

Crime, Development and Welfare in Latin America

Conference “Confronting Crime and Violence in Latin America: Crafting a Public Policy Agenda,” July 2007

Rodrigo R. Soares

Catholic University of Rio de Janeiro (PUC-Rio), University of Maryland, NBER, IZA

with

Joana Naritomi

World Bank

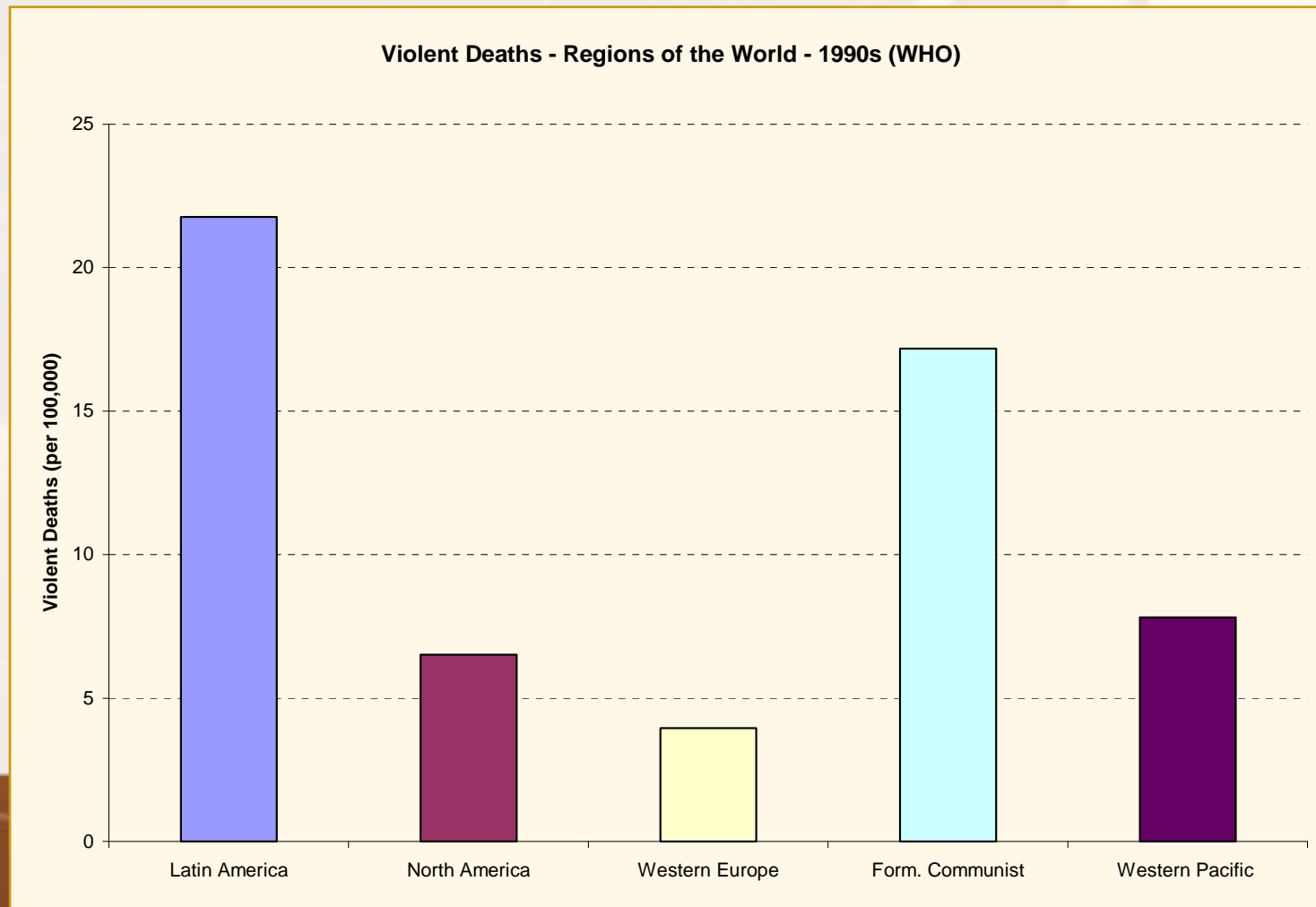
Overview

1. Crime and Welfare
2. Latin America
 - i. Measurement
 - ii. Patterns
3. Candidate Explanations
 - i. Socioeconomic conditions and repressive policies
 - ii. Quantitative relevance
4. Concluding Remarks

1. Crime and Welfare

- Latin America has been traditionally regarded as a particularly violent region of the world:
 - Deaths to violence 200% higher than North America and Pacific, 450% higher than Western Europe, and 30% higher than Former Communist block (WHO);
 - 44% of the population reported being victim of some type of crime in the previous year (ICVS);
 - Crime and violence as the second most important public policy issue, ranking first for countries such as Argentina, El Salvador, and Venezuela (Latinobarómetro 2006).

1. Crime and Welfare



1. Crime and Welfare

- Many potential welfare implications:
 - Direct welfare loss due to increased mortality;
 - Reduced investments in human and physical capital due to shorter planning horizon;
 - Material costs, including both direct costs and expenditures on criminal justice and crime prevention;
 - Loss of human capital and productivity of those deceased, incapacitated and incarcerated.

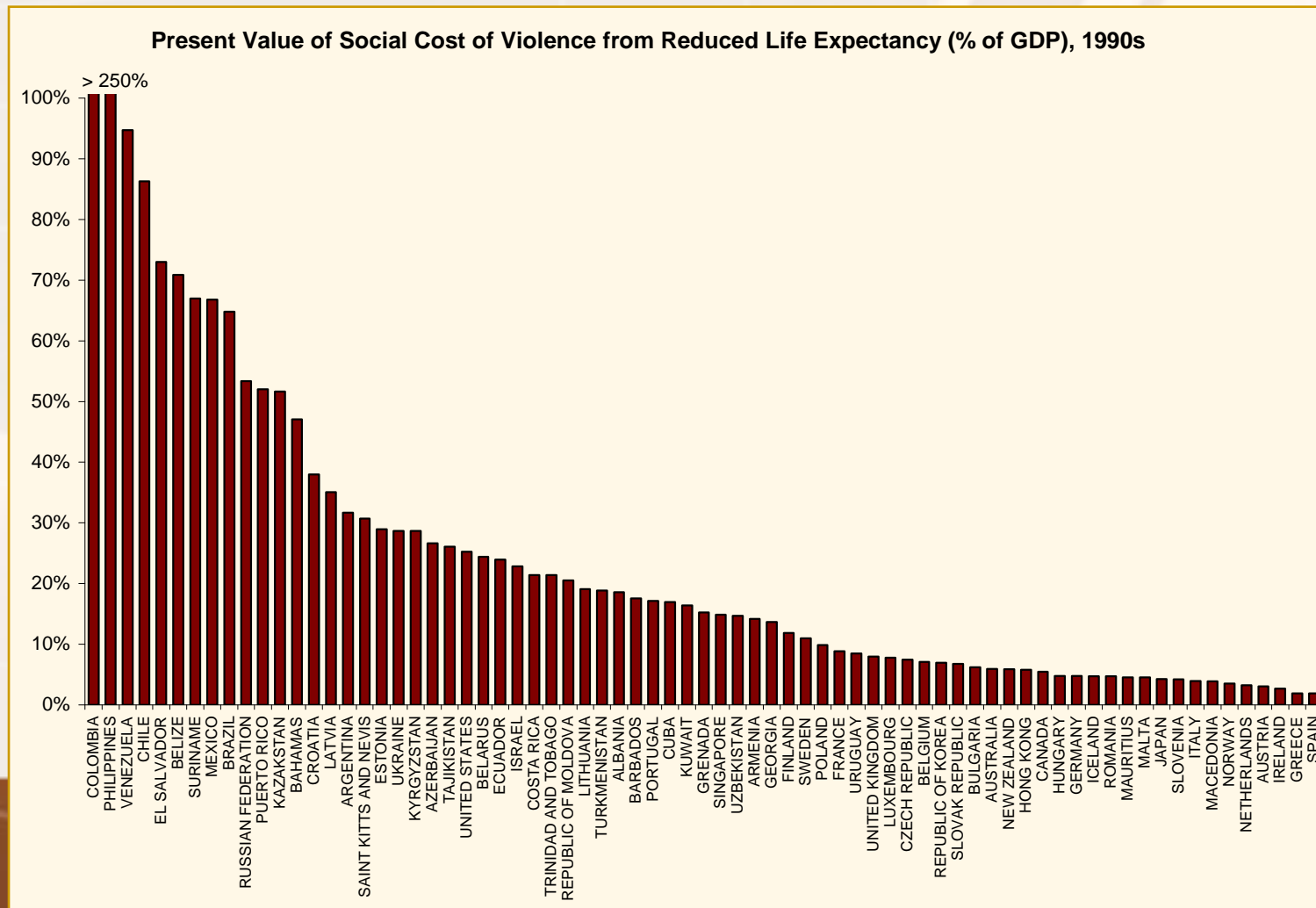
1. Crime and Welfare

- Material Costs:
 - Direct costs and expenditures on criminal justice and crime prevention: around 2.1% of the GDP per year for the United States, and 3.6% for Latin America (Bourguignon, 1999 and Londono and Guerrero, 1999);
 - Considering monetary costs related to property crime, number rises to 2.6% for the US and 5.1% for Latin America (Bourguignon, 1999).

1. Crime and Welfare

- Welfare loss from injuries and increased mortality:
 - Recent estimation of the welfare value from gains in life expectancy are quantitatively very important.
 - For violence, increased mortality has been shown to represent welfare loss of the same order of magnitude of material costs (Soares, 2006): 1 year of life expectancy associated with a yearly social cost of 3.8% of GDP.
 - Colombia lost 2.2 expected years of life to violence: social loss analogous to permanent decline of 9.7% of yearly income, number for the US would be only 0.9% (Soares, 2006).

1. Crime and Welfare



1. Crime and Welfare

- Indirect consequences of reduced length of life expectancy:
 - Changes in behavior due to shorter planning horizon: reduced incentives to take actions that generate long-term benefits and short-term costs;
 - Decreased investments in human capital and health, reduced savings and investments in physical capital, and possibly reduced growth.
 - Link from mortality to investment in human capital and growth through fertility (Lorentzen, McMillan, and Wacziarg, 2006, Kalemli-Ozcan, 2006).
 - Connection leads to negative correlation between mortality and investment in human and physical capital, and can be a source of poverty traps.

1. Crime and Welfare

- Intangible effects for the labor market and business climate:
 - Deterioration of productivity, consumption, and labor force may constitute major part of Latin American's cost: 7.1% of GDP according to Londono and Guerrero (1999).
 - Crime has perverse effects on economic efficiency, reducing investment and employment in poor urban Colombian communities (Gaviria and Velez, 2002).
 - In Brazil, 52% of managers rank crime as a major business constraint (World Bank's Investment Climate Survey).
 - But these dimensions are conceptually less clear and difficult to measure in a straightforward way.

1. Crime and Welfare

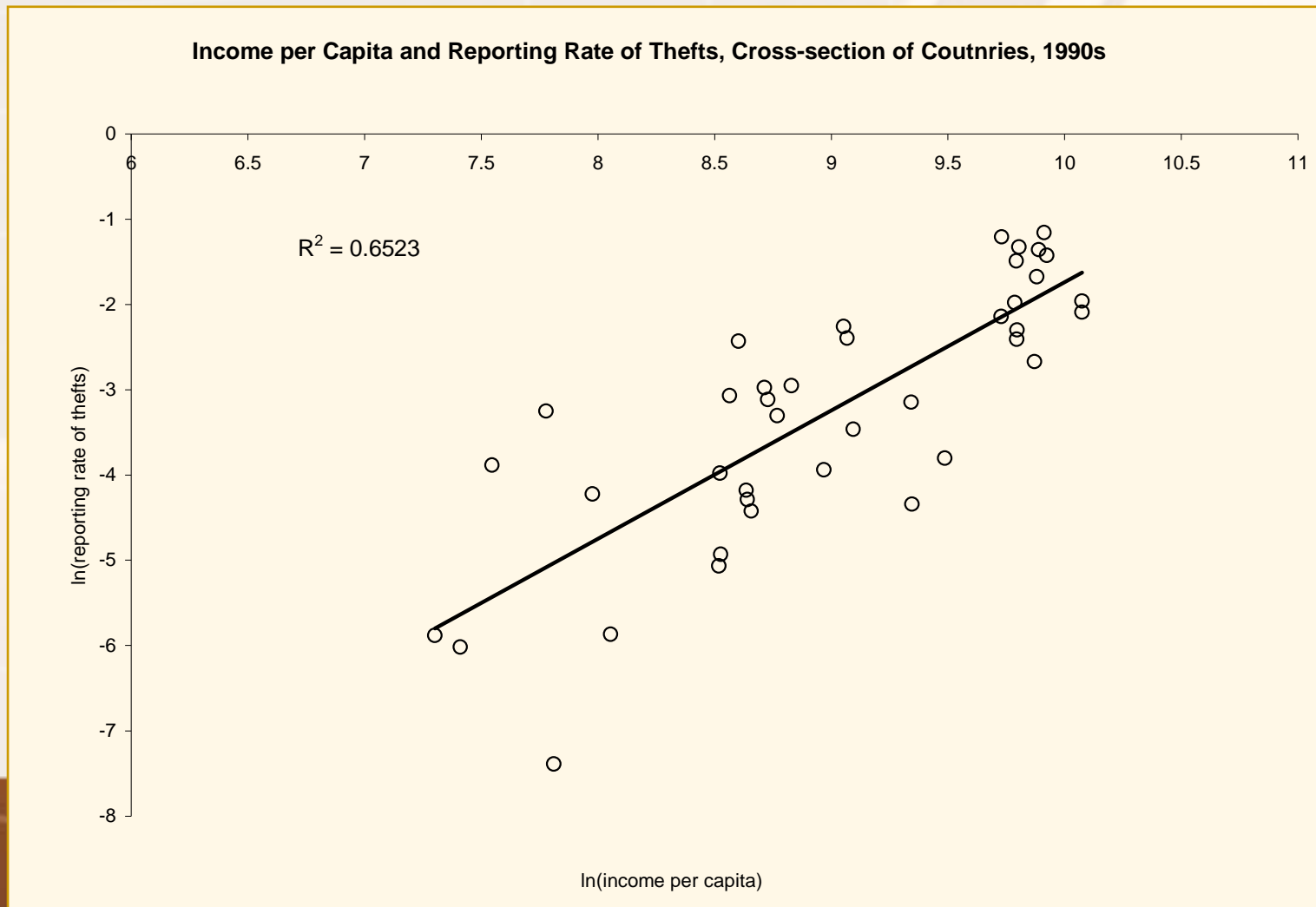
Social Cost of Violence (yearly cost as % GDP), Latin America and US, 1990s

	mortality increase	public secur.	justice system	private prevent.	opportunity cost of incarcerat.	monet. costs (medical, etc.)	growth	Sub-total	+ intangibles from Londono and Guerrero (1999)
Latin America	2.0	1.1	0.5	1.4	0.1	0.6	0.1	5.8	12.9
US	0.9	0.5	1.3	0.6	0.6	0.2	0.0	4.1	-

2. Latin America

- International comparisons of crime have to deal with measurement error in crime rates.
- Underreporting in official data is related to institutional development (Soares, 2004) → may bias conclusions from cross-country comparisons.
- Comparing victimization data and official records, one can estimate the reporting rate (fraction of crimes reported to authorities).

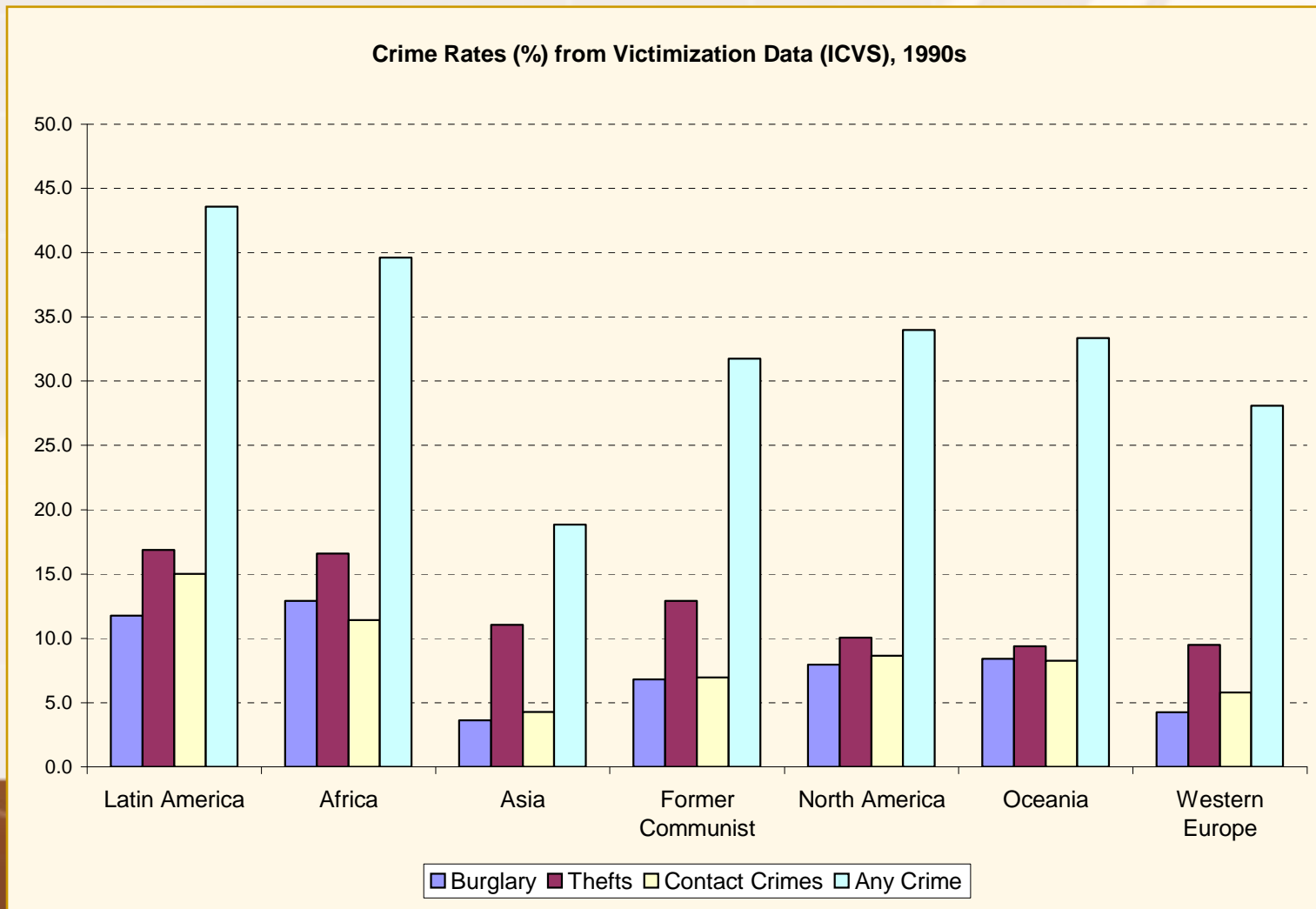
2. Latin America



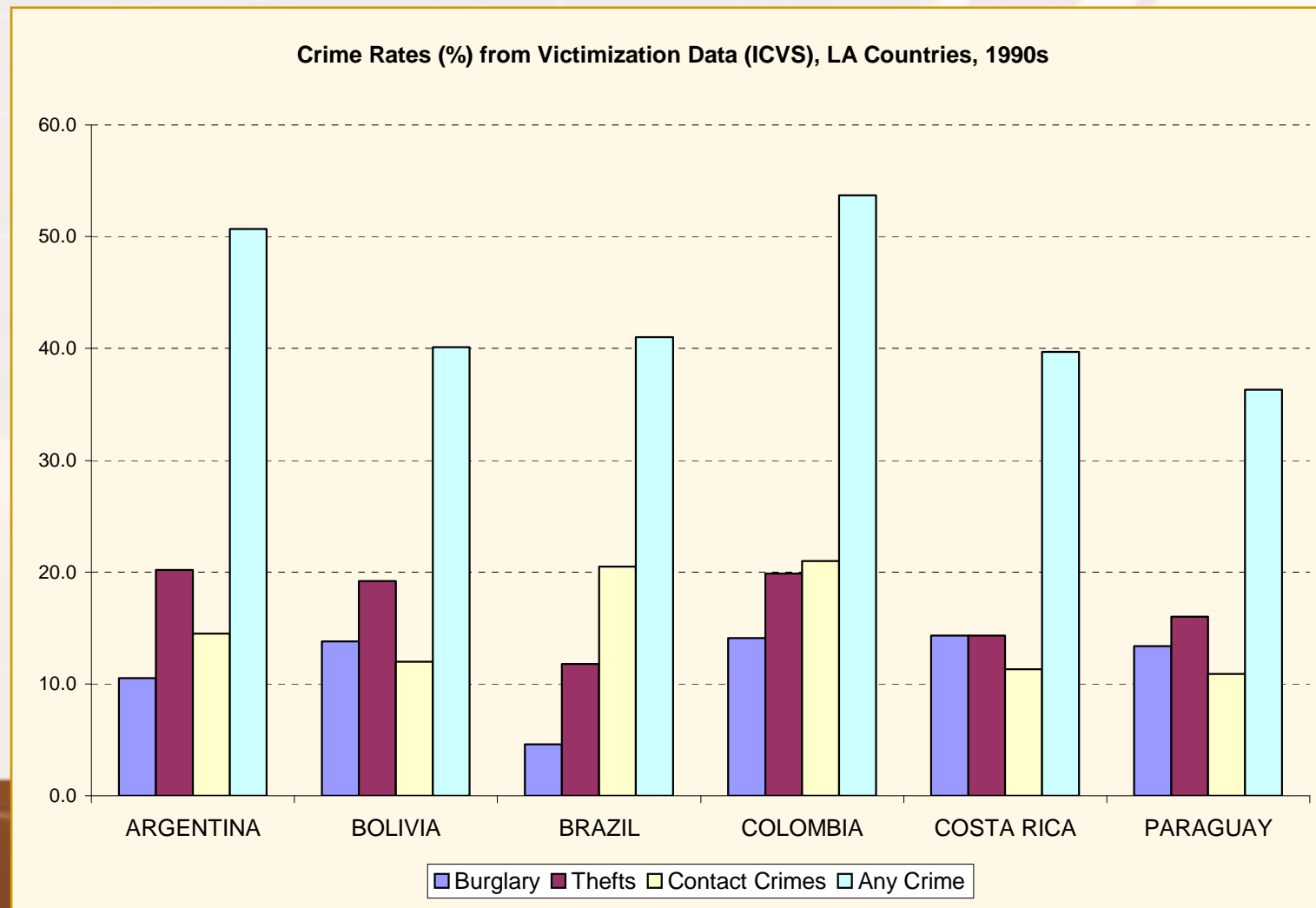
2. Latin America

- Ignoring this problem can lead to wrong conclusion in terms of the correlation between various variables and development.
- But victimization surveys are available only for some countries and few periods of time.
- Use information from number of deaths due to violence as the best available alternative for analyzing the evolution of crime through time.

2. Latin America



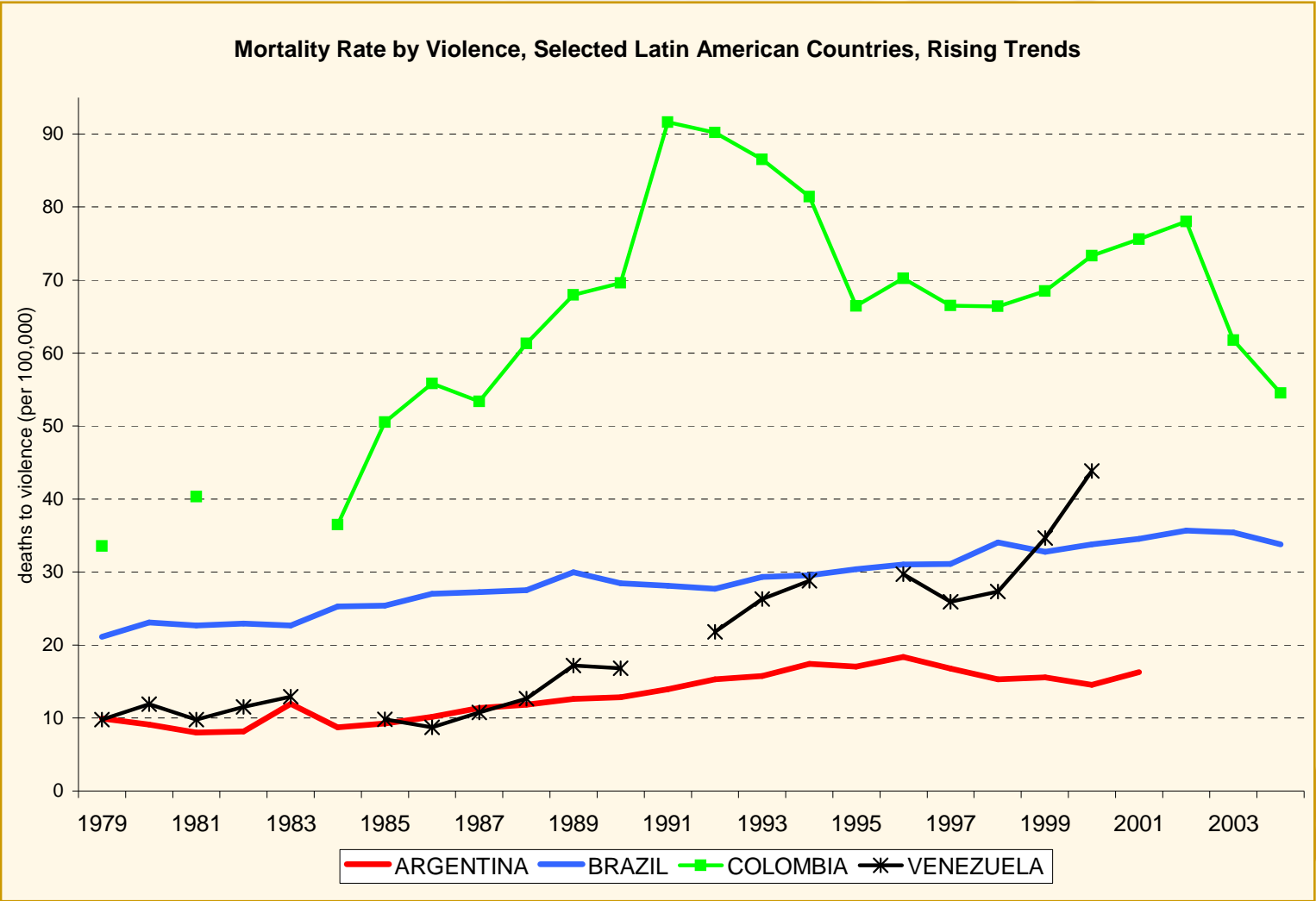
2. Latin America



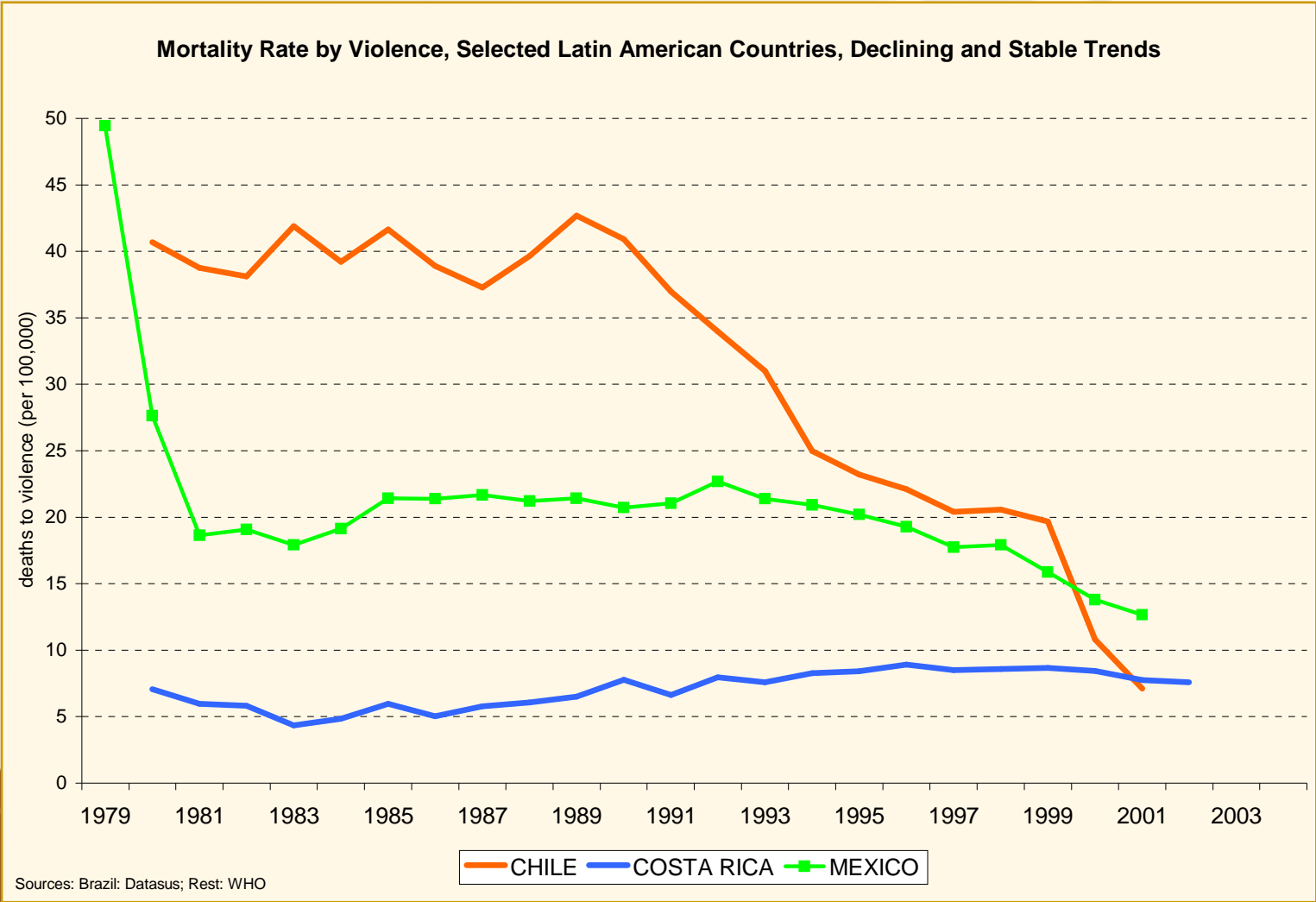
2. Latin America

- High crime rates in the region hide considerable cross-country heterogeneity.
- Even more so when we look at evolution of death due to violence through time:
 - One group with increasing trend;
 - Another with stable or declining trend.

2. Latin America



2. Latin America



2. Latin America

- High crime rates in Latin America span various different types of crime and are not artifact of the particular statistics used.
- What can explain this pattern?
- Why some countries have been successful at maintaining low violence and others at reducing it, while some have seen increasing violence?

3. Candidate Explanations

- Hypotheses can be classified in two groups:
 - Socioeconomic conditions conducive to an environment where crime is attractive to large fraction of the population;
 - Government actions targeted at repression of criminal activities.
- From this interaction of forces – supply of potential criminals vs. repressive measures – an equilibrium level violence emerges.

3. Candidate Explanations

- Concentrate discussion on 7 Latin American countries and a group of comparison countries:
 - Latin American countries: Argentina, Brazil, Chile, Colombia, Costa Rica, Mexico, and Venezuela ;
 - Comparison group: Japan, US, South Korea, Spain, Sweden and Russia.

3. Candidate Explanations

- Socioeconomic conditions:
 - Inequality;
 - Growth;
 - Age structure of the population.

3. Candidate Explanations

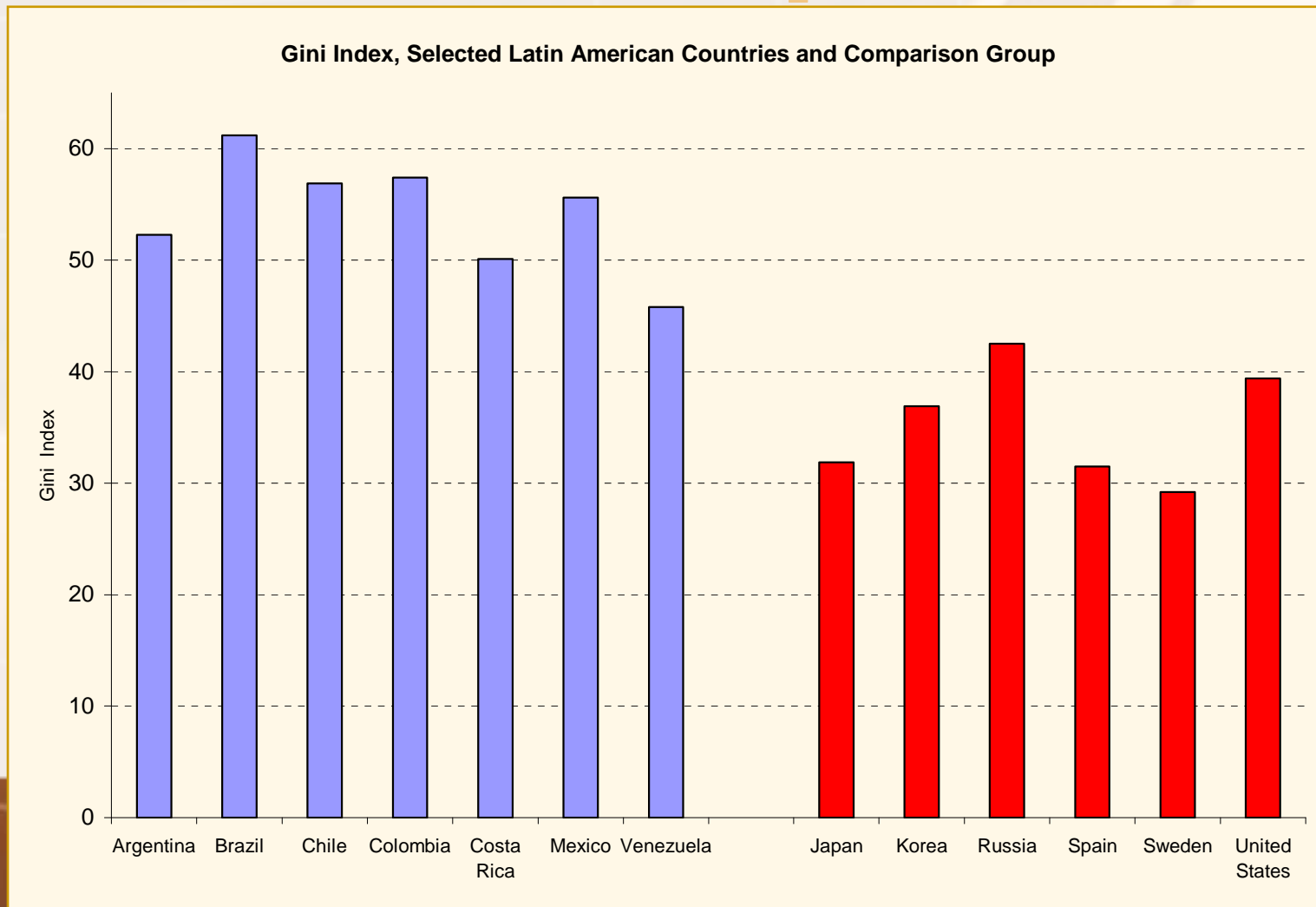
- Repressive policies:
 - Incarceration of offenders;
 - Harsher penalties;
 - Large police presence;
 - Effective judicial systems;
 - Respect to the law and a clean and efficient government apparatus.

3. Candidate Explanations

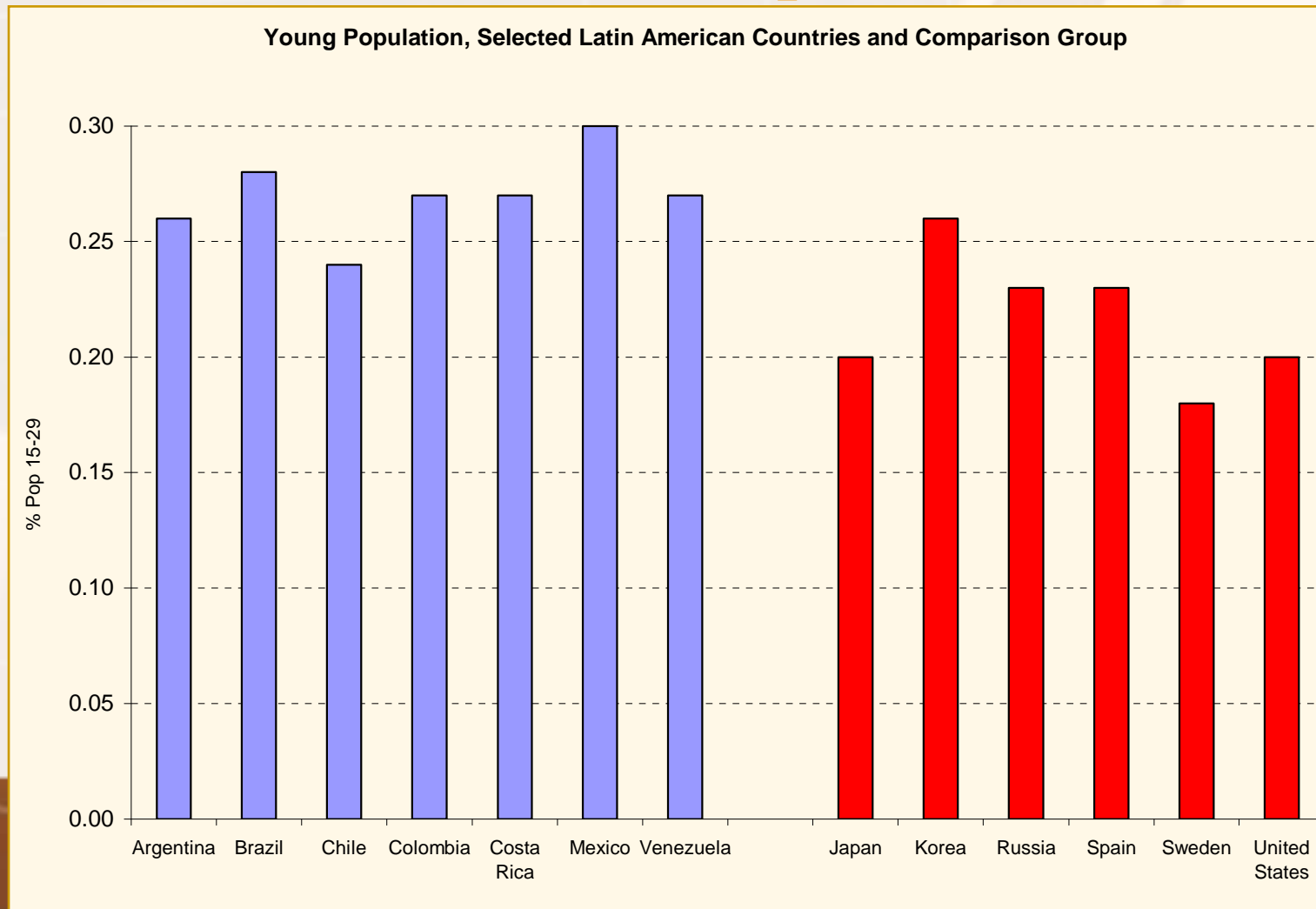
Socioeconomic Conditions and Repressive Policies

	Violence 2000	Growth 1980-2000	Gini 2000	Pop 15-29 2000	Rule of Law 2000	Police 2000	Judges 2000	Incarcer. 2001
Selected LA Countries	28.4	0.7%	54.2	27%	-0.04	252	7.5	139
Comparison Group	12.4	2.2%	35.2	22%	1.0	398	15.2	282

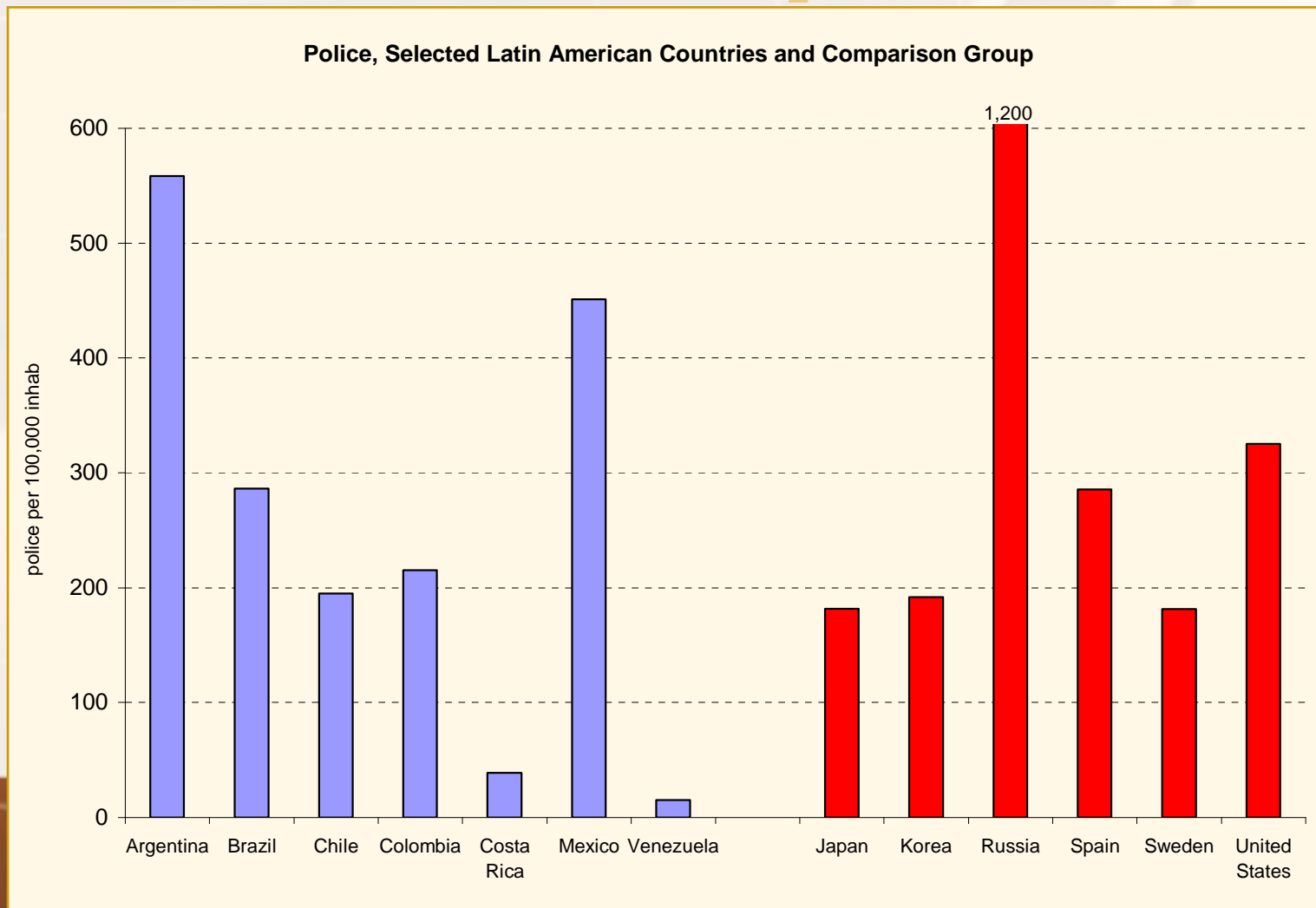
3. Candidate Explanations



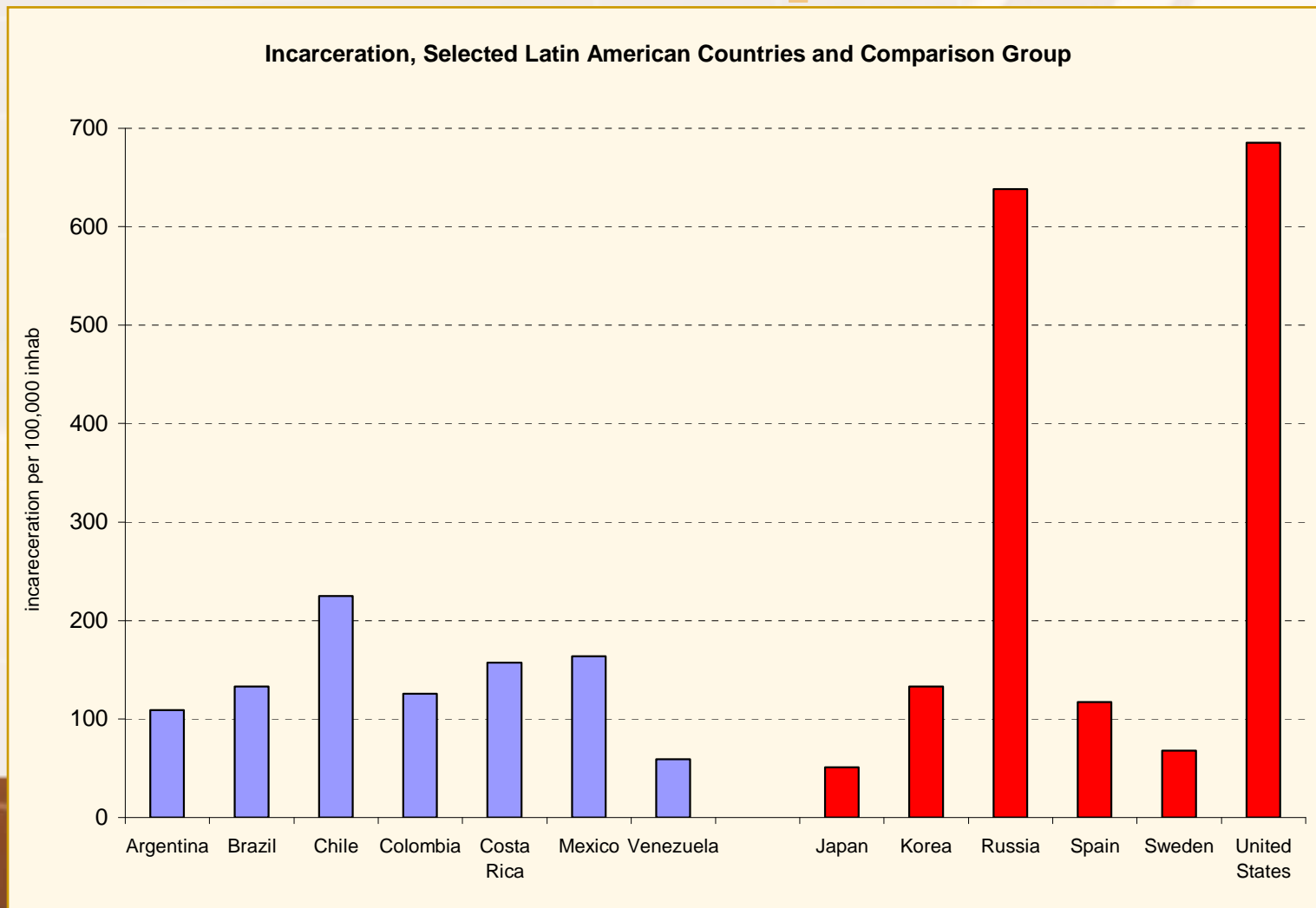
3. Candidate Explanations



3. Candidate Explanations



3. Candidate Explanations



3. Candidate Explanations

- High crime rates in Latin America do not seem that surprising after all:
 - Economic and demographic factors put a large fraction of the population at the margin of engaging in criminal activities;
 - At the same time, policies toward repression of crime and violence are timid and likely ineffective.
- Is this enough to explain the observed differences?

3. Candidate Explanations

- Empirical literature offers estimates of effects on crime:
 - Incarceration: Levitt (1996);
 - Police: Levitt (2002);
 - Fraction of young population: Levitt (1999);
 - Inequality: Fajnzylber, Lederman, and Loayza (2002b);
 - Growth: Fajnzylber, Lederman, and Loayza (2002b).
- Taking these seriously, how much can we explain?

3. Candidate Explanations

Response of Violence in L.A. if Variables were set to Average of Comparison Group

Variable Adjusted	Partial Effect		Cumulative Effect
	Counterfactual Level in L.A.	% reduction from 28.4	
incarceration rate	17.3	39%	17.3
police	21.2	25%	12.9
fraction of young population	26.1	8%	11.9
inequality (gini)	20.3	29%	8.5
growth (income p.c.)	27.3	4%	8.4

3. Candidate Explanations

- Violence in Latin America is not exceptionally high, given socioeconomic conditions and repressive policies, and what is known about their effects.
- Russia is an outlier within the comparison group; if variables in Latin America were set to average of comparison group excluding Russia, violence would still fall to 14.1 (50% reduction).

3. Candidate Explanations

- Quantitative roles of inequality, incarceration rates, and police are the most important.
 - Incarceration rates and number of policemen are policy variables directly under the control of the government.
 - Inequality is an outcome variable that changes only very slowly through time (Deininger and Squire, 1996).
- Stronger policies in relation to incarceration and policing seem to be the most obvious immediate choice available.

4. Concluding Remarks

- Quantitative exercise brings implicit idea that the effectiveness of policies will be transported. This is obviously not the case.
- Effectiveness of any given intervention will depend on the way it is implemented and on the institutional context.
- Discussion also leaves out many relevant dimensions: police technology and training, effectiveness of judicial system, social norms related to violence, and interactions between citizen and State.
- Still, specific experiences show that it is possible to bring these together in an effective way: Bogotá, São Paulo, etc.