

Compound indexes of competitiveness, corruption and standard of living: a comparative study

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Abstract

Reports that estimate each country's economic performance and the standard of living of their population have different origins and methodologies. The media tends to reflect the results of these measurements that assess a certain number of countries in an order (or ranking) that represents their position in relation to the pertinent issue. Two types of indicators can be mainly distinguished regarding the sources used: those exclusively based on statistical data, and those that make use of a combination of statistical data and surveys. The empirical evidence indicates that in those indexes that have opinion polls as one of their inputs, Argentina tends to obtain results that are clearly far from those exclusively based on statistical data.

1. Introduction

For approximately fifteen years there have been numerous reports estimating the countries' economic performance and the standard of living of their population. The media tends to reflect the results of these measurements, though little is reported regarding the methodology used. In general, these indicators¹ assess a certain number of countries in an order (or ranking) that represents their position in relation to the pertinent issue. The evidence that GDP *per capita* is not the only variable to represent a country's standard of living lies in the origin of these measurements.

Currently, there are numerous examples of non-monetary indexes that are meant to reflect several aspects of social and economic welfare, combining different factors that influence the economic and institutional assessment, and people's standard of living. Privately-run organizations that elaborate this sort of indicators proliferate. They are aimed at providing information to their members and to the general public, and they are meant to constitute a non-governmental source of information often clearly intended for entrepreneurs and business people who can therefore get an overview of some aspect regarding said country's current facts and figures.

Two types of indexes can be mainly distinguished according to the sources used: those exclusively based on statistical data, and those that make use of a combination of statistical data and surveys. In the first type of indicator, Argentina is generally ranked medium-high. However, in those indicators where the opinion of those polled is given significant relevance, the country generally gets mediocre or very poor results.

The objective of the present work is to describe some of the best known indexes, elucidate how they are elaborated and financed, what sources are used and who those indexes are addressed to. Whenever necessary, the ranking reached by Argentina and some other countries in these indicators will be compared with that obtained in the Human Development Index elaborated by the United Nations Development Programme. Finally, in the Annex, poverty and income distribution indexes in Latin America and the Caribbean are presented.

In fact, the key point is to use some economic and social indicators that can establish a comparison free of "perceptions", mainly subject to objective and reliable statistical data.

2. Selected indexes

¹ An indicator is a quantitative or qualitative measure used to reflect facts in a simplified way.

2.1. Index of economic freedom

The Heritage Foundation (THF)² together with the Wall Street Journal (WSJ) prepare the index of economic freedom (IEF). THF takes into account some factors which it refers to as the "ten economic freedoms": business freedom, trade freedom, fiscal freedom, government size, monetary freedom, investment freedom, financial freedom, property rights, freedom from corruption, and labour freedom.

In 2007, Argentina was ranked 95th, with a score of 57.5 per cent, below Kazakhstan, Guyana and Ghana. This ranking position identifies the country's economy as "mostly unfree".

The score obtained is similar to that of 2006 and it is very far from those achieved between 1996 and 2001, when the same index considered the domestic economy as "mostly free". The sources used by the THF are the World Bank, the WTO, the United States Department of State's Country Commercial Guides and domestic statistics agencies.

The score is attributed to labour legislation, tax rates, official price controls, the uncertainty driven by regulatory changes, and the high levels of corruption. According to THF, property rights, labour freedom and the level of corruption are the basic problems Argentina faces. The report states that some foreign investors have resorted to international arbitration after filing claims on the violation of property rights that road and street blockades represent. Likewise, THF states that a very high non-wage cost coexists with barriers to new job creation (severance payments, compulsory holidays, overtime payments, etc.).

Such as its web page states, THF is a research and educational institute—a think tank—whose mission is to formulate and promote conservative public policies based on the principle of free enterprise, limited government, individual freedom, traditional American values and a strong defense. Its web site informs that "more than 280,000 conservative people and institutions finance the foundation". The foundations ReagansHeritage.org and The Margaret Thatcher Center for Freedom are associated to THF.

2.2. Global competitiveness Index

The World Economic Forum (WEF)³ is an independent international organization that, since 2001 has been elaborating a competitiveness ranking that combines publicly available data with the results of an opinion poll carried out by the WEF and its local partners in each country. For the making of the index, more than 11,000 executives in 131 countries were consulted. The index calculated by the WEF measures competitiveness by means of the assessment of several aspects of the domestic economies, such as institutions, macroeconomic stability, health, education, labour market and innovation, among others.

According to the 2007 ranking, Argentina occupied the 85th position, falling by 15 positions with respect to the previous year, below Jordan, Jamaica, Azerbaijan and Trinidad and Tobago, among others. Argentina obtained low scores in items that refer to institutions, the labour market, efficiency of trade in goods, financial market sophistication, and innovation. The best scores were obtained in market size, health, primary education, higher education and training.

The descent in the ranking was driven mainly by outstanding foreign debts, price control and by attitudes that can be interpreted as a way of exerting pressure on the judiciary, thus raising uncertainty about the predictability of regulatory frameworks.

The following are some of the WEF's members: banks (Citigroup, ABN Amro Bank, Deutsche Bank, Grupo Santander), consultancies (PricewaterhouseCoopers), food industry companies (Swift, Nestlé), technological companies (Siemens, Microsoft, Intel Corporation), chemical and laboratory sector companies (Pfizer, Dow Chemical Company), financial services companies (Lehman Brothers, Merrill Lynch), energy companies (Total, Duke Energy) and telecommunications companies (France Telecom).

² The index is published at www.heritage.com

³ This index is published at <http://www.weforum.org/en/index.htm>.

2.3. World Competitiveness Yearbook

Since 1989, the Institute for Management Development (IMD) has been publishing a competitiveness index for 55 economies in the World Competitiveness Yearbook (WCY). According to the IMD, the variables analysed account for the way nations and companies manage their resources to obtain greater prosperity and benefits. The IMD, the result of the merger of two organizations⁴, was conceived as an academic institution with strong links with international corporations, as described in its web site⁵.

The person directly in charge of elaborating the WCY is Professor Stéphane Garelli. He was board member in some banks, Managing Director of the World Economic Forum held in Davos as well as IMD professor.

Two sources of data are used for the elaboration of the WCY: on the one hand, the statistics provided by international bodies (WTO, UN, etc.) and by local partners (Universidad Católica Argentina is the local partner in Argentina); and on the other hand, 3,700 surveys answered by entrepreneurs and businesspeople in the countries analysed. The statistical data represent 2/3 of the index, while the surveys, 1/3 of it.

In the 2007 publication, Argentina was ranked 51 out of 55 countries receding 4 positions with respect to 2006. Venezuela, in the last position, is the only South American country surveyed that is ranked below our country.

For the elaboration of the index, the IMD measures 8 aspects of the economy and countries are ranked accordingly. Table 1 shows the evolution of the sectors analysed, as well as Argentina's relative position in each of them. It can immediately be seen that this index is rather volatile: for instance, in 2003, Argentina was ranked 46th in prices, moving to the 9th position in 2005 and to the 32nd position in 2006.

Table 1
Argentina

Ranking for each of the factors that constitute the IMD's competitiveness index.

	2002	2003	2004	2005	2006
Infrastructure	38	40	41	40	41
Government efficiency	49	50	50	50	49
Business efficiency	48	51	50	51	48
Macroeconomic evolution	48	51	50	27	30
International trade	44	43	50	37	18
Foreign investment	46	47	51	46	48
Employment	47	49	20	25	28
Prices	31	46	20	9	32
General	48	50	50	49	47

Source: IMD.

According to the IMD, Argentina improved markedly in three of the aspects measured—international trade, employment and macroeconomic development—while the rest of the aspects showed slight variations with respect to 2002. However, in spite of this progress, the competitiveness index measured by this institution showed that our country's position remained almost unchanged between 2002 and 2006.

2.4. Corruption Perceptions Index

⁴ The IMI, founded in Geneva by Alcan Aluminium LTD in 1946, and the IMEDE, founded in Lausanne by Nestlé in 1957.

⁵ The index is published at <http://www.imd.ch>.

Transparency International (TI)⁶ is a global network organization that encompasses more than 90 associations in several countries. TI is supported by Exxon, Procter & Gamble, Shell International, and UBS and Merck, among others.

The Corruption Perceptions Index (CPI), elaborated by TI since 1995, scores countries according to surveys based on expert studies and business opinion polls. The Global Competitiveness Report prepared by the World Economic Forum is one of CPI's sources. In Argentina, this institution is represented by "Poder Ciudadano".

According to the CPI, out of a maximum score of 10 points, Argentina obtained a 2.9 score, in the same level as Eritrea and Tanzania, below Burkina Faso and Gabon, and 0.2 points above Libya.

2.5. Competitiveness index of nations

The FIESP (Federation of Industries of the State of São Paulo) devises the Competitiveness Index of Nations⁷ (CIN) for 43 countries. To that aim, it combines 83 current and structural variables, which are then divided into 8 sectors: infrastructure, capital, technology, government, human resources, openness, domestic economy and management. The sources used are The World Bank, the United Nations, the CIA, the World Economic Forum and the Institute for Management Development (IMD).

In spite of the fact that this index is similar to the other indexes analyzed here, the CIN prepared by the FIESP only uses quantitative variables that leave aside the subjectivity present in surveys. For its making, the same methodology, variables and weighting are applied to a set of countries (43 states representing 95% of world GDP) throughout a historical series.

According to the data published and as a consequence of a 30% improvement in the competitiveness index, Argentina was ranked 31st in 2005, 4 positions above that of 2004.

Whereas, in the same year, Brazil and Chile were ranked 38th and 32nd respectively. Although Argentina and Brazil show a similar result in five of the eight factors of the index, our country is best ranked in the remaining three (capital, human resources and business factor).

According to the FIESP, in spite of the 2001 crisis, those structural aspects eased Argentina's prompt recovery, in terms of the competitiveness index and the country's relative position with respect to the rest of the countries surveyed.

2.6. Human development index

Since 1990, the United Nations has been devising the "human development index (HDI) seeking to provide a wider definition of well-being that lies beyond GDP. The HDI is a composite index that measures a country's average development in three basic dimensions of human development: leading a long and healthy life, being knowledgeable and enjoying a decent standard of living. It is calculated on the basis of indicators that are currently available at a worldwide scale, using a simple and transparent methodology.⁸ Even though the concept of human development is much broader than what any particular index could determine, the HDI offers a solid alternative to the use of average income as a measure to assess human well-being" (UNDP, 2006: page 263).

The HDI available at the moment of doing the present work processed 2005 data. Argentina was ranked in the 38th position, on top of Chile and Uruguay and among those members that the UNDP classifies as

⁶ The index is published at <http://www.transparency.org/>

⁷ The index is published at <http://www.fiesp.com.br/competitividade>.

⁸ The methodology for the calculation is available at www.undp.org.

having “high human development⁹”. Table 2 depicts some countries’ recent performance, regarding fundamental aspects of human development, some of which significantly influence competitiveness of the nations.

Table 2

Selected indicators

Indicator	HDI	GDP per capita	GDP per capita	Literacy	Life expectancy	Access to water (2)	Population growth	Public expenditure in education	Public expenditure in health	Exports
Year	2004	2003	1990-2004	2004	2000-2005	2004	1975-2004	2002-2004	2003	1990-2006
Unit	- - -	(USD PPP)	(% var.) (1)	population %	(years)	population %	(% var.) (1)	(% of GDP)	(% of GDP)	(% var.) (1)
Australia	3	30,331	2.5	99.9	80.2	0%	1.30%	4.80%	6.40%	8.10%
Argentina	36	13,298	1.3	97.2	74.3	4%	1.30%	3.50%	4.30%	6.90%
Chile	38	10,874	3.7	95.7	77.9	5%	1.50%	3.70%	3.00%	11.70%
Kazakhstan	79	7,440	1.7	99.5	63.2	- - -	0.20%	2.40%	2.00%	32.70%
Jordan	86	4,688	0.5	89.9	71.2	3%	3.60%	- - -	4.20%	10.90%
Jamaica	104	4,163	-0.1	79.9	70.7	7%	0.90%	4.90%	2.70%	3.30%
Ghana	136	2,240	1.9	57.9	56.7	25%	2.60%	- - -	1.40%	5.00%
Burkina Faso	174	1,169	1.3	21.8	47.4	39%	2.60%	- - -	2.60%	6.20%

(1) Average annual change.

(2) Lack of access to drinkable and sustainable water.

Sources: Human Development Report 2006, UNDP.

Direction of Trade Statistics, CD-Rom August 2007, IMF.

3. Conclusions

In the literature, there is generalized consensus on the fact that determining the population’s well-being is extremely difficult due to the purely subjective nature of what is intended to be measured. Except for the HDI, and the competitiveness index calculated by the FIESP, which are exclusively based on statistical data and indicators, the rest of the indexes described in this report combine statistical data with surveys carried out by subsidiaries and members of the organizations in charge of calculating said rankings. Table 3 shows the position of some countries in the indexes described further above. By way of example, it is worth referring to the case of Jamaica, which, according to the UNDP, is a country with medium human development. Its GDP grew 0.7% yearly between 1990 and 2004; and its GDP per capita (measured by purchasing power parity) is slightly one third of that of Argentina, and exports grew at a lower pace than Argentina’s exports during the last fifteen years (see Table 2). Jamaica was ranked 101st in the HDI, whereas it was ranked above Argentina in the rest of the indicators. The case of Chile can also be mentioned. It obtained a similar ranking to Argentina’s in the HDI, whereas in the rest of the indexes it is well above our country in the rest of the indicators.

It is worth questioning how valid it is to compare the indexes that measure the competitiveness of nations or the transparency of their governments with another index measuring human development in a broader context, such as the HDI calculated by the UNDP. The core issue is then to know if there is a view point from which it becomes meaningful to draw a parallel between the results obtained in these measurements, given they deal with aspects that are so different.

Assuming the indexes attempt to reflect aspects of the countries’ standard of living by approaching any issue in particular, it is then pertinent to make a comparison with the Human Development Index, which, with all the limitations implied by the calculation of well-being, constitutes the most complete one since it includes a wide range of variables regarding the individuals’ standard of living.

On the other hand, if only competitiveness is compared, the following are the results obtained by Argentina in three indexes of diverse origin: FIESP, WEF and IMD. The first one uses pure statistical data, while the remaining two complement the statistics with the already mentioned surveys answered by business people. The index estimated by the FIESP detects that there has been an increase in competitiveness in Argentina since 2002; however, in the other two indexes, the country has been losing

⁹ All countries included in the HDI are classified into three different groups according to the goals achieved in matters of human development: high human development (HDI at 0.8 or higher), medium human development (HDI between 0.5 and 0.799) and low human development (HDI lower than 0.5) In 2004, Argentina obtained 0.869.

positions year after year. The empirical evidence indicates that in those indexes that have opinion polls as one of their inputs, Argentina tends to obtain results that are clearly far from those exclusively based on statistical data.

Table 3

Position of some of the countries in each of the indexes reviewed

COUNTRIES	HDI (1)	WEF (2)	TI (3)	THF (4)	WCY (5)
Australia	3	19	9	3	12
Argentina	36	85	93	95	51
Chile	38	26	20	11	26
Kazakhstan	79	61	111	75	---
Jordan	86	49	40	53	---
Jamaica	104	78	61	46	---
Ghana	136	---	70	91	---
Burkina Faso	174	112	79	113	---

(1) human development index, 2004, UNDP. It encompasses 177 countries.

(2) The Global Competitiveness Index, 2007, World Economic Forum. It encompasses 131 countries.

(3) Corruption perceptions index, 2006, Transparency International. It encompasses 163 countries.

(4) Index of Economic Freedom, 2006, The Heritage Foundation. It encompasses 162 countries.

(5) World Competitiveness Yearbook, 2007, Institute for Management Report. It encompasses 55 countries.

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Annex

Income distribution in Latin America and the Caribbean

This annex presents information about two dimensions of income distribution. In the first place, Argentina is ranked for the poverty index in the Latin America and the Caribbean region. In the second place, the exercise is repeated, though in relation to some measures accounting for income distribution inequality.

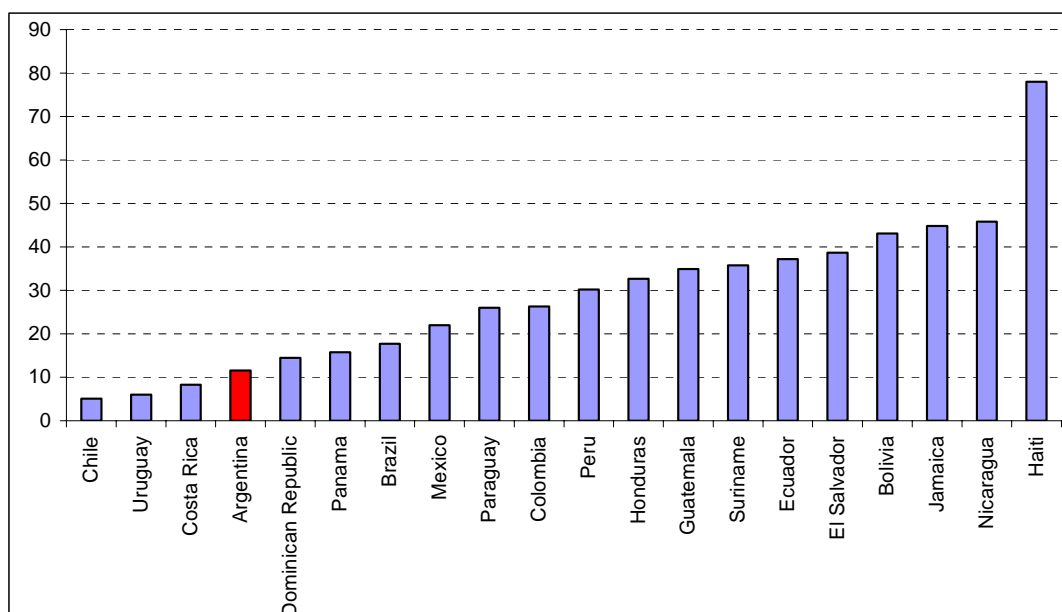
The source of information used is the Socio-Economic Database for Latin America and the Caribbean (SEDLAC), which is calculated by the Centro de Estudios Distributivos, Laborales y Sociales (CEDLAS) of Universidad Nacional de La Plata (UNLP) for the World Bank's LAC Poverty Group (LCSPG) and MECOVI Programme consulted on 4 October 2007.

Poverty

With the aim of comparing the poverty levels in Latin American and Caribbean countries, international poverty lines are used. ¹⁰ In particular, those individuals with family per capita income lower than one or two daily US dollars measured by purchasing power parity are considered poor. For the construction of the individual incomes used to calculate the poverty rate, the same methodology is used. Comparability of the estimations presented increases as a consequence. ¹¹

Graph 1

Population below poverty line of USD 2
(percentage)



Source: CEDLAS.

¹⁰ Note that the official poverty measures computed by each country are not comparable since they define differently the individuals taken as poor. For instance, different baskets of goods are used to determine poverty line.

¹¹ To that respect, see Gasparini (2007).

Table 4

Population below poverty line
(population percentage)

Year	Country	USD 1	USD 2
2003	Chile	1.4	5.1
2005	Uruguay	0.6	6.0
2004	Costa Rica	3.6	8.3
2005	Argentina	3.9	11.6
2005	Dominican Republic	3.8	14.5
2004	Panama	6.1	15.8
2004	Brazil	6.9	17.7
2004	Mexico	10.4	22.0
2004	Paraguay	10.2	26.0
2004	Colombia	14.8	26.3
2003	Peru	10.0	30.2
2005	Honduras	16.5	32.7
2004	Guatemala	12.8	34.9
1999	Suriname	19.7	35.8
2003	Ecuador	14.7	37.2
2004	El Salvador	16.4	38.7
2002	Bolivia	23.7	43.1
2002	Jamaica	33.4	44.8
2001	Nicaragua	18.0	45.8
2001	Haiti	53.9	78.0

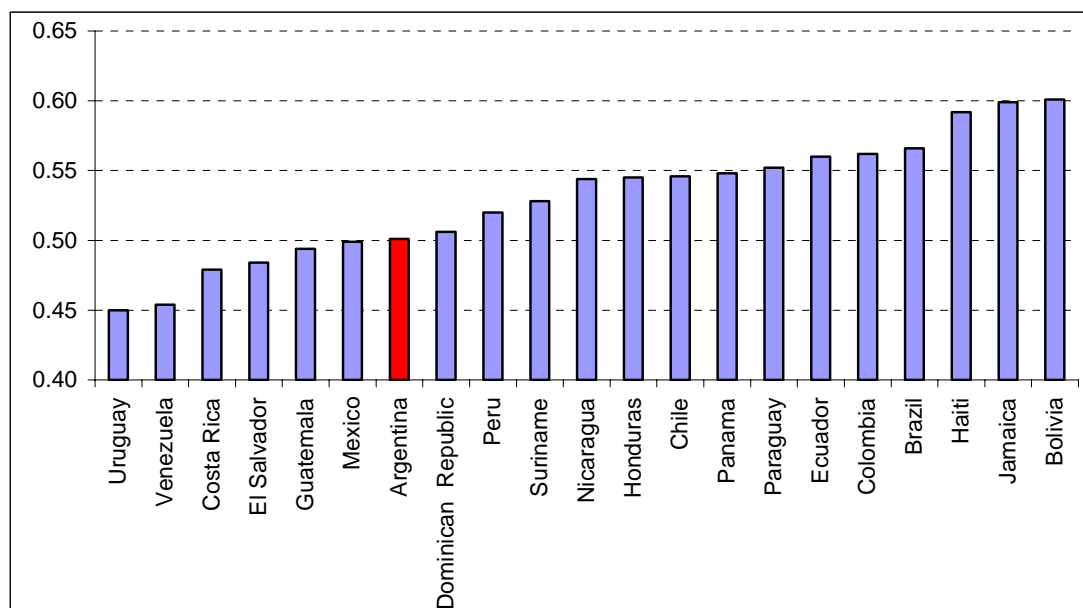
Source: Centro de Estudios Distributivos y Sociales (CEDLAS).

Income distribution

The Gini coefficient is used to measure inequality in income distribution. This indicator ranges from zero (perfect equality) to one (maximum inequality). In this case also, the indicator is computed for family per capita income distribution that derives from the comparison between household surveys in Latin American and Caribbean countries.

Graph 2

Distribution of wealth
(Gini coefficient)



Source: CEDLAS.

Table 5

Distribution of wealth
(Gini coefficient)

Year	Country	Ratio 10/1 (1)	Gini coefficient
2005	Uruguay	19.0	0.450
2004	Venezuela	23.0	0.454
2004	Costa Rica	25.9	0.479
2004	El Salvador	38.0	0.484
2004	Guatemala	29.1	0.494
2004	Mexico	31.4	0.499
2005	Argentina	32.7	0.501
2005	Dominican Republic	28.7	0.506
2003	Peru	30.3	0.520
1999	Suriname	41.9	0.528
2001	Nicaragua	36.1	0.544
2004	Honduras	55.4	0.545
2003	Chile	32.2	0.546
2004	Panama	49.3	0.548
2004	Paraguay	44.0	0.552
2000	Ecuador	43.1	0.560
2004	Colombia	53.6	0.562
2004	Brazil	46.2	0.566
2001	Haiti	71.8	0.592
2002	Jamaica	194.0	0.599
2002	Bolivia	171.1	0.601

(1) Quotient between the incomes of the top and bottom deciles.

Source: CEDLAS.