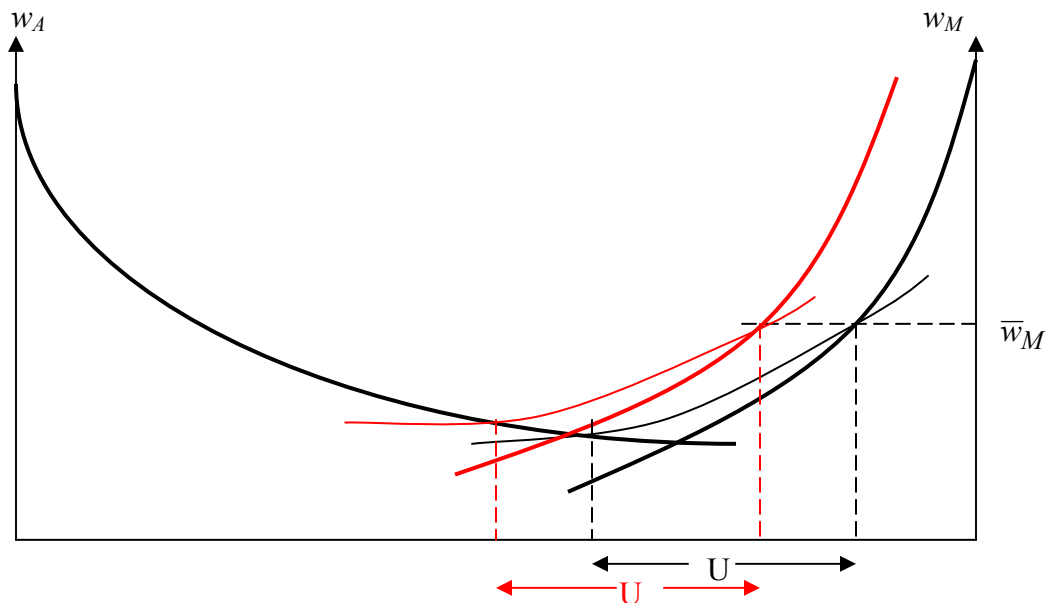


**Economics 404W**  
**Lecture 15**  
 February 28, 2006

**E. Migration and Unemployment**

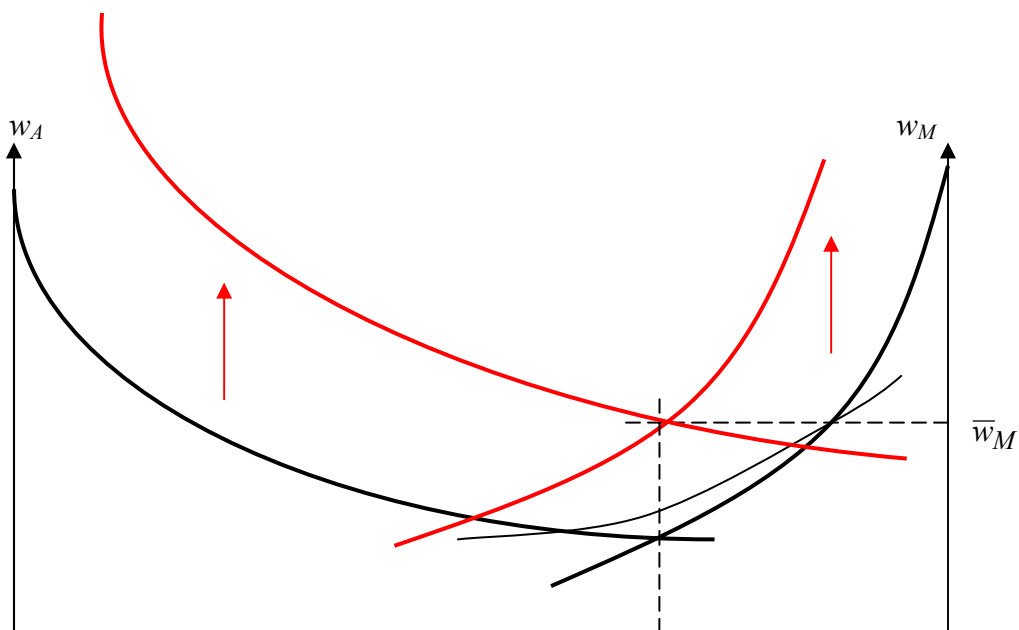
Possible policies:

- Increase demand for modern sector products through subsidies or protection. (Effect is to shift out demand for modern workers, attracting new migrants by driving up probability of employment. That is, creation of more high-wage jobs can be counter-productive.)
- Prohibit migration to the cities. This has been done in Africa.
- Subsidize agricultural employment; promote rural development.
- Spread information about job queues and rationing mechanisms. If everyone knows who gets the next jobs, there is no point hanging around the city to queue up.



The graph above depicts the effects of policies that shift demand for modern sector labor outward. Note that unemployment need not fall, because the extra demand attracts more migrants. Is there a net gain in the value of output?

What is optimal? Given these VMP schedules, the first-best alternative is to go to the  $VMP_A$  and  $VMP_M$  intersection point (i.e., the labor allocation that obtains in competitive equilibrium), and eliminate unemployment entirely. This can be done, in principle, by subsidizing both industry and agriculture, financing the subsidies with lump-sum taxes.



Of course this may not be feasible if taxation to finance the subsidies is not politically possible, or if it introduces new distortions.

The Harris-Todaro model as I have described it doesn't fit the data in a literal sense. The rate of open unemployment is only about 10-15 percent in the problem cities, and after adjusting for disguised unemployment, probably not over 30 percent in most cases. Yet urban wages are sometimes double rural wages, implying 50 percent unemployment.

The model can be reconciled with the data in various ways:

- Incomplete job turnover. Actual rates of job turnover are around 15 percent in semi-industrialized countries.
- Search while working in the informal sector, albeit not as intensively (hence number searching exceeds number of unemployed.)

## G. A Final Issue: How well does LDC industry do, once it emerges?

### 1. The size distribution is skewed toward smaller plants

**TABLE 1: THE DISTRIBUTION OF EMPLOYMENT SHARES ACROSS PLANT SIZES**

	Number of Workers					
	<i>1-4</i>	<i>5-9</i>	<i>10-19</i>	<i>20-49</i>	<i>50-99</i>	<i>&gt;99</i>
United States, 1992 <sup>a</sup>	1.3	2.6	4.6	10.4	11.6	69.4
Mexico, 1993 <sup>b</sup>	13.8	4.5	5.0	8.6	9.0	59.1
Indonesia, 1986 <sup>c</sup>	44.2	17.3		38.5		
S. Korea, 1973 <sup>d</sup>	7.9	22.0			70.1	
S. Korea, 1988 <sup>e</sup>	12			27		61
Taiwan, 1971 <sup>c</sup>	29.1				70.8	
Taiwan, 1986 <sup>f</sup>	20			29		51
India, 1971 <sup>g</sup>	42		20		38	
Tanzania, 1967 <sup>g</sup>	56		7		37	
Ghana, 1970 <sup>g</sup>	84		1		15	
Kenya, 1969 <sup>g</sup>	49		10		41	
Sierra Leone, 1974 <sup>g</sup>	90		5		5	
Indonesia, 1977 <sup>g</sup>	77		7		16	
Zambia, 1985 <sup>g</sup>	83		1		16	
Honduras, 1979 <sup>g</sup>	68		8		24	
Thailand, 1978 <sup>g</sup>	58		11		31	
Philippines, 1974 <sup>g</sup>	66		5		29	
Nigeria, 1972 <sup>g</sup>	59		26		15	
Jamaica, 1978 <sup>g</sup>	35		16		49	
Colombia, 1973 <sup>g</sup>	52		13		35	
Korea, 1975 <sup>g</sup>	40		7		53	

<sup>a</sup> source: 1992 United States Census of Manufacturing, unpublished Census Bureau calculations.

<sup>b</sup> source: INEGI (1995).

<sup>c</sup> source: Steel (1993)

<sup>d</sup> source: Little et al (1987, Table 6.5)

<sup>e</sup> source: 1988 Census of Manufacturing, Republic of Korea, calculations of Bee-Yan Aw.

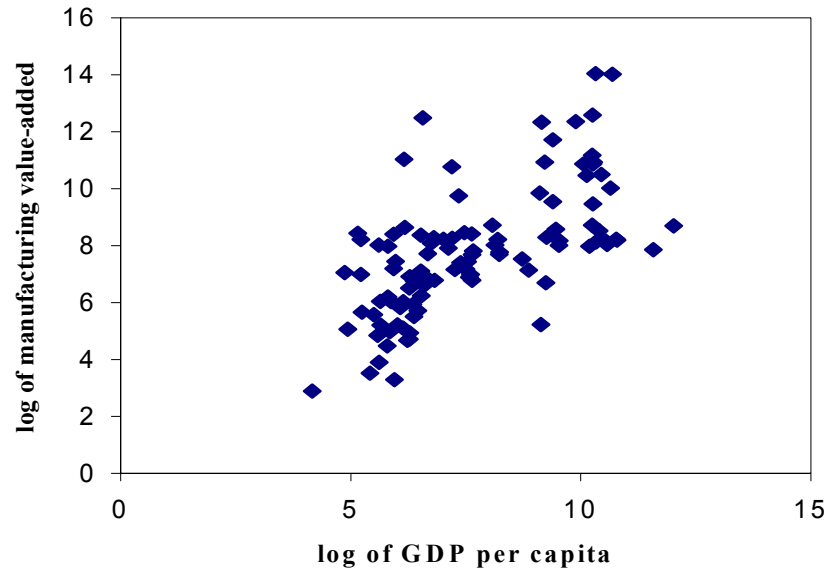
<sup>f</sup> source: Chen (1997, table 2.4).

<sup>g</sup> source: Liedholm and Mead (1987)

### Why are firms in LDCs so small?

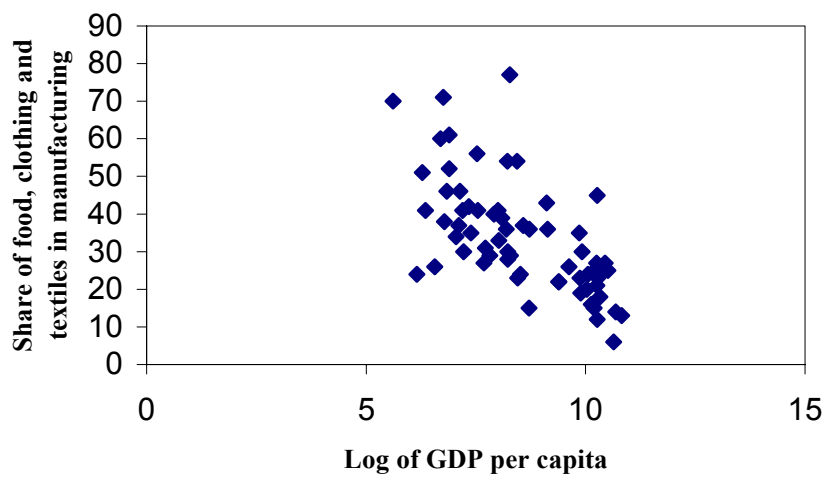
Small, diffuse markets for products:

**Figure 1: Size of the Manufacturing Sector and Level of Development**



The types of goods demanded are not subject to strong increasing returns:

**Figure 2: Light Manufacturing and Level of Development**



2. **Small domestic markets also mean that relatively few plants operate in each sector (no figures available).**

3. **Does this feature of LDC industry imply monopoly power?**

It need not. If there are no sunk start-up costs, markets are contestable even when they are dominated by a few firms.

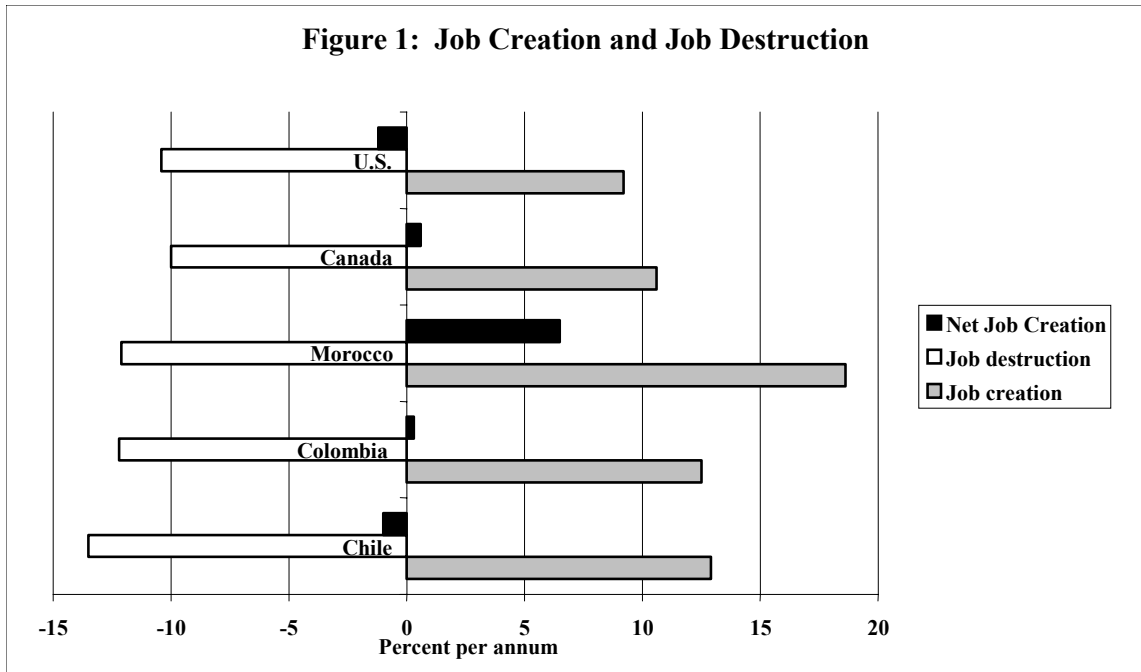
The key question is: how costly is it to get into or out of an industry?

Sunk start-up costs: are incurred to begin production and cannot be recouped when the firm is liquidated.

- *product development;*
- *setting up production lines;*
- *firm-specific capital goods;*
- *training workers to operate production lines.*
- *bureaucratic red tape.*

**We see more turnover in the LDCs that have been studied than in DCs, suggesting that sunk costs are lower there.**

Country	Annual Job Turnover Rate	Annual Job Volatility Rate	Annual Plant Turnover Rate
Chile (1979-86)	26.8	18.4	17.9
Colombia (1977-89)	26.2	23.4	22.0
Morocco (1984-89)	30.7	24.2	n.a.
Canada (1973-86)	20.5	17.8	n.a.
United States (1973-86)	19.6	15.3	10.5



*High turnover is largely due to the kinds of products LDCs produce:*

<i>Average Annual Employment Turnover Rates by Three-Digit ISIC Industry</i>			
Iron and Steel	.11	Professional/Scientific Equip.	.19
Industrial Chemicals	.12	Printing	.20
Glass	.12	Non-metallic Mineral Prod.	.20
Ceramic Products	.12	Leather	.20
Paper	.13	Plastic Products	.20
Rubber	.14	Footwear	.21
Beverages	.14	Fabricated Metal Products	.22
Nonferrous Metal Refining	.14	Non-electrical Machinery	.22
Electrical Machinery	.16	Furniture	.24
Transport Equipment	.16	Apparel	.24
Other Chemical Products	.16	Food Processing	.24
Textiles	.18	Wood Products	.28

So, even though the number of firms in most LDCs is relatively small; the entry costs associated with their product mix are low, and this imposes competitive pressures on incumbents.

On the other hand, the more advanced the economy (in terms of per capita income), the more complex the manufacturing processes, and the more substantial sunk entry costs become. Where domestic markets are small these sectors may behave relatively oligopolistically unless they are faced with import competition.

If monopoly power is not a big problem, can we conclude that the industrial sectors in these countries operate efficiently?

Not necessarily. The opposite is often true because of distinctive features of the business environment—poor governance, and volatility/uncertainty.

1) **Governance** The state (1) sets the formal rules; (2) enforces them; and (3) engages in economic activity directly:

**Formal rules:**

- taxation and subsidization
- commercial policy
- new business licensing
- labor regulation
- safety and environmental regulations
- property rights and business law

**Enforcement**

- regulators
- tax/tariff collection, transfer payments
- judiciary

**Public economic activity**

- create and run public enterprises
- provision of infrastructure
- macro management
  1. public spending
  2. money market intervention
  3. foreign currency market intervention
  4. wage and price controls

When the rules are “bad” (discourage efficient resource allocation, are in some sense perceived as inequitable) or unpredictable, the business environment suffers. Less activities, or the “wrong” activities take place.

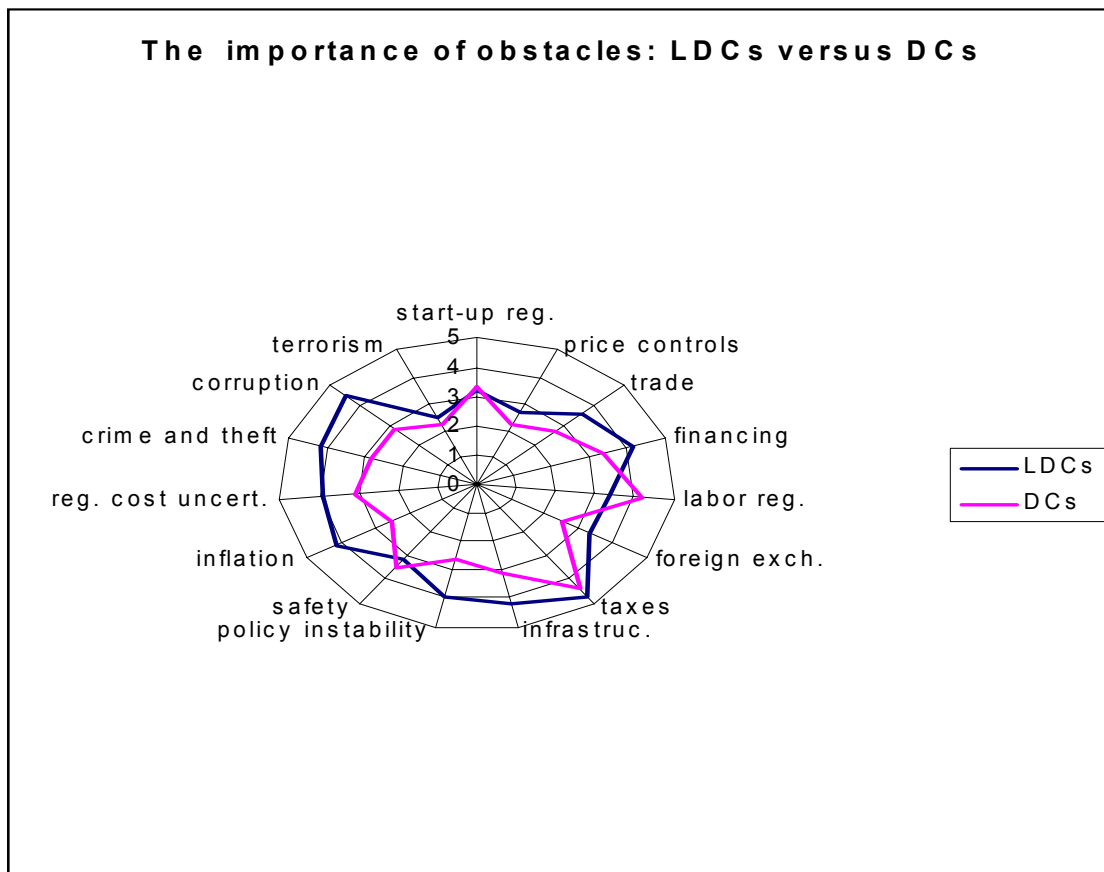
This is true in all countries. But how are LDCs different?

Refer to Brunetti et al (1996) summary

More than 3,600 firms in 69 countries, 58 of which were LDCs  
Grouped by region (refer to p. 5), table 1  
Questions on impediments to doing business

“Please judge on a six point scale how problematic these different policy areas are for doing business.”

- a) regulations for starting business/new operations
- b) price controls
- c) regulations on foreign trade
- d) financing
- e) labor regulations
- f) foreign currency regulations
- g) tax regulations and/or high taxes
- h) inadequate supply of infrastructure
- i) policy instability
- j) safety or environmental regulations
- k) inflation
- l) general uncertainty on costs of regulations
- m) crime and theft
- n) corruption
- o) terrorism



The ranking of problems clearly differs across regions:

**Developed countries:** taxes, labor reg., safety and environmental (these are necessary things that aren't meant to make business easier; they have other motivations.) Financing, start-up costs, and uncertainty of regulation come next. (Financing always a cost of doing business.) Corruption not in top 6 problems.

**S., S.E. Asia** taxes still no. 1, but now infrastructure, inflation are #2, #3. Start-up costs #5, corruption and uncertainty follow.

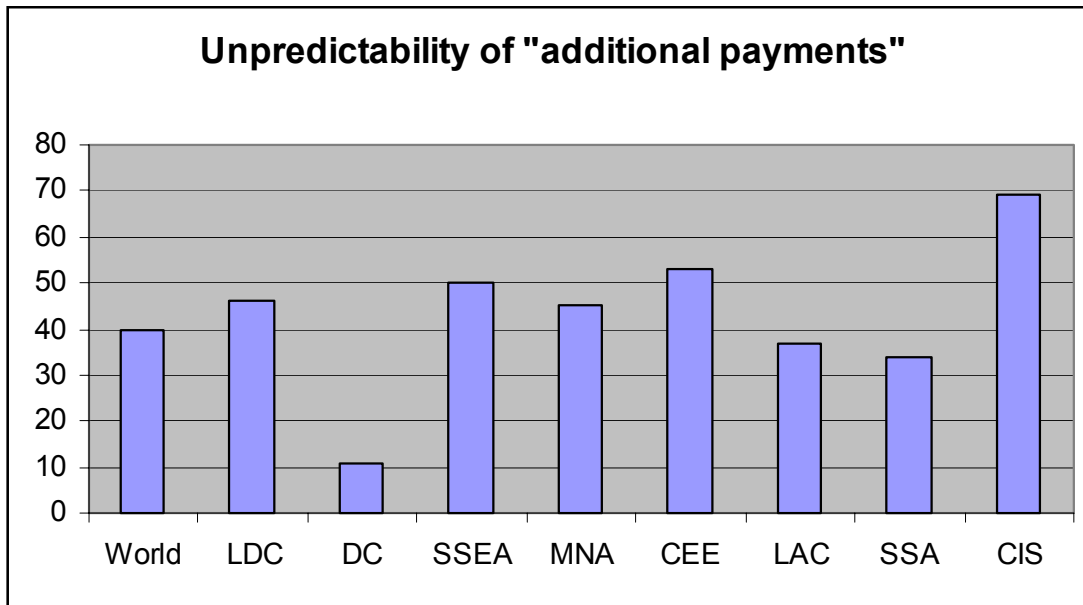
**Middle E. and N. Africa** infrastructure #1, corruption #2, taxes bumped down to #3. Uncertainty and political instability #6, #7.

**L.A./Caribbean** corruption #1, infrastructure, crime and theft. Financing, taxes (down to #5) and instability next.

**S. S. Africa** corruption #1, taxes, infrastructure, inflation, crime and theft.

Big cross-regional contrasts are found for: relative importance of infrastructure, corruption, crime and theft. Outside S/SE Asia, policy instability also tends to rank higher than in the OECD.

Why does corruption matter so much to doing business? In a sense, its just another tax. But if it is coming from an unorganized center, it can be unpredictable. Each bureaucrat is an independent operator—sets his own price, doesn't care if someone else has already charged you—look at question 15 and 16 (p. 32) on predictability of payments, and question 18 on discretionary power of bureaucrats (p. 34).



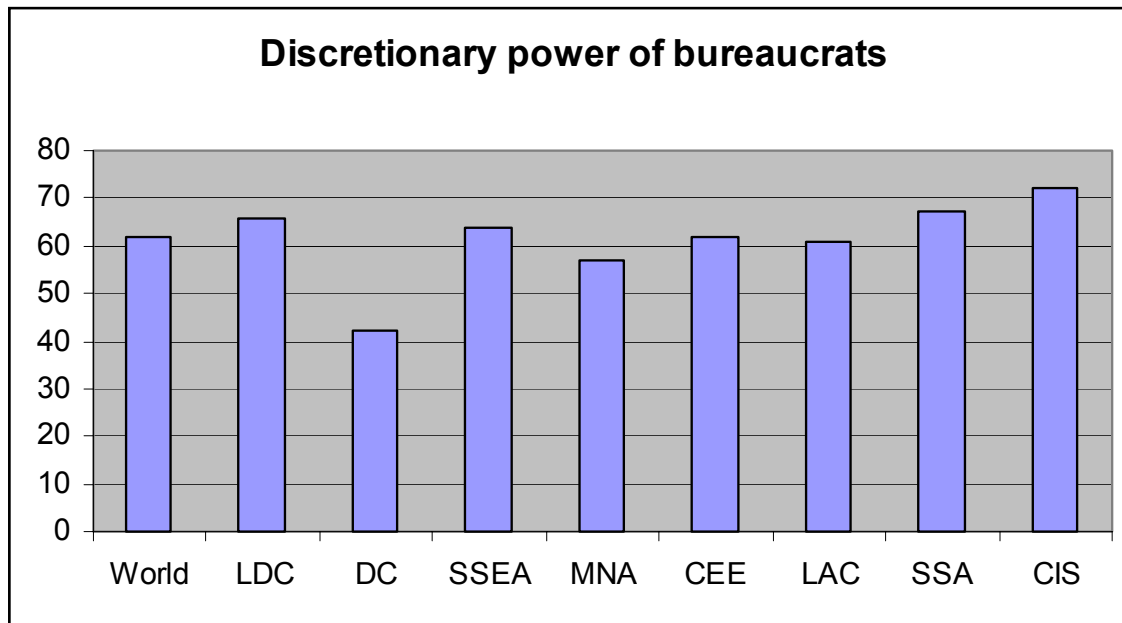
Percentage of firms who answered 4, 5 or 6 to the following question:

“Firms in my line of work usually know in advance about how much this ‘additional payment’ is.” This is true:

- 1 always
- 2 mostly
- 3 frequently
- 4 sometimes
- 5 seldom
- 6 never

Source: Brunetti, Aymo, Gregory Kisunko and Beatrice Weder, Institutional Obstacles for Doing Business: Data Description and Methodology of a Worldwide Private Sector Survey. The World Bank, 1996.

SSEA: South and Southeast Asia  
MNA: Middle East and North Africa  
CEE: Central and Eastern Europe  
LAC: Latin America and Caribbean  
SSA: Sub-Saharan Africa  
CIS: Commonwealth of Independent States (formerly part of USSR)



Percentage of firms who answered 4, 5 or 6 to the following question.

“If a government agent acts against the rules I can usually go to another official or to his superiors and get the correct treatment.” This is true:

- 1 always
- 2 mostly
- 3 frequently
- 4 sometimes
- 5 seldom
- 6 never

SSEA: South and Southeast Asia  
MNA: Middle East and North Africa  
CEE: Central and Eastern Europe  
LAC: Latin America and Caribbean  
SSA: Sub-Saharan Africa  
CIS: Commonwealth of Independent States (formerly part of USSR)

Source: Brunetti, Aymo, Gregory Kisunko and Beatrice Weder, Institutional Obstacles for Doing Business: Data Description and Methodology of a Worldwide Private Sector Survey. The World Bank, 1996.

In sum, corruption is largely a source of uncertainty. Notice that other sources of uncertainty matter a lot in developing countries: policy instability, general uncertainty, uncertainty on costs of regulations, crime and theft, inflation (which makes relative prices unpredictable). Not on the list, but relevant: judiciary.

- 2) The ***macro environment***, which responds to policy, is another basic source of **uncertainty**. Some oft-used summary measures include
- real GDP growth
  - real consumption growth
  - real exchange rate (affects factor prices too)
  - terms of trade
  - inflation rate
  - real wages
  - real interest rates

Hausman and Gavin summarize the relative volatility of some of these measures in different regions. Their results are summarized below.

**Standard Deviations of Macro Variables, Policy Variables and External Shocks, by Region**

	DCs	LAC	E Asian Miracle	S. Asia	Other E. Asia & Pacific	Sub-Saharan Africa	Middle East and N. Africa
<b>Outcomes</b>							
GDP growth	2.2	4.7	3.0	3.4	4.1	5.3	7.9
Consumption growth	2.1	5.6	4.1	5.4	4.0	10.3	8.2
Investment growth	8.3	16.1	16.4	11.0	15.3	28.7	20.3
Change in real exchange rate	4.8	13.4	6.2	n.a.	8.9	19.4	5.5
Annual Inflation rate	3.9	463.5	6.2	7.9	10.8	88.7	7.0
<b>Policies</b>							
Fiscal Deficit (%GDP)	2.4	4.7	2.4	4.2	3.5	4.5	8.5
Public consumption (%GDP)	1.6	2.5	1.1	2.1	4.1	3.7	5.5
M1 (%GDP)	2.4	5.5	1.9	1.4	1.0	3.8	3.1
M1 growth	5.6	211.11	13.6	7.4	13.3	93.7	13.1
<b>External Shocks</b>							
Terms of trade growth	8.9	5.1	8.0	7.9	11.4	22.1	25.6
International Cap. Flows (%GDP)	1.7	2.8	1.5	1.1	3.9	4.4	6.1

Source: Hausmann, Ricardo and Michael Gavin. "Securing Stability and Growth in a Shock-Prone Region: The Policy Challenge for Latin America," in Ricardo Hausman and Hlemut Reisen, eds., *Securing Stability and Growth in Latin America*. 1996. Paris, OECD.