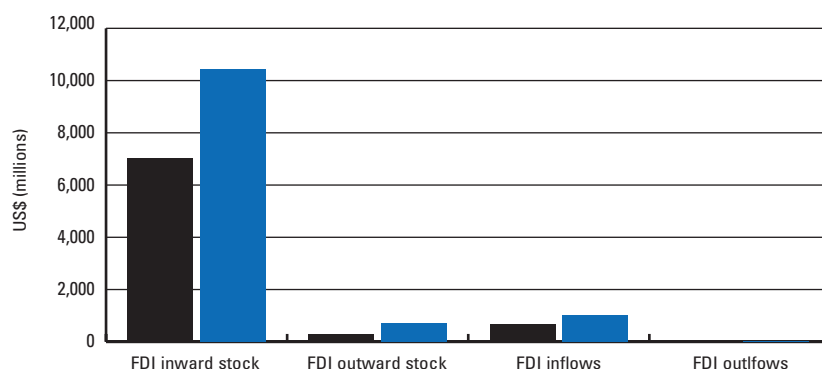
Source: EIU, CountryData Database, December 2005



## FDI Inward and Outward Stocks and Flows (US\$ millions), 2000 and 2004

- 2000
- 2004

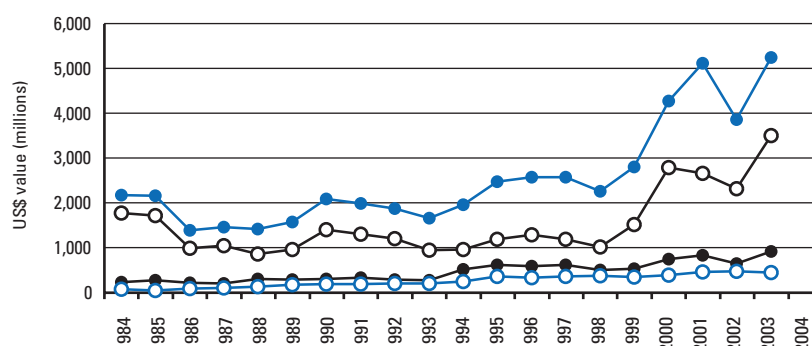
Source: UNCTAD, FDI Database, December 2005



## Main Exports (in millions US\$ value)

- All commodities
- Mineral fuels, lubricants and related materials
- Chemical and related products, nes
- Manufactured goods classified chiefly by materials

Source: UN Comtrade Database, December 2005



## Competitiveness Rankings

	Rank out of 117 countries	Rank out of 21 LA&C countries
<b>Global Competitiveness Index 2005 .....</b>	<b>66</b>	<b>10</b>
<b>Basic Requirements.....</b>	<b>56</b>	<b>5</b>
1st Pillar: Institutions .....	78	9
2nd Pillar: Infrastructure .....	72	10
3rd Pillar: Macroeconomy .....	24	3
4th Pillar: Health and Primary Education .....	55	14
<b>Efficiency Enhancers.....</b>	<b>66</b>	<b>8</b>
5th Pillar: Higher Education and Training.....	73	10
6th Pillar: Market Efficiency .....	67	9
7th Pillar: Technological Readiness .....	59	6
<b>Innovation Factors.....</b>	<b>69</b>	<b>9</b>
8th Pillar: Business Sophistication .....	61	9
9th Pillar: Innovation.....	80	10

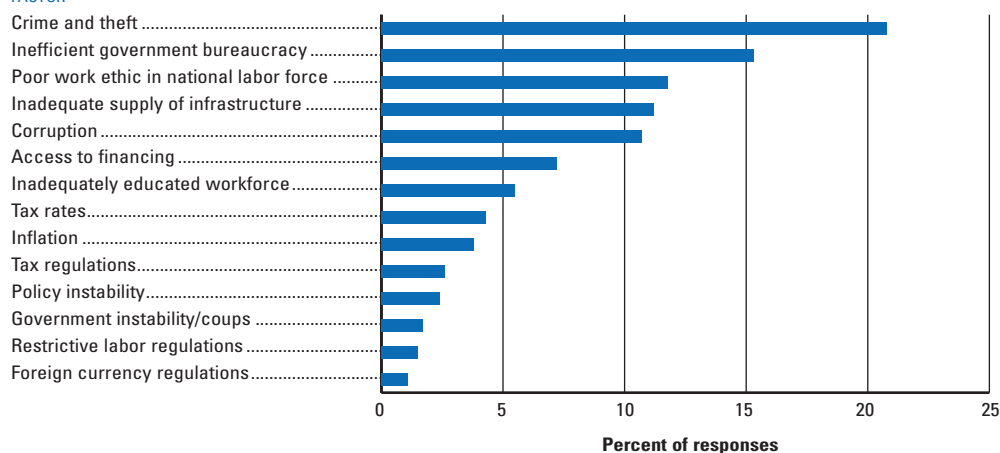
Source: World Economic Forum, *Global Competitiveness Report 2005–2006*

## Starting a Business, 2005

No data available for Trinidad and Tobago. See “How country profiles work” for explanation.

## The Most Problematic Factors for Doing Business

### FACTOR



Note: From a list of fourteen factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars show the responses weighted according to their rankings.

Source: World Economic Forum, Executive Opinion Survey 2005

NOTABLE COMPETITIVE ADVANTAGES		RANK/117
<b>Institutions</b>		
8.23	Strength of auditing and accounting standards .....	47
<b>Infrastructure</b>		
5.08	Telephone lines, 2003 .....	48
<b>Macroeconomy</b>		
2.13	Government surplus/deficit, 2004 .....	20
2.14	National saving rate, 2004 .....	17
<b>Health and primary education</b>		
4.12	Tuberculosis prevalence, 2003 .....	16
<b>Market efficiency</b>		
6.11	Extent and effect of taxation .....	28
2.18	Exports, 2004 .....	28
8.17	Hiring and firing practices .....	45
8.14	Reliance on professional management .....	42
2.03	Financial market sophistication .....	46
2.06	Venture capital availability .....	37
2.04	Soundness of banks .....	29
2.08	Local equity market access .....	42
<b>Technological readiness</b>		
3.04	FDI and technology transfer .....	32
3.18	Cellular telephones, 2003 .....	48
<b>Business sophistication</b>		
8.05	Production process sophistication .....	50
<b>Innovation</b>		
3.08	Government procurement of advanced technology products .....	47

(Disadvantages cont'd. from bottom of right column)

NOTABLE COMPETITIVE DISADVANTAGES		RANK/117
<b>Business sophistication</b>		
7.05	Local supplier quantity .....	61
7.06	Local supplier quality .....	54
8.06	Extent of marketing .....	62
8.08	Control of international distribution .....	78
8.12	Willingness to delegate authority .....	61
8.01	Nature of competitive advantage .....	91
8.02	Value chain presence .....	88
<b>Innovation</b>		
3.05	Quality of scientific research institutions .....	69
3.06	Company spending on research and development .....	76
3.07	University/industry research collaboration .....	80
6.04	Intellectual property protection .....	78
3.09	Availability of scientists and engineers .....	70
8.03	Capacity for innovation .....	95
3.17	Utility patents, 2004 .....	81

NOTABLE COMPETITIVE DISADVANTAGES		RANK/117
<b>Institutions</b>		
6.03	Property rights .....	63
6.24	Diversion of public funds .....	91
6.26	Public trust of politicians .....	78
6.01	Judicial independence .....	53
6.08	Favoritism in decisions of government officials .....	87
6.06	Wastefulness of government spending .....	75
6.07	Burden of government regulation .....	78
2.02	Business costs of terrorism .....	98
6.14	Reliability of police services .....	108
6.15	Business costs of crime and violence .....	114
6.16	Organized crime .....	111
8.04	Ethical behavior of firms .....	71
8.16	Efficacy of corporate boards .....	57
8.21	Protection of minority shareholders' interests .....	62
<b>Infrastructure</b>		
5.01	Overall infrastructure quality .....	65
5.02	Railroad infrastructure development .....	104
5.03	Port infrastructure quality .....	77
5.04	Air transport infrastructure quality .....	78
5.05	Quality of electricity supply .....	62
<b>Macroeconomy</b>		
2.16	Inflation, 2004 .....	59
2.17	Interest rate spread, 2004 .....	68
2.20	Government debt, 2004 .....	54
2.15	Real effective exchange rate, 2004 .....	71
<b>Health and primary education</b>		
4.04	Medium-term business impact of malaria .....	76
4.05	Medium-term business impact of tuberculosis .....	76
4.06	Medium-term business impact of HIV/AIDS .....	103
4.10	Infant mortality .....	75
4.11	Life expectancy, 2003 .....	70
4.13	Malaria prevalence .....	61
4.14	HIV prevalence, 2003 .....	103
4.15	Primary enrollment, 2003 .....	76
<b>Higher education and training</b>		
4.16	Secondary enrollment .....	67
4.17	Tertiary enrollment .....	95
4.01	Quality of the educational system .....	72
4.03	Quality of math and science education .....	57
8.15	Quality of management schools .....	52
7.09	Local availability of specialized research and training services .....	88
8.11	Extent of staff training .....	55
<b>Market efficiency</b>		
2.12	Agricultural policy costs .....	80
6.02	Efficiency of legal framework .....	52
7.10	Number of procedures required to start a business .....	n/a
7.11	Time required to start a business .....	n/a
7.01	Intensity of local competition .....	70
7.02	Effectiveness of antitrust policy .....	95
	GDP – exports + imports .....	100
8.18	Flexibility of wage determination .....	71
8.19	Cooperation in labor-employer relations .....	109
8.20	Pay and productivity .....	103
4.08	Brain drain .....	75
4.09	Private sector employment of women .....	68
2.05	Ease of access to loans .....	55
<b>Technological readiness</b>		
3.01	Technological readiness .....	71
3.02	Firm-level technology absorption .....	74
3.15	Laws relating to ICT .....	92
3.19	Internet users, 2002 .....	55
3.21	Personal computers, 2002 .....	55

<<< (Cont'd. on bottom of left column)

# Uruguay

## Key Indicators

Total population (millions), 2005 .....	3.5
Gross Domestic Product (US\$ billions), 2005 .....	16.4
Gross Domestic Product per capita (PPP, US\$), 2005 .....	9,619.4
Real growth in GDP (percent), 2005.....	6.0
Growth of output (average annual percent change), 1990–2004 .....	2.2
Agriculture.....	3.4
Industry .....	0.3
Manufacturing .....	–0.3
Services .....	3.0
Inflation (annual percent change), 2005 .....	5.2
Budget balance (percent of GDP), 2005.....	–2.2
Gross fixed capital formation (percent of GDP), 2004.....	11.4
National savings rate (percent of GDP), 2004 .....	12.5
Interest rate spread (percent), 2005.....	26.4
Real effective exchange rate (percent)*, 2004.....	–33.8
Exports of goods and services (percent of GDP), 2004 .....	29.6
Imports of goods and services (percent of GDP), 2004.....	27.9
Current account balance (percent of GDP), 2005.....	–2.8
Gross official reserves in months of imports, 2004 .....	8.3
Government debt (percent of GDP), 2005 .....	77.6
Unemployment (percent of total labor force), 2004 .....	13.3
Gini index** .....	0.4

## Human Development Indicators

Gross primary enrollment (percent of relevant age group), 2003 .....	109.3
Gross secondary enrollment (percent of relevant age group), 2003 .....	105.6
Gross tertiary enrollment (percent of relevant age group), 2003 .....	37.4
Adult literacy rate (percent of population aged 15 and above), 2002 .....	97.7
Life expectancy at birth, 2003 .....	75.0
HIV prevalence rate (percent of population aged 15 to 49), 2003 .....	0.3
Public expenditure on health (percent of GDP), 2002 .....	2.9

## Infrastructure and Technology Diffusion Indicators

Paved roads (percent of total roads).....	90.0
Main telephone lines per 100 inhabitants, 2003 .....	29.0
Cellular mobile telephone subscribers per 100 inhabitants, 2003 ..	15.4
Personal computers per 100 inhabitants, 2003.....	12.7
Internet users per 100 inhabitants, 2003 .....	16.4

\* Real effective exchange rate 2004 relative to the 1997–2003 average. Values greater (less) than 0 indicate appreciation (depreciation).

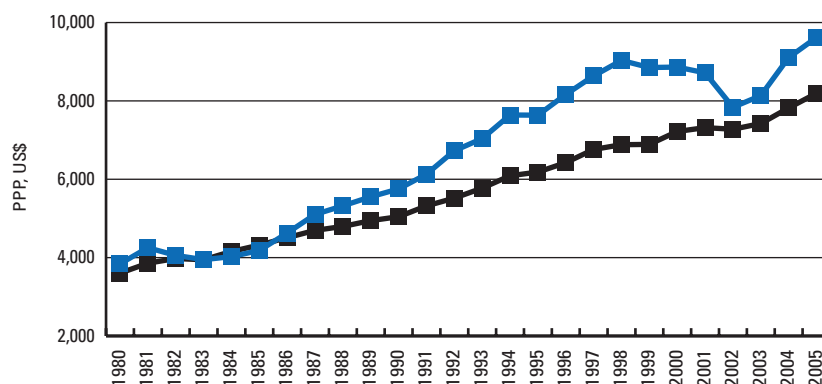
\*\* The Gini index is a number between 0 and 1 that is a measure of inequality, with lower (higher) values representing less (more) inequality.

Sources: UNFPA, *State of World Population 2005*; IMF, *World Economic Outlook Database*, September 2005; EIU, *CountryData Database*, December 2005; IMF, *International Financial Statistics Database*, December 2005; IMF, Information Notice System; IMF, IMF Country Report No. 05/109, March 2005; UNDP, *Human Development Report 2005*; UNESCO Institute for Statistics; WHO, *World Health Statistics 2005*; World Bank, *World Development Indicators 2005*; ITU, *World Telecommunication Indicators 2004*; ITU, *World Telecommunication Indicators 2004*



## GDP per capita (PPP, US\$), 1980–2005

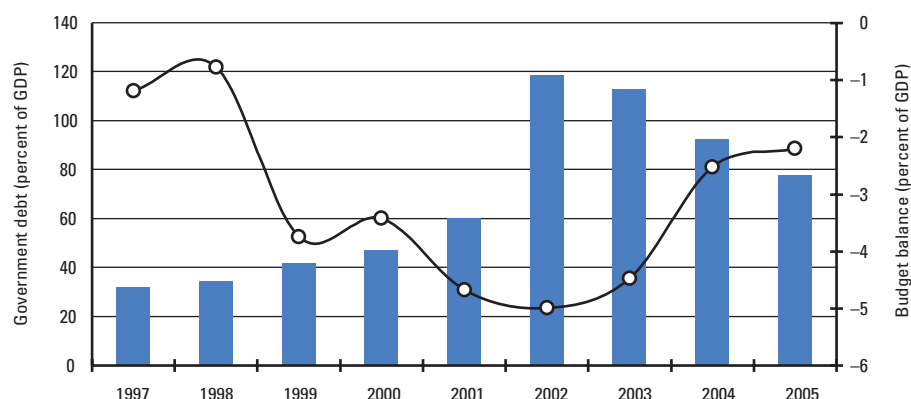
- Uruguay
- LA&C average



Source: IMF, World Economic Outlook Database, September 2005

## Government Debt and Budget Balance

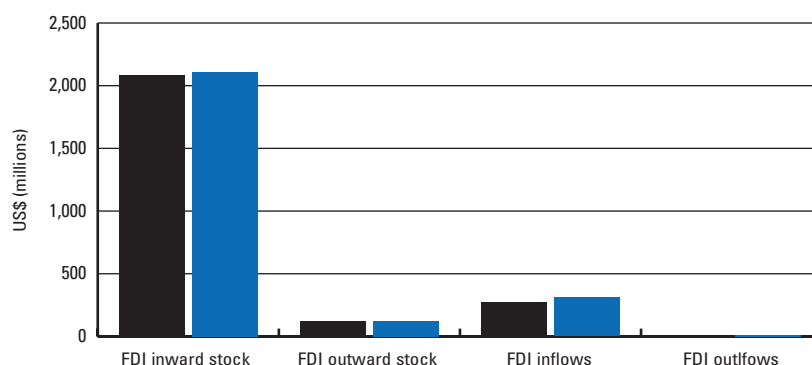
- Government debt (percent of GDP) (left axis)
- Budget balance (percent of GDP) (right axis)



Source: EIU, CountryData Database, December 2005

## FDI Inward and Outward Stocks and Flows (US\$ millions), 2000 and 2004

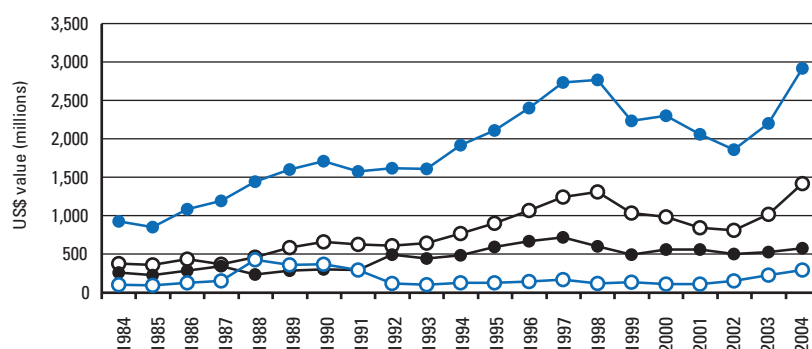
- 2000
- 2004



Source: UNCTAD, FDI Database, December 2005

## Main Exports (in millions US\$ value)

- All commodities
- Food and live animals chiefly for food
- Manufactured goods classified chiefly by materials
- Crude materials, inedible, except fuels



Source: UN Comtrade Database, December 2005

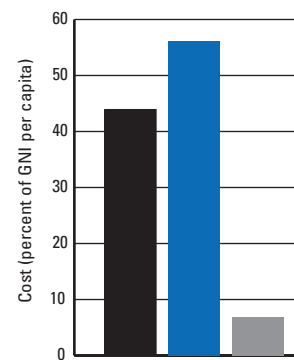
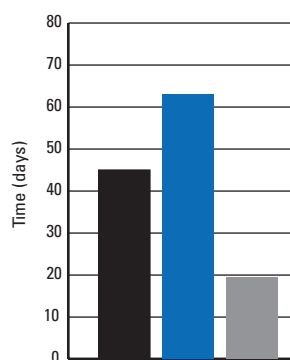
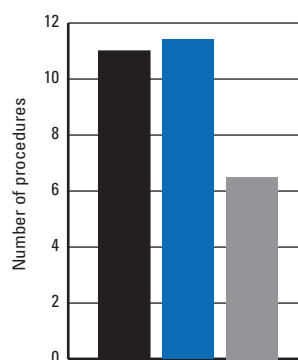
## Competitiveness Rankings

	Rank out of 117 countries	Rank out of 21 LA&C countries
<b>Global Competitiveness Index 2005 .....</b>	<b>70 .....</b>	<b>11 .....</b>
<b>Basic Requirements.....</b>	<b>54 .....</b>	<b>3 .....</b>
1st Pillar: Institutions .....	42 .....	2 .....
2nd Pillar: Infrastructure .....	57 .....	4 .....
3rd Pillar: Macroeconomy .....	98 .....	17 .....
4th Pillar: Health and Primary Education .....	34 .....	3 .....
<b>Efficiency Enhancers.....</b>	<b>71 .....</b>	<b>11 .....</b>
5th Pillar: Higher Education and Training.....	53 .....	4 .....
6th Pillar: Market Efficiency .....	106 .....	15 .....
7th Pillar: Technological Readiness .....	66 .....	11 .....
<b>Innovation Factors.....</b>	<b>75 .....</b>	<b>11 .....</b>
8th Pillar: Business Sophistication .....	76 .....	12 .....
9th Pillar: Innovation.....	76 .....	9 .....

Source: World Economic Forum, *Global Competitiveness Report 2005–2006*

## Starting a Business, 2005

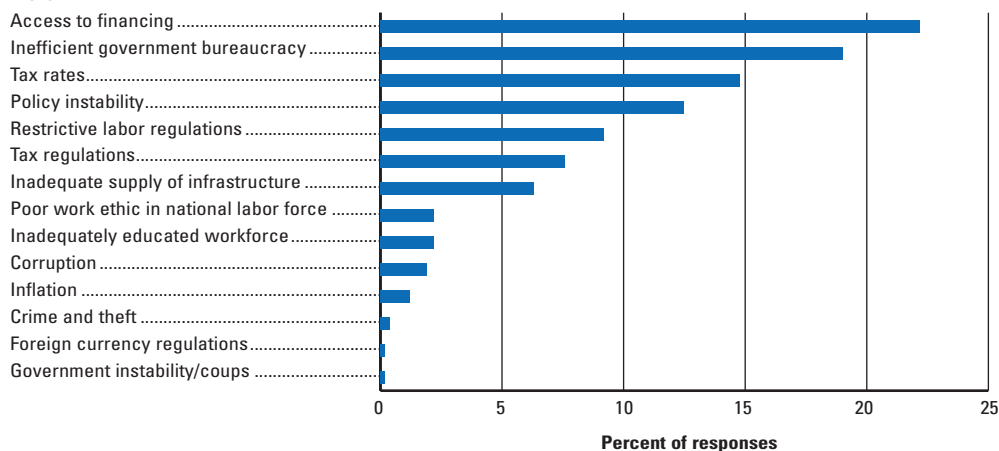
■ Uruguay  
■ LA&C average  
■ OECD average



Source: World Bank, *Doing Business in 2006: Creating Jobs*

## The Most Problematic Factors for Doing Business

FACTOR



Note: From a list of fourteen factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars show the responses weighted according to their rankings.

Source: World Economic Forum, Executive Opinion Survey 2005

# National Competitiveness Balance Sheet Based on the Global Competitiveness Index 2005

NOTABLE COMPETITIVE ADVANTAGES		RANK/117	NOTABLE COMPETITIVE DISADVANTAGES		RANK/117
<b>Institutions</b>			<b>Institutions</b>		
6.24	Diversion of public funds .....	34	6.03	Property rights.....	52
6.26	Public trust of politicians .....	37	6.06	Wastefulness of government spending.....	67
6.01	Judicial independence .....	26	6.07	Burden of government regulation .....	59
6.08	Favoritism in decisions of government officials.....	27	6.14	Reliability of police services .....	54
2.02	Business costs of terrorism .....	11	6.15	Business costs of crime and violence .....	64
6.16	Organized crime .....	20	8.16	Efficacy of corporate boards .....	89
8.04	Ethical behavior of firms .....	41	8.21	Protection of minority shareholders' interests.....	66
<b>Infrastructure</b>			8.23	Strength of auditing and accounting standards .....	105
5.01	Overall infrastructure quality .....	50	<b>Infrastructure</b>		
5.03	Port infrastructure quality.....	40	5.02	Railroad infrastructure development .....	98
5.05	Quality of electricity supply.....	37	5.04	Air transport infrastructure quality .....	95
5.08	Telephone lines, 2003 .....	38	<b>Macroeconomy</b>		
<b>Macroeconomy</b>			2.13	Government surplus/deficit, 2004.....	64
2.15	Real effective exchange rate, 2004 .....	5	2.14	National saving rate, 2004.....	105
<b>Health and primary education</b>			2.16	Inflation, 2004 .....	100
4.04	Medium-term business impact of malaria .....	7	2.17	Interest rate spread, 2004.....	108
4.05	Medium-term business impact of tuberculosis .....	8	2.20	Government debt, 2004 .....	105
4.06	Medium-term business impact of HIV/AIDS.....	24	<b>Health and primary education</b>		
4.11	Life expectancy, 2003 .....	35	4.10	Infant mortality .....	54
4.12	Tuberculosis prevalence, 2003 .....	38	4.13	Malaria prevalence .....	67
4.15	Primary enrollment, 2003.....	30	4.14	HIV prevalence, 2003 .....	61
<b>Higher education and training</b>			<b>Higher education and training</b>		
4.16	Secondary enrollment .....	18	4.01	Quality of the educational system .....	64
4.17	Tertiary enrollment .....	46	4.03	Quality of math and science education.....	80
<b>Market efficiency</b>			8.15	Quality of management schools .....	53
2.12	Agricultural policy costs .....	28	7.09	Local availability of specialized research and training services .....	62
6.02	Efficiency of legal framework .....	41	8.11	Extent of staff training .....	88
<b>Technological readiness</b>			<b>Market efficiency</b>		
3.19	Internet users, 2003.....	49	6.11	Extent and effect of taxation.....	96
3.21	Personal computers, 2003 .....	44	7.10	Number of procedures required to start a business.....	61
			7.11	Time required to start a business.....	65
			7.01	Intensity of local competition .....	96
			7.02	Effectiveness of antitrust policy.....	102
				GDP – exports + imports .....	81
			2.18	Exports, 2004 .....	76
			8.17	Hiring and firing practices .....	59
			8.18	Flexibility of wage determination .....	67
			8.19	Cooperation in labor-employer relations.....	79
			8.14	Reliance on professional management.....	84
			8.20	Pay and productivity .....	106
			4.08	Brain drain .....	84
			4.09	Private sector employment of women .....	92
			2.03	Financial market sophistication .....	75
			2.05	Ease of access to loans .....	102
			2.06	Venture capital availability .....	111
			2.04	Soundness of banks .....	112
			2.08	Local equity market access.....	113
			<b>Technological readiness</b>		
			3.01	Technological readiness .....	52
			3.02	Firm-level technology absorption .....	95
			3.15	Laws relating to ICT .....	74
			3.04	FDI and technology transfer.....	76
			3.18	Cellular telephones, 2003.....	76
			<b>Business sophistication</b>		
			7.05	Local supplier quantity .....	78
			7.06	Local supplier quality .....	72
			8.05	Production process sophistication .....	66
			8.06	Extent of marketing.....	66
			8.08	Control of international distribution .....	77
			8.12	Willingness to delegate authority.....	87
			8.01	Nature of competitive advantage .....	90
			8.02	Value chain presence .....	78

(Disadvantages cont'd. from bottom of right column)

<<< (Cont'd. on bottom of left column)

# Venezuela

## Key Indicators

Total population (millions), 2005 .....	26.7
Gross Domestic Product (US\$ billions), 2005 .....	131.0
Gross Domestic Product per capita (PPP, US\$), 2005 .....	5,801.4
Real growth in GDP (percent), 2005.....	7.8
Growth of output (average annual percent change), 1994–2004 .....	1.0
Agriculture.....	0.9
Industry .....	1.8
Manufacturing .....	0.3
Services .....	0.2
Inflation (annual percent change), 2005 .....	16.6
Budget balance (percent of GDP), 2005.....	–0.5
Gross fixed capital formation (percent of GDP), 2004.....	17.7
National savings rate (percent of GDP), 2004 .....	33.7
Interest rate spread (percent), 2005.....	5.4
Real effective exchange rate (percent)*, 2004.....	–23.9
Exports of goods and services (percent of GDP), 2004 .....	36.4
Imports of goods and services (percent of GDP), 2004.....	20.3
Current account balance (percent of GDP), 2005.....	15.9
Gross official reserves in months of imports, 2004 .....	n/a
Government debt (percent of GDP), 2005 .....	31.9
Unemployment (percent of total labor force), 2004 .....	15.1
Gini index** .....	0.5

## Human Development Indicators

Gross primary enrollment (percent of relevant age group), 2003 .....	103.9
Gross secondary enrollment (percent of relevant age group), 2003 .....	69.9
Gross tertiary enrollment (percent of relevant age group), 2003 .....	40.2
Adult literacy rate (percent of population aged 15 and above), 2001 .....	93.0
Life expectancy at birth, 2003 .....	74.0
HIV prevalence rate (percent of population aged 15 to 49), 2003 .....	0.7
Public expenditure on health (percent of GDP), 2002 .....	2.3

## Infrastructure and Technology Diffusion Indicators

Paved roads (percent of total roads).....	33.6
Main telephone lines per 100 inhabitants, 2003 .....	11.1
Cellular mobile telephone subscribers per 100 inhabitants, 2003 ..	27.3
Personal computers per 100 inhabitants, 2002 .....	6.1
Internet users per 100 inhabitants, 2003 .....	6.0

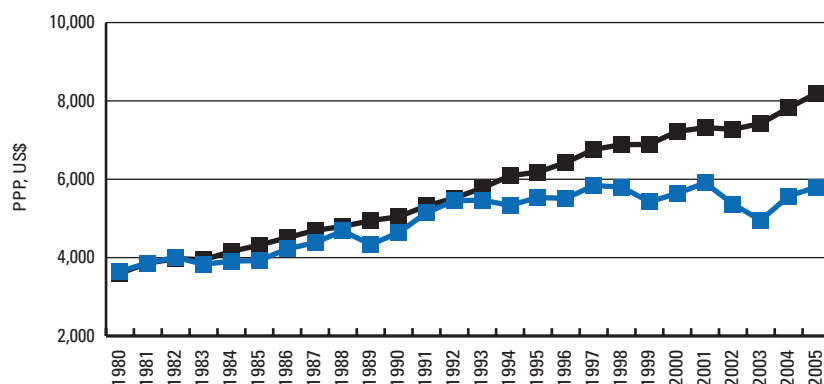
\* Real effective exchange rate 2004 relative to the 1997–2003 average. Values greater (less) than 0 indicate appreciation (depreciation).

\*\* The Gini index is a number between 0 and 1 that is a measure of inequality, with lower (higher) values representing less (more) inequality.

Sources: UNFPA, *State of World Population 2005*; IMF, *World Economic Outlook Database*, September 2005; EIU, *CountryData Database*, December 2005; IMF, *International Financial Statistics Database*, December 2005; IMF, Information Notice System; UNDP, *Human Development Report 2005*; UNESCO Institute for Statistics; WHO, *World Health Statistics 2005*; World Bank, *World Development Indicators 2005*; ITU, *World Telecommunication Indicators 2004*; UN Statistics Division and ITU estimates

## GDP per capita (PPP, US\$), 1980–2005

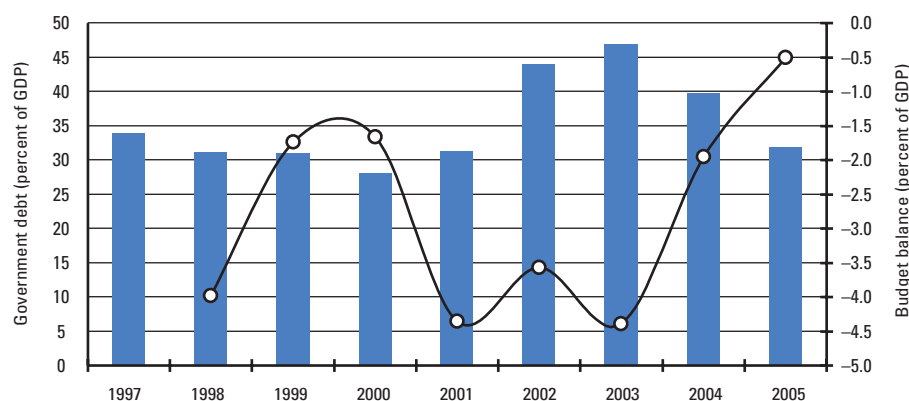
- Venezuela
- LA&C average



Source: IMF, World Economic Outlook Database, September 2005

## Government Debt and Budget Balance

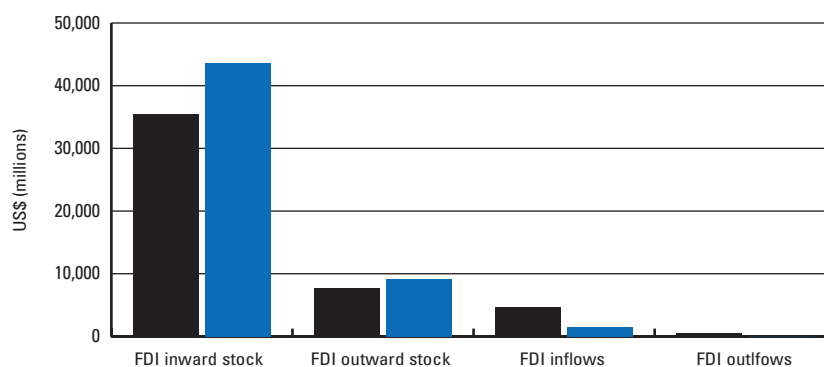
- Government debt (percent of GDP) (left axis)
- Budget balance (percent of GDP) (right axis)



Source: EIU, CountryData Database, December 2005

## FDI Inward and Outward Stocks and Flows (US\$ millions), 2000 and 2004

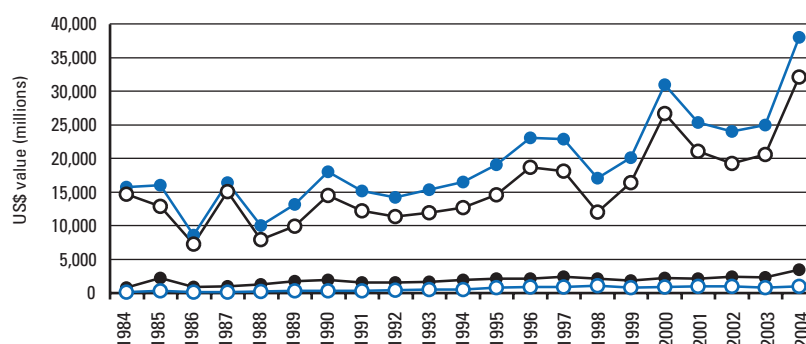
- 2000
- 2004



Source: UNCTAD, FDI Database, December 2005

## Main Exports (in millions US\$ value)

- All commodities
- Mineral fuels, lubricants and related materials
- Manufactured goods classified chiefly by materials
- Chemicals and related products, nes



Source: UN Comtrade Database, December 2005

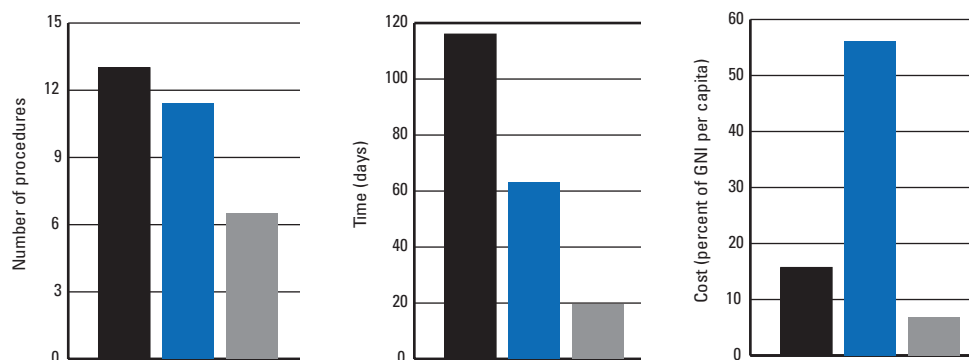
## Competitiveness Rankings

	Rank out of 117 countries	Rank out of 21 LA&C countries
<b>Global Competitiveness Index 2005 .....</b>	<b>84 .....</b>	<b>13 .....</b>
<b>Basic Requirements.....</b>	<b>79 .....</b>	<b>13 .....</b>
1st Pillar: Institutions .....	116 .....	20 .....
2nd Pillar: Infrastructure .....	77 .....	12 .....
3rd Pillar: Macroeconomy .....	45 .....	5 .....
4th Pillar: Health and Primary Education .....	43 .....	8 .....
<b>Efficiency Enhancers.....</b>	<b>76 .....</b>	<b>13 .....</b>
5th Pillar: Higher Education and Training.....	77 .....	12 .....
6th Pillar: Market Efficiency .....	95 .....	12 .....
7th Pillar: Technological Readiness .....	60 .....	7 .....
<b>Innovation Factors.....</b>	<b>92 .....</b>	<b>13 .....</b>
8th Pillar: Business Sophistication .....	92 .....	16 .....
9th Pillar: Innovation.....	88 .....	11 .....

Source: World Economic Forum, *Global Competitiveness Report 2005–2006*

## Starting a Business, 2005

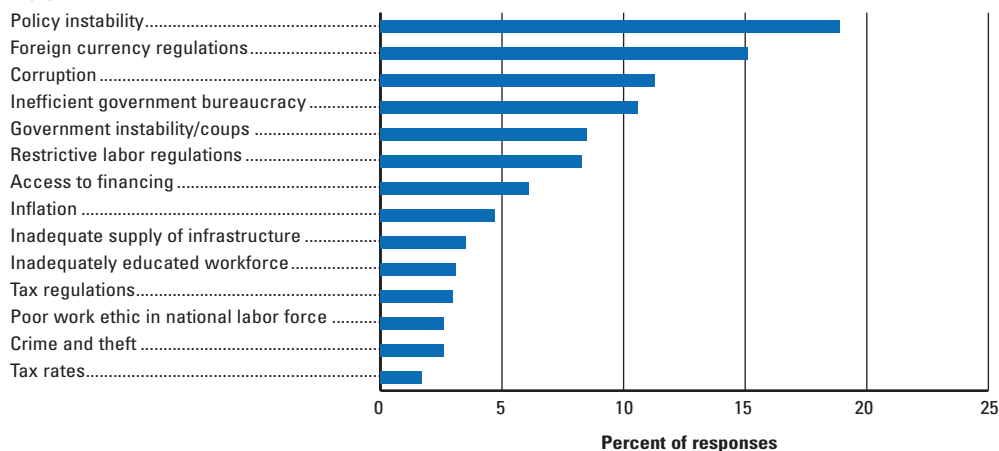
■ Venezuela  
■ LA&C average  
■ OECD average



Source: World Bank, *Doing Business in 2006: Creating Jobs*

## The Most Problematic Factors for Doing Business

FACTOR



Note: From a list of fourteen factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars show the responses weighted according to their rankings.

Source: World Economic Forum, Executive Opinion Survey 2005

# National Competitiveness Balance Sheet Based on the Global Competitiveness Index 2005

NOTABLE COMPETITIVE ADVANTAGES		RANK/117
<b>Macroeconomy</b>		
2.13	Government surplus/deficit, 2004 .....	33
2.14	National saving rate, 2004 .....	9
2.20	Government debt, 2004 .....	33
2.15	Real effective exchange rate, 2004 .....	10
<b>Health and primary education</b>		
4.11	Life expectancy, 2003 .....	40
4.12	Tuberculosis prevalence, 2003 .....	47
<b>Higher education and training</b>		
4.17	Tertiary enrollment .....	40
<b>Market efficiency</b>		
8.14	Reliance on professional management .....	49
4.09	Private sector employment of women .....	20
<b>Technological readiness</b>		
3.01	Technological readiness .....	37
<b>Innovation</b>		
3.17	Utility patents, 2004 .....	47

(Disadvantages cont'd. from bottom of right column)

NOTABLE COMPETITIVE DISADVANTAGES		RANK/117
<b>Technological readiness</b>		
3.02	Firm-level technology absorption .....	66
3.15	Laws relating to ICT .....	58
3.04	FDI and technology transfer .....	81
3.18	Cellular telephones, 2003 .....	60
3.19	Internet users, 2003 .....	72
3.21	Personal computers, 2002 .....	59
<b>Business sophistication</b>		
7.05	Local supplier quantity .....	104
7.06	Local supplier quality .....	92
8.05	Production process sophistication .....	76
8.06	Extent of marketing .....	59
8.08	Control of international distribution .....	111
8.12	Willingness to delegate authority .....	71
8.01	Nature of competitive advantage .....	105
8.02	Value chain presence .....	106
<b>Innovation</b>		
3.05	Quality of scientific research institutions .....	95
3.06	Company spending on research and development .....	87
3.07	University/industry research collaboration .....	63
3.08	Government procurement of advanced technology products .....	76
6.04	Intellectual property protection .....	106
3.09	Availability of scientists and engineers .....	54
8.03	Capacity for innovation .....	102

NOTABLE COMPETITIVE DISADVANTAGES		RANK/117
<b>Institutions</b>		
6.03	Property rights .....	117
6.24	Diversion of public funds .....	117
6.26	Public trust of politicians .....	112
6.01	Judicial independence .....	114
6.08	Favoritism in decisions of government officials .....	116
6.06	Wastefulness of government spending .....	116
6.07	Burden of government regulation .....	111
2.02	Business costs of terrorism .....	88
6.14	Reliability of police services .....	113
6.15	Business costs of crime and violence .....	111
6.16	Organized crime .....	104
8.04	Ethical behavior of firms .....	98
8.16	Efficacy of corporate boards .....	107
8.21	Protection of minority shareholders' interests .....	93
8.23	Strength of auditing and accounting standards .....	103
<b>Infrastructure</b>		
5.01	Overall infrastructure quality .....	70
5.02	Railroad infrastructure development .....	105
5.03	Port infrastructure quality .....	86
5.04	Air transport infrastructure quality .....	75
5.05	Quality of electricity supply .....	63
5.08	Telephone lines, 2003 .....	76
<b>Macroeconomy</b>		
2.16	Inflation, 2004 .....	115
2.17	Interest rate spread, 2004 .....	64
<b>Health and primary education</b>		
4.04	Medium-term business impact of malaria .....	79
4.05	Medium-term business impact of tuberculosis .....	63
4.06	Medium-term business impact of HIV/AIDS .....	86
4.10	Infant mortality .....	65
4.13	Malaria prevalence .....	87
4.14	HIV prevalence, 2003 .....	80
4.15	Primary enrollment, 2003 .....	52
<b>Higher education and training</b>		
4.16	Secondary enrollment .....	86
4.01	Quality of the educational system .....	105
4.03	Quality of math and science education .....	81
8.15	Quality of management schools .....	55
7.09	Local availability of specialized research and training services .....	99
8.11	Extent of staff training .....	79
<b>Market efficiency</b>		
2.12	Agricultural policy costs .....	110
6.02	Efficiency of legal framework .....	117
6.11	Extent and effect of taxation .....	55
7.10	Number of procedures required to start a business .....	84
7.11	Time required to start a business .....	101
7.01	Intensity of local competition .....	97
7.02	Effectiveness of antitrust policy .....	67
	GDP – exports + imports .....	52
2.18	Exports, 2004 .....	71
8.17	Hiring and firing practices .....	117
8.18	Flexibility of wage determination .....	97
8.19	Cooperation in labor-employer relations .....	110
8.20	Pay and productivity .....	105
4.08	Brain drain .....	83
2.03	Financial market sophistication .....	61
2.05	Ease of access to loans .....	79
2.06	Venture capital availability .....	101
2.04	Soundness of banks .....	89
2.08	Local equity market access .....	94

<<< (Cont'd. on bottom of left column)

# About the Authors

## Laura Alfaro

Laura Alfaro is Associate Professor at Harvard Business School in the Business, Government, and International Economy Unit. She is also a faculty associate at Harvard's Weatherhead Center for International Affairs. Her primary expertise is international economics, in particular international capital flows, foreign direct investment, and sovereign debt. Her latest research has focused on the role played by local institutions in attracting capital flows and allowing positive benefits of such flows, in particular foreign direct investment, to materialize. Laura Alfaro earned her PhD in economics from the University of California, at Los Angeles (UCLA) in 1999, where she was recipient of the Dissertation Fellowship award. She received a BA in economics with honors from the Universidad de Costa Rica in 1992 and a Licenciatura from the Pontificia Universidad Católica de Chile in 1994, from which she graduated with highest honors.

## Laura Altinger

Laura Altinger joined the World Economic Forum as Senior Economist after transferring from the United Nations Economic Commission for Europe, where she worked on economic and environmental issues related to the European, Central Asian, and North American regions, and contributed to various issues of their flagship publication, the *Economic Survey of Europe*. Her recent project for the Environment Division was awarded a Swiss government research grant. Previously, she worked as an economics consultant for various organizations including the National Economic Research Associates (NERA), Maxwell Stamp, and the Council of the European Union, advising a number of governments such as Bangladesh, the United Arab Emirates, Kenya, the Bahamas, and Eire, as well as various clients including the Irish Presidency of the Council of the EU, the European Commission, and the UK regulator for the telecommunications industry. She holds a PhD from London Business School, an MSc from Bristol University, and an MA from Cambridge University.

## Paulo Roberto de Almeida

Paulo Roberto de Almeida has been Special Advisor to the head of the Strategic Affairs Unit of the Brazilian Presidency, in Brasília, since late 2003. Since receiving his MA in economic planning and PhD in social sciences in 1977, he has served as a career diplomat and as professor of International Economics. Prior to his current position, Dr. Almeida was Minister-Counselor at the Brazilian Embassy in Washington (1999–2003). Among his many published books are: *Envisioning Brazil: a Guide to Brazilian Studies in the United States* (ed. with Marshall C. Eakin, 2005); *Formação da diplomacia econômica no Brasil* (2005); *Une Histoire du Brésil: pour comprendre le Brésil contemporain* (with Katia de Q. Mattoso, 2002); *Le Mercosud: un marché commun pour l'Amérique du Sud* (2000); *O Brasil e o multilateralismo econômico* (1999).

## Omar S. Arias

Omar S. Arias is Senior Economist with the Poverty and Gender Group, Latin America, and the Caribbean Region at the World Bank. Dr. Arias' principal research interests are the strategy and policy formulation of labor markets and public policies to reduce poverty and inequality in Latin America and the Caribbean. He also supports the design, targeting, and impact evaluation of poverty-targeted projects, the elaboration of national poverty

reduction strategies, and Country Assistance Strategies. His research has focused on the impact of growth on the poor, family income dynamics, the determinants of tax evasion, and the various links between labor markets and poverty including returns to schooling, informal labor, and migration. From 1998 to 1999, Dr. Arias worked at the Bank as a Consultant for the Poverty Reduction and Economic Management Department in Latin America. Born in the Dominican Republic, he received his BA in economics from the Instituto Tecnológico de Santo Domingo (INTEC), and was a Fulbright Scholar at the University of Illinois at Urbana-Champaign, where he obtained his PhD in economics with a concentration in public finance, labor economics, and applied econometrics.

## Carlos Arruda

Carlos Arruda is Professor of Competitiveness and Innovation and Coordinator of the Innovation and Entrepreneurship Centre at Fundação Dom Cabral, where he teaches courses on the Management of Innovation and Competitiveness. Prior to his current position, Professor Arruda was a Senior Officer at the International Trade Centre, and Associate Dean for Research, Development and Finance, and MBA Director and Coordinator of the Competitiveness and Internationalization of the Brazilian Enterprises Centre at the Foundation for Development Corporation (FDC). Dr. Arruda has also been visiting professor of international organizations at the Australian Graduate School of Management, and of economic development at the TRIUM Program and at the BVLA program of the Harvard Business School. He received his PhD in international business from the Bradford Management Centre. In addition to many articles, chapters and case studies, Dr. Arruda has written two books, entitled *Internationalization of Brazilian Enterprises* and *Brazilian Competitiveness*.

## Jennifer Blanke

Jennifer Blanke is Senior Economist and Associate Director of the Global Competitiveness Network at the World Economic Forum. She has written and lectured extensively on issues related to national competitiveness. From 1998 to 2001, she was Senior Program Manager responsible for developing the business, management, and technology section of the World Economic Forum's Annual Meeting in Davos. Before joining the Forum, Blanke worked for a number of years as a management consultant for Eurogroup (Mazars Group) in Paris, France, where she specialized in banking and financial market organization. Blanke obtained an MA in international affairs from Columbia University and an MA and a PhD in international economics from the Graduate Institute of International Studies (Geneva).

## Mario I. Blejer

Mario I. Blejer is currently the Director of the Centre for Central Banking Studies at the Bank of England. He is also a member of the Financial Stability Board and Advisor to the Governor. During 2001–2002 he was Deputy Governor and then Governor of the Central Bank of Argentina. Previously, he served 21 years at the International Monetary Fund, where he was Senior Advisor at the Monetary and Exchange Affairs and the Asian Departments, working also in the European, Fiscal and Research Departments. Dr. Blejer held the Walther Rathenau Chair in Economics at The Hebrew University of Jerusalem (1996–1999) and taught at Boston University, New York University, Johns Hopkins University,



the University of Geneva, and George Washington University. He also held recurrent positions as a professor at Universidad de San Andrés, Buenos Aires, Argentina, and the Central European University, Budapest. He received his BA and MA from the Hebrew University of Jerusalem and his PhD from the University of Chicago. He has published numerous books and articles in specialized journals.

#### **Margareta Drzeniek**

Margareta Drzeniek is Senior Economist with the Global Competitiveness Network at the World Economic Forum. She is responsible for developing the economics section of the program for the World Economic Forum's Annual Meeting in Davos and also contributes to the work of the Global Competitiveness Network. Before joining the Global Competitiveness Team she worked for several years with the International Trade Centre in Geneva, where she designed and managed trade promotion projects for Central and Eastern European countries. Drzeniek received a diploma in economics from the University of Münster and holds a PhD in international economics from the University of Bochum, both in Germany.

#### **Pablo E. Guidotti**

Pablo E. Guidotti is Dean of the School of Government, Universidad Torcuato Di Tella, and Director of the consulting company LECG. He is a founding member of the Latin American Shadow Financial Regulatory Committee. He has been member of the Board of Directors of Caja de Valores, S.A., external advisor to the Board of Directors of Banco de Galicia S.A., Moore Capital Strategy Group as well as Visiting Scholar at the IMF. Prior to that, Dr. Guidotti was Deputy Minister of Finance and Secretary of the Treasury of Argentina. He also served as co-Chairman of the G-22 Working Group on Strengthening Financial Systems, and held several positions at the Central Bank, including Second Vice President and member of the Board of Directors. Dr. Guidotti has also been a member of the Executive Board for the Trust Fund for Bank Capitalization. Dr. Guidotti has published numerous articles in books and in scholarly journals, and holds a PhD in economics from the University of Chicago.

#### **Eliza Hammel**

Eliza Hammel is a PhD candidate in business economics at Harvard University and the Harvard Business School. Her primary research areas are international economics and corporate finance, with a particular focus on emerging markets. Before her graduate work, Eliza was a consultant with McKinsey & Company for several multinationals.

#### **David S. Hoelscher**

David S. Hoelscher is the Division Chief for the Systemic Issues Division of the Monetary and Financial Systems Department at the International Monetary Fund. He has worked extensively in a number of countries including Argentina, Ecuador, and Russia. Prior to his current position, he spent ten years in the Western Hemisphere Department. He was also resident representative for the Fund in Bolivia and Kazakhstan. His publications include an IMF Board paper, "Managing Systemic Banking Crises in the Context of Sovereign Debt Restructuring," an occasional paper "Managing Systemic Banking Crises" and has recently edited the book *Bank Restructuring and Resolution* (forthcoming).

#### **Felipe Larraín**

Felipe Larraín is Professor of Economics at Universidad Católica de Chile in Santiago. From 1997 to 1999 he was the Robert F. Kennedy Visiting Professor of Latin American Studies at Harvard University in Cambridge. Since 1985, he has served as economic advisor to several American governments, including Bolivia, Canada, Colombia, Costa Rica, Chile, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Jamaica, Mexico, Nicaragua, Paraguay, Peru, and Venezuela. Dr. Larraín is a consult-

ant on macroeconomic issues to the UN, the World Bank, the IMF, and the IADB, and to a number of Latin American and US companies. He received his PhD (1985) and MA (1983) in economics from Harvard University. President of Felipe Larraín B. & Associates, he is also the editor and author of 11 books, including *Macroeconomics in the Global Economy*, (co-authored with Jeffrey Sachs) and has published over 120 articles in books and specialized journals in Latin America, the United States and Europe.

#### **Humberto López**

Humberto López is Senior Economist in the Office of the Chief Economist of the Latin America and Caribbean region of the World Bank. Previously, Dr. López served for five years as a country economist in the Bank's Central America Department where he worked on operational aspects of the PRSP and HIPC initiatives, and two years in the Poverty Department of the World Bank working on pro-poor growth, and on poverty and social impact analysis. Before joining the Bank permanently, he was Professor of Economics at the University of Salamanca (Spain) and a Visiting Professor at Louisiana State University, Baton Rouge. Dr. López has published widely on issues related to fiscal policy, optimal currency areas, real exchange rate misalignment, international business cycle synchronization, armed conflict and development, and pro-poor growth. A native of Spain, he received a BA degree from the University of the Basque Country, where he first studied economics, and later received an MSc from the University of Warwick (1991), and PhD in economics (1995) from the European University Institute of Florence (Italy).

#### **Augusto López-Claros**

Augusto López-Claros is Chief Economist and Director of the Global Competitiveness Network at the World Economic Forum in Geneva. Before joining the Forum he was Executive Director and Senior International Economist with Lehman Brothers International (London). He was the International Monetary Fund's resident representative in the Russian Federation (Moscow) from 1992 to 1995. Augusto López-Claros was educated in England and the United States, receiving a diploma in mathematical statistics from Cambridge University and a PhD in economics from Duke University. Before joining the IMF, he was Professor of Economics at the University of Chile in Santiago. He has written and lectured extensively in South America, the United States, Asia, and Europe on a broad range of subjects, including aspects of economic reform in transition economies, economic integration, interdependence and cooperation, governance, peace, and issues in the reform of international organizations.

#### **William F. Maloney**

William F. Maloney is Lead Economist in the Office of the Chief Economist of the Latin America and Caribbean region at the World Bank. Dr. Maloney has published on issues related to international trade, the impact and sequencing of liberalization, speculative attacks on currencies, developing country labor markets, and issues of innovation. Before joining the Bank, Dr. Maloney was a Professor of International and Development Economics at the University of Illinois, Champaign-Urbana (1990–1997). He also served as a consultant for the Bank of Mexico (1994–95) and Nigeria (1986), and at the Harvard Kennedy School of Government (1982). A native of Boston, he received a BA degree in economics and political science from Harvard University (1981), and later studied at the University of the Andes in Bogotá, Colombia (1982–83) before attending the University of California Berkeley for his PhD in economics (1990).

#### **Irene Mia**

Irene Mia is a Senior Economist with the Global Competitiveness Network at the World Economic Forum. Her responsibilities include researching on competitiveness issues and developing the economic content for World Economic Forum activities. She is also in charge of the technical coordination and one of the Editors

of the *Global Information Technology Report 2005–2006*. Her main research interests are in the field of development, international trade, and economic integration (with special reference to the Latin American region) and competitiveness. She has written and spoken extensively on issues related to national competitiveness. Before joining the Forum, she worked at the headquarters of Sudameris Bank in Paris for a number of years, holding various positions in the international affairs and international trade divisions. Irene Mia has an MA in Latin American Studies from the Institute of Latin American Studies, London University, and a PhD in international economic and trade law from Bocconi University.

#### Moisés Naím

Moisés Naím is Editor-in-Chief of *Foreign Policy* magazine. He has written extensively on international political economy, underdevelopment, US foreign policy and the unintended consequences of globalization. He is the author or editor of eight books including *Illicit: How Smugglers, Traffickers and Copycats Are Hijacking the Global Economy*. His regular opinion columns appear in the *Financial Times*, *El País*, *Newsweek*, *Corriere della Serra* and many other internationally-recognized newspapers and magazines. Dr. Naím previously served as an executive director at the World Bank, and directed policy studies on economic reforms at the Carnegie Endowment for International Peace. He also served as Venezuela's Minister of Trade and Industry in the early 1990's. Prior to his ministerial position, he was professor and dean at IESA, a business school and research center in Caracas. Dr. Naím is currently one of six members of *Time* magazine's board of international economists. Dr. Naím holds MSc and PhD degrees from the Massachusetts Institute of Technology.

#### Guillermo Perry

Guillermo Perry is Chief Economist for Latin America and the Caribbean region at the World Bank, appointed in August, 1996. Prior to joining the Bank, Dr. Perry served his native Colombia in various capacities: as Minister of Finance and Public Credit (August 1994 to April 1996), as Minister of Mining and Energy (1986 to 1988), as Director of National Taxes (1974 to 1976), and as Deputy Director of the Departamento Nacional de Planeación y Consejo Nacional de Política Económica, in 1970. He was also a Member of the Constitutional Assembly (1991) and of the Senate of the Republic (1990). He has had broad consulting experience around the world in public finances, tax, and energy policy, through the Harvard Institute for International Development, the World Bank, IDB, and other institutions. Dr. Perry was Director of two of Colombia's leading economic think-tanks: FEDESARROLLO (1988–1989) and Center for Economic Development Studies (CEDE), (1972–1974), and has been a professor at Universidad de los Andes and Universidad Nacional de Colombia. He received his PhD in economics and operational research from the Massachusetts Institute of Technology.

#### Luis Servén

Luis Servén is Research Manager for Macroeconomics and Growth in the Development Research Group at the World Bank. His recent research focuses on open economy macroeconomics, fiscal policy and growth, exchange rate regimes, international portfolio diversification, saving and investment determinants, and microeconomic regulation and growth. After joining the Bank in 1988, he worked at the Research Department, and from 1999 to 2004, managed the regional research program on Latin America and the Caribbean. Prior to joining the Bank he worked as a senior researcher at FEDEA and taught at the Universidad Complutense of Madrid, MIT and CEMFI. A citizen of Spain, he holds a Bachelor in economics from the Universidad Complutense de Madrid and a PhD in economics from the Massachusetts Institute of Technology.

#### Ernesto Stein

Ernesto Stein is Principal Research Economist in the Research Department of the Inter-American Development Bank. His areas of expertise include regional integration, foreign direct investment, institutional economics and political economy. He has published several journal articles and book chapters on regional integration, currency unions, political economy of exchange rate policy, and budget institutions. His current research focuses on the study of policymaking processes in Latin America, and on the effect of political institutions on economic outcomes. In this area, he has coordinated a team of researchers in the production of the IDB 2006 Economic and Social Progress of Latin America Report, entitled *The Politics of Policies*. He holds a PhD in economics from the University of California at Berkeley.

#### Arturo Valenzuela

Arturo Valenzuela is Professor of Government and Director of the Center for Latin American Studies in the Edmund A. Walsh School of Foreign Service of Georgetown University. A specialist on the origins and consolidation of democracy, Latin American politics, electoral systems, civil-military relations, political parties, regime transitions, and US-Latin American relations, Dr. Valenzuela is an expert on the politics of the Southern Cone and Mexico. During President Clinton's first term of office, Dr. Valenzuela served as Deputy Assistant Secretary for Inter-American Affairs in the US Department of State, and during the second term, as Special Assistant to the President and Senior Director for Inter-American Affairs at the National Security Council. He is a member of the Council on Foreign Relations. In addition to numerous media appearances, he is the author or co-author of nine books. His many articles have appeared in *Comparative Politics*, *Foreign Policy*, *Foreign Affairs*, *Rivista Italiana di Scienza Politica*, *Estudios Públicos*, and the *Latin American Research Review*.

#### René Villarreal

René Villarreal is currently President of the Center of Intellectual Capital and Competitiveness in Mexico and of the Institute of Systemic Competitiveness and Development, where he has elaborated the competitiveness programs for the state of Nuevo León, Coahuila, and Durango, as well as for PEMEX Refinery, among others. From 1988 to 1998 he was President and CEO of PIPSA one of the largest public enterprises in Mexico. He served as Under-Secretary of Industry and Trade from 1982 to 1985, as General Director of the Center of Industrial Re-Conversion at the Energy, Mining and Public Industry Ministry (SEMIP 1987–1988) and Director of International Finances and Tributary Planning at the Treasury Ministry. He has published numerous books, of which the most recent is *NAFTA: Ten Years Later, Mexico's Experience and Lessons for Latin America* as well as numerous articles. Dr. Villarreal received his PhD in economics from Yale University.