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Country Performance in the South American Region: A Multivariate Analysis

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ABSTRACT

South American countries have historically been characterized by weak democratic regimes, high levels of corruption and abuse of power, and generally low social and economic development. Nevertheless, citizens' increasing demand for better public services have impelled governments to improve countries' performance.

The literature highlights a framework of interrelationships between governance, corruption and social-economic development indicators. Using these indicators, this paper analyses how South American countries have evolved and how they compare to each other, regarding their performance in the past two decades. Applying multivariate statistical techniques, the research revealed important differences between countries, clustering together those with similar behavior trends and evidencing the best performers.

This research contributes in applying a methodology to identify the best performers according to nine worldwide indicators. This identification is important because top performers may serve as benchmarks for neighboring countries, pushing towards overall performance improvements, hence strengthening citizens' confidence in their countries' governments.

KEYWORDS

Governance; corruption; social-economic development; indicators; transparency; benchmarking

Introduction

In recent years, at an international level and due to the high demand of citizens for better public goods and services, governments across the world are making great efforts to reduce and control certain economic variables, such as external debt, unemployment rate and public deficit, in order to rationalize the use of financial resources and improve the performance of public services (Bauhr & Grimes, 2014; Hood & Heald, 2006; Meijer, 2009). Historically, many South American countries have been plundered by abuse of power; therefore, the need to establish transparency mechanisms is essential to improve public managers' decision making (Meijer, 2013).

The key lies in recognizing the importance of information for effective democracies (Hood & Heald, 2006; Stiglitz, 2002) and the role of international financial institutions in promoting transparency (Bastida & Benito, 2006; De Simone, Gaeta, & Mourão, 2017; Florini, 1999; Kopits & Craig, 1998). Therefore, the disclosure of governance, corruption and social-economic performance indicators and their comparability is crucial as a best practice, as it reinforces the democratic relationship between governments, citizens and countries' international communities, contributing to increase trust and the feeling of safety (Rodríguez, Navarro, & Alcaide, 2015; Transparency International, 2017).

Governance consists of the traditions and institutions under which authority in a country is exercised. This includes the process by which governments are selected, monitored and replaced; the capacity of a government to formulate and implement effectively sound policies; and the respect of citizens and the state for the institutions that govern economic and social interactions among them.[1] According to Arndt and Oman (2006), governance indicators such as those used in this study (namely Voice and Accountability, Political Stability, Government Effectiveness, Regulatory Quality, and Rule of Law) correlate with economic growth.

Regarding corruption, governments are required to adhere to transparency in the exercise of democracy, as corruption is undoubtedly the biggest obstacle to the delivery of aid and economic development (Davis & Ruhe, 2003). Transparency is understood as the effective flow of information or as the process in which the information is prepared and disclosed in a safe, understandable and timely manner (Kopits & Craig, 1998; Vishwanath & Kaufmann, 1999). Transparency in public administrations gives greater openness about political and economic decisions and promotes the accountability of organizations (Florini, 1999). In line with Filgueiras (2016), economic development and transparency go together. In the same stream, Bastida

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and Benito (2006) demonstrate that transparency is negatively correlated with corruption and positively correlated with economic development.

The use of performance indicators is a challenge that public administrations have faced in the last decades. Thus, several international organizations have developed performance indicators of country governance, corruption and social-economic development. The World Bank Institute's Worldwide Governance Indicators (WGI) are the most commonly used metrics to measure specific areas of governance, as is the Corruption Perception Index (CPI) developed by Transparency International. However, there is scarce research about the link between governance, corruption and social-economic performance of countries, through indicators.

This paper aims at contributing to fill this gap, as it addresses the performance of countries in relation to corruption, governance and social-economic development. In particular, this research analyses trends and main differences between South American (SA) countries, using worldwide established indicators. As these performance indicators interrelate with transparency and social-economic issues, the paper derives behavior patterns in the countries based on different initiatives, evidencing and encouraging benchmarking. Accordingly, this research has also practical implications: identifying the best performer countries so that they may serve as benchmarks for their neighbors, pushing towards overall performance improvements and accountability, hence strengthening citizens' confidence.

The literature on the SA countries is descriptive and predominantly non-academic. The academic studies on governance, corruption and social-economic links are scarce in this context, which justifies carrying out the current research that addresses the following research questions in particular:

RQ1: What have been the main differences between SA countries regarding governance, corruption and social-economic development indicators?

RQ2: What have been the behavior patterns of SA countries concerning governance, corruption and social-economic development indicators?

RQ3: Can some SA countries be identified as benchmarks for others, in terms of overall behavior?

Henceforth, the paper is organized as follows. First, a literature review is presented about the governance, corruption and social-economic development of countries and the relationship with transparency; the use of country performance indicators as benchmarks is also referred. Studies addressing the context of SA countries are considered separately. The empirical study starts by explaining the data and methodology used, followed by a presentation and discussion on the findings. The conclusions are summarized in the last section.

Literature review

Several academic research and reports of worldwide institutions, e.g., Hood and Heald (2006), Kaufmann, Kraay, and Mastruzzi (2006, 2009), and Meijer (2013), have addressed the interrelationships between governance, corruption, social-economic development indicators and transparency. According to them, enhanced performance of countries is expected to foster better governance, less corruption and better social-economic contexts.

Additionally, the development of holistic performance indicators is a challenge that public administrations must face. The evaluation of governance is a subject that has been studied by various international organizations, such as the United Nations Development Program (UNDP, 2007). Jabes (2002); Kaufmann, Kraay, and Mastruzzi (2009), the United Nations (2007), and the World Bank (2016) have developed prototypes to assess public management, based on the objectives and methodologies for calculating the main international indicators. The United Nations (2007) and World Bank (2016) governance indicators are the most commonly used metrics to measure specific areas of governance, such as citizens' voice and accountability, political stability and absence of violence, government effectiveness, regulatory quality, rule of law, and control of corruption (Arndt & Oman, 2006).

Governance, corruption, social-economic development and transparency

It has been demonstrated that reducing corruption has a significant impact on economic development and investment. Important evidence was presented in a study on the Corruption Perception Index (CPI) by Transparency International (2017), which ranked 180 countries and territories by their perceived levels of public sector corruption, according to experts and business people. Transparency is researched as a cause for reducing corruption and improving efficiency and effectiveness in public administrations. When social-economic development increases, citizens expect to receive better services and demand more information to assay whether their taxes are being used effectively. Filgueiras (2016) points out that a transparency policy through normative arguments, principles and rules, toward stronger public

management processes, improves the quality of information and effective governance. Currently, there is a growing number of organizations that are responsible for measuring the degree of transparency of public bodies at international, regional and national levels (Aldao et al., 2015). Some case studies highlight experiences and situations in SA that are related to transparency and the fight against corruption (Moreira & Claussen, 2011; Zalaquett & Muñoz, 2008).

Best practices seek to strengthen governments legitimacy, which is relevant since information about government decision-making processes, procedures, functioning and performance is disclosed (Curtin & Meijer, 2006). Meijer (2009, 2013) searched disclosure principles and best practices for public sector transparency. The need to endow public sector bodies with efficient management systems to improve the performance of public services is promoted by the right of citizens to receive public information (Etzioni, 2014; Transparency International, 2017).

In the process of public sector modernization, the success of public administrations' reforms to achieve transparency is key. In this context, Guthrie, Ball, and Farneti (2010) address the concept of sustainable transparency, arguing that it plays an important role in the delivery of public services. Transparency should assist users to determine an entity or government's capacity to meet its sustainability commitments (Guthrie et al., 2010; Meijer, 2013; Piotrowski, 2009). The general trend of transparency conditions along these lines shows that most countries have unsatisfactory levels of public spending (Bastida & Benito, 2006). Public financial management systems have also advanced greatly, namely through the issuance and adoption of a series of public sector accounting standards (IPSASB, 2017) in order to increase the quality of governmental financial reporting to improve financial transparency (Rodríguez et al., 2015).

The reforms towards enhanced transparency have involved cultural changes in public administrations, including strategies such as: government decentralizing and downsizing; 'cutting red tape'; increasing administrative discretion; empowering workers; encouraging entrepreneurial behavior; managing for results and increased focus on performance measurement; and developing citizen participation mechanisms (Calland & Bentley, 2013; Grant & Keohane, 2005; Romzek, 2000).

Academic literature has highlighted transparency as a requirement for accountability (e.g., Lourenço, 2015), which implies that actors are held responsible and have obligations to act in ways that are consistent with accepted standards of ethical behavior (Grant & Keohane, 2005). Western countries have experienced a growing demand for transparency and accountability as an essential element for the democratization of the country (Filgueiras, 2016). Accountability and transparency, as principles of governance, complement one another to produce good governance in countries. Observers often cite transparency as a response to the accountability concerns of global actors, and how the disclosure and openness affect country behavior and actions in view of transparency (Hale, 2008; Hood, 2010).

Best practices on transparency for accountability in public administrations include publishing performance indicators, key issues in the disclosure of financial and non-financial information in a format that can be understood (Bauhr & Grimes, 2014), allowing for cross-country meaningful comparisons and monitoring over time (Bushman & Smith, 2003; Guthrie & English, 1997; Heinrich, 2002; Propper & Wilson, 2003; Smith, 1990).

Increased availability of information and more open decision-making determine a more transparent government entity (Armstrong, 2011). This line of thought has turned indicators into a social tool, by allowing stakeholders to maintain management control regarding the allocation of public resources and the obtained results, through performance evaluation mechanisms.

The hypothesis that good government management fosters development, estimates that a country improving its governance from a relatively low level to an average level could triple the *per capita* income of its population in the long term (Kaufmann, 2007; Landman & Häusermann, 2003).

Country performance indicators and benchmarking

The development of international indicators seems to reflect the use of benchmarks to measure the performance of countries. Benchmarking might be defined as the systematic comparison of certain performance measures with predefined reference levels, aiming at continuous improvement (Da Cruz & Marques, 2014). Ammons and Roenigk (2014) refer to 'best practice benchmarking' as aiming to identify the top performers of a particular process, trying to understand what makes them top performers, and ultimately adopting or adapting their practices.

Many authors have observed that a fundamental requirement of benchmarking is that uniform measures be applied (Ammons, Coe, & Lombardo, 2001; Folz, 2004; Rutherford, 2000). Others, as Pina, Torres, and Royo (2007) and Rondo-Brovetto and Saliterer (2007), used meaningful vertical benchmarking between local and regional governments to study the effects of e-government on the transparency of public organizations. Alcaraz-Quiles, Navarro-Galera, and Ortiz-Rodriguez (2014) have focused on the comparison (benchmarking)

of the disclosure of information about sustainability at various levels of government.

Notions on the importance of how to assess the quality of governance have been developed by UN/ASPA (2002) and the United Nations (2003, 2004, 2005, 2007, 2008). At a global level, governance can be compared across countries and over time, thanks to standardized data that can be applied to different cultures, economies and political systems. Therefore, governance data can enable sound benchmarking between countries, using common units of analysis.

Previous studies have highlighted that the use of internationally recognized good governance principles provides benchmarks for comparison and sets targets for an optimum governance. Although not without contestation, good governance principles prove useful as targets and benchmarks for the performance and behavior of governing institutions (Crabbé & Leroy, 2008).

The main advantage of benchmarking is that it focuses on the areas required for best practices, forcing the organizations or governments to adopt change and improve their performance; while one limitation is that it simply helps to spot areas for improvement, but it does not solve the issues, comparing the numbers only and not finding the proper solution for improving the indicators.

Studies and measures in the context of South American countries

This sub-section provides a review of the academic and professional literature that addresses country performance issues overall, including matters such as social accountability, the perception of corruption, political and administrative reforms, financial transparency and social-economic development in SA countries.

According to Ramio (2008), modern governance worldwide has been increasing in its complexity, especially due to the adoption of new public management tools such as 'agencialization', outsourcing and 'managerialization' technologies. However, the degree of public sector reforms has varied across countries, including between SA countries. This author acknowledges the positive association between innovation strategies and more effective and efficient public services, although there are important risks related to the introduction in the public sector of institutions based only on private sector values.

Governance issues linked to transparency in SA countries have been analyzed by a number of academic and professional studies. A detailed analysis, by country, follows. No studies or reports were found on Suriname and Guyana.

In the case of **Argentina**, the very difficult financial conditions have caused the deepest economic crisis in its history. The renegotiation of the external debt, the inability of political parties to represent large sectors of the citizenry, and the weak judiciary system are some of the factors that undoubtedly threaten the very foundations of a minimally civilized social coexistence (Aldao et al., 2015; Oszlak, 2013).

In **Bolivia**, the level of public information disclosure is still low. There has been an overall absence of a culture of transparency, which has not been able to advance due to little democratic experience, bureaucratic inefficiency, tradition in corruption with more or less intensity in the different governments, absence of a democratic culture in citizenship with the principle that people have the right to demand accountability, and public officials giving in to inefficiency (Apaza, 2012; Camacho, 2007).

Four main transparency measures stand out in **Brazil**: the Procurement Portal of the Federal Government, the enactment of the fiscal responsibility law, the creation of the Federal Government Transparency Portal, and legislation on the freedom of access to public information (Dos Santos Brito, Dos Santos Neto, da Silva Costa, Garcia, & de Lemos Meira, 2014; Moreira & Claussen, 2011).

In **Chile**, the institutional transformation represented by a policy of transparency was complex, since it implied the modernization of the Government and a change in the way of doing things. Among several initiatives there was the creation of laws on public ethics, access to public information, reforms of lobbying regulation, probity of public officials, and financing of political parties; and innovations in digital management (Moya, Ortíz, Soto, Murden, & Atton, 2012; Sousa Oliva, 2010; Zalaquett & Muñoz, 2008).

Colombia has been a pioneer in the hearings and public disclosure of draft administrative acts, namely in the Constitution of 1991. Since then, there were several legislative initiatives, such as: law of semaphore-fiscal rules, decree on fiscal policies, laws to incorporate new technologies in public administration, the creation of the Anticorruption Statute, and the creation of an open public procurement system. E-government was further implemented in departments that had low levels of information disclosure (Gómez & Montesinos, 2014).

In **Ecuador** there has been some progress in laws on access to public information, establishing the publication on the internet of the budget, information on salaries and benefits of public servants, concessions, permits and contracts, subsidy programs, and internal and external audit body reports (Cunill, 2013).

Peru started promoting citizens' participation in the monitoring and controlling of public administration. There have also been laws that protect the right to

information of citizens. The Standard Transparency Portal set the obligation to publish certain types of information in standardized transparency portals. More recently, the country joined the Open Government Partnership and there was a specific initiative, at national and regional level, for Transparency in Extractive Industries (De la Cruz, 2006; Huamán, 2015).

In **Paraguay**, there have not been significant measures, although the framework for the fight against corruption was laid down in the National Integrity Plan and the creation of the Transparency International Paraguay chapter (Velázquez & Pereira, 2008). More recently, the National Anti-Corruption Secretariat and the National Corruption Prevention Plan were created and, under the policy of greater transparency of information, the country joined the Open Government Partnership initiative (Ramírez Alujas & Dassen, 2014).

In **Uruguay**, the use of ICTs in government has been considered an important strategy for government reform, highlighting the possibility of transforming the fundamental relationships between government, citizens, companies and other interest groups. The country has also developed anti-corruption policies, such as the Law on Anti-corruption of Officials, it set up the Transparency and Public Ethics Board and the Consultative Council, and enacted the Law on the Right of Access to Public Information (Skaar, 2013).

Venezuela has been in an emergent situation. Eradicating corruption requires re-engineering of the justice system, comptrollers and police. So far, there is no law on access to public information (Belandria, 2014; De Freitas, 2008).

The aforementioned studies report that, in the majority of the SA countries, there has been an accelerated progress in regulations and laws on access to public administration information, especially referring to critical issues, being the budget the most important. Those countries have ratified international conventions, created anti-corruption offices for criminal responsibility, and established bodies for the protection of whistleblowers who report corruption cases. However, corruption remains uncontrollable, since factors such as the lack of coordination between the different governmental institutions, and impunity when there is no sanction, continue to prevail. As underlined by Canache and Allison (2005), Latin America countries are quite aware of the degree of seriousness of corruption in their geographical areas (Relly, 2012).

The Latin American experience shows, accordingly, that enacting a Freedom of Information Act (FOIA) is a first step towards fulfilling and guaranteeing the right of citizens to information from the government and public administrations overall. Many of these FOIAs incorporate innovative elements in their design, such as requesting that public agencies proactively publish relevant and accessible information, or creating independent oversight bodies to monitor compliance.

In the SA region three countries created national FOI laws quite recently: Argentina (2016), Colombia (2014) and Paraguay (2014). Other five countries had already passed these laws several years ago, namely Brazil in 2011, Chile in 2008, Ecuador in 2004, Peru in 2002 and Uruguay in 2008. Bolivia presented in 2005 a Presidential Decree on FOI, a regional milestone confirming the validity of upholding the right to information that can build a legal foundation. Therefore, this is an advance in SA laws, trying to guarantee citizens' right to information and promoting transparency in public administrations. However, there are four countries which have not adopted FOIAs yet: Bolivia, Guyana, Suriname and Venezuela.

In relation to governance in SA countries, in the last ten years, political reforms have been implemented (such as decentralization and innovation in public management) that increase political trust with emphasis on political legitimacy. Part of this legitimacy introduces other mechanisms of transparency, such as procedural mechanisms in public decision-making, monitoring of results, and the newest mechanism for managing interests. Galvez, Caba, and Lopez (2012) explain that experience in self-regulation is the factor that influences the requirement of transparency the most.

Furthermore, the alliance Open Government Partnership (OGP), established to enhance transparency, technologies and innovation, citizen participation and accountability, among other objectives, has in the SA region the most widespread participation. In particular Argentina, Brazil, Chile, Colombia, Costa Rica, Paraguay, Peru, Uruguay and Ecuador have presented and implemented their action plans. These include a number of specific and measurable commitments, the estimated dates for implementation over the short and medium terms, and the responsible agencies. Their commitment to the alliance has marked the beginning of an accelerated process of construction and strengthening of the regulatory framework and greater awareness of transparency (Ramírez Alujas & Dassen, 2014).

Finally, adopting technological innovations, such as e-government and open-government, has made governments more efficient, inclusive and accessible to the citizenry. Likewise, the social-economic development, a growing number of social organizations, citizen observatories, civil society bodies, and organizations in pursuit of transparency for developing transparency monitoring systems across public administration and fighting corruption, is remarkable.

Appendix A summarizes the main laws passed in SA countries for improving governance and corruption issues. The list is not exhaustive, as it just includes the laws the authors deemed most relevant.

Data and methodology

This paper uses data from the twelve SA countries for the period of 1996 to 2016. These countries are, in alphabetic order: Argentina, Bolivia, Brazil, Colombia, Chile, Ecuador, Guyana, Peru, Paraguay, Suriname, Uruguay and Venezuela.

Given that the objective is to analyze how countries behave in terms of some governance performance indicators, associating these with transparency issues, secondary official data sources have been used, as has been done by other researchers. Accordingly, the indicators used in the study (Table 1) were collected from the databases of Transparency International and the World Bank.

The calculation methodology of the Worldwide Governance Indicators (WGI) is based on several underlying variables, taken from perception-based governance data that include firms and household surveys. It also assesses a variety of commercial business information providers, non-governmental organizations, several multilateral organizations and other public-sector bodies. More specifically, the data sources include four cross-country firm surveys, as well as seven commercial risk-rating agencies surveys, three cross-country surveys of individuals, six sets of ratings produced by government and multilateral organizations, and finally another eleven data sources produced by a wide range of non-governmental organizations (Kaufmann, Kraay, & Mastruzzi, 2007). These individual data sources are then combined into the six aggregate governance indicators using a statistical tool known as Unobserved Components Model. The WGI are measured in percentile rank terms from 0 (lowest) to 100 (highest) among all countries worldwide.[2]

The Corruption Perception Index (CPI) captures the informed views of analysts, businesspeople and experts in the countries around the world. Its calculation is based on various surveys[3] that evaluate the country's performance. Data related to corruption is obtained from surveys of country experts, residents and non-residents and companies, carried out also by independent and accredited institutions. The information is standardized and collected by the sources using matching percentiles to determine the score. The country score is determined by averaging the standardized values along with their classification, the number of sources used, the minimum and maximum range, estimated by means of the non-parametric bootstrapping methodology. Measurement scale for the country ranges from 0 (perceived as most corrupt) to 10 (perceived as without corruption). There are some limitations to Transparency International's CPI due to the methodologies used in aggregating or averaging the surveys, the reliability of the sources on which they are based, and the different corruption ratings averaged into the CPI. However, it is a powerful measure that governments are taking notice of and acting upon.[4]

The Human Development Index (HDI) is a summarized measure of average achievement in key dimensions of human development. This index is the geometric mean of normalized indices that include three dimensions – long and healthy life, education, and a decent standard of living.

Table 1. Indicators used in the empirical analysis.

Abbreviation	Description	Source	Available Years
	Governance		
VA	Voice and Accountability, capturing perceptions of the extent to which a country's citizens are able to participate in selecting their government.	World Bank	1996, 1998, 2000, 2002-2016
PS	Political Stability and absence of violence, capturing perceptions of the likelihood that the government will be destabilized or overthrown by unconstitutional or violent means.	World Bank	1996, 1998, 2000, 2002-2016
GE	Government Effectiveness, capturing perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies.	World Bank	1996, 1998, 2000, 2002-2016
RQ	Regulatory Quality, capturing perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development.	World Bank	1996, 1998, 2000, 2002-2016
RL	Rule of Law, capturing perceptions of the extent to which agents have confidence in and abide by the rules of society.	World Bank	1996, 1998, 2000, 2002-2016
	Corruption		
COCO	Control of Corruption, capturing perceptions of the extent to which public power is exercised for private gain.	World Bank	1996, 1998, 2000, 2002-2016
CPI	Corruption Perception Index, based on how corrupt a country's public sector is perceived to be.	Transparency International	1998, 1999, 2001-2016
	Socio-economic development		
HDI	Human Development Index, emphasize that expanding human choices should be the ultimate criteria for assessing development results.	United Nations Development Programme	1996-2015
GDPPPS	Gross Domestic Product per Population, representing the wealth of the country.	World Bank	1996-2016

The health dimension is assessed by life expectancy at birth. The education dimension is measured by mean years of schooling of adults aged 25 years and above, and expected years of schooling of school-age children. The standard of living is measured using the logarithm of gross national income per capita (to reflect the diminishing importance of income with increasing gross national income). The HDI sets a minimum and a maximum value for each dimension and then shows where each country stands in relation to these values, expressed as a number between 0 and 1. The higher a country's HDI score, the greater its level of human development (and vice versa).[5]

GDP per capita is estimated using a complete data series for each country. The methodology related to the compilation of official national accounts data is provided by the National Statistics. GDP data is converted into US dollars using appropriate annual monthly average or annual end of month average quotations of exchange rates.

It must be noted that some data for Suriname, Guyana, Paraguay and Brazil were missing. A common approach to account for a large number of missing data in many analyses is to exclude the years for the indicators that have any missing data. However, as the missing values for indicators in the present study in the different years were less than 3%, those values could be estimated using multiple linear regressions. Also, in order to avoid problems with different measurement scales, all variables were standardized, meaning that all were transformed into *z-scores* with a mean of 0 and a standard deviation of 1.

Concerning the methodology, this study uses descriptive and cluster analysis.

Cluster analysis is a multivariate analysis technique that causes the partition of a group of individuals (countries, in this case) into smaller groups, such that the ones belonging to the same collection are very similar to each other, but very different from the countries belonging to other groups (homogeneity in each group and heterogeneity between groups). Used in the specific context of this paper, cluster analysis allows a country typology to be obtained in such a way that each conglomerate will correspond to a different performance and transparency pattern.

Accordingly, in the present analysis, cluster analysis leads to identify the best-performing countries in terms of governance, corruption and social-economic development indicators, and to explain how they have evolved in the last decades towards greater transparency and accountability. This analysis could also encourage benchmarking behavior among governments of the considered countries, pushing for continuous improvements. Based on the previously described indicators, groups of SA countries presenting similar characteristics are identified, and their most important features and role in the whole territory of the SA continent are underlined.

Cluster analysis has a long history, and although hierarchical methods are by far the oldest, because of the improvement of computer power, non-hierarchical *k-means* clustering has lately become the most widely used. Furthermore, because the variables included in this study are time series, other more modern methods (e.g., model-based clustering) have also been considered. Finally, because the number of SA countries (12) is small, the complexity related to large databases, often pointed out as one of the main drawbacks of hierarchical methods (Aghabozorgi, Shirkhorshidi, & Wah, 2015), can be overcome, making their advantages stand out. Therefore, the hierarchical cluster analysis, in particular Ward's method with squared Euclidean distances, is applied, since practical experience shows that it allows for the best results in situations like this particular one. A more formal and rigorous description of these techniques can be found, for example, in Everitt, Landau, Leese, and Stahl (2011), Hair, Black, Babin, and Anderson (2009), or Kaufman and Rousseeuw (2009). See also Aghabozorgi et al. (2015) for an exhaustive review of clustering time series.

Main findings

The descriptive statistics of the governance, corruption and social-economic development indicators in SA countries over the last twenty-one years are presented in Appendix B.

Regarding the Governance indicators, the following issues are noticeable:

- In *Voice and Accountability* (VA), most SA countries present an average between 41.62 (Paraguay) and 61.88 (Brazil) points; three countries, however, are outside of this interval – Uruguay and Chile are above 80 and the average of Venezuela is below (but close to) 30 points. Venezuela also presents the highest dispersion in this indicator throughout the period covered by the study.
- *Political Stability and Absence of Violence* (PS) might be said to present low average values in most countries, once again except in Uruguay (75.40) and Chile (64.67). In Colombia, however, it reaches the lowest value with an average of only 7.21 points, which is very low when compared to the results of the other SA countries, whose average is 36.80 points. The highest dispersion in this indicator is in Paraguay.
- In *Government Effectiveness* (GE), Paraguay and Venezuela contrast with Uruguay and Chile, the former presenting the lowest average values below 20 and the latter reaching average values of around 70 and 85 points, respectively.

- In *Regulatory Quality* (RQ), Chile scores highest in the region (91.18). Venezuela and Ecuador contrast with the lowest average values of around 13 and 20 points, respectively. In this indicator, two countries present the highest dispersion of all governance indicators – Argentina and Bolivia, with standard deviations above 16.
- Finally, the region also shows large variation in terms of the *Rule of Law* (RL) – while Venezuela averages around 8, Chile contrasts with average and median values of around 88 points. The highest dispersion throughout the study period is in Bolivia.

As for indicators of Corruption:

- It is observed that the average of the *Control of Corruption* (COCO) indicator is the lowest in Venezuela (12.10) and Paraguay (12.94), whereas the highest values are again in Uruguay and Chile (above 80 points), well above the 45.05 average for the region.
- Likewise, the lowest average values of the *Corruption Perception Index* (CPI) are also in Venezuela (21.84) and Paraguay (22.18), compared to the 36.26 point average of the whole of the SA region. The highest CPI average values are again in Uruguay (around 62) and Chile (around 71).

In terms of Social-economic indicators:

- The average values of the *Human Development Index* (HDI) bring countries together in the SA region; still, the lowest average value of 0.62 is found in Guyana and Chile has the highest (0.79); the regional average is 0.70.
- The *Gross Domestic Product per Capita* (GDPPPS) shows high dispersion in all countries. Bolivia shows the lowest average value of 1,679 USD, whereas the top three are Chile (average of 9,375 USD), Uruguay (average of 9,324 USD) and Argentina (average of 8,555 USD).

The cluster analysis, performed as described above, made it possible to group countries according to the three categories of indicators in the period considered, as shown in (Figures 1–3).

The graphical presentation with dendrogram in Figure 1 shows a clear picture of the clusters of SA countries. Analysing the successive increases in the distances at which clusters were joined (jumps on the vertical axis of the values of the between-group sum of squares), it can be concluded that a reasonable choice must fall on the four cluster solution (marked with the dashed line in Figure 1).

As a result of the dendogram, the SA countries can be grouped into four clusters:

Cluster 1 – Chile and Uruguay;
Cluster 2 – Argentina, Brazil and Suriname;
Cluster 3 – Venezuela, Ecuador and Paraguay;
Cluster 4 – Bolivia, Colombia, Guyana and Peru.

In order to observe the countries' cluster behavior, Figure 2 shows how these countries have evolved in the last two decades, regarding their performance towards transparency and accountability, considering the three categories of indicators analyzed.

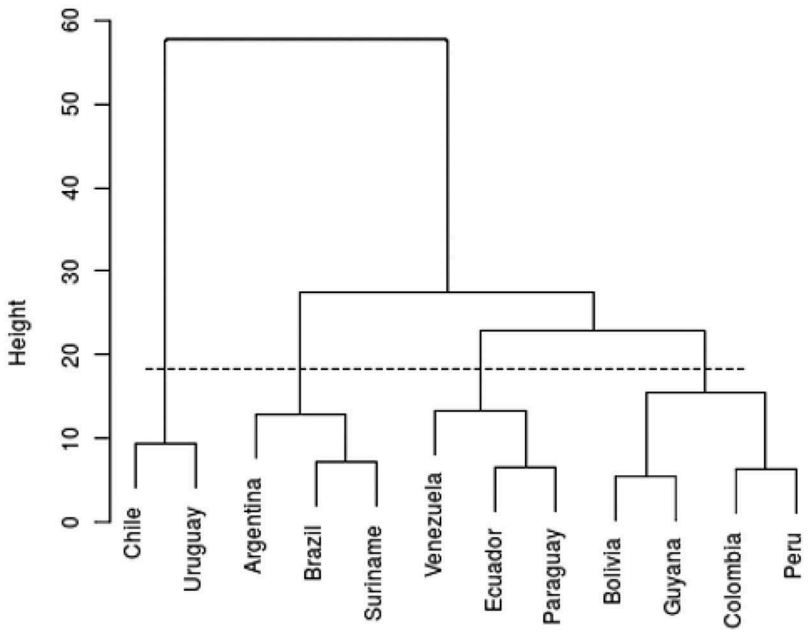


Figure 1. Dendogram of the cluster analysis in South American countries.

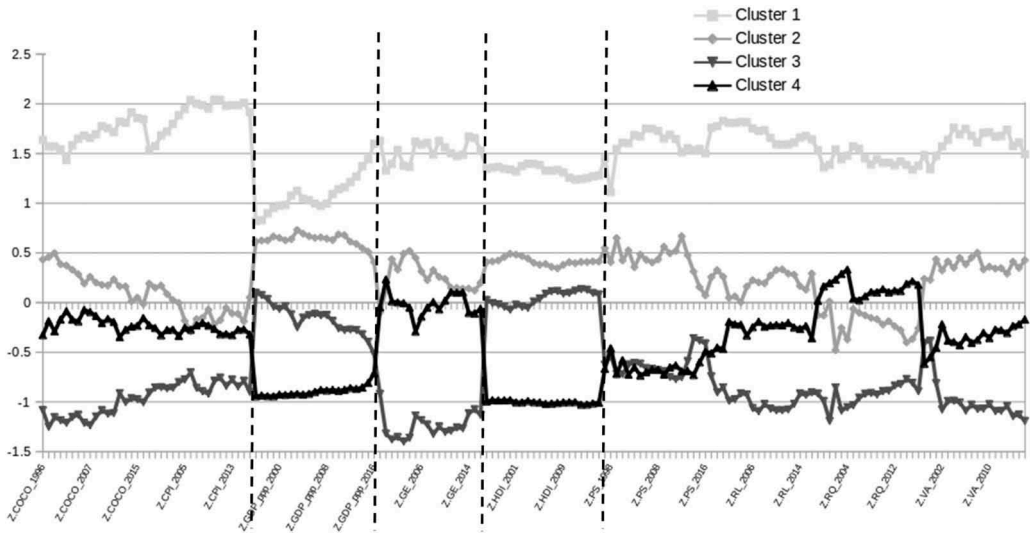


Figure 2. Final cluster centroids of South American countries regarding performance towards accountability – 1996 to 2016.

Significant differences are clear among SA countries. A more detailed description of the four clusters follows.

Cluster 1 – Chile and Uruguay are the countries included in this cluster of best performers in terms of governance, corruption and social-economic development indicators, towards transparency and accountability. As it can be observed in Figure 2 (light grey line), this cluster has the best mean values in all variables, well above the other three clusters. Moreover, over time, many of these indicators have clearly improved.

Cluster 2 – This is the largest cluster in terms of the geographical area covered by the three countries (Argentina, Brazil and Suriname), all located in the East of the continent (see Figure 3). Values for all the indicators are close to and above their respective mean (represented by the zero line), with only a few below that (*Corruption Perception Index* – CPI and *Regulatory Quality* – RQ). The indicators related to the *Control of Corruption* (COCO), *Political Stability* (PS), *Rule of Law* (RL) and *Regulatory Quality* (RQ) have deteriorated in the last twenty-one years. Furthermore, Cluster 2 mean values (grey line) are above those of Clusters 3 and 4, the only exception being those related to the RQ (indicators Z_RQ_2000 to Z_RQ_2016, in Figure 2).

Cluster 3 – Includes Venezuela, Ecuador and Paraguay. The values for most indicators are below their respective mean (dark grey line), in particular, for *Control of Corruption* (COCO), *Corruption Perception Index* (CPI), *Government Effectiveness* (GE), *Rule of Law* (RL), *Regulatory Quality* (RQ) and *Voice and Accountability* (VA). The mean values of the *Political Stability* (PS) indicator are very similar to those of Cluster 4. Nevertheless, in the last two decades, corruption indicators have improved,



Figure 3. Panorama of South American countries regarding performance towards accountability in the last two decades.

while those more related to governance have generally deteriorated.

Cluster 4 – This is the largest cluster in number of countries (Bolivia, Colombia, Guyana, Peru) and, similarly

to Cluster 3, values for most indicators are below their respective mean (black line). The exception is the *Regulatory Quality* (Z_RQ_2000 to Z_RQ_2016) indicators that are, on average, the second best, second only to indicator values of Cluster 1, showing some concern in the last decades towards improving the quality of regulations. Overall, the governance indicators have improved, with the exception of *Political Stability* (PS) and *Governance Effectiveness* (GE) that seemed to have maintained the same trend in the last twenty years, the latter sometimes presenting significant variance around the mean value (e.g., decrease in 2006).

All in all, it may be said that, despite efforts to improve accountability and governance overall, most SA countries are progressing very slowly.

The map clearly shows the heterogeneity of the SA region, and the performance leaders in the south coast – Chile in the West, and Uruguay in the East (Cluster 1). These countries have managed to improve governance and reduce the abuse of power and corruption. This may be justified on the grounds of a sound system of transparency based on a successful experience of implementation of the law of transparency and access to public information on State administration, as well as the modernization of actions that are mostly transparent and involve citizens in public matters (Skaar, 2013; Sousa Oliva, 2010). These two countries can serve as a benchmark for the other SA countries, for good practices in terms of governance, corruption and social-economic development, to increase transparency and accountability. Particularly, the large neighboring countries, such as Argentina and Brazil in Cluster 2, could try to follow the transparency measures adopted by Cluster 1 countries. Additionally, Bolivia, Guyana, Colombia and Peru (Cluster 4) might want to use Cluster 1 country practices for reducing corruption and improving Regulatory Quality and Rule of Law, as a reference point.

Discussion

The findings presented above show how the performance of SA countries has evolved over the past two decades, as a consequence of improved governance, corruption and transparency practices. The analysis focused on key variables of the institutional context of each country, in relation to anti-corruption policies, social-economic conditions and governance, namely political stability and the effectiveness of the government and of the legal framework. Considering indicators on these issues, countries with similar behaviors in the last twenty-one years were grouped for establishing their most important features and their role in the SA continent.

Overall, these findings show that the countries' conditions have improved as a result of the measures implemented in recent years (see section 2.3). Contrasting cases can be clearly identified, with Chile and Uruguay as the top performers.

The case of Chile would appear to result from the fact that this country has signed and ratified international treaties on corruption, money laundering, intellectual property and taxation crimes, seeking to increase the catalogue of crimes that generate a type of criminal responsibility (Moya et al., 2012; Zalaquett & Muñoz, 2008). Also, since the year 2000, according to the Chilean DIPRES[6] website, different instruments have been created that are part of the Management Evaluation and Control System, including Monitoring Instruments (strategic definitions, performance indicators, Integral Management Balance, Program-based Budgets), the Evaluation of Programs and Institutions (evaluation of government programs, impact evaluation, comprehensive evaluation of expenditure, evaluation of new programs), and Institutional Performance Incentive Mechanisms (Management Improvement Program, Institutional Efficiency Goals). This system seeks to help improve efficiency in the allocation and use of public resources in the different Chilean programs, projects and institutions, also promoting better management of these and transparency in the use of public resources and in the public accounts.

The good position reached by Uruguay is largely explained by more than ten years of policies developed to promote the culture of Transparency and Access to Public Information in the country. This is the result of a long tradition of sound institutions that have allowed Uruguay to stand out in democracy, prosperity, equity, transparency, corruption control, and also in quality of life. It is, indeed, the most egalitarian country in Latin America in terms of the access to the internet. Its *Plan Ceibal* and *Ibiriapitá*, which deliver laptops to children attending public schools and pensioners, respectively, are worldwide models in the reduction of the digital gap among its population.

On the other hand, Venezuela, Paraguay and Ecuador show considerable need for improvement. While in other countries, laws on access to public information have been passed, Venezuela still does not have a law that stipulates the right to information. The access to information on public administrations is still severely constrained.

Across the SA region, the main differences are found in corruption, GDPPPS and governance indicators concerning the quality of regulation and rule of law and, perhaps consequently, government effectiveness. These

differences reflect the different paths that countries have taken to improve transparency.

Venezuela, Ecuador and Paraguay, the countries in Cluster 3, are the worst performers. Venezuela has the lowest values in governance indicators and has not improved in any of them. According to De Freitas (2008), this country still does not have a regulatory framework for transparency and accountability issues, namely a law on transparency in the access to public information; additionally, it has been affected by a serious political and economic crisis. Furthermore, in Cluster 3, Ecuador has only improved the indicator of government effectiveness. However, it has still not passed regulation for good governance practices. The country also shows political instability and government management constraints arising from governability problems (Cunill, 2013). On the positive side, Paraguay has improved slightly in terms of corruption and government effectiveness indicators, although it still does not have regulation for good governance practices and governance instability persists in the country (Velázquez & Pereira, 2008). Consequently, the literature supports evidence that these three countries should look at the governance practices of their neighbors in order to achieve transparency improvements (Kaufmann et al., 2007) and better social-economic contexts, in line with authors defending that transparency drives more accountability (Calland & Bentley, 2013; Filgueiras, 2016; Hood & Heald, 2006; Meijer, 2009).

The very low political stability indicator in Colombia may be due to the investigations that have been running since the previous presidential campaigns, which generated governance problems and a deep political uncertainty (Zalaquett & Muñoz, 2008).

The findings on corruption for the countries with lower values (Venezuela and Paraguay) are rather surprising, especially when looking at the other indicators as well. On the one hand, their populations show a lower perception of corruption in the public sector and, on the other hand, perhaps because of this level of perception, they have low level of control over corruption. However, Venezuela presents high values in social-economic development indicators, compared to the region's average, with an HDI of 0.72 (average in the region is 0.70) and a GDPPPS of 7,567 USD (average in the region is 5,454 USD).

In the last decades, most SA governments have expanded their presence on the internet with integrated platforms; initiatives have been developed on open government in order to facilitate the access of citizens to accountability processes (Alcaraz-Quilés, Urquía-Grande, Muñoz-Colomina, & Rautiainen, 2018; Pina et al., 2007). Consequently, there have been improvements particularly in voice and accountability and in corruption, as well as in social-economic indicators, which were more significant, as evidenced, in Chile and Uruguay (Moya et al., 2012; Skaar, 2013). Voice and accountability have also improved in Argentina and Brazil. These results show that, by implementing those practices, SA leaders are following in the footsteps of world leader countries, subsequently heading towards better governance, transparency, accountability and social-economic development (Lourenço, 2015; Oyelere, Laswad, & Fisher, 2003).

As e-government evolves, citizens demand that administrative tasks take up less time, especially where routine governmental transactions can be carried out on line (Pina, Torres, & Royo, 2009). In SA, most governments have websites that publish reports and services, transforming the relationship between administration and citizens. The implementation of these reforms carried out in Chile, Uruguay, Argentina, and Brazil has helped countries improve governance and corruption and boost social-economic development. (Moreira & Claussen, 2011; Moya et al., 2012; Skaar, 2013; Sousa Oliva, 2010; Zalaquett & Muñoz, 2008).

All in all, the results of this study show how the performance of SA countries, represented by governance, corruption and social-economic indicators, has evolved, as a consequence of initiatives related to transparency, online information availability and citizen's participation, which have driven improvements in the SA continent. Evidence of significant differences across countries was found, which tend to reflect the level of implementation of New Public Management (NPM) reforms, in line with the literature (e.g., Dunleavy & Hood, 1994; Hood, 1995; Hood & Heald, 2006; O'Flynn, 2007). However, in the group performing better, there are also countries where NPM is less developed.

The disparity found across countries in governance issues and the different speeds at which progress has taken place derive from the fact that some of these countries have been slower in adopting transparency and public administration reform measures (Filgueiras, 2016; Florini, 1999; Hood & Heald, 2006; Kaufmann et al., 2007).

The main findings in this study highlight that the countries that show better transparency and accountability levels e.g., with several legislative measures and other initiatives, are also better performers in terms of the indicators analyzed. By enhancing their transparency practices, countries also improve governance, decrease corruption and raise social-economic development. The best performers can serve as a benchmark for the other countries, especially in the context of the

Mercosur, where countries may be interested in aligning their performance. Some scholars have long underlined the value of benchmarking as a way of taking public sector performance and innovation progress further (Ammons & Roenigk, 2014; Da Cruz & Marques, 2014; Folz, 2004). Accordingly, an outcome of benchmarking might be a decision to improve, or might just as well be a decision to maintain the *status quo* or even to reduce the relative and absolute quality, quantity and efficiency of a given task (Ammons & Roenigk, 2014). Moreover, best practice benchmarking exists when there is a willingness to set aside the usual practices when a better practice is confirmed.

Conclusions

This paper looks into the trends and differences between the performance of SA countries in the last two decades. It uses governance, corruption and social-economic development indicators to analyze how countries have evolved and how they are positioned relatively to each other, evidencing and encouraging benchmarking.

By applying multivariate statistical techniques, the research was able to group the SA countries into four clusters with similar characteristics. Results show clear differences between the countries under analysis, in terms of behavior patterns concerning performance linked with transparency towards accountability. Although in general, in the last two decades, SA countries have developed transparency best practices that helped to improve overall performance, there have been significant differences among countries in terms of corruption, governance and social-economic development indicators.

Chile and Uruguay improved corruption indicators significantly. By contrast, Venezuela and Paraguay are still the countries with the lowest average concerning those indicators, which suggest that they are the least transparent countries. Chile and Uruguay have also enjoyed significant political stability, while this indicator and the rule of law in Ecuador, Venezuela, Paraguay, Colombia, Guyana, Bolivia and Peru show low levels. As to voice and accountability, most countries improved, except for Venezuela, Ecuador and Paraguay. In government effectiveness, Chile and Uruguay reached the highest values in the region, in the last two decades, by contrast with Paraguay and Venezuela.

In terms of the social-economic development indicators, Guyana, Paraguay and Bolivia show the lowest levels of human development (though not very low), whereas Chile, Argentina and Uruguay show the highest values of this indicator. After the inflection observed in 2002, GDP growth has been constant in all countries. Concretely, in recent years, Brazil, Chile and Colombia have presented progressive GDP per capita growth. Likewise, it is important to highlight that in Chile, Paraguay and Ecuador public debt levels have dropped in recent years, while Brazil, Argentina and Colombia still have high levels of indebtedness.

In summary, the analysis shows clear differences between SA countries in terms of performance behavior pattern. This is likely to be due to improved transparency towards accountability, legal initiatives and practices. In the process, Chile and Uruguay, best performers, have been identified as benchmarks for other countries, which should therefore follow the best practices of their neighbors (e.g., by enacting laws that provide for free access to information; engaging in the Open Budget Partnership, …), so as to improve their condition.

Despite being predominantly descriptive, this analysis of the governance behavior and transparency practices in SA countries across two decades contributes to academia by allowing understanding how and why some countries have detached from others and by doing so, realizing the changes towards best performance. In any geographical region with commonalities as in SA, it is important to know about top performance countries as they may act as benchmarks pushing neighbors for improvements. Given that the top performers, Chile and Uruguay, are two countries which have put most effort into improving governance practices, such as increasing political stability, legal security and decreasing corruption, making a considerable effort to use ICTs, these are practices desirably to be followed by other countries, wanting to improve performance internationally.

The research also creates the opportunity to advance in theoretical concepts resulting from the interrelationship between the governance, corruption and social-economic development indicators analyzed.

From the empirical point of view, it also provides information of value for the practitioners in the form of comparable and reliable performance indicators. Such studies, especially using a comparative-international perspective, are practically inexistent in the SA region.

Notes

1. https://info.worldbank.org/governance/wgi/.
2. See https://info.worldbank.org/governance/wgi/#home.
3. African Development Bank Country Policy and Institutional Assessment, Bertelsmann Stiftung Sustainable Governance Indicators, Bertelsmann Stiftung Transformation Index, Economist Intelligence Unit Country Risk Service, Freedom House Nations in Transit, Global Insight Business Conditions and Risk Indicators, IMD World Competitiveness Center World Competitiveness Yearbook Executive Opinion Survey,

Political and Economic Risk Consultancy Asian Intelligence, The PRS Group International Country Risk Guide, World Bank Country Policy and Institutional Assessment, World Economic Forum Executive Opinion Survey, World Justice Project Rule of Law Index Expert Survey, Varieties of Democracy (V-Dem).

4. See https://www.transparency.org/research/cpi/overview.
5. See http://hdr.undp.org/en/content/human-development-index-hdi.
6. The DIPRES (http://www.dipres.gob.cl) is the Chilean technical agency responsible for ensuring the efficient allocation and use of public resources within the framework of fiscal policy, through the application of systems and instruments of financial management, programming and management control.

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Data availability statement

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References

Aghabozorgi, S., Shirkhorshidi, A. S., & Wah, T. Y. (2015). Time-series clustering–A decade review. *Information Systems*, *53*, 16–38. doi:10.1016/j.is.2015.04.007

Alcaraz-Quiles, F. J., Urquía-Grande, E., Muñoz-Colomina, C. I., & Rautiainen, A. (2018). E-government implementation: Transparency, accessibility and usability of government websites. In L. Alcaide Muñoz & M. Rodríguez Bolívar (Eds.), *International E-Government development* (pp. 291–306). Palgrave Macmillan.

Alcaraz-Quiles, F., Navarro-Galera, A., & Ortiz-Rodriguez, D. (2014). A comparative analysis of transparency in sustainability reporting by local and regional governments. *Lex Localis, Journal of Local Self-Government*, *12*(1), 55–78. doi:10.4335/12.1.55-78(2014)

Aldao, M. G., Astrada, G. M., Benicio, A. E., Bivilaqua, E. D., Camacho González, L. E., Carrer, L., … Frontera, M. B. (2015). *Administración financiera gubernamental. Un enfoque comparativo entre la Nación y la provincia de Córdoba, Argentina* [Government financial administration. A comparative approach between the Nation and the province of Córdoba, Argentina]. Córdoba, Argentina: Ministerio de finanzas.

Ammons, D., Coe, C., & Lombardo, M. (2001). Performance-comparison projects in local government: Participants' perspective. *Public Administration Review*, *61*(1), 100–115. doi:10.1111/0033-3352.00009

Ammons, D., & Roenigk, D. (2014). Benchmarking and interorganizational learning in local government. *Journal of Public Administration Research and Theory*, *25*(1), 309–335. doi:10.1093/jopart/muu014

Apaza, C. (2012). Ensuring accountability and transparency through integrated public management systems. *PS: Political Science & Politics*, *45*(3), 435–441.

Armstrong, C. (2011). Providing a clearer review: An examination of transparency on local governments websites. *Governments Information Quarterly*, *28*(1), 11–16. doi:10.1016/j.giq.2010.07.006

Arndt, C., & Oman, C. (2006). *Uses and abuses of governance indicators*. OECD, Development Centre Studies, Retrieved from http://www.oecd.org/development/povertyreductionandsocialdevelopment/usesandabusesofgovernanceindicators.htm

Bastida, A. F., & Benito, B. (2006). *Propuesta de un índice de transparencia presupuestaria* [Proposal for a budget transparency index]. IX Jornada de Contabilidad Pública ASEPUC, Logroño, La Rioja (Spain). Retrieved from http://hdl.handle.net/10317/1039

Bauhr, M., & Grimes, M. (2014). Indignation or resignation: The implications of transparency for societal accountability. *Governance*, *27*(2), 291–320. doi:10.1111/gove.2014.27.issue-2

Belandria, A. (2014). Los negocios y la ética empresarial en el estado de Carabobo-Venezuela [Business and business ethics in the state of Carabobo-Venezuela]. *Observatorio Laboral Revista Venezolana*, *7*(13), 111–133.

Bushman, R., & Smith, A. (2003). Transparency, financial accounting information, and corporate governance. *Economic Policy Review*, *9*(1), 65–87.

Calland, R., & Bentley, K. (2013). The impact and effectiveness of transparency and accountability initiatives. Freedom of information. *Development Policy Review*, *31* (51), 569–587. doi:10.1111/dpr.12020

Camacho, C. (2007). *Cultura de transparencia. El derecho humano a la información en el desarrollo de la ciudadanía comunicativa en Bolivia* [Culture of transparency. The human right to information in the development of communicative citizenship in Bolivia]. La Paz, Bolivia: Editorial Bolivia.

Canache, D., & Allison, M. (2005). Perceptions of political corruption in Latin American democracies. *Latin American Politics and Society*, *47*(3), 91–111. doi:10.1111/j.1548-2456.2005.tb00320.x

Crabbé, A., & Leroy, P. (2008). *The handbook of environmental policy evaluation*. London, UK: Earthscan.

Cunill, N. (2013). La transparencia en la gestión pública ¿Cómo construirle viabilidad? [Transparency in public management How to build viability?] *Biblioteca Virtual. Secretaria Nacional de Planeación y Desarrollo (SENPLADES)*. Retrieved from http://biblioteca.senplades.gob.ec/jspui/handle/30000/252

Curtin, D., & Meijer, A. (2006). Does transparency strengthen legitimacy? A critical analysis of European

Union policy documents. *Information Policy*, *11*(2), 109–122. doi:10.3233/IP-2006-0091

Da Cruz, N. F., & Marques, R. (2014). Scorecards for sustainable local governments. *Cities*, *39*, 165–170. doi:10.1016/j.cities.2014.01.001

Davis, J., & Ruhe, J. (2003). Perceptions of country corruption: Antecedents and outcomes. *Journal of Business Ethics*, *43*(4), 275–288. doi:10.1023/A:1023038901080

De Freitas, M. (2008). El sistema de indicadores de transparencia municipal (SITM) en Venezuela [The system of municipal transparency indicators (SITM) in Venezuela]. In J. Lizcano (Ed.), *Transparencia y lucha contra la corrupción en el ámbito Iberoamericano: Experiencias y recomendaciones* (pp. 73–84). Madrid, Spain: Transparency Internacional España.

De la Cruz, J. (2006). *Derechos fundamentales, transparencia, rendición de cuentas y participación ciudadana: Pilares básicos en la gobernabilidad democrática de un estado de derecho* [Fundamental rights, transparency, accountability and citizen participation: Basic pillars in the democratic governance of a rule of law] *XI Congreso Internacional del CLAD sobre la Reforma del Estado y de la Administración Pública*. Ciudad de Guatemala (Guatemala). Retrieved from http://siare.clad.org/fulltext/0055826.pdf

De Simone, E., Gaeta, G. L., & Mourão, P. R. (2017). The impact of fiscal transparency on corruption: An empirical analysis based on longitudinal data. *The BE Journal of Economic Analysis & Policy*, *17*(4). doi:10.1515/bejeap-2017-0021

Dos Santos Brito, K., Dos Santos Neto, M., da Silva Costa, M. A., Garcia, V. C., & de Lemos Meira, S. R. (2014). *Using parliamentary Brazilian open data to improve transparency and public participation in Brazil*. Proceedings of the 15th Annual International Conference on Digital Government Research, Aguascalientes, Mexico, 171–177. doi:10.1145/2612733.2612769

Dunleavy, P., & Hood, C. (1994). From old public administration to new public management. *Public Money & Management*, *14*(3), 9–16. doi:10.1080/09540969409387823

Etzioni, A. (2014). The limits of transparency. *Public Administration Review*, *74*(6), 687–688. doi:10.1111/puar.12276

Everitt, B., Landau, S., Leese, M., & Stahl, D. (2011). *Cluster analysis* (5th ed.). Chichester, UK: John Wiley & Sons, Ltd.

Filgueiras, F. (2016). Transparency and accountability: Principles and rules for the construction of publicity. *Journal of Public Affairs*, *16*(2), 192–202. doi:10.1002/pa.v16.2

Florini, A. (1999,April). *Does the invisible hand need a transparent glove? The politics of transparency*. Proceedings of the Annual World Bank Conference on Development Economics, 28–30Washington DC. Retrieved from http://ink.library.smu.edu.sg/soss_research/2092

Folz, D. (2004). Service quality and benchmarking the performance of municipal services. *Public Administration Review*, *65*(2), 209–220. doi:10.1111/j.1540-6210.2004.00362.x

Galvez, M., Caba, M., & Lopez, M. (2012). How self-regulatory nongovernmental organizations perceive transparency: Comparative analysis of Latin America versus Europe and the United States. *Latin American Research Review*, *47*, 179.

Gómez, M., & Montesinos, V. (2014). Gobierno electrónico y transparencia financiera y presupuestal de los departamentos en Colombia [Electronic Government and Financial and Budgetary Transparency for Colombian Departments]. *Revista Venezolana de Gerencia*, *68*, 670–698.

Grant, R., & Keohane, R. (2005). Accountability and abuses of power in world politics. *The American Political Science Review*, *99*(1), 29–43. doi:10.1017/S0003055405051476

Guthrie, J., Ball, A., & Farneti, F. (2010). Advancing sustainable management of public and not for profit organizations. *Public Management Review*, *12*(4), 449–459. doi:10.1080/14719037.2010.496254

Guthrie, J., & English, L. (1997). Performance information and programme evaluation in the Australian public sector. *International Journal of Public Sector Management*, *10*(3), 154–164. doi:10.1108/09513559710166039

Hair, J., Black, W., Babin, B., & Anderson, R. (2009). *Multivariate data analysis* (7th ed.). Upper Saddle River, NJ: Pearson.

Hale, T. (2008). Transparency, accountability, and global governance. *Global Governance: A Review of Multilateralism and International Organizations*, *14*(1), 73–94. doi:10.1163/19426720-01401006

Heinrich, C. (2002). Outcomes-based performance management in the public sector. *Public Administration Review*, *62*(6), 712–721. doi:10.1111/1540-6210.00253

Hood, C. (1995). The "new public management" in the 1980s: Variations on a theme. *Accounting Organizations and Society*, *20*(2/3), 93–109. doi:10.1016/0361-3682(93)E0001-W

Hood, C. (2010). Accountability and transparency: Siamese twins, matching parts, awkward couple? *Journal West European Politics*, *33*(5), 989–1009. doi:10.1080/01402382.2010.486122

Hood, C., & Heald, D. (Eds.). (2006). *Transparency: The key to better governance?* New York: Oxford University Press.

Huamán, E. (2015). *El gobierno abierto en el Perú: Perspectivas y análisis de los resultados obtenidos en OGP* [The Open Government in Peru: Perspectives and analysis of the results obtained in OGP]. Master Degree Thesis, University Politècnica de València. Retrieved from http://hdl.handle.net/10251/54176

IPSASB - International Public Sector Accounting Standards Board. (2017). *Handbook of international public sector accounting standards*. New York, NY: IFAC.

Jabes, J. (2002). *On the (f)utility of governance indicators: Lessons from countries in transition*. Speech given as part of the 'Assessing Good Governance' panel at the International Institute of Administrative Sciences Second Specialized International Conference, New Delhi, India.

Kaufman, L., & Rousseeuw, P. (2009). *Finding groups in data: An introduction to cluster analysis*. New York, NY: John Wiley & Sons.

Kaufmann, D. (2007). Daniel Kaufmann Conference, Director of the Institute of the World Bank, Boletín Govern Asia, (No 3 Vietnam), 1–12. Retrieved from www.casaasia.es/governasia/boletin3/pdf/20073gob1_kaufmann.pdf

Kaufmann, D., Kraay, A., & Mastruzzi, M. (2006). *Governance matters V: Aggregate and individual governance indicators for 1996-2005*. World Bank Policy Research Deparment Working Paper No. 4012.

Kaufmann, D., Kraay, A., & Mastruzzi, M. (2007). *Measuring corruption: Myths and realities* (Africa Region Findings & Good Practice Infobriefs; No. 273). Washington, DC: World Bank. Retrieved from https://openknowledge.worldbank.org/handle/10986/9576

Kaufmann, D., Kraay, A., & Mastruzzi, M., (2009). *Governance Matters VIII: Aggregate and Individual Governance Indicators, 1996-2008*. World Bank Policy Research Working Paper No. 4978.

Kopits, G., & Craig, J. (1998). *Transparency in government operations*. International Monetary Fund (IMF), Occasional Paper 158.

Landman, T., & Häusermann, J. (2003). *Map-making and analysis of the main international initiatives on developing indicators on democracy and good governance*. University of Essex. Human Rights Centre, Eurostat Contract No. 200221200005 - Final Report. Retrieved from: http://www.la.utexas.edu/users/chenry/global/coursemats/2006/about%20indicators/GovIndicatorsEssex2003.pdf

Lourenço, R. (2015). An analysis of open government portals: A perspective of transparency for accountability. *Government Information Quarterly*, *32*, 323–332. doi:10.1016/j.giq.2015.05.006

Meijer, A. (2009). Understanding modern transparency. *International Review of Administrative Sciences*, *75*(2), 255–269. doi:10.1177/0020852309104175

Meijer, A. (2013). Understanding the complex dynamics of transparency. *Public Administration Review*, *73*(3), 429–439. doi:10.1111/puar.2013.73.issue-3

Moreira, I., & Claussen, M. (2011). Políticas de transparencia en la administración pública Brasileña [Transparency policies in the Brazilian public administration]. *Revista Centro Latinoamericano de Administración para el Desarrollo*, *51*, 129–152.

Moya, E., Ortíz, P., Soto, V., Murden, A., & Atton, V. (Eds.). (2012). *Transparencia y rendición de cuentas en organizaciones sin fines de lucro* [Transparency and accountability in non-profit organizations]. Chile: Transparency International. Retrieved from http://www.chiletransparente.cl/wp-content/files_mf/1353010360TransparenciayRendiciondeCuentasenOSFL.pdf

O'Flynn, J. (2007). From new public management to public value: Paradigmatic change and managerial implications. *The Australian Journal of Public Administration*, *66*(3), 353–366. doi:10.1111/j.1467-8500.2007.00545.x

Oszlak, O. (2013). Estado abierto: Hacia un nuevo paradigma de gestión pública [Open state: Towards a new public management paradigm]. Paper presented at the XVIII Congreso Internacional del CLAD sobre la Reforma del Estado y de la Administración Pública, Montevideo, Uruguay. (29 oct - 1 nov). Retrieved from http://cladista.clad.org//handle/123456789/7500

Oyelere, P., Laswad, F., & Fisher, R. (2003). Determinants of internet financial reporting by New Zealand companies. *Journal of International Financial Management and Accounting*, *14*(1), 27–63. doi:10.1111/jifm.2003.14.issue-1

Pina, V., Torres, L., & Royo, S. (2007). Are ICTs improving transparency and accountability in the EU regional and local governments? an empirical study. *Public Administration*, *85*(2), 449–472. doi:10.1111/padm.2007.85.issue-2

Pina, V., Torres, L., & Royo, S. (2009). E-government evolution in EU local governments: A comparative perspective. *Online Information Review*, *33*(6), 1137–1168. doi:10.1108/14684520911011052

Piotrowski, S. (2009). Is transparency sustainable? *Public Administration Review*, *69*(2), 359–361. doi:10.1111/puar.2009.69.issue-2

Propper, C., & Wilson, D. (2003). The use and usefulness of performance measures in the public sector. *Oxford Review of Economic Policy*, *19*(2), 250–267. doi:10.1093/oxrep/19.2.250

Ramio, C. (2008). Technocratic public management, transparency and accountability: Spaniards perceptions on public administration. Extrapolable reflections to Latin American public institutions. *Revista del CLAD Reforma y Democracia*, *41*, 111.

Ramírez Alujas, A. V., & Dassen, N. (2014). *Winds of change: The progress of open government policymaking in Latin America and the Caribbean* (Inter-American Development Bank, Technical Note 629). Retrieved from https://publications.iadb.org/en/winds-change-progress-open-government-policymaking-latin-america-and-caribbean

Relly, J. (2012). Examining a model of vertical accountability: A cross-national study of the influence of information access on the control of corruption. *Government Information Quarterly*, *29*(3), 335–345. doi:10.1016/j.giq.2012.02.011

Rodríguez, M., Navarro, A., & Alcaide, L. (2015). Governance, transparency and accountability: An international comparison. *Journal of Policy Modeling*, *37*(1), 136–174. doi:10.1016/j.jpolmod.2015.01.010

Romzek, B. (2000). Dynamics of public sector accountability in an era of reform. *International Review of Administrative Sciences*, *66*, 21–44. doi:10.1177/0020852300661004

Rondo-Brovetto, P., & Saliterer, L. (2007). Comparing regions, cities and communities: Local government benchmarking as an instrument for improving performance and competitiveness. *The Innovation Journal: The Public Sector Innovation Journal*, *12*(3), 1–18.

Rutherford, B. (2000). Construction and presentation of performance indicators in executive agency external reports. *Financial Accountability & Management*, *16*(3), 225–249. doi:10.1111/1468-0408.00106

Skaar, E. (2013). Wavering courts: From impunity to accountability in Uruguay. *Journal of Latin American Studies*, *45*(3), 483–512. doi:10.1017/S0022216X13000801

Smith, P. (1990). The use of performance indicators in the public sector. *Journal of the Royal Statistical Society*, *153*(1), 54–72.

Sousa Oliva, J. D. (2010). *La experiencia de Chile en la transparencia y acceso a la información: El cambio institucional del gobierno central ante las nuevas disposiciones normativas* [Chile's experience in transparency and access to information: The institutional change of the central government in the face of new regulatory provisions]. Chile: Universidad de Chile: Magister en Gestión y Políticas Públicas. Retrieved from http://repositorio.uchile.cl/handle/2250/102479

Stiglitz, J. (2002). Transparency in government. In R. Islam, S. Djankov, & C. McLeish (Eds.), *The right to tell: The role of mass media in economic development* (pp. 27–44). Washington, D.C.: World Bank Institute Development Studies.

Transparency International. (2017). *Corruption perception index 2016*. Retrieved from https://www.transparency.org/research/cpi/overview

UN/ASPA. (2002). *Benchmarking E-government: A global perspective*. New York, NY: United Nations.

United Nations. (2003). *World public sector Report E-government at the crossroad*. In United Nations/American Society for Public Administration. New York, NY.

United Nations. (2004). *Global E-government readiness report. Towards access for opportunity*. New York, NY: Author.

United Nations. (2005). *Global E-government readiness report 2005. from e-government to e-inclusion*. New York, NY: Author.

United Nations. (2007). *Public governance indicators: A literature review* (Report ST/ESA/PAD/SER.E/100). New York, NY: Author.

United Nations. (2008). *UN E-government survey 2008. From e-government to connected governance*. New York, NY: Author.

United Nations Development Programme. (2007). *Governance indicators: A users' guide*. Oslo: UNDP Oslo Governance Centre.

Velázquez, A., & Pereira, N. (2008). Experiencias de políticas públicas de transparencia y una propuesta para el caso de Paraguay [Experiences of transparency public policies and a proposal for the case of Paraguay]. *Investigación Administrativa*, *102*, 64–80.

Vishwanath, T., & Kaufmann, D. (1999, September). *Towards transparency in finance and governance*. Washington, DC: World Bank. Retrieved from http://siteresources.worldbank.org/INTWBIGOVANTCOR/Resources/tarawish.pdf

World Bank. (2016). *Worldwide Governance Indicators (WGI)*. Retrieved from http://info.worldbank.org/governance/wgi/index.aspx#home

Zalaquett, J., & Muñoz, A. (Eds.). (2008). *Transparencia y probidad pública: Estudios de casos en América Latina* [Transparency and public integrity. case studies in Latin America]. Chile: Universidad de Chile, Facultad de Derecho, Centro de Derechos Humanos.

Appendix A: Relevant legislation about governance and transparency in SA

	Legislation	Year	Name	Objective
Argentina	Decree 801, 802	2018	Law of Ministries – modification Decree 438/1992	Reduces the number of ministries in order to centralize powers
	Decree No. 117	2016	National Opening of data plan	Regulates deadlines for the publication of the first sets of data
	Law 27275	2016	Right of access to public information	Introduces obligations of transparency in management announcing
	Resolution 538	2013	Creation of the National Public Data System Program (SINDAP)	Develops and manages the national public data portal
	Decree 1172	2003	Access to public information	Establishes the General Regulation of Access to Public Information for the National Executive Power, via Internet
Bolivia	Law 28168	2005	Right of access to the information	Ensures access to information as a fundamental right of every person
	Law 974	2017	Units of transparency and fight against corruption	Regulates the functioning of the Transparency and Anti-Corruption Units in the State, and its coordination with the Ministry of Justice and Institutional Transparency
Brazil	Decree 7892	2013	Creation of Purchasing Portal Federal Government "Comprasnet"	Tool that presents in one place the main figures of public contracting from all levels of public administration
	Law 101	2000	Fiscal Responsibility	Provides guidelines for budgetary and financial matters in the three levels of Government
	Law 12527/2011	2011	Access to public information	Guarantees the right of access to information
	Decree 5482	2005	The Transparency Portal of the Federation Public Administration "www.portaldetransparencia.gob.br"	Provides free real-time access to information on budget execution and supports direct monitoring of federal government programs
Chile	Decree 423	1994	National Committee on public ethics	Actively promotes a reflection on public ethics to the various powers of the state and citizenry sectors
	Law 20285	2008	Access to public information	Regulates the principle of transparency in the public service and the right of access to information for citizens
	Law 20128	2011	Fiscal responsibility	Establishes standards on improvement of financial management and budget
	Law 20730	2014	Lobby and code of good practices for lobbyists	Regulates the lobby and the efforts that represent special interests before the authorities and officials.
	Law 20880	2016	About probity in the civil service and the prevention of conflicts of interest	Regulates the principle of probity in the civil service
Colombia	Law 358	1997	Provisions regarding indebtedness	Establishes the indebtedness of local authorities may not exceed its capacity to pay
	Decree 1122	1999	Rules to suppress procedures, facilitate citizen activity and strengthen the principle of good faith	Guarantees the rights of citizens and the rationality, effectiveness and efficiency of the Public Administration
	Decree 1413	2017	Information and communications technologies	Ensures the maximum use of ICT in the development of their functions to achieve the provision of efficient services
	Law 1474	2011	Anti-corruption statute	Establishes rules to strengthen the mechanisms of prevention, investigation and punishment of acts of corruption
	Decree Law 4170	2011	Creation of the Colombia efficient buying portal "www.colombiacompra.gov.co"	Creates unified policies that serve as a guide for purchasing managers and allow them to monitor the performance
Ecuador	Tram. 339936	2018	Anti-corruption and denouncer protection bill	Defines strategies and concrete actions for the prevention and fight against corruption
	Decree 744	2007	Creation of the public procurement portal "www.compraspublicas.gov.ec"	Establishes the creation, administration and development of the Public Contracting Information and Consulting portal
	Law 24	2004	Transparency and access to public information	Guarantees the publicity, transparency and accountability to which all state entities are subject
Paraguay	Decree 4900	2016	National plan of prevention of corruption	Organizes the actions of the competent institutions for the strengthening of anti-corruption policies
	Law 5282	2014	Free citizen access to public information and government transparency	Guarantees every citizen the effective exercise of the right of access to public information
	Law 5189	2014	Provision of information on the use of public resources	Establishes the obligation of providing information on the use of public resources.
	Law 5033	2013	Affidavit of assets, active income and liabilities of public officials	Requires the presentation of the declarations of assets for public officials
	Decree 10144	2012	Creation of the National Anticorruption Secretariat	Establishes the governing body of the public administration on transparency and anticorruption

(*Continued*)

(Continued).

	Legislation	Year	Name	Objective
Peru	Decree 063	2010	Standard transparency portal	Approves the implementation of the Standard Transparency Portal in the Public Administration Entities
	Law 29091	2007	Publication of legal documents in the Portal of the Peruvian State.	Establishes the administrative procedure and the publication of various legal devices in the portals of the state
	Law 27806	2002	Transparency and access to public information	Promotes the transparency of the acts of the state and regulates the fundamental right of access to information
	Law 26300	1994	The rights of citizen to participation and control	Regulates the exercise of the rights of citizen participation and control
Uruguay	Law 18381	2008	Right of access to public information	Promotes the transparency of the administrative function of any public body, whether it is state or not
	Law 18362. Art 9, 413, 425	2008	Recruitment of civil servants	Establishes objectively, impartially and efficiently the regular intake of civil servants
	Law 17060	1998	The improper use of public power (corruption) – Cristal Law	Promotes anti-corruption among public officials
	Law 17060 art 4	1998	Creation of the Transparency and Public Ethics Board (JUTEP)	Grants technical independence for the exercise of its functions, to preserve it from possible bureaucratic influences
Venezuela	Decree 825	2000	Internet as a priority of the State	Declares access and use of the Internet as a prioritypolicy for social and political development
	Law VCB/FEVI/ YJMWJO/jgr	2013	Creation Law Government Information	Regulates the principles for the use of ICTs in the different institutions of State
	Law 1024	2001	Data messages and electronic signatures	Develops the new modalities of transmission and reception of information

Appendix B: Descriptive statistics

			Argentina	Bolivia	Brazil	Chile	Colombia	Ecuador	Guyana	Paraguay	Peru	Suriname	Uruguay	Venezuela
Governance	VA	Average	59.13	48.84	61.88	80.59	42.04	41.72	53.78	41.62	49.33	59.58	80.97	29.71
		Median	58.47	47.49	62.13	81.44	42.48	40.14	52.03	44.10	51.78	59.42	81.71	26.44
		Std. Dev.	2.33	4.33	2.17	6.12	4.59	4.81	5.75	4.76	7.38	4.46	4.58	10.90
	PS	Average	43.21	30.68	40.59	64.67	7.21	28.35	32.86	26.96	21.56	54.17	75.40	15.91
		Median	45.80	33.18	38.35	64.27	7.08	24.70	30.49	23.19	19.77	54.94	75.01	13.56
		Std. Dev.	8.62	7.15	7.70	8.14	3.82	8.73	7.71	10.52	6.91	6.71	6.45	5.31
	GE	Average	52.85	37.90	52.49	84.97	50.44	27.29	48.18	17.87	45.17	48.04	69.90	14.96
		Median	50.73	35.65	51.25	85.23	51.45	25.84	49.02	18.35	44.78	50.48	70.12	12.56
		Std. Dev.	6.12	8.15	5.18	1.90	5.52	8.71	5.05	3.85	8.25	8.03	2.25	6.37
	RQ	Average	30.50	32.03	56.32	91.18	58.85	20.14	36.07	32.46	64.04	29.71	66.57	12.96
		Median	24.21	23.81	55.10	91.43	58.10	16.46	32.45	32.31	65.42	29.02	65.40	5.99
		Std. Dev.	17.35	16.13	5.52	1.48	5.64	10.57	7.98	8.93	5.17	2.91	5.05	12.71
	RL	Average	33.58	24.42	48.26	87.66	37.58	20.13	37.11	21.58	32.39	50.58	69.53	7.83
		Median	32.08	19.90	46.76	88.12	41.01	16.10	37.59	21.20	33.18	49.76	69.93	2.38
		Std. Dev.	9.62	12.18	5.34	1.43	8.00	9.19	3.67	4.70	4.06	2.24	3.54	9.62
Corruption	COCO	Average	42.57	31.32	55.33	89.72	46.48	26.42	36.66	12.94	45.92	55.60	85.49	12.10
		Median	41.61	29.50	56.79	90.50	47.24	25.88	34.94	12.22	46.34	56.45	85.78	10.77
		Std. Dev.	5.43	6.75	6.52	2.37	5.62	3.99	6.90	8.20	6.08	9.01	3.14	6.81
	CPI	Average	30.68	27.88	38.15	70.74	34.55	26.10	27.33	22.18	37.74	36.08	61.86	21.84
		Median	30.00	28.00	39.00	72.00	37.00	24.50	26.50	22.00	37.00	36.00	67.00	21.50
		Std. Dev.	3.32	4.80	3.29	3.55	5.15	4.64	2.64	3.99	3.66	4.48	11.04	3.38
Socio-economic development	HDI	Average	0.79	0.63	0.71	0.79	0.68	0.70	0.62	0.65	0.70	0.70	0.76	0.72
		Median	0.79	0.63	0.70	0.80	0.67	0.69	0.62	0.65	0.69	0.70	0.76	0.72
		Std. Dev.	0.03	0.03	0.03	0.04	0.03	0.02	0.01	0.03	0.03	0.02	0.02	0.04
	GDPPPS	Average	8 554.95	1 679.29	7 093.47	9 374.82	4 459.88	3 705.23	2 203.02	2 563.37	3 794.67	5 125.22	9 324.25	7 566.98
		Median	8 161.31	1 233.59	5 860.15	9 484.68	3 709.08	3 350.79	1 945.63	2 009.65	3 171.50	5 207.90	7 327.96	5 432.69
		Std. Dev.	3 343.70	847.27	3 509.61	4 222.16	2 130.12	1 681.01	1 340.17	1 201.45	1 780.62	3 022.73	4 506.46	4 193.75