

## Use and abuse of Official Statistics in Latin America\*

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### Abstract

In line with the Fundamental Principles of Official Statistics to produce valid and reliable statistics Governments need to provide the legal framework and resources to the statistical system to allow statisticians to produce the required statistics, without interference, using the best available methodology and techniques from the most suited sources of information. In Latin America and the Caribbean the colonial past affected and still affects the production of statistics. During the Colonial period statistics were of limited scope and use, mostly serving the interests of the Colonial powers. After independence in Latin America statistics became an instrument for development only after World War II, while in the Caribbean the newly independent nations had to adjust the Colonial system to national sovereignty. Conflicts between statistical independence and administrative desire and convenience did occur. Occasionally statisticians were under pressure to modify results to serve administrative or political purposes. An extreme case of Government interference with statistical activities is the case of Argentina since 2007. The gross manipulation of the Consumer Price Index (CPI) that began at that time was aimed at concealing the rise in inflation which took place at the beginning of that year. Statisticians in the National Statistical Office who refused to be part of the forgery were demoted, and dismissed while others resigned. The alteration of the CPI severely affected other statistical indices. Private consultants and researchers were subject to criminal prosecutions and punished with hefty fines for the “crime” of publishing their own price estimates. Although in most cases the judicial system acquitted them, this happened some years later, and currently there are still researchers awaiting the final judgement. In spite of the reaction by public opinion and the world statistical community nothing changed substantially until now. The paper concludes with some recommendations to safeguard the integrity of statistics inspired by this sad experience.

**Keywords:** Colonial origin; authoritarian nature; alternative methodology; criminal act.

### 1. Introduction

Following the discovery of the Americas the continent has for a considerable period been subjected to the dominance by European countries whose interest was to transfer the riches from the Americas to Europe and transfer their excess (or undesirable) population to the Americas. Statistics in the modern sense was not yet developed, but the colonial powers maintained registers and records of items that were of interest to them. Prominent were registers or counts of population for reasons of labour resources, taxation and security (men capable of bearing arms) and records of production of goods (agricultural and precious metals) and trade movements. The veracity and completeness of information is sometimes questionable due to the divergence of the interests of the colonists and the mother

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countries. Because of lack of effective administrative control over the territories data collected were often incomplete and lack of standardised weights, measures and procedures hamper the use of surviving documents in the creation of historical statistics in the modern sense. Data was often meant for use of the authorities only and were not in the public domain. With the creation of independent nations, first in North America in the 18<sup>th</sup> century, in Latin America in the 19<sup>th</sup> century and in the Caribbean in middle of the 20<sup>th</sup> century the need for statistical information for national development became paramount.

Political independence from Spain and Portugal meant that the new nations needed information to develop effective national administrations. However, the use of the emerging statistical methodology was limited, due to lack of the required knowledge, human resources but above all the parasitic, authoritarian and autocratic nature of many governments. The quality of statistical activities was uneven across countries, but in some countries considerable progress was made in the collection of specific statistics, notably on health and economic activities. Modern statistical systems were only established after the end of the Second World War, due to efforts of the Inter-American Statistical Institute (IASI), the Organisation of American States (OAS) and the United Nations, particularly through the Economic Commission for Latin America and the Caribbean (ECLAC).

In the Caribbean and the Guyanas national independence, with the exception of Haiti, the Dominican Republic and Cuba, was only achieved after the Second War. Colonies of the United Kingdom in general followed the practices of the mother country, while in those of the Netherlands territory specific administrative systems produced statistical information mainly destined for the Colonial power. After national independence these countries needed to adjust their systems to cater for national development.

Increasing democratisation in the region after the second half of the 20<sup>th</sup> century meant that adherence to the principles of accountability and transparency was required, which led to the demand by parliaments and the civil society for accessible statistical information to effectively monitor and evaluate government's policies. The colonial practices where political regimes were not used to open scrutiny by the population, and that statistical information was for administrative and policy development use only created tension between the government of the day and the professional statisticians who claimed professional independence. In general governments, maybe reluctantly, did not interfere with the statistical production, although there have been cases in which governments did not agree with the statistics produced and statisticians were put under pressure to produce results that were more to the liking of the government in power. Occasionally, the media would cast doubt on the credibility of statistical results, and statisticians may be vilified. In general, sometimes with the support of the public opinion and international organisations, statistical independence was maintained although statisticians and the statistical office were subject to minor forms of harassment, lack of (timely) promotion, withholding of funds to attend international conferences, or delays in the disbursement of approved funds, or reduction of the budget for statistical activities. However, in the last decade or so the region and the world have witnessed an extreme and prolonged case of governmental interference with statistical activities in Argentina.

## **2. INDEC: the manipulation of public statistics in Argentina and harassment and persecution of INDEC's technicians**

Argentina had reliable statistics since the implementation of the first national census of population - which took place in 1869- until December 2006. The General Directorate for Statistics, dependent on the Ministry of Finance, which is the mediate antecedent of the current INDEC, was established in 1894. The CPI begins in 1924, when the mentioned General Directorate for Statistics creates the index for the Greater Buenos Aires Area (GBA).

In January 2007, in order to conceal the growing inflation, a process of manipulation of the CPI-GBA began. Essentially it consisted in not using in the data entry process the information provided by the surveys. Given the interrelationship between the various statistical series, manipulation quickly spread

to other indicators. An automatic effect was to alter the estimates of the indices of poverty and indigence for whose calculation many prices included in the CPI are a necessary input. The Wholesale Price Index was also "tuned up" so that its rates of variation kept consistent with the CPI. To avoid the comparisons, the elaboration of the CPI at the national level, which was in charge of another technical team, was discontinued and the team was dissolved.

Other "corrections" were then applied to the estimates of GDP to exaggerate growth rates or hide their decrease. One of the most notorious tampering was what happened with the estimates of car production. In this case there is a single source of primary information -the car factory chamber- that is the source of data used by INDEC. In a complaint filed to justice by a former national MP he revealed that between November 2008 and 2012 December car production amounted 2.892.198 units, according to the information provided by the car factory chamber. On the other hand, according to INDEC 3.166.776 units would have been produced in that period of time. INDEC itself manufactured nearly 300,000 vehicles!

In the course of the year 2006, the Secretary of Domestic Trade –in charge of the price control policy- required INDEC to provide the list of stores and establishments included in the sample used for the elaboration of the CPI. Providing such information would have entailed a violation of the Argentine law on statistics, which in its article 10 protects the statistical confidentiality. For this reason, the INDEC authorities refused to comply with such a request.

The situation caused crisis in January 2007. Preliminary estimates of the CPI announced a jump in the monthly value of the indicator. The refusal of the authorities of the INDEC to introduce ad-hoc procedures to decrease its magnitude resulted in the displacement of the Price Indices Director who was replaced by an official of the Secretary of Domestic Trade. This allowed starting the manipulation of the basic data for the construction of the CPI while the Secretary of Domestic Trade was able to have access to the information that has been requiring. From then on, inspectors of the Secretary visited retailers included in the sample and "instructed them" about how to answer the questionnaires of INDEC.

After the displacement of the Price Indices Director her superior –the National Director of Statistics of Conditions of Life- resigned. Shortly after, the General Director of INDEC followed suit and several officials were displaced or resigned. 13 directors were replaced between July and December 2007, other 7 in 2008 and other 7 in 2009. By 2012 only 2 of 36 directors who were in office in January 2007 remained in office. The majority of the displaced directors had been appointed by competition and they were required as experts by the offices of statistics in the region.

It is estimated that since 2007 INDEC appointed more than 600 new employees - without any competition - on a plant that was 1200 and more than 300 resignations or retirements took place since 2007, while, as a result of the work stress produced by mobbing practices introduced from that date, more than 100 officials were absent for months or even years with psychiatric and medical licensing. Those who were reluctant to violate legal norms and good statistical practices were physically secluded from the rest. For example, in the case of the Agricultural Census Office a wall was erected to separate those from the others and the "loyals" were instructed to not interact with the group of technicians who did not accept to transgress ethical and methodological thresholds. In 2011, the staff of the Direction of Studies of Income and Household Expenditure was moved to another site of INDEC, while the Director remained at the headquarters without the practical possibility of exercising her functions. Similar practices were developed in other areas of INDEC, generating a climate of intolerance towards any manifestation or opinion contrary to the directives of the new leadership. One of the workers' trade unions (see CTA-ATE-INDEC, 2014) has documented some of the many irregularities that have happened and continue going on against INDEC's staff. Irregularities that mean benefits and privileges for the allies, and situations of injustice, arbitrary changes or no allocation at all of tasks and responsibilities, postponement of requests for leave of absence or vacations, suspensions and even threats to all those considered as "enemies" or detractors.

According to data supplied by INDEC to the Council of Universities, in August 2009 only 32% of its staff had university degree. The Council concluded that "the appointment policy of human resources followed in the period 2006-2009 has resulted in a decline in the quality of INDEC's staff" (CAES, 2010, p.4). This decline has been reflected in the quality of the statistical production, beyond the mere tampering of the data. This happened in the case of the censuses; for example, only a handful of tables were published after the 2008 agricultural census and no information was provided at the national level since the field work could not be completed. The 2010 population census was conducted by personnel lacking experience in censuses and surveys and the questionnaires had serious deficiencies in the opinion of the specialists. The results aroused suspicions among users with respect to the response rate and quality of coverage; no further control survey was performed to estimate the incompleteness.

### **3. The report by universities and persecution of the private consulting firms**

In 2009, the Ministry of Economy -on which depends INDEC- invited representatives from five universities to produce a report on the institution. The report was highly critical of INDEC's management since 2007. It compared the behaviour of the IPC-GBA series elaborated by INDEC with the consumer price indices of some Argentine provinces from 1994 to 2010. The report observed that "the behaviour of the indices is very similar until the beginning of 2007, moment from which a striking discrepancy begins to be observed between the different series. In particular, attention is drawn to the fact that as of that date the inter-annual variation rates recorded by the IPC-GBA are systematically lower than those captured by the rest of the series" (CAES, 2010, p.51). After listing many criticisms the universities concluded that "the discredit upon statistics has happened in parallel with deterioration in the functioning of the Institute and with the loss of valuable human resources due to departures and displacements of involuntary character. In this scenario, the introduction of urgent institutional reforms is required, with the purpose of creating a framework that will ensure the greater independence of its actions and the highest technical excellence of its products" (Ibid. p.42).

The lack of reliable information about the index of consumer prices was initially replaced by those provided by the provincial offices of statistics, research centres and consultants with experience in the elaboration of price indices.

This determined Government measures to try to eliminate these alternative sources of information. As we have pointed out above, one of the first measures was to terminate the program of support to the provinces to calculate themselves an index as part of the program of calculation of a CPI for the whole country. As several provinces persisted in its calculations despite the withdrawal of funds by INDEC, they were asked to leave their own calculations under the pretext of the upcoming development of a new index for the country as a whole. This was done because their estimates showed large discrepancies with the ones provided by the national statistics office and put in evidence the manipulation to which it subjected its statistics. This allowed reducing to a minimum the provinces which calculated its own price index.

In relation to the private estimates -which coincided with those of provincial origin- the Secretary of Domestic Trade proceeded to apply fines of up to \$100,000 contending that they violated the fair trade law! This was done invoking article 9 of that law which states that "the fulfilment of any kind of presentation, advertising or propaganda that via inaccuracies or concealment can induce to error, deception or confusion with respect to the characteristics or properties, nature, origin, quality, purity, mixture, quantity, use, price, conditions of marketing or production techniques of goods, real estate goods or services is strictly prohibited." The penalty was based on a report on the methodology used by the consulting firms issued by whom? By INDEC! From then on consultants decided to stop publishing their estimates and went on delivering them anonymously to a group of MP's who proceeded to calculate the average and make it known to the public. It was what came to be known as

the Congress CPI. Thanks to this trick an estimate of the variation of prices with some approximation to reality could be maintained during the last 8 years.

Obviously, no private consultant or research institute has the considerable material and human resources that a National Statistics Office has in order to carry out a comprehensive survey of prices and calculate an index but at least the private estimates served to have an order of magnitude of the price variations given the total absence of veracity of the official index. Finally, justice left without effect many of the applied sanctions arguing that consultants did not violate the fair trade law, since their estimates do not constitute “commercial advertising” or “propaganda”, but contained public and technical information, that, as such, “are not of sufficient fitness to induce to error, deception or confusion to a recipient with respect to the prices and conditions of certain consumer goods.” Unfortunately this decision was taken only after several years of administrative and judicial procedures. There are still some professionals -as the former INDEC’s Head of the CPI Department, Graciela Bevacqua- who are still awaiting a definitive pronouncement of Justice.

#### 4.The agreement with the IMF

In April 2011 an agreement between INDEC and the International Monetary Fund to advance in the preparation of a new price index was announced. This occurred after the IMF, in its 2010 World Economic Outlook, included a footnote to its Statistical Appendix mentioning that in the case of Argentina “private analysts estimate that CPI inflation has been considerably higher.”

With the technical assistance from the IMF and the collaboration of 16 universities INDEC worked for 3 years in the development of a new methodology for a new nationwide consumer price index, which was released in January 2014. Obviously, neither the IMF nor the universities had or have anything to do with the data entry process that since 2007 has been the key piece in the process of manipulation of the index. The new CPI presents discrepancies with the private estimates and those produced by those provincial offices of statistics that still calculate provincial price indices, discrepancies that have not a very different magnitude to those criticized to the CPI-GBA. As an example, I include a table with the monthly price variations of the CPI for 2014 according to INDEC, 2 provincial statistical offices and the city of Buenos Aires statistical office. Given the different scopes of the indices one would expect some level of discrepancy but not of the magnitude and persistence shown by the figures below.

**IPC evolution in 2014 according to different sources**

	<b>INDEC</b>	<b>Buenos Aires city</b>	<b>San Luis</b>	<b>Tierra del Fuego</b>
January	3.7	4.8	4.2	4.6
February	3.4	4.4	7.2	3.4
March	2.6	3.6	4.0	3.0
April	1.8	3.1	2.1	1.6
May	1.4	1.5	2.6	3.5
June	1.3	2.3	1.8	0.6
July	1.4	2.2	2.0	2.3
August	1.3	2.3	2.5	2.1
September	1.4	2.2	3.1	3.9
October	1.2	1.9	1.3	1.7

INDEC has not done any effort to give credibility to the new index. For example, it could provide information on the prices of relevant products used in the estimation of the index as it was a regular practice until December 2006 but it does not. Moreover, despite that, according to the published methodology, the national index is an average of six regional indices, the values of these are not made public, which encourages deep doubts regarding whether the published methodology is actually applied.



Finally, since the appearance of the new index, the publication of the poverty and indigence rates was discontinued, in a tacit recognition of their lack of technical rigor. The disappearance of these data has been one further step in the path of statistical misinformation and impoverishment started in 2007. One of Argentina's main contribution to the United Nations' "Millennium Development Goals" has been not to make poverty disappear, but to make poverty statistics vanish. In an attempt to justify the lack of poverty statistics in Argentina some authorities have argued that it would be "stigmatizing" to issue poverty figures based on purchasing power. This is at variance with international practices, as exemplified by the poverty statistics issued by the OECD, the EU and the USA.

## 5. Conclusions and lessons to be learned from what happened with INDEC

Argentina's experience shows that, de facto, the National Statistics Office acts – involuntarily- as a kind of auditor of the national Government's performance. Its indices indicate the success or failure of the policies on inflation, poverty, economic growth, distribution of income, unemployment, etc. In countries with high institutional fragility it becomes irresistible the temptation to force statisticians to submit the statistical information to the wishes of the authorities rather than improving their policies. Therefore the first priority is to ensure the autonomy of the National Statistics Office, freeing it from any interference of political or economic powers and making it a strictly technical and scientific institution.

Secondly, the institution and its staff must strive for achieving greater credibility and respect among the population, making its procedures as transparent as possible. Interaction with the life forces of society –entrepreneurs' chambers, trade unions, political parties- as well as users in the public and private sector should help make the work of the Office be known, respected, and valued as well as offering the possibility of positive feedback about which are the demands and concerns of society.

## References

- American Statistical Association (2011). Letter to the United Nations Special Rapporteur on the promotion and protection of the right to freedom of opinion and expression. August.
- American Statistical Association (2012). Letter to the U.S. State Department. September.
- Berumen, E., Beker, V.A. (2011). Recent developments in price and related statistics in Argentina. *Statistical Journal of the IAOS*, vol. 27, pp. 7–11.
- Berumen, E., Beker, V.A. (2012). Argentina: An Update on Credibility in CPI and Other Official Statistics and Perils Endured by Some Statisticians. Joint Statistical Meetings. San Diego.
- Bodin, J. L. (2011). How to react when the independence of statisticians and the integrity of statistics are endangered? *Statistical Journal of the IAOS*, vol. 27, pp. 59/69.
- CAES (2010). Informe del Consejo Académico de Evaluación y Seguimiento de la Actividad del Instituto Nacional de Estadística y Censos. September.
- CTA-ATE-INDEC. Junta Interna (2014), *No somos cómplices de la mentira*, CTA Ediciones, Buenos Aires.
- Rice, S. A. (1959), The Inter American Statistical Institute at Age Nineteen *Revue de l'Institut International de Statistique / Review of the International Statistical Institute*, Vol. 27, No. 1/3 (pp. 1-7).
- Ryten, J. (2012), Credibility and interference in official statistics: opposites at war. *Realidad, datos y espacio: Revista internacional de estadística y geografía*. Vol. 3 N°. 1, pp. 5 – 13.
- Seltzer, W. (2012). International Responses to Governmental Targeting of Statisticians and Research Organizations in Argentina. Joint Statistical Meetings. San Diego.