Exploratory Study on the Relationship between Good Public Governance and National Competitiveness

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ABSTRACT
This study aims to examine empirically the relationship between good public governance and national competitiveness. The motivation behind the study was the desire to answer a cosmic question regarding the association between the implementation of good public governance and the capability of a country to compete in the global market. An exploratory research design was applied in this study. Public governance and national competitiveness were treated as two independent variables. Public governance was broken down into attributes, namely public accountability, government effectiveness, the quality of government regulation, government control toward corruption, the rule of law and a country’s political stability. The World Governance Index (WGI) was used to measure public governance. Meanwhile, the Global Competitiveness Index (GCI) was adopted to measure national competitiveness. Bivariate correlation analysis was applied in this study and involved 140 countries that are officially listed as World Bank members. The findings concluded that public governance had a positive association with national competitiveness. All attributes of public governance showed a positive and significant correlation with national competitiveness. Statistical analysis using Pearson correlation indicated that all public governance attributes indicated a solid correlation ($r > 0.6$, $p<0.01$) except for political stability ($r = 0.585$, $p<0.01$) and public accountability ($r = 0.541$, $p<0.01$). Although the results revealed that not all public governance attributes had a strong correlation with national competitiveness, the nature of the correlation has already been justified. The results imply that if the government implements good public governance practice, it might have a positive impact on the capability of the nation to create power to compete with other countries in the global market.

Keywords: public governance; national competitiveness; foreign direct investment; World Governance Index; Global Competitiveness Index

ABSTRAK
Penelitian ini bertujuan untuk menguji secara empiris hubungan antara good public governance dan national competitiveness. Motivasi penelitian ini adalah untuk menjawab pertanyaan kosmik tentang asosiasi antara implementasi good public governance dan kemampuan suatu negara untuk bersaing di pasaran dunia. Dalam penelitian ini, penelitian deskriptif eksploratori digunakan. Good public governance dan national competitiveness ditemati sebagai dua variabel. Good public governance dibedakan menjadi atribut, yaitu accountability publik, efektivitas pemerintah, kualitas regulasi pemerintah, kontrol pemerintah terhadap korupsi, hukum dan stabilitas politik suatu negara. World Governance Index (WGI) digunakan untuk mengukur good public governance. Sementara itu, Global Competitiveness Index (GCI) digunakan untuk mengukur national competitiveness. Analisis korelasi bivariat digunakan dalam penelitian ini dan melibatkan 140 negara yang secara resmi terdaftar sebagai anggota World Bank. Hasil penelitian menunjukkan bahwa good public governance memiliki asosiasi positif dengan national competitiveness. Setiap atribut good public governance menunjukkan korelasi positif dan signifikan dengan national competitiveness. Analisis statistik menggunakan Pearson correlation menunjukkan bahwa semua atribut good public governance menunjukkan korelasi kuat dan signifikan ($r > 0.6$, $p<0.01$) kecuali political stability ($r = 0.585$, $p<0.01$) dan public accountability ($r = 0.541$, $p<0.01$). Walaupun hasil penelitian menunjukkan bahwa tidak semua atribut good public governance memiliki korelasi kuat dengan national competitiveness, namun nature of the correlation telah dibuktikan. Hasil penelitian menggambarkan bahwa jika pemerintah menerapkan praktik good public governance, maka mungkin akan memiliki dampak positif terhadap kapabilitas suatu negara untuk bersaing dengan negara lain di pasaran dunia.

Keywords: good public governance; national competitiveness; foreign direct investment; World Governance Index; Global Competitiveness Index
public governance dan daya saing nasional. Motivasi dibalik penelitian ini adalah keinginan untuk menjawab pertanyaan kosmik mengenai hubungan antara penerapan good governance dan kemampuan suatu negara untuk bersaing di pasar global. Desain penelitian eksploratif diterapkan dalam penelitian ini. Tata kelola pemerintahan dan daya saing nasional sebagai dua variabel independen. Public Governance dijabarkan menjadi akuntabilitas publik, efektivitas pemerintah, kualitas peraturan pemerintah, kontrol pemerintah terhadap korupsi, peraturan hukum dan stabilitas politik suatu negara. World Governance Index (WGI) digunakan untuk mengukur Public Governance. Sementara itu, Global Competitiveness Index (GCI) diadopsi untuk mengukur daya saing nasional. Analisis korelasi bivariat diterapkan dalam penelitian ini dan melibatkan 140 negara yang secara resmi terdaftar sebagai anggota Bank Dunia. Temuan penelitian ini menyimpulkan bahwa tata kelola pemerintahan memiliki hubungan positif dengan daya saing nasional. Semua atribut Public Governance menunjukkan korelasi positif dan signifikan dengan daya saing nasional. Analisis statistik dengan menggunakan korelasi Pearson menunjukkan bahwa semua atribut tata pemerintahan menunjukkan korelasi yang solid (r > 0,6, p < 0,01) kecuali stabilitas politik (r = 0,585, p < 0,01) dan akuntabilitas publik (r = 0,541, p < 0,01). Meskipun hasilnya menunjukkan bahwa tidak semua atribut tata kelola pemerintahan memiliki hubungan positif dengan daya saing nasional, sifat dari korelasi tersebut telah dibenarkan. Hasilnya menyiratkan bahwa jika pemerintah menerapkan praktik tata kelola publik yang baik, hal itu mungkin memiliki dampak positif pada kemampuan bangsa untuk menciptakan kekuatan untuk bersaing dengan negara lain di pasar global.

**Keywords:** Public Governance, Daya Saing Nasional, Investasi Asing Langsung, World Governance Index; Global Competitiveness Index

**INTRODUCTION**

The globalization process has a direct impact in terms of increasing competitiveness among countries (Ulman, 2013). The terms “competitiveness” and “governance” are closely associated as they are reflected in the efficiency of the economy, especially in the enterprise sector (Cuckovic and Jurlin, 2009). However, lately, public governance has attracted attention and become a key component that is believed to contribute to economic development. Good public governance drives economic growth and leads the country toward achieving a level of competitiveness (Roy, 2006). It is generally believed that good public government practice leads to the generation of national competitive advantage (Griffiths & Zammuto, 2005). Good-quality public governance drives the development of multinational enterprises and national competitiveness (Fainshmidt, Smith and Judge, 2016). Good-quality public governance positively affects public trust (Lim, Min and Kwon, 2016) and a lack of quality in public governance slow down economic growth and investment (Roy, 2006).
The public sector plays a significant role in society (IFAC, 2013), including in the implementation of good public governance in governmental institutions. The public sector is an important catalyst in pursuing national objectives of international competitiveness through implementing efficient and effective government policies. A government that practices good public governance will attract investors because it helps build trust and social capital (Heichlinger, Thijs and Bosse, 2017). Public governance determinants, namely human rights protection, environmental concern, and social responsibility, play a substantive role in reducing investor perceptions of risk. In terms of its contribution to healthy economic growth and social progress, public governance acts as a foundation (Business Council of Canada, 2017). Moreover, the quality of public governance of a country provides initial information needed by investors for planning their investment projects. Good public government enables a steady and productive relationship between the state and the stakeholder (OECD, 2011).

The World Economic Forum organization has defined national competitiveness as “the set of institutions, policies, and factors that determine the level of productivity of a country” (World Economic Forum, 2013). It refers to the capacity of a country to establish a conducive environment that encourages firms in that country to be innovative faster than their competitors in another country (Macerinskiene and Sakhanova, 2011). It is also closely associated with the capability of a country to promote and maintain an environment that enables its companies to achieve value added and increased prosperity for its residents. National competitiveness is driven by the actions of business institutions, policies made by the government and public investments and it has a direct impact on the overall economy of the country (Ulman, 2013). Indicators to measure national competitiveness can be identified from the capabilities of the country to increase living standards, the job market, national productivity, national attractiveness, and government flexibility, and
sustain economic growth (Staskeviciute and Tamosiuniene, 2010). Countries usually become competitive through government policies and sets of rules and regulations that enable business entities to improve their productivity and efficiency (Weymouth & Feinberg, 2011). Competitive nations provide an institutional environment conducive to growth (Porter, 1990). Although public governance and national competitiveness may be closely associated, they are different notions due to the fact that competitiveness incorporates some governance variables (Roy, 2006). National competitiveness is affected by three determinants, namely social capital, government institutions, and a macro- and microeconomic policy environment (Delgado, Ketels, Porter and Stern, 2012). These drivers are associated with creating a friendly business climate through product market competitiveness, free trade, infrastructure, and the government’s economic policy. By practicing good public governance, problems related to efforts to improve the national infrastructure, attract foreign direct investment, and increase educational standards can be avoided (Harford, 2006).

The role of the government is pivotal for business entities and especially for all citizens. The government, through its policies, is responsible for improving the standard of living and citizens’ quality of life (Cuckovic & Jurlin, 2009). The quality of government institutions is crucial for investors in considering the overall risk faced in a certain country. An investor tends to consider whether a country’s government institutions support a friendly business environment. Investors are generally interested in investing in countries are concerned about property rights protection, and have well-established rules and regulations, efficient and effective public administration and bureaucracy, and low-cost economy of transactions. It is essential that policies made by the government are transparent, fair, and support the business environment, and that the government is committed to combating crime and fraud (Cuckovic & Jurlin, 2009).

Currently, the challenge in practicing good public governance
is to maximize its positive impact for both sustainable economic growth and social development in an environment of international competition. It is necessary to stress various attributes of public governance and national competitiveness with the purpose of reducing poverty and supporting economic growth in the country (Roy, 2006). The government as policymakers plays an important role in taking a country-level look at competitiveness as domestic factors can help to increase firm competitiveness by providing sufficient input for production and low transaction costs (Hoekman, 2013). In order to achieve international competitiveness in the global economy, fundamental aspects such as productivity, low transaction cost, and efficiency must be present within the country (Pereira, 2007). By practicing good public governance, the efforts of the government to achieve conditions that facilitate national competitiveness are expected to be effective.

**LITERATURE REVIEWS AND HYPOTHESIS DEVELOPMENT**

**PUBLIC ACCOUNTABILITY AND NATIONAL COMPETITIVENESS**

Public accountability refers to the capability of the government to give proper responses to society (Avram, 2014). The definition of public accountability is closely associated with the capability of the government to give responsibility to citizens transparently in terms of budget spending. Theoretically, transparency can reduce the possibility of regulatory misappropriation, enables enforcement, decreases uncertainty, increases the sense of belonging for regulators and users, and builds trust (OECD, 2011). Public accountability is not only manifested by the responsibility given to citizens for taxes paid to the government but also by positive image building toward foreign investors. Before making a decision, investors will first consider the capability of the government in terms of responsibility given to society. A government that has good accountability will be trusted by stakeholders and public trust in government is pivotal for an investor in
Making the decision to invest.

Accountability plays a significant role in enhancing performance, as it will increase stakeholder trust in institutions, organizations, and individuals (Laffan, 2010). One of the performance indicators for measuring national competitiveness is FDI inflows. However, without a trusted government, foreign investors will not invest their capital due to the risks involved. The transparency of public finances and accountability are a powerful tool for convincing a society living in a risk community (Árpád Kovács, 2010). Social risk and business risks can be reduced by thorough implementation of good public accountability practice (Archibugi, 2004). A government that practices good public accountability will encourage private business organizations to do the same. A trusted and accountable government will give confidence to foreign investors and facilitate the development of a conducive environment in which private sector organizations can deal with their business activities. Therefore, we can formulate the following hypothesis:

*Hypothesis 1: A country with higher public accountability will have a higher national competitiveness level.*

**REGULATORY QUALITY AND NATIONAL COMPETITIVENESS**

Regulatory quality is defined as the quality of the state in terms of managing rules and laws to regulate the general interest of society within the country (Rhode, 1997). Regulatory quality in association with national competitiveness is designed to provide policies made by the government that supports market friendliness and eliminates excessive regulation that might increase transaction costs (Avram, 2014). Furthermore, regulatory quality can attract foreign and domestic investors by providing market friendly policies, eliminating government interference, and ensuring freedom of capital flow (Fazio & Talamo, 2008). Regulatory quality that accommodates the public interest and facilitates business sector economic activity is believed to be pivotal.
to achieving effective economic development (Avram, 2014; Kraay & Tawara, 2010). Sullivan (2009) argues that the quality of laws and regulations has a negative correlation with the levels of corruption in a certain country. This indicates that if a certain country has good regulatory quality, corruption can be limited.

The legislation is required to make sure that the practice of businesses conforms with their ethical responsibilities and that the society involved is not affected by risks such as the impact of fraudulent business practices (Breslin, 2017). Poor regulations can impede business acceleration, turn away economic resources from productive investments, hinder investors, reduce the possibilities of job creation, and discourage entrepreneurship (OECD, 2011). This study indicates that good public services significantly influence the investment climate (OECD, 2011). However, the quality of public services is very much determined by good regulations that regulate both the public and private sectors (OECD, 2011). Implementation of regulations that comply with regulatory principles and quality standards can improve economic growth and national competitiveness (OECD, 2011). Regulatory quality as reflected in the elimination of government regulatory distortions enhances the competitiveness of the country through cost-efficiency in doing business (Weymouth & Feinberg, 2011). Therefore, we can formulate the following hypothesis:

**Hypothesis 2:** A country with higher regulatory quality will have a higher national competitiveness level.

**RULE OF LAW AND NATIONAL COMPETITIVENESS**

The rule of law covers some measures that figure out the extent to which the public and citizens have confidence in, and abide by, the rules of society (Avram, 2014). These indicators refer mostly, but not solely, to the effectiveness of the protection of property rights and the judicial system (Avram, 2014). National competitiveness is always associated with the ability to create innovation. In order to increase the passion for innovation, the government must protect the results of innovation by the
rule of law. Judicial independence as reflected in the rule of law is the dominant factor that influences managers’ perception of ethics in business (Ekici & Onsel, 2013). Business entities expect fair rule of law frameworks to guarantee impartial judgment. Additionally, an independent judicial system can help individuals and organizations alike to feel safe (IFAC, 2013). A reliable system of property rights that facilitates property ownership protection is one of the most important instruments for business attractiveness and national competitiveness (Rondinelli, 2003). One of the national competitiveness indicators is productivity and it requires the rule of law that supports business entities in that country (Weymouth & Feinberg, 2011). As the regulatory designer, the government needs to better understand related regulatory problems that inhibit the development of firm productivity (Coglianese, Healey, Keatin, and Michael, 2004). The rule of law must protect business entities from anti-competitive behavior, monopoly, and other unethical business behavior that could be detrimental to national competitiveness. The regulator must control and oversee business practice that has the potential to break the antitrust law and guide businesses toward acting ethically (Breslin, 2017). Through the rule of law, the government can control the behavior of society and facilitate the development of a basic infrastructure for firms with a friendly business environment. Therefore, we can formulate the following hypothesis:

Hypothesis 3: A country with a higher rule of law will have a higher national competitiveness level.

GOVERNMENT EFFECTIVENESS AND NATIONAL COMPETITIVENESS

In order to improve the development of markets internationally and achieve national competitiveness, the existence of public administration and civil service systems that work effectively is fundamental (Rondinelli, 2003). An effective government supports public sector leaders in making better decisions. Further-
more, it helps in terms of using efficient resources and reinforces accountability in the management of resource spending (IFAC, 2013). Government effectiveness is closely associated with attributes such as public service quality, the capability of public apparatus, the bureaucracy level, public apparatus that is free from political influences, and government institution credibility (Avram, 2014). A government that works effectively can create a friendly business environment for foreign investors by reducing complicated bureaucracy, procedures, and the overall time required to complete business activities (IADB, 2001; OECD, 2000). A government that performs effectively enables society and firms to complete their bureaucracy-related activities more efficiently in terms of financial resources and time (Avram, 2014).

The performance of the government in solving societal issues can be measured based on the effectiveness of government institutions in performing their service responsibilities towards citizens (Kooiman, 2003). This means public service quality, a bureaucracy model, and the government’s credibility in implementing good public administration (Alemu, 2013). An effective government can be identified from the ability of the nation to implement policies that allow both individual citizens and firms as institutions receiving services cost and use resources efficiently and effectively (Rammal & Zurbruegg, 2006). There is a substantial reduction of the administrative burden for businesses and micro-competitiveness is enhanced if the government performs effectively (Cuckovic & Jurlin, 2009). Furthermore, effective government can enhance the quality of decisions made by public sector managers, which leads to an improvement in service delivery and in the end, better service outcomes (IFAC, 2013). On the other hand, a government that does not work effectively will detract from a conducive business environment (Ekici & Onsel, 2013). Having an effective government is important; it is a key factor that determines the effectiveness of the business environment. Therefore, we can formulate the following hypothesis:

_Hypothesis 4: A country with a more effective government will have_
a higher national competitiveness level.

POLITICAL STABILITY AND NATIONAL COMPETITIVENESS

Political stability refers to the condition of a country that is relatively free of political turmoil and free of violent changes in the government’s structure through which a legitimate government could be toppled by an unconstitutional movement (Avram, 2014). Political stability implies that investors can predict a political environment that will influence them in terms of decisions to invest. A stable government is important for economic growth as the country gets more opportunities for capital inflow from both domestic and foreign investors (Shepherd, 2010). Therefore, the government needs to maintain stable economic policies and strengthen the stability of politics in order to attract more foreign and domestic investors (Wang, Chai, Zang, 2013). National competitiveness and the social environment are not only affected by poverty but also by political instability, social disruption, and deficiencies in social capital (Rantos, Fysarakis, Soultatos, and Askoxylikis, 2015). It is widely recognized that the most important conditions for investment by investors from foreign countries are economic potential and political stability in that country (Rondinelli, 2003).

Political stability and competent political leadership play an important role in raising a country’s credibility and therefore can develop a positive image among investors (Pashayev, 2015). The growth of national living standards and economic progress as a consequence of national competitiveness appear to be a precondition for a country to achieve political stability (AICESIS, 2014). Countries may fail to compete on the basis of their comparative cost profile, but they still have a chance by empowering a comparative institutional profile. This means, for instance, an exceptionally well-trained labor force, state-of-the-art infrastructure, the latest technologies, flexible labor markets, patient investment capital willing to support innovation, advanced research
and development programs, social cohesion, political stability, and other things that help firms enormously to compete in today’s global economy (Campbell & Pedersen, 2005). Therefore, we can formulate the following hypothesis:

**Hypothesis 5**: A country with higher political stability will have a higher national competitiveness level.

**CONTROL OF CORRUPTION AND NATIONAL COMPETITIVENESS**

Corruption is a disease that undermines public trust and destroys the legitimacy of public sector organizations and private sector institutions. Its impact can destroy the stability of the national economy, especially at a time when globalization markets can drastically turn away investment and capital inflows if the confidence and trust of investors are eroded by systemic corruption (Sullivan, 2009). Corruption is classified as a major risk in good-governance literature. Its negative impact also endangers the standard of living, productivity, market equilibrium, national attractiveness, public policies, and sustaining growth (Ulman, 2013). Corruption is widely recognized as one of the major obstacles that hinder the economic development and economic growth of underdeveloped countries (Herciu, 2006). Corruption harms the relationships between regulators, business entities, and society, reducing economic efficiency and economic growth, increasing income disparity, dissolving trust in government institutions, decreasing investor’s desire to invest, and encouraging a poor public service culture (Harris & Merve, 2012).

A lack of transparency and corrupt behavior reduce the confidence of business entities and result in misappropriation of resources, leading to the loss of the welfare society (Roy, 2006). Bribes, which are categorized as another form of corruption, also damage business activities by increasing the cost of economic transactions. Corruption and bribes lead to decreased current and potential investment and in the end, could slow down economic growth (Mauro, 1995). The results showed that a rise
in the corruption level reduced foreign direct investment inflow (Habib and Zurawicki, 2002). Corruption is a social disease that influences economic growth, increases the disparity between wealth and poverty, reduces trust, and drives political instability (Ulman, 2013). A country that is not capable of monitoring and eradicating corruption endures significant losses in terms of economic growth and social welfare (Ulman, 2013). It is acknowledged that increased levels of corruption and bribes are closely associated with a lack of national capability to compete in the international market (Lambsdorff, 1999). Emerson (2006) empirically proved that national competition and corrupt behavior are closely associated. It is also agreed by many scholars that government policies aimed at combating corruption may strengthen industrial competition in cases where this is set as a development goal. Therefore, we can formulate the following hypothesis:

**Hypothesis 6:** A country with greater control of corruption will have a higher national competitiveness level.

**METHODOLOGY**

The population of this study covers the countries that are listed as members of the World Bank. The number of World Bank members total 214 countries as reported in 2017. In total, 140 World Bank member countries were chosen as a sample for the research. Purposive sampling was the technique applied in this research due to the requirement that the data had to comply with certain criteria.

Public governance and national competitiveness are two independent variables that are subjected to investigation in this research. Public governance was broken down into attributes, namely public accountability, regulatory quality, the rule of law, government effectiveness, political stability, and control of corruption. The World Governance Index (WGI) was used to measure the attributes of public governance and the Global Competitiveness Index (GCI) is an instrument for measuring national public governance. The WGI is published annually by the World
Bank and is widely used as a performance indicator to measure national competitiveness. Meanwhile, the GCI is an index released by the World Economic Forum to measure national competitiveness. The data were collected by accessing directly the official websites of source data. The data used in this research were published for the year 2015, which is the latest official publication available for both sources of data.

Because the research applies an exploratory study, which is a preliminary study, descriptive statistics analysis, and bivariate correlation analysis were adopted for the research. Descriptive statistics analysis was used to show the basic features of the data used in the study. It provides simple summaries of information about the sample and the measures. In order to understand the association between the two independent variables in this study, the bivariate correlation was adopted. Furthermore, bivariate correlation analysis was used to justify the acceptance of the proposed hypotheses previously mentioned. The Pearson correlation method was chosen in this research as data are categorized as interval scale data.

RESULTS
DESCRIPTIVE STATISTICS

The Worldwide Governance Indicator (WGI) in public governance measures shows that the interval value is from the minimum value of -2.5 (weak public governance performance) to +2.5 (strong public governance performance). Information, as depicted in Table 1, indicates that public governance attributes of 140 sample countries lie at a moderate value (mean value lies in between -0.04 and 0.19). The mean value, which is a moderate value, implies that the samples have homogeneous characteristics in terms of the performance of public governance. This can be identified based on the value of the coefficient of variation, which is <30%, and it also confirms that the data are normally distributed.
The Global Competitiveness Index (GCI) is measured using an interval scale from 1 (worst) to 7 (best). Information, as stated in Table 1, shows that the mean value of the national competitiveness of 140 countries is 4.24. Referring to the interval scale of GCI measurement (1 is the worst and 7 is the best), it can be seen that the national competitiveness index of the sample is on a moderate level. The GCI coefficient of variation value also indicates low-level mode of 0.16% (< 30%). This implies that the sample has a relatively small national competitiveness index variation value. A small coefficient of variation means that the samples have a homogeneity in terms of their national competitiveness index and also confirms that the data are normally distributed. This implies that there are no significant differences in national competitiveness index among the countries included in the research.

**TABLE 1. DESCRIPTIVE STATISTICS OF PUBLIC GOVERNANCE**

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Coefficient of Variation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Accountability</td>
<td>140</td>
<td>-1.76</td>
<td>1.70</td>
<td>0.04</td>
<td>0.91</td>
<td>20.80</td>
</tr>
<tr>
<td>Government Effectiveness</td>
<td>140</td>
<td>-2.00</td>
<td>2.25</td>
<td>0.18</td>
<td>0.95</td>
<td>5.29</td>
</tr>
<tr>
<td>Regulatory Quality</td>
<td>140</td>
<td>-1.86</td>
<td>2.26</td>
<td>0.19</td>
<td>0.93</td>
<td>4.80</td>
</tr>
<tr>
<td>Corruption Control</td>
<td>140</td>
<td>-1.33</td>
<td>2.29</td>
<td>0.08</td>
<td>0.99</td>
<td>12.90</td>
</tr>
<tr>
<td>Rule of Law</td>
<td>140</td>
<td>-1.99</td>
<td>2.07</td>
<td>0.12</td>
<td>0.96</td>
<td>7.80</td>
</tr>
<tr>
<td>Political Stability</td>
<td>140</td>
<td>-2.54</td>
<td>1.49</td>
<td>-0.04</td>
<td>0.84</td>
<td>20.23</td>
</tr>
<tr>
<td>National</td>
<td>140</td>
<td>2.84</td>
<td>5.76</td>
<td>4.24</td>
<td>0.67</td>
<td>0.16</td>
</tr>
<tr>
<td>Competitiveness</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**CORRELATION ANALYSIS**

Correlation analysis in this research was conducted to reveal the degree of association between the independent variables national competitiveness and public governance. Public governance variables were broken down into attributes, namely public accountability, government effectiveness, regulatory quality, corruption control, the rule of law, and political stability. Therefore, in the correlation analysis matrix, the correlation between
national competitiveness and attributes of public governance is depicted. Furthermore, the correlation matrix also shows the correlation among attributes of public governance. Comprehensive information about the results of the correlation is presented in Table 2.

In this research, the design of the correlation analysis is one-tailed, which is a positive correlation. A one-tailed correlation analysis test was applied due to the availability of sufficient literature that supports the nature (positive direction) of the relationship between public governance and national competitiveness. The results of the Pearson correlation matrix as presented in Table 2 show that there is a strong correlation among the attributes of public governance, namely public accountability, government effectiveness, regulatory quality, rule of law, political stability, and control of corruption ($r > 0.6$, $p<0.01$).

<table>
<thead>
<tr>
<th>No</th>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Public Accountability</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Government Effectiveness</td>
<td>0.710*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Regulatory Quality</td>
<td>0.738*</td>
<td>0.933*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Corruption Control</td>
<td>0.732*</td>
<td>0.921*</td>
<td>0.884*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Rule of Law</td>
<td>0.762*</td>
<td>0.951*</td>
<td>0.938*</td>
<td>0.963*</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Political Stability</td>
<td>0.649*</td>
<td>0.730*</td>
<td>0.701*</td>
<td>0.762*</td>
<td>0.759*</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>National Competitiveness</td>
<td>0.541*</td>
<td>0.910*</td>
<td>0.857*</td>
<td>0.822*</td>
<td>0.853*</td>
<td>0.585*</td>
<td>1</td>
</tr>
</tbody>
</table>

*Correlation is significant at the 0.01 level (1-tailed).

It means that among attributes of public governance has strong correlation each other and it enables us to predict the performance at-tributes of public government by finding information about only one attributes. If one attribute of public governance gets a high valuation score, it will affect the other public governance at-tributes.
HYPOTHESIS TESTING

There are six hypotheses in this research and they all proposed that there is a positive association between public governance attributes and national competitiveness. A summary of the hypotheses proposed is presented in Table 3. The hypothesis predicted that the country with the highest level of public governance would have the highest national competitiveness level. Since the research is an exploratory study, the hypotheses are not intended to look for the impact or influence of good public governance practice on national competitiveness but is limited to the association between two independent variables. The proposed hypotheses are designed to obtain an understanding of the relationship or association between attributes of public governance and national competitiveness. A summary of the hypothesis testing is presented in Table 3 below:

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Pearson Correlation</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: Public accountability and national</td>
<td>0.541*</td>
<td>Supported</td>
</tr>
<tr>
<td>competitiveness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H2: Government effectiveness and national</td>
<td>0.910*</td>
<td>Supported</td>
</tr>
<tr>
<td>competitiveness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H3: Regulatory quality and national</td>
<td>0.857*</td>
<td>Supported</td>
</tr>
<tr>
<td>competitiveness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H4: Corruption control and national</td>
<td>0.822*</td>
<td>Supported</td>
</tr>
<tr>
<td>competitiveness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H5: Rule of law and national</td>
<td>0.853*</td>
<td>Supported</td>
</tr>
<tr>
<td>competitiveness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H6: Political stability and national</td>
<td>0.585*</td>
<td>Supported</td>
</tr>
<tr>
<td>competitiveness</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Correlation is significant at the 0.01 level (1-tailed).

The information summarized in Table 3 indicates that all proposed hypotheses are supported (p < 0.01). All public governance attributes based on correlation analysis are shown to have a positive and significant correlation with national competitiveness. However, in terms of the correlation between the variables public accountability and political stability and the variable national competitiveness, it should be noted that although the results indicate a positive and significant correlation, the degree of correlation is relatively moderate in terms of its magnitude (r = 0.541 and r = 0.585). This means that public accountability and political stability as attributes of public governance are relatively
moderate instruments for explaining or predicting national competitiveness. However, overall, the attribute of public governance as an integral whole is still reliable for predicting national competitiveness. This argument is based on data analysis statistics that indicate that the remaining public governance attributes show a strong correlation with national competitiveness \((r > 0.6)\). Based on correlation analysis as depicted in Table 3, this implies that if a country has a high public governance score, the national competitiveness of that country will also be high. This means that the practice of good public governance among governmental agencies will have an impact on national competitiveness. The efforts of the government in relation to implementing principles of good public governance contribute to the positioning of the country at international level in terms of its competitiveness.

**CONCLUSION**

The research concludes that attributes of public governance, namely public accountability, government effectiveness, regulatory quality, corruption control, the rule of law, and political stability, are positively and significantly associated with national competitiveness. In general, the degree of correlation between public governance and national competitiveness is strong, even though there are two attributes (political stability and public accountability) of public governance that are indicated to have only a moderate correlation. Referring to the results of the research, this implies that the performance of public governance will determine national competitiveness. The government plays an important role in terms of conditioning infrastructure to achieve national prosperity. This supports the theoretical framework that the application of good governance principles in governmental institutions will affect the capability of the nation in terms of providing a good environment for business, increasing national productivity, improving quality of life and increasing the attractiveness for foreign direct investment.
In order to achieve national competitiveness, the state must be committed to combating corruption practices. By eradicating corrupt behavior among state officials, a social cost that leads to a high cost economy can be avoided. Regulatory quality determines the achievement of the goal of regulation itself. By having laws and regulations that truly attempt to streamline bureaucracy, complicated procedures to fulfill government requirements can be avoided and this will attract foreign investors. Domestic political stability enables the state to continue the national development program without any interference. Political stability is also a key factor that influences inflows of foreign direct investment. An effective government enables the nation to develop the country to achieve national prosperity with economic efficiency. Lastly, public accountability creates trust in the government among citizens related to spending money on tax payments. A trusted government has the power to reduce tax avoidance among citizens and create a positive image to attract foreign investors.

For further research, an extension of the investigation time period is suggested. Longitudinal panel data with more countries involved are recommended. Furthermore, micro-level analysis of best practice in achieving national competitiveness is a potential object of the research to be conducted. By conducting a more detailed investigation of best practice in achieving national competitiveness, we will obtain more specific information about the role of public governance. Since this research is an explorative study, which considers the association among independent variables, in the future, a multiple regression analysis models is recommended. Using multiple regression analysis, the accumulative impact of public governance attributes on national competitiveness will hopefully be discovered. Therefore, it is relevant to investigate the impact of good public governance practice on national competitiveness using multiple regression analysis.
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