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Oil, Macro Volatility and Crime in the Determination of Beliefs in Venezuela

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Abstract

We use data on political beliefs (broadly, left-right position, meritocracy and origins of poverty) to discuss Venezuela's economic institutions. Our starting point is the large role attributed to beliefs in determining the economic system and the extent of government intervention (see, for example, Alesina *et al*, 2001). This brings us to the question of what causes changes in beliefs. We briefly discuss and present some evidence consistent with the idea that some of the main social and economic forces that affected Venezuela this century may have changed people's rational beliefs. These include a dependence on oil, a history of macro-economic volatility, the rise in crime and the rise in a preoccupation with corruption. We end up with a cautionary result: although these results point in the direction of giving a role to real shocks in the determination of beliefs, we test and find that perceptions for different phenomena are sometimes correlated. In particular, the perception of corruption is related to the perception of crime rather than the amount of real corruption actually experienced.

JEL: P16, E62.

Keywords: beliefs, oil, crime, corruption, macro volatility, perceptions, causality.

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I. Introduction

In an important paper, Piketty (1995) showed how beliefs could be central to economic organization. He focused on beliefs concerning the income generating process and argued that when income was determined by luck, rational agents would be inclined to increase taxes. In contrast, when effort played a large role, rational agents fearing adverse incentive effects would moderate taxes. He then argued that, even if there was one fixed reality, two agents who started with prior beliefs at each end of the spectrum would not necessarily converge as long as agents could not freely find credible information to generalize from their own experience. In fact, he argued that information on how much effort really pays is not easy to observe (given that effort input is not observable), and that eventually agents would settle on some belief about the likely value of these parameters and stop experimenting (a form of bandit problem). Generalizing to countries, he argued that tax choices would reinforce these beliefs: where effort doesn't pay and luck dominates, agents would tend to vote on high taxes and luck would then really dominate. Indeed, the key finding in Piketty's paper is that two different economic systems, one with high taxes and beliefs that luck matters that can be called the French equilibrium and another with low taxes and a belief that effort pays that can be called an American equilibrium, could arise out of the same underlying reality. Other papers that explore related ideas concern the role of upward mobility (Benabou and Ok, 2001), fairness (Alesina and Angeletos, 2002), belief in a just world (Benabou and Tirole, 2006) and corruption (Alesina and Angeletos, 2004 and Di Tella and MacCulloch, 2002). North and Denzau (1993) discuss institutions as "shared mental models" (see also Greif, 1994).

A belief-based explanation is attractive given the difficulties that the standard economic model (e.g., Meltzer and Richards, 1981) has in explaining the observed patterns of inequality and redistribution across Europe and the US. Indeed, these models are particularly relevant once one observes the remarkable differences in beliefs across the Atlantic. For instance, Alesina *et al* (2001) report that 60% of Americans - yet only 26% of Europeans - believe the poor are lazy, while spending on social welfare in 1995 in the US was 16% of GDP compared to an average of 25% for countries in Europe. See also Lipset and Rokkan (1967) and the evidence in Hochschild (1981), Alesina and La Ferrara (2005), Fong (2004) and Ladd and Bowman (1998) *inter alia*.

Given the centrality of beliefs in economic organization, it seems natural to ask what drives beliefs. Very little evidence (that has a causal interpretation) is available (but see Di Tella, Donna and MacCulloch, 2006, on the connection with crime; and Di Tella, Galiani and Schargrdosky, 2004, on the connection with property rights and a windfall gain). One extreme position is to argue that beliefs are cultural norms and are thus immutable. Alternatively, a rational learning process would posit their dependence on economic conditions. The latter hypothesis is particularly interesting in the context of Latin America, in general, and Venezuela, in particular, given their rather eventful history, with several traumatic and joyous events that may have affected beliefs simply because reality, at least for a while, appeared to have changed. The oil discoveries and the high prices during the 1970's, the macroeconomic crises and the crime waves are all candidate episodes to be explored.

In this paper, we take some of the likely forces that may have affected the formation of beliefs in Venezuela, explore their validity using data from a broader sample of countries, and then use the results to see how much of the Venezuelan experience they can explain. In particular, we wish to explain why the economy did so well between 1920 and 1970 yet so poorly after 1970 when the economies of other Latin American countries were growing. Our explanation centers on the increased macroeconomic volatility caused by the oil price shocks in the 1970s that led to a shift toward more leftist economic beliefs. In particular Venezuelans began to view luck as the predominant determinant of economic success rather than effort. In this sense the curse of Venezuela's "resource curse" may have been a tendency for people to become more left wing as volatile oil prices ushered in an era of populist and interventionist government policies that hampered the nation's post 1970s economic development.

In section II we discuss the role of a history of macroeconomic volatility, in section III we explore the role of a country's dependence on oil rents; in section IV we present further results on the role of corruption and beliefs (along the lines discussed in Di Tella and MacCulloch, 2002), while section V presents the correlations between beliefs and having been the victim of crime. Section VI studies the correlation between beliefs about a phenomenon (corruption) and the beliefs about a second phenomenon (crime) controlling for reality (i.e., the experience with corruption and the experience with crime). Section VII discusses the results in the context of Venezuela while section VIII offers some concluding comments.

II. Beliefs and a History of Macro Volatility

In this section we study the correlation between a country's historical macroeconomic performance and their average beliefs in a cross-section of countries. We use the average values obtained from the 3rd wave of the World Values Survey to construct our measures of beliefs and the World Bank's World Development Indicators to construct our measures of macro volatility. The basic results are presented in Tables 1A-B. All regressions are estimated using OLS for simplicity (similar results are obtained if ordered logits are estimated) and control for income (6 categories), gender and age.¹ Results in columns (1-4) in Table 1A focus on a general measure of beliefs: ideological self-placement on a 0-10 scale. These regressions are illustrative as a first broad pass at the data as clearly the answers are provided with some country-specific ideological content. It is still perhaps interesting to note that a history of inflation volatility tilts the survey answers significantly to the left. In order to get some sense of the size of the effect, note that a one standard deviation of the *History of Inflation Volatility* variable is associated with a decline of *Right Wing-R* of 5.8% of a standard deviation of this variable ($-0.058 = (329.1/2.33) * (-4.1e-04)$). Columns (2-4) in Table 1A presents similar regressions, using *History of GDP Growth Volatility*, *History of Exchange Rate Volatility* and *History of Unemployment*. The results are consistent (the coefficients are negative) although they are less precisely estimated.

Regressions (5-8) in Table 1A focus on a more interesting dimension of beliefs, namely *Unfair for Poor-L*, a dummy equal to 1 if the response to the question: "*Why, in your opinion, are there people in this country who live in need? Here are two opinions: which comes closest to your view? (1) They are poor because of laziness and lack of willpower, or (2) They are poor because society treats them unfairly*" is (2) and 0 if the answer is (1). Now the key coefficients are generally positive as expected (the variable is defined so that bigger numbers have a natural interpretation as being left) and significant for both a history of inflation volatility and a history of exchange rate volatility. A history of unemployment volatility is also positive, but only significant at the 15% level.

¹ The controls are chosen to keep constant some basic set of personal characteristics of the respondents that may affect beliefs (although these are country averages, so their influence in this particular case is marginal) without sacrificing sample size.

Columns (1-4) in Table 1B focus on the variable *No Escape-L* (all variable definitions are in the Appendix) and reveal that the volatility of inflation and of the exchange rate, as well as the history of unemployment, are correlated with more left-wing beliefs as expected. Columns (5-8) focus on *Business Owner-L*. Columns (5-6) are positive and significant, while column (7) is positive but only significant at the 11% level.

III. Beliefs and Oil

We now explore the hypothesis that economic dependence on oil causes the average beliefs in the country to lean towards the left-end of the political spectrum. The results are presented in Table 2, where we now focus on one summary variable of beliefs (ideological self-placement on a 1-10 scale) and regress the average country-year values against several measures of dependence on oil. One improvement over the previous section is that, given that we are no longer interested in historical background, we can exploit the time dimension of the values data and present panel regressions that control for country and year fixed effects. We adopt the convention that data from the WVS for wave 1 is matched to World Development Indicators data from 1981, for wave 2 to 1990 and wave 3 to 1997. All regressions control for age, gender and income of the respondents, although given representative sampling within countries this should not have a large influence in our results.² All standard errors adjusted for clustering at the country level.

Column (1) reports a negative coefficient, significant at the 13% level, indicating a tendency to move left when fuel exports (as a percentage of merchandise exports) increase. Column (2) uses logs and reports a somewhat larger and considerably more precise coefficient on the dependence on oil (it is significant at the 1% level). In terms of size, a one standard deviation of *Log Fuel Exports* is associated with a decline equal to 4.6% of a standard deviation in (right-wing) beliefs.

² When we add gender as personal control in the regressions of Table 2A, Mexico's observations for the first wave are lost. This might be significant as Mexico is a gross outlier, with the largest reduction in dependence on fuel exports, all concentrated in the first two waves, and the largest decline in *Right Wing* inclinations.

The rest of the table switches to other measures of income's dependence on luck in the country. Column (3) focuses on ores and metal exports as a percentage of merchandise exports. The coefficient is negative but insignificant. Column (4) uses logs, and finds a negative coefficient significant at the 8% level. In terms of size, a one standard deviation of *Log Ores Exports* is associated with a decline equal to 3.5% of a standard deviation in beliefs. Columns (5-6) present weaker results (but still with the expected sign) using *Manufacturing Exports* and its log.

IV. Beliefs and Corruption

In Table 3 we explore the relationship between ideological inclination and corruption. When corruption is widespread, the legitimacy of profits and business is called into question and individuals will be attracted to left-wing ideas, particularly in the economic sphere (see Di Tella and MacCulloch, 2002, 2006). It uses a corruption variable as coded by experts working for Political Risk Services, a private international investment risk service. Introduced into economics by Knack and Keefer (1995), the International Country Risk Guide (ICRG) corruption index has been produced annually since 1982 and intends to capture the extent to which “high government officials are likely to demand special payments” and “illegal payments are generally expected throughout lower levels of government” in the form of “bribes connected with import and export licenses, exchange controls, tax assessments, police protection, or loans”.

Column (1) in Table 3 correlates the average ideological inclination in the country with the perceived corruption level, controlling for country and year effects. The coefficient is negative as expected and significant at the 3% level. In terms of size, we note that a one standard deviation (within) in the ICRG corruption indicator is associated with a decline in a country's ideological inclination, *Right Wing-R*, equal to 3.7% of a standard deviation (within) of the ideological variable $(-0.037 = 0.42 * (-0.19) / 2.15)$. Column (2) shows that the same correlation using logs is weaker as it is only statistically significant at the 10.5% level.

V. Beliefs and Crime

In Table 4 we study the connection between crime and beliefs following Di Tella *et al* (2006). Such a connection might be expected when, for example, agents have incomplete information about the role of effort in the income generating process and the observation of crime informs agents about other people's view of how much it pays to work hard (which is probably low, given that they have chosen crime). Indeed, the two equilibria in the Piketty (1995) model survive only as long as agents cannot observe how much effort others are putting in (and how much income they obtain). This requires that agents cannot reconstruct other people's information set from their choices in the labor market or in the political market which is a somewhat artificial assumption given that vote outcomes are well-known and also career choices (for example, criminal or not). In order to test this hypothesis we need data on people's beliefs and on their view of how much crime there is (or on their experience as victims of crime).

Such data can be found in the Latino-barometer, an annual public opinion survey of approximately 19,000 interviews in 18 countries in Latin America. Questions of interest rotate, so the number of waves (and thus our sample size) varies considerably depending on the question being studied. It is produced by Latinobarómetro Corporation, a non profit NGO based in Santiago, Chile. It has data on a number of attitudinal variables that are associated with ideological standing (on an economic dimension). From the long list we choose two that are suitable for our purposes. One concerns the fairness of the distribution of income and the other concerns how successful were privatizations. The exact data is *Fair-L* (Now I'd like you some questions about the problem of poverty, in this country and in other countries: How fair do you think the distribution of income is in this country? The four possible answers are 1. Very fair; 2. Fair; 3. Unfair; and 4. Very unfair) and *Privatiz-L* (Do you agree or disagree with the following statement: The Privatization of public companies has been beneficial to the country? The two possible answers are 1. I agree; and 2. I disagree).

In columns (1-2) of Table 4 we correlate these beliefs question with *Perception of crime*, the answer to the question "Crime has increased or decreased?". The possible answers are coded such that it takes the value 0 if the answer is "Has increased a lot" and 1 if it is "Has increased a little", "Has stayed the same", "Has fallen a little" or "Has fallen a lot". We collapse the answers into two because, although there are four categorical answers to this question, the overwhelming majority chooses one option. The raw data show that 96,358 individuals selected the answer "crime has increased a lot

over the past year”, while 14,610 say “it has increased somewhat”, 8,591 say it has stayed the same, 2,904 say it has dropped somewhat and 439 say it has dropped a lot. We repeated the analysis using the four categories and all the results remain qualitatively similar. Both coefficients are negative as expected and significant. Note that this is unlikely to reflect a fixed trait of the respondents because such a fixed characteristic is most likely ideological orientation: right wing individuals are always complaining that crime is a terrible thing and also tend to think that the distribution of income is fair. In this case the connection goes the opposite way so, at least in this regard, it is an underestimate of the true effect. We also include a set of control variables that help ameliorate this concern, including age, gender income as well as year and country fixed effects.

Columns (3-4) move to *Real Crime* as independent variable, namely whether the respondent (or a relative of the respondent) was a victim of crime over the previous year. Again, both coefficients are negative and comfortably significant. Now the potential confounding effect is not an ideological fixed effect but rather some omitted variable such as income, which determines that you are both the victim of crime and that you hold left wing views. Columns (5-6) repeat the exercise with a broader set of controls. These include age, gender, dummies for city size and all the previous explanatory variables but using a new measure of each respondent’s income. A person’s declared income level is now captured by the question: “The wage or salary you receive and the total family income, Does it allow you to satisfactorily cover your needs? In which of these situations are you?” The possible answers are: “It is good enough, you can save”, “It is just enough, without great difficulties”, “It is not enough, you have difficulties” and “It is not enough, you have great difficulties”. The results are again supportive of the hypothesis that an experience with crime moved individuals to the left-end of the political spectrum. In auxiliary regressions we included controls for educational attainment, a person’s ideological self-placement and simultaneous controls for both measures of income and obtained similar results.

VI. Perceptions versus Reality

Having established that perceptions of corruption and crime affect ideological inclination, it is interesting to explore what drives these perceptions. Is it reality, so that people’s perception of corruption follows the fact that there is more corruption? Or is it that these perceptions are like

“moods” that can get divorced from reality? In a recent paper, Olken (2006) shows that there can be a substantial divorce between reality and perceptions using Indonesian data.

One possible strategy is to evaluate if the perception of a certain phenomenon is related strongly to the experience of that phenomenon or the perception of a (presumably unrelated) phenomenon. In Table 5 we present regressions for *Perception of Corruption* on *Real Corruption*. The coefficient is positive and significant, suggesting that reality does affect perceptions. Regression (2) includes year fixed effects and the coefficient remains unaffected. Regression (3) shows that when we include the perception and reality of a second phenomenon, crime, the coefficient on *Real Corruption* is almost halved and is now statistically insignificant. Interestingly, the coefficient on *Perception of Crime* is positive and statistically well-defined (while *Real Crime* is uncorrelated with *Perception of Corruption*). *Real Crime* is included as a reassurance that actual crime is being kept constant (although its inclusion does not affect the conclusions). The size of the coefficient is extremely large, suggesting that the role of perceptions (generally) is important, potentially overwhelming the impact of reality. To get a sense of the relative size, note that a one standard deviation increase in *Real Corruption* is associated with an increase in *Perceived Corruption* equal to less than 1% of a standard deviation in that variable ($0.009=(0.43/0.68)*0.015$). In contrast, a one standard deviation increase in *Perception of Crime* is associated with an increase in *Perception of Corruption* equal to 53% of a standard deviation ($0.53=(0.74/0.68)*0.49$). *Real Crime* has virtually no effect (just over 1.4% in standardized units).

Regressions (5-6) repeat the exercise for Venezuela and reveal that the same phenomenon applies there. This suggests that perceptions of corruption (and of other “bads”) are driven not by reality, but rather by some other force. We conjecture that this makes the electorate particularly receptive to “political activists” who supply beliefs, as in Glaeser’s (1995) model of hatred.

VII. The Case of Venezuela

We can apply the above results to the case of Venezuela. We first focus on the role of volatility of the economy. High levels of volatility may mean that the connection between effort and reward is lost. This may in turn affect people’s (right-left) beliefs about the degree of regulation and taxation that is required for their society. Venezuela lies in the top quarter of the countries in our sample in

terms of both inflation and unemployment volatility. An increase in inflation (unemployment) volatility from US to Venezuelan levels explains 6.9% (24.8%) of the difference in leftist beliefs about the degree to which the poor have been treated unfairly and 4.3% (21.0%) of the difference in leftist beliefs about the chances of escaping from poverty between these two nations (see Tables 1A and 1B).

Another striking feature of Venezuela is its' unusually high dependence on natural resources, in particular oil. To the extent that this country relies on abundant natural resources, becoming wealthy may be more associated with success in capturing rents and belonging to the elite, rather than on working hard in competitive industries. Venezuela has the second highest level of fuel exports as a proportion of total merchandise exports across all the countries in our sample (at 78.9%). The highest proportion is Nigeria (see Figure 1). A high dependence on oil may also be one of the causes of the increased unemployment and inflation volatility discussed above (see, inter alia, Carruth, Hooker and Oswald, 1998). An increase in fuels as a proportion of total merchandise exports from US to Venezuelan levels is predicted to push an individual toward having more leftist beliefs by 1.1 units on the 0-10 right-left scale (see Table 2).

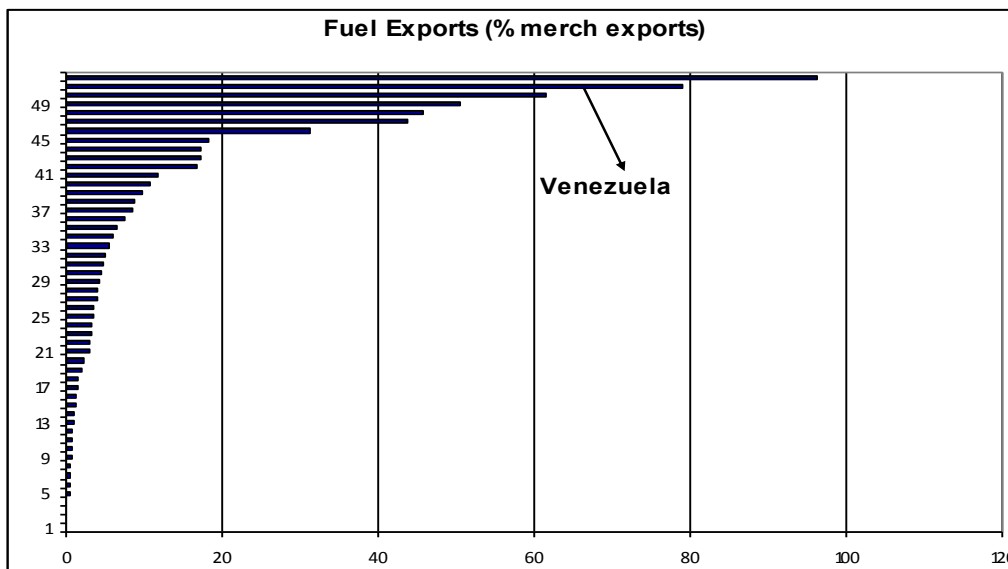


Figure 1: Ordered Ranking of Fuels Exports as a Proportion of Total Merchandise Exports for Sample

Turning to corruption, the International Country Risk Guide (ICRG) index places Venezuela in the

bottom 13% of nations in our sample. An increase in the corruption index from US to Venezuelan levels is predicted to push an individual toward having more leftist beliefs by 0.24 units on the 0-10 right-left scale (see Table 3). We also noted earlier how higher observed crime rates may lead people to believe that effort exerted in legal labour market activities is not rewarding thereby affecting their political beliefs. An increase from the lowest to the highest average measures of *Perception of Crime* recorded between 1995 and 2001 within Venezuela explains 15.4% of the range of leftist values as measured by ‘fairness of the distribution of income’ (see Table 4).

VIII. Conclusions

The starting point of this paper is the fact that the Venezuelan public has become more receptive to left wing, populist, anti-market rhetoric. This paper explores why. Our main explanation centers on the increased macroeconomic volatility stemming from the oil price shocks in the 1970s that led Venezuelans to view luck (rather than effort) as the reason behind economic success. Their heavy dependence on oil meant that internationally determined prices became an important driver of the economy and led to a shift toward more leftist economic beliefs that favored the view that the poor were not to blame for their predicament and should be helped by the government. In other words, the curse of Venezuela’s “resource curse” may have been a tendency for the people to become more left wing as volatile oil prices in the 1970s ushered in an era of populist and interventionist policies that hampered the nation’s post 1970s economic development.

More specifically, we use anecdotal evidence to focus on four phenomena that appear to be widespread in Venezuela: a history of macro-volatility, an economic dependency on oil, a belief that corruption is widespread and the belief that there has been a crime wave in the country. These four phenomena are theoretically compatible with moving the electorate to the left, because macro-volatility and oil dependency mean that luck is important relative to effort in the determination of income, because corruption erodes the legitimacy of business (see for example Di Tella and MacCulloch, 2002) and because widespread crime gives us information about how badly other people (criminals) fared in the labor market. The evidence is consistent with the hypothesis that beliefs are correlated with these forces.

Although these points broadly in the direction of reality being an important factor in the formation of beliefs for some of the factors study (e.g., our data on oil dependency is from actual oil dependency), the data on corruption used on Di Tella and MacCulloch (2002) is based on the perception of corruption. Perceptions may sometimes be divorced from reality, as political players (like Hugo Chavez) can potentially affect the beliefs of the electorate (perhaps by attacking a political group for political gain). In an attempt to shed some light on the relative perception of reality, we run regressions of the perception of corruption on reality (personal experience with corruption) and on the perceptions of another phenomenon (the perceptions of how much has crime increased), controlling for reality. We note that the perceptions of corruption are strongly correlated with the perceptions of this second phenomenon (the increase in crime) and have a much weaker connection with the personal experience with corruption or crime (reality).

Table 1A
How Beliefs (General Ideology and ‘Poor are Lazy’) vary with Macro Volatility:
Cross Section, 32 countries

<i>Dependent variables:</i>	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	<i>Right Wing-R</i>	<i>Right Wing-R</i>	<i>Right Wing-R</i>	<i>Right Wing-R</i>	<i>Unfair for Poor-L</i>	<i>Unfair for Poor-L</i>	<i>Unfair for Poor-L</i>	<i>Unfair for Poor-L</i>
<i>History of Inflation Volatility</i>	-4.1e-04 (1.3e-04)				1.5e-04 (3.9e-05)			
<i>History of GDP growth Volatility</i>		-0.018 (0.034)				-0.006 (0.015)		
<i>History of Exchange Rate Volatility</i>			-0.033 (0.027)				0.019 (0.007)	
<i>History of Unemployment</i>				-0.017 (0.022)				0.008 (0.005)
R-sq	0.013	0.010	0.003	0.011	0.018	1e-04	0.011	0.010
Number of Groups	32	32	32	32	31	31	31	31
Number of Obs.	31,585	31,585	31,585	31,585	27,120	27,120	27,120	27,120

Notes:

[1] Name of dependent variable has L (R) extension if higher numbers mean more Left (Right).

Right Wing-R: A categorical variable that is the answer to the question: “In politics people talk of the “left” and of the “right”. In a scale where “0” is left and “10” is right, where would you place yourself?”.

Unfair for Poor-L: A dummy that is the response to the question: “Why, in your opinion, are there people in this country who live in need? Here are two opinions: which comes closest to your view? (1) They are poor because of laziness and lack of willpower, or (2) They are poor because society treats them unfairly.” The dummy takes the value 1 if the answer is (2) and 0 if the answer is (1).

[2] All regressions are cross-section (3rd wave) OLS regressions. Standard errors (adjusted for clustering) are in parentheses. The regressions include a set of personal controls which include age, gender and *Income 1a* (which is the respondents declared income level as captured in the answer to the question: “People sometimes describe themselves as belonging to the lower class, the middle class, or the upper. How would you describe yourself?”).

[3] Right hand side variables are constructed using the World Bank’s World Development Indicators as follows:

History of Inflation Volatility: Average of the absolute value of the inflation (CPI) 1993-1997 (5 years before the 3rd wave of the WVS) using annual averages in %.

History of Growth Volatility: Average of the absolute value of the GDP growth 1993-1997 (5 years before the 3rd wave of the WVS) using annual averages in %.

History of Exchange Rate Volatility: Average of the absolute value of the Exchange Rate growth 1993-1997 (5 years before the 3rd wave of the WVS) calculated using the official exchange rate (LCU per US\$, annual average)

History of Unemployment: Average of the absolute value of the Unemployment rate 1993-1997 (5 years before the 3rd wave of the WVS) using annual averages (% of total labor force).

Table 1B
How Beliefs ('Escape from Poverty' and 'Ownership of Business') vary with
Macro Volatility: Cross Section, 32 countries

<i>Dependent variables:</i>	(1) <i>No Escape-L</i>	(2) <i>No Escape-L</i>	(3) <i>No Escape-L</i>	(4) <i>No Escape-L</i>	(5) <i>Business Owner-L</i>	(6) <i>Business Owner-L</i>	(7) <i>Business Owner-L</i>	(8) <i>Business Owner-L</i>
<i>History of Inflation Volatility</i>	2.2e-04 (5.3e-05)				2.0e-04 (4.4e-05)			
<i>History of GDP growth Volatility</i>		-0.009 (0.022)				0.036 (0.005)		
<i>History of Exchange Rate Volatility</i>			0.029 (0.010)				0.024 (0.015)	
<i>History of Unemployment</i>				0.016 (0.008)				-8.2e-04 (0.005)
R-sq	0.024	0.007	0.015	0.023	0.032	0.057	0.014	0.007
Number of Groups	32	32	32	32	32	32	32	32
Number of Obs.	32,266	32,266	32,266	32,266	29,566	29,566	29,566	29,566

Notes:

[1] Name of dependent variable has L (R) extension if higher numbers mean more Left (Right).

No Escape-L: A dummy equal to 1 if the answer to the question: "In your opinion, do most poor people in this country have a chance of escaping from poverty, or there is very little chance of escaping? (1) They have a chance or (2) There is very little chance." was category (2) and 0 if it was category (1).

Business Ownership-L: The response to the World Values question: "There is a lot of discussion about how business and industry should be managed. Which of these four statements comes closest to your opinion? (1) The owners should run their business or appoint the managers, (2) The owners and the employees should participate in the selection of managers, (3) The government should be the owner and appoint the managers, (4) The employees should own the business and elect the managers". *Business Ownership-L* was defined as a dummy equals 1 if the answer is category (3) or (4) and 0 if the answer is category (1) or (2).

[2] All regressions are cross-section (3rd wave) OLS regressions. Standard errors (adjusted for clustering) are in parentheses. The regressions include a set of personal controls which include age, gender and *Income 1a* (which is the respondents declared income level as captured in the answer to the question: "People sometimes describe themselves as belonging to the lower class, the middle class, or the upper. How would you describe yourself?").

[3] Right hand side variables are constructed using the World Bank's World Development Indicators as follows:

History of Inflation Volatility: Average of the absolute value of the inflation (CPI) 1993-1997 (5 years before the 3rd wave of the WVS) using annual averages in %.

History of Growth Volatility: Average of the absolute value of the GDP growth 1993-1997 (5 years before the 3rd wave of the WVS) using annual averages in %.

History of Exchange Rate Volatility: Average of the absolute value of the Exchange Rate growth 1993-1997 (5 years before the 3rd wave of the WVS) calculated using the official exchange rate (LCU per US\$, annual average)

History of Unemployment: Average of the absolute value of the Unemployment rate 1993-1997 (5 years before the 3rd wave of the WVS) using annual averages (% of total labor force)

Table 2
Left Wing Beliefs and Dependence on Oil Rents: Panel Regressions

<i>Dependent Variable:</i> <i>Right Wing-R</i>	(1)	(2)	(3)	(4)	(5)	(6)
<i>Fuel Exports</i>	-0.010 (0.006)					
<i>Log Fuel Exports</i>		-0.323 (0.092)				
<i>Ores Exports</i>			-0.065 (0.026)			
<i>Log Ores Exports</i>				-0.466 (0.256)		
<i>Manufacturing Exports</i>					0.006 (0.004)	
<i>Log Manufacturing Exports</i>						0.211 (0.204)
Adj R-sq	0.061	0.062	0.062	0.062	0.060	0.060
Between Number of Groups	24	24	24	24	24	24
Max Number of Groups	49	49	49	49	49	49
Number of Obs.	79,251	79,251	79,251	79,251	79,251	79,251

Notes:

[1] All regressions are OLS regressions and include country and year dummies. [2] Dependent variable is *Right Wing-R* a categorical variable that is the answer to the question: “In politics people talk of the “left” and of the “right”. In a scale where “0” is left and “10” is right, where would you place yourself?” and is obtained from the WVS. [3] *Fuel Exports* refers to ‘Fuel exports as % of merchandise exports’ and is obtained from the World Bank’s World Development Indicators. [4] *Ores Exports* refers to ‘Ores and metals exports as % of merchandise exports’ and is obtained from the World Bank’s World Development Indicators. [5] *Manufacturing Exports* refers to “Manufactures exports as % of merchandise exports” and is obtained from the World Bank’s World Development Indicators. [6] *Merchandise Exports* show the f.o.b. value of goods provided to the rest of the world valued in U.S. dollars. They are classified using the Standard International Trade Classification (SITC). In particular, the World Bank figures distinguish between ‘Merchandise Exports’ and “Exports of Services”. [7] *Log Variable Name* refers to the natural log of *Variable Name*. [8] All regressions control for age, gender and *Income Ia*. [9] *Income Ia*: The respondents declared income level as capture in the question “People sometimes describe themselves as belonging to the lower class, the middle class, or the upper. How would you describe yourself?” [10] Standard errors on *Fuel Exports*, *Log Fuel Exports*, *Ores Exports*, *Log Ores Exports*, *Manufacturing Exports* and *Log Manufacturing Exports* adjusted to take account of clustering within countries. [11] Clustered standard errors in parentheses.

Table 3
How Left Wing Beliefs vary with Corruption: Panel Regressions

<i>Dependent Variable: Right Wing-R</i>	<i>(1)</i>	<i>(2)</i>
<i>Corruption</i>	-0.190 (0.086)	
<i>Log Corruption</i>		-0.262 (0.157)
Adj R-sq	0.067	0.061
Between Number of Groups	25	25
Max Number of Groups	36	36
Number of Obs.	66,144	66,144

Notes:

[1] All regressions are OLS regressions and include country and year dummies. [2] Dependent variable is *Right Wing-R*, a categorical variable that is the answer to the question: “In politics people talk of the “left” and of the “right”. In a scale where “0” is left and “10” is right, where would you place yourself?” and is obtained from the WVS. [3] *Corruption* is obtained the ICRG. See Knack and Keefer (1995). [7] *Log Corruption* refers to the natural log of Corruption. [8] All regressions control for age, gender and *Income Ia*. [9] *Income Ia*: The respondents declared income level as captured by the question “People sometimes describe themselves as belonging to the working class, the middle class, or the upper or lower class. How would you describe yourself?” [10] Standard errors on *Corruption* and *Log Corruption* adjusted to take account of clustering within countries. [11] Clustered standard errors in parentheses.

Table 4
How Left Wing Beliefs vary with Crime: Panel Regressions

<i>Dependent Variables:</i>	LATIN AMERICA							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	<i>Fair-L</i>	<i>Privatiz-L</i>	<i>Fair-L</i>	<i>Privatiz-L</i>	<i>Fair-L</i>	<i>Privatiz-L</i>	<i>Fair-L</i>	<i>Privatiz-L</i>
<i>Perception of Crime</i>	-0.283 (0.012)	-0.051 (0.005)			-0.237 (0.014)	-0.050 (0.005)		
<i>Real Crime</i>			-0.031 (0.009)	-0.011 (0.004)			-0.022 (0.011)	-0.010 (0.004)
Personal Controls I	Yes	Yes	Yes	Yes	No	No	No	No
Personal Controls II	No	No	No	No	Yes	Yes	Yes	Yes
Pseudo Rsq	0.082	0.045	0.072	0.044	0.105	0.045	0.099	0.042
Max No. of Groups	17	17	17	17	17	17	17	17
Between No. Groups	17	17	17	17	15	17	15	17
No of Observations	47,283	53,107	47,231	68,738	35,267	51,827	35,181	66,323

Notes:

[1] Name of dependent variable has L (R) extension if higher numbers mean more Left (Right). [2] All regressions are OLS regressions and include country and year dummies. [3] All variables are obtained from the Latinobarómetro. [4] Standard errors in parentheses. [5] *Perception of Crime* is a dummy that equals 0 if the answer to the question “Crime has increased or decreased?” is “Has increased a lot” and 1 if it is “Has increased a little”, “Has stayed the same”, “Has fallen a little” or “Has fallen a lot”. [6] *Real Crime* is a categorical variable equal to 1 if the answer to the question: “Have you or a relative of yours been a victim of an assault, an aggression, or a crime, in the last 12 months?” is “Yes”, and 2 if the answer is “No”. [7] Personal Controls I: age, gender and *Income Ib*. Personal Controls II: age, gender, *Income Ib*, and *City Size*. [8] *Income Ib*: The respondents declared income level as capture in the question “The wage or salary you receive and the total family income, Does it allow you to satisfactorily cover your needs? In which of these situations are you?” The possible answers are “It is good enough, you can save”, “It is just enough, without great difficulties”, “It is not enough, you have difficulties” and “It is not enough, you have great difficulties”. [9] *City Size*: The size of the city where the interview takes place. The 2 possible categories are 1 if “100,000 or less” and 2 if “capital or more than 100,000”. [10] Dependent variables are the answers to the questions:

Columns (1,3,5,7)

Fair-L: Now I'd like you some questions about the problem of poverty, in this country and in other countries: How fair do you think the distribution of income is in this country? The five possible answers are 1. Very fair; 2. Fair; 3. Neither Fair nor unfair; 4. Unfair; and 5. Very unfair.

Columns (2,4,6,8)

Privatiz-L: Do you agree or disagree with the following statement:
The Privatization of public companies has been beneficial to the country. The two possible values are 1. I agree (if the answer to the question is: I completely agree or I agree); and 2. I disagree (if the answer to the question is: I completely disagree or I disagree).

Table 5
How Perceptions of Corruption vary with Real Corruption,
Perception of Crime and Real crime: Panel Regressions

<i>Dependent Variable:</i> <i>Perception of Corruption</i>	LATIN AMERICA				VENEZUELA	
	(1)	(2)	(3)	(4)	(5)	(6)
<i>Real Corruption</i>	0.028 (0.012)	0.028 (0.012)	0.015 (0.011)	0.015 (0.011)	0.069 (0.064)	0.068 (0.059)
<i>Perception of Crime</i>			0.490 (0.007)	0.490 (0.007)		0.660 (0.044)
<i>Real Crime</i>			0.011 (0.010)	0.011 (0.010)		-0.028 (0.054)
<i>Year dummy</i>	NO	YES	NO	YES	Year: 2001	Year: 2001
R ² overall	0.009	0.010	0.217	0.220	0.036	0.211
No. of Groups	17	17	17	17		
Obs	17,564	17,564	17,564	17,564	1,037	1,037

Notes:

[1] All regressions are OLS regressions. [2] Dependent variable is *Perception of Corruption* a categorical variable equal 1 if the answer to the question “Corruption has increased or decreased?” is “Has increased a lot”, 2 if it is “Has increased a little”, 3 if it is “Has stayed the same”, 4 if it is “Has fallen a little” and 5 if it is “Has fallen a lot”. [3] *Real Corruption* is a categorical variable equal to 1 if the answer to the question: “Have you or a relative of yours been a victim of corruption, in the last 12 months?” is “Yes”, and 2 if the answer is “No”. [4] *Perception of Crime*, a categorical variable equal 1 if the answer to the question “Crime has increased or decreased?” is “Has increased a lot”, 2 if it is “Has increased a little”, 3 if it is “Has stayed the same”, 4 if it is “Has fallen a little” and 5 if it is “Has fallen a lot”. [5] *Real Crime* is a categorical variable equal to 1 if the answer to the question: “Have you or a relative of yours been a victim of an assault, an aggression, or a crime, in the last 12 months?” is “Yes”, and 2 if the answer is “No”. [6] All regressions control for: age, gender, *Income Ib* and *Right Wing-R*. [7] *Income Ib*: The respondents declared income level as capture in the question “The wage or salary you receive and the total family income, Does it allow you to satisfactorily cover your needs? In which of these situations are you?” The possible answers are “It is good enough, you can save”, “It is just enough, without great difficulties”, “It is not enough, you have difficulties” and “It is not enough, you have great difficulties”. [8] *Right Wing-R*, is the answer to the World Values question: “In politics people talk of the “left” and of the “right”. In a scale where “0” is left and “10” is right, where would you place yourself?”. [9] Standard errors in parentheses.

Table 6
 Summary Statistics for the Aggregate Variables
 (Latinobarómetro, WVS, World Bank).

Variable	Obs.	Mean	Std. Dev.	Min.	Max.	Table
<i>Right Wing-R</i> - between - within	Total= 31,585 n=32 T-bar= 987.031	5.71	2.33 0.68 2.26	1 4.77 -0.33	10 7.93 10.94	1A
<i>Unfair for Poor-L</i> - between - within	Total= 27,120 n=31 T-bar= 874.839	0.71	0.45 0.13 0.43	0 0.40 -0.15	1 0.86 1.31	1A
<i>No Escape-L</i> - between - within	Total= 32,266 n=32 T-bar= 1008.31	0.59	0.49 0.19 0.45	0 0.12 -0.27	1 0.86 1.47	1B
<i>Business Owner-L</i> - between - within	Total= 29,566 n=32 T-bar= 923.938	0.23	0.42 0.14 0.40	0 0.4 -0.34	1 0.57 1.19	1B
<i>History of Inflation Volatility</i> - between - within	Total= 31,585 n=32 T-bar= 987.031	169.30	329.10 306.20 0	0.80 0.80 1219.82	1219.82 1219.82 169.30	1A
<i>History of GDP growth Volatility</i> - between - within	Total= 31,585 n=32 T-bar= 987.031	4.88	2.31 2.30 0	0.82 0.82 4.88	12.47 12.47 4.88	1A
<i>History of Exchange Rate Volatility</i> - between - within	Total= 31,585 n=32 T-bar= 987.031	0.81	1.79 1.72 0	1.9e-03 1.9e-03 0.81	7.62 7.62 0.81	1A
<i>History of Unemployment</i> - between - within	Total= 31,585 n=32 T-bar= 987.031	7.91	4.30 4.97 0	0.50 0.50 7.91	22.32 22.32 7.91	1A
<i>... continued next page</i>						

<i>continued from previous page...</i>						
Variable	Obs.	Mean	Std. Dev.	Min.	Max.	Table
<i>Right Wing-R</i> - between - within	Total= 79,251 n=49 T-bar= 1,617.37	5.56	2.21 0.62 2.14	1 4.26 -0.47	10 7.93 11.30	2A
<i>Fuel Exports</i> - between - within	Total= 79,251 n=49 T-bar= 1,617.37	12.65	20.50 20.63 2.79	0.01 0.01 -1.81	96.28 96.28 25.73	2A
<i>Log Fuel Exports</i> - between - within	Total= 79,251 n=49 T-bar= 1,617.37	1.35	1.78 2.03 0.31	-5.11 -5.11 0.60	4.57 4.57 2.15	2A
<i>Ores Exports</i> - between - within	Total= 79,251 n=49 T-bar= 1,617.37	6.33	9.50 9.70 0.91	0.01 0.01 2.26	54.61 52.15 8.78	2A
<i>Log Ores Exports</i> - between - within	Total= 79,251 n=49 T-bar= 1,617.37	1.12	1.41 1.51 0.16	-4.22 -4.22 0.55	4.00 3.95 1.65	2A
<i>Manufacturing Exports</i> - between - within	Total= 79,251 n=49 T-bar= 1,617.37	59.72	24.72 26.09 4.18	3.36 3.36 41.99	95.89 95.35 79.33	2A
<i>Log Manufacturing Exports</i> - between - within	Total= 79,251 n=49 T-bar= 1,617.37	3.93	0.68 0.74 0.08	1.21 1.21 3.45	4.56 4.56 4.26	2A
<i>Right Wing-R</i> - between - within	Total= 66,144 n=36 T-bar= 1,837.33	5.61	2.21 0.64 2.15	1 4.58 -0.43	10 7.93 11.02	3
<i>Corruption</i> - between - within	Total= 66,144 n=36 T-bar= 1,837.33	2.46	1.38 1.36 0.42	1 1 1.20	5 5 3.78	3
<i>Log Corruption</i> - between - within	Total= 66,144 n=36 T-bar= 1,837.33	0.73	0.60 0.58 0.23	0 0 0.01	1.61 1.61 1.11	3
<i>... continued next page</i>						

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Variable	Obs.	Mean	Std. Dev.	Min.	Max.	Table
<i>Fair-L</i> - between - within	Total= 47,283 n=17 T-bar= 2,781.35	4.00	1.03 0.19 1.00	1 3.64 0.65	5 4.35 5.36	4
<i>Privatiz-L</i> - between - within	Total= 53,107 n=17 T-bar= 3,123.94	1.65	0.48 0.08 0.47	1 1.44 0.88	2 1.77 2.22	4
<i>Perception of Crime</i> - between - within	Total= 47,283 n=17 T-bar= 2,781.35	0.20	0.40 0.11 0.39	0 0.06 -0.23	1 0.43 1.14	4

Appendix 2: Survey Descriptions World Values Survey

World Values Survey and European Values Survey (1981-84, 1990-92, 1995-97)

The Combined World Values Survey is produced by the Institute for Social Research, Ann Arbor, MI, USA. The series is designed to enable a cross-national comparison of values and norms on a wide variety of norms and to monitor changes in values and attitudes across the globe. Both national random and quota sampling were used. All of the surveys were carried out through face-to-face interviews, with a sampling universe consisting of all adult citizens, aged 18 and older, across over 60 nations around the world. The 1981-83 survey covered 22 independent countries; the 1990-93 survey covered 42 independent countries; the 1995-97 survey covered 53 independent countries. In total, 64 independent countries have been surveyed in at least one wave of this investigation (counting East Germany as an independent country, which it was when first surveyed). These countries include almost 80 percent of the world's population. A fourth wave of surveys is being carried out in 1999-2000. The full set of countries covered is: Argentina, Armenia, Australia, Austria, Azerbaijan, Belgium, Bangladesh, Bulgaria, Bosnia-Herzegovina, Belarus, Brazil, Canada, Switzerland, Chile, China, Colombia, Czech Republic, East and Unified Germany, Denmark, Dominican Republic, Spain, Estonia, Finland, France, United Kingdom, Georgia, Ghana, Croatia, Hungary, India, Ireland, Northern Ireland, Iceland, Italy, Japan, South Korea, Lithuania, Latvia, Madagascar, Mexico, Macedonia, Montenegro, The Netherlands, Norway, Pakistan, Peru, Philippines, Poland, Puerto Rico, Portugal, Russia, Slovak Republic, Slovenia, Sweden, Turkey, Taiwan, Ukraine, Uruguay, United States of America, Venezuela, South Africa, Moscow, Tambov oblast, Montenegro, Spain, Nigeria, Romania, Moldova and Serbia.

Income Ia: The respondents declared income level as capture in the question “People sometimes describe themselves as belonging to the lower class, the middle class, or the upper. How would you describe yourself?”

Right Wing-R: is a categorical variable that is the answer to the question: “In politics people talk of the “left” and of the “right”. In a scale where “0” is left and “10” is right, where would you place yourself?”

Unfair for Poor-L: A dummy that is the response to the question: “Why, in your opinion, are there people in this country who live in need? Here are two opinions: which comes closest to your view? (1) They are poor because of laziness and lack of willpower, or (2) They are poor because society treats them unfairly.” The dummy takes the value 1 if the answer is (2) and 0 if the answer is (1).

No Escape-L: A dummy equal to 1 if the answer to the question: “In your opinion, do most poor people in this country have a chance of escaping from poverty, or there is very little chance of escaping? (1) They have a chance or (2) There is very little chance.” was category (2) and 0 if it was category (1).

Government help Poor-L: The response to the World Values question: “Do you think that what the government is doing for people in poverty in this country is about the right amount, too much, or too little? (1) Too much, (2) About the right amount, or (3) Too little.”. *Government help Poor-L* is a categorical variable equal 1 if the answer is (1), 2 if the answer is (2) and 3 if the answer is (3).

Business Ownership-L: The response to the World Values question: “There is a lot of discussion about how business and industry should be managed. Which of these four statements comes closest to your opinion? (1) The owners should run their business or appoint the managers, (2) The owners and the employees should participate in the selection of managers, (3) The government should be the owner and appoint the managers, (4) The employees should own the business and elect the managers”. *Business Ownership-L* was defined as a dummy equals 1 if the answer is category (3) or (4) and 0 if the answer is category (1) or (2).

Fair Pay-L: The response to the World Values question: “Imagine two secretaries, of the same age, doing practically the same job. One finds out that the other earns considerably more than she does. The better paid secretary, however, is quicker, more efficient and more reliable at her job. In your opinion, is it fair or not fair that one secretary is paid more than the other? (1) Fair or (2) Not fair.”. *Fair Pay-R* was defined as a dummy equals 1 if the answer is category (2) and 0 if the answer is category (1).

Appendix 2 (continued): Latinobarometro

The Latinobarometro Survey, an annual public opinion survey of approximately 19,000 interviews in 18 countries in Latin America. Questions of interest rotate, so the number of waves (and thus our sample size) varies considerably depending on the question being studied. It is produced by Latinobarómetro Corporation, a non profit NGO based in Santiago, Chile. It surveys development of democracies, economies and societies and we are particularly interested in a number of attitudinal variables that are associated with ideological standing (on an economic dimension). Just like the WVS, it is designed to enable a cross-national comparison of values and norms on a variety of topics. As far as we can tell, a national random sampling were used, and the surveys were carried out through face-to-face interviews, with a sampling universe consisting of adult citizens, aged 18 and older. The countries covered are Argentina, Bolivia, Brazil, Colombia, Costa Rica, Chile, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay, Venezuela and Spain.

Perception of Crime is a dummy that equals 0 if the answer to the question “Crime has increased or decreased?” is “Has increased a lot” and 1 if it is “Has increased a little”, “Has stayed the same”, “Has fallen a little” or “Has fallen a lot”.

Real Crime is a categorical variable equal to 1 if the answer to the question: “Have you or a relative of yours been a victim of an assault, an aggression, or a crime, in the last 12 months?” is “Yes”, and 2 if the answer is “No”.

Perception of Corruption is a categorical variable equal 1 if the answer to the question “Corruption has increased or decreased?” is “Has increased a lot”, 2 if it is “Has increased a little”, 3 if it is “Has stayed the same”, 4 if it is “Has fallen a little” and 5 if it is “Has fallen a lot”.

Real Corruption is a categorical variable equal to 1 if the answer to the question: “Have you or a relative of yours been a victim of corruption, in the last 12 months?” is “Yes”, and 2 if the answer is “No”.

Right Wing, is the answer to the question: “In politics people talk of the “left” and of the “right”. In a scale where “0” is left and “10” is right, where would you place yourself?”.

Fair-L: Now I'd like you some questions about the problem of poverty, in this country and in other countries: How fair do you think the distribution of income is in this country? The four possible answers are 1. Very fair; 2. Fair; 3. Unfair; and 4. Very unfair.

Privatiz-L: Do you agree or disagree with the following statement: The Privatization of public companies has been beneficial to the country. The two possible answers are 1. I agree; and 2. I disagree.

Age: The respondent's age, in years.

Gender: The respondent's gender.

Income Ib: The respondents declared income level as capture in the question “The wage or salary you receive and the total family income, Does it allow you to satisfactorily cover your needs? In which of these situations are you?” The possible answers are “It is good enough, you can save”, “It is just enough, without great difficulties”, “It is not enough, you have difficulties” and “It is not enough, you have great difficulties”.

City Size: The size of the city where the interview takes place. The 2 possible categories are 1 if “100,000 or less” and 2 if “capital or more than 100,000”.

Appendix 2 (continued): World Development Indicators (World Bank)

WDI Online is a data source on the global economy. It contains statistical data for over 600 development indicators and time series data from 1960-2004 (selected data for 2005) for over 200 countries and 18 country groups. Data includes social, economic, financial, natural resources, and environmental indicators.

Inflation, consumer prices (annual %): Inflation as measured by the consumer price index reflects the annual percentage change in the cost to the average consumer of acquiring a fixed basket of goods and services. In general, a Laspeyres index formula is used.

GDP growth (annual %): Annual percentage growth rate of GDP at market prices based on currency. Aggregates are based on constant U.S. dollars. GDP measures the total output of goods and services for final use occurring within the domestic territory of a given country, regardless of the allocation to domestic and foreign claims. Gross domestic product at purchaser values (market prices) is the sum of gross value added by all resident and nonresident producers in the economy plus any taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources.

Official exchange rate (LCU per US\$, annual average): Official exchange rate refers to the actual, principal exchange rate and is an annual average based on monthly averages (local currency units relative to U.S. dollars) determined by country authorities or on rates determined largely by market forces in the legally sanctioned exchange market.

Unemployment Total (% of total labor force): Unemployment refers to the share of the labor force without work but available for and seeking employment. Definitions of labor force and unemployment differ by country.

History of Inflation Volatility: Average of the absolute value of the Inflation (consumer prices) 1993-1997 (5 years before the 3rd wave of the WVS) using annual averages in %.

History of Growth Volatility: Average of the absolute value of the GDP growth 1993-1997 (5 years before the 3rd wave of the WVS) using annual averages in %.

History of Exchange Rate Volatility: Average of the absolute value of the official exchange rate growth 1993-1997 (5 years before the 3rd wave of the WVS) calculated using the official exchange rate (LCU per US\$, annual average)

History of Unemployment: Average of the absolute value of Unemployment Total (% of total labor force) 1993-1997 (5 years before the 3rd wave of the WVS) using annual averages.

Fuel Exports: Refers to Fuel exports as % of merchandise exports. Fuels comprise SITC revision 1, section 3 (mineral fuels).

Ores Exports: Refers to ores and metals exports as % of merchandise exports. Ores and metals comprise commodities in SITC revision 1, sections 27 (crude fertilizer, minerals nes); 28 (metalliferous ores, scrap; and 68 non-ferrous metals).

Manufacturing Exports: Refers to Manufactures exports as % of merchandise exports. Manufactures comprise commodities in SITC revision 1, sections 5 through 9 (chemicals and related products, basic manufactures, machinery and transport equipment, other manufactured articles and goods not elsewhere classified) excluding division 68 (non-ferrous metals).

Merchandise exports show the f.o.b. value of goods provided to the rest of the world valued in U.S. dollars. They are classified using the Standard International Trade Classification (SITC). In particular, the World Bank figures distinguish between "Merchandise Exports" (Exports of things that you can touch) and "Exports of Services", like shipping, tourism, and communications

Corruption: The International Country Risk Guide (ICRG) corruption index has been produced annually since 1982 by Political Risk Services, a private international investment risk service. It is measured on a 0 to 6 scale. The index is based on the opinion of experts, and intends to capture the extent to which "high government officials are likely to demand special payments" and "illegal payments are generally expected throughout lower levels of government" in the form of "bribes connected with import and export licenses, exchange controls, tax assessments, police protection, or loans".

References

- Alesina, Alberto, Ed Glaeser and Bruce Sacerdote (2001) "Why Doesn't the US have a European Style Welfare State?", *Brookings Papers on Economic Activity*, 2, 187-277.
- Alesina, Alberto, and Eliana La Ferrara (2005) "Redistribution in the Land of Opportunities", *Journal of Public Economics*, LXXXIX, 897-931.
- Alesina, Alberto and George-Marios Angeletos (2005) "Corruption, Inequality and Fairness", *Journal of Monetary Economics*, vol. 52(7), pp. 1227-44.
- Alesina, Alberto and George-Marios Angeletos (2005) "Fairness and Redistribution", *American Economic Review*, 95(4), 960-980.
- Benabou, Roland and Efe A. Ok (2001) "Social Mobility and the Demand for Redistribution: The POUM Hypothesis", *Quarterly Journal of Economics*, 116(2), 447-487.
- Benabou, Roland and Jean Tirole (2005) "Belief in a Just World and Redistributive Policies.", forthcoming *Quarterly Journal of Economics*.
- Benabou, Roland (2000) "Unequal Societies: Income Distribution and the Social Contract" *American Economic Review*, 90, 96-129.
- Carruth, A., Hooker, M. and A. Oswald (1998) "Input Prices and Unemployment Equilibria: Theory and Evidence for the United States, *Review of Economics and Statistics*, 80, 621-628.
- Denzau, A. and D. North (1993) "Shared Mental Models: Ideologies and Institutions", *Economic History* 9039003 working paper.
- Di Tella, Rafael and Robert MacCulloch (2002) "Why Doesn't Capitalism Flow to Poor Countries?", mimeo.
- Di Tella, Rafael and Robert MacCulloch (2006) "Corruption and the Demand for Regulating Capitalists", Chapter 13 in Susan Rose-Ackerman (ed.) *Handbook of Corruption*, Elgar Publishing.
- Di Tella, Rafael, Schargrotsky, Ernesto and Sebastian Galiani (2004) "The Formation of Beliefs: Evidence from the Allocation of titles to Squatters", forthcoming *Quarterly Journal of Economics*.
- Di Tella, Rafael, Donna, Javier and Robert MacCulloch (2006) "Crime and Beliefs", mimeo.
- Di Tella, R. and R. MacCulloch (2005) "Culture and Beliefs", mimeo.
- Fong, Christina (2004) "Which Beliefs Matter for Redistributive Politics? Target-specific versus general beliefs about the causes of income", mimeo Carnegie Mellon University.
- Geertz, Clifford (1973) *The Interpretation of Cultures*. New York: Basic Books.
- Glaeser, Edward, "The Political Economy of Hatred," *Quarterly Journal of Economics*, CXX (2005), 45-86.
- Greif, Avner (1994) "Cultural Beliefs and the Organization of Society: A Historical and Theoretical Reflection on Collectivist and Individualist Societies", *Journal of Political Economy* 102(5), 912-50.
- Hochschild, Jennifer, (1981) *What's Fair? American Beliefs about Distributive Justice*, Cambridge, Harvard University Press.
- Knack, Stephen and Philip Keefer (1995), "Institutions and Economic Performance: Cross-Country Tests Using Alternative Institutional Measures." *Economics and Politics*, 7 (3), pp. 207-27.
- Ladd, Everett Carl and Karlyn Bowman (1998) *Attitudes Towards Economic Inequality*, AEI Press: Washington.
- Lipset, Seymour Martin and Rokkan Stein (1967) "Cleavage Structures, Party Systems, and Voter Alignments: An Introduction", in Lipset and Rokkan (eds.) *Party Systems and Voter Alignments*. New York: Free Press.
- Meltzer, A. and S. Richard (1981) A rational theory of the size of government. *Journal of Political Economy* 89(5): 914-927.
- Olken, Ben (2006) "Corruption Perceptions vs Corruption reality", NBER wp#12428.
- Piketty, Thomas (1995). "Social Mobility and Redistributive Politics." *Quarterly Journal of Economics*, 110(3): 551-84.