

The Influence of E-Government Adoption and Political Stability on Levels of Happiness: A Panel Study of ASEAN Countries

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E-government is an emerging concept of new technology for the provision of services to the public, resulting in an increase in transparency and efficiency. Political stability means the stability and peaceful conditions of politics and government. Happiness is the state of mind where a person does not experience negativity and is instead full of satisfaction and well-being. The purpose of this study is to explore the impact of e-government and political stability on the level of happiness of people, in the presence of two control variables, literacy rate and GDP growth. For the purposes of this research, data has been collected from ASEAN countries over a period of 29 years, from reliable resources. For the purposes of this research, several techniques and tests are used, such as panel unit root tests, panel cointegration tests, coefficient estimation test and the Granger casualty test. As a consequence of these tests, the impact of e-government and political stability, as well as the control variable, GDP growth on peoples' happiness levels is accepted. While the impact of a control variable, literacy rate is rejected. This study has several benefits and implications related to theoretical, practical and policy making for future researchers, citizens and government.

Key words: *E-Government Adoption, Political Stability, Level of Happiness, ASEAN Countries.*

Introduction

Happiness is an emotion that is felt and can also be used to depict various emotions that are positive in nature such as joy, pride and contentment. Many researchers have used the subjective well-being of a person, to describe or define happiness. Al-Mulali & Ozturk, (2015) and Al-Seheel and Noor (2016) discussed, the well-being of a person is based on the level of satisfaction that person is experiencing in their life. Different emotions that are either positive or negative are also used to describe the well-being and happiness of a particular person. A person feels happy and joyful when their life is satisfying and good in all aspects (Arab, Rafiei, Safarizadeh, Ahmadi, & Safarizadeh, 2016). E-government is understood as the use of technology and innovative practices in the services provided by government and information management systems, in order to increase the transparency of different activities and effectiveness of government. The aim of adopting e-government is to promote the growth and development of the ,economy of the country. Abu-Shanab (2017) argued that people of that country play an important part in this concept, as they participate in different decision making practices of government, and can also collaborate with the government in order to bring various improvements in government services using e-government. Political stability can be defined in various terms (Alam, 2017). A government where all the laws are obeyed in an effective way, where the government is not in any danger and where the political situation is under control, can be considered as politically stable government. A politically stable government enhances market activities and improves relationships with employees, resulting in increased productivity. In addition to that, a politically stable government also attracts many investments that are beneficial to that country (Bai & Jia, 2016). A country is considered to be politically stable when there are no crimes or revolutionary actions, and where laws and regulations are carefully abided by its citizens.

Figure 1. Political stability index of different ASEAN countries (researchgate.net)

No	Country	Average	Ranking
1	Philippines	-1.24	10
2	Myanmar	-1.08	9
3	Thailand	-0.76	8
4	Indonesia	-0.51	7
5	Malaysia	0.16	6
6	Cambodia	0.17	5
7	Vietnam	0.31	4
8	Lao People's Democratic Republic	0.43	3
9	Brunei Darussalam	1.19	2
10	Singapore	1.59	1

Figure 1 represents the political stability index of various countries of the ASEAN region. E-government adoption and political stability of a government results in the happiness of its citizens. Unfortunately in ASEAN countries, lack of activities related to e-government and political instability, to some extent is resulting in depression and sadness in citizens. According to Al-Hujran, Al-Debei, Chatfield, and Migdadi (2015), many developing and underdeveloped countries other than ASEAN countries, are also facing the same issues among their citizens. If this situation is not solved promptly, it will have serious outcomes on the emotional and mental health of citizens of those countries. Therefore, it is crucial to promote e-government and political stability in order to eliminate this issue (Camp, 2019; Caselli & Tesei, 2016).

There are many researchers' that have studied different aspects of political stability and instability, in relation to e-government and its applications (Anthopoulos, Reddick, Giannakidou, & Mavridis, 2016). In addition, different aspects of the levels of happiness have been studied. However, there is a gap in the research that studies the effect of e-government and political stability on the levels of happiness. In their research Buffat (2015) recommends studying this aspect. The most important aims of this study are:

- 1) To analyse the significant impact of E-Government adoption on levels of happiness in ASEAN countries,
- 2) To analyse the significant effect of political stability on levels of happiness in ASEAN countries.

Even though ASEAN countries are steadily growing economically, they still experience considerable political instability. The scope of this research revolves around the influence of e-government adoption and political instability on the levels of happiness of people in ASEAN countries (Buffat, 2015). The significance of this study is that it will provide a complete literature review, about the concepts of e-government, political stability and happiness factors in people and their impacts. In addition, it will assist governments of ASEAN countries to improve political conditions, as well as consider adopting e-government (Cordero, Salinas-Jiménez, & Salinas-Jiménez, 2017; Cox & Weingast, 2018). Moreover, it will also assist the government to devise policies and regulations that support e-government and aspects of political stability, in order to increase the happiness levels of citizens.

Literature Review

Hedonism Theory

According to Hedonism theory, happiness is a feeling experienced by a person. A happy person has all the positive emotions and is far away from the negative emotions. The happiness of a person can be perceived in their physical appearance, such as the shine in their eyes and a smile

on their face (Drakopoulos, 1991). This theory explains what happiness actually is and when a person feels happy. There are several reasons for a person to experience happiness, the most important of which is the well-being of that person. One of the most important objectives of a persons' life is to remain happy. For this reason, a person is supposed to do anything within a reasonable limit that could make them happy (Soper, 2014). As this study is based on the concept of e-government and political stability, and their respective impacts on the happiness levels of people, therefore this theory can be used to study these concepts effectively. As e-government and political stability play a crucial role in the increase of people's well-being, the increase in levels of peoples happiness can be effectively applied in this study.

Impact of E-Government Adoption on Levels of Happiness

E-government is the use of latest technologies and innovative tools in different services provided by government to the people (Flory, 2015). This not only increases the transparency of government services, but also increases the efficiency and effectiveness of these services. The information and communication technologies used in e-government leads better relationships between government and people of that country. Güler, Mukul, & Büyüközkan (2019) state this is because people have easier access to government services and they can make better use of them in their lives. As a result, citizens of that country collaborate with the government in its various activities, so that the government may improve and grow. In order to improve the well-being of its people, government tries to recognise the needs and wants of its citizens (Hardgrave, 2019). In addition, government also tries to specify various aspects that improve citizen's quality of life, as well as the government. The union of various countries that is collectively known as the United Arab Emirates UAE, is one of the richest countries in the world, due to its widespread and successful economy.. Kurfalı, Arifoğlu, Tokdemir and Paçin (2017) explain that successful economic growth and development of the UAE is actually because of the best usage and management of its oil reserves by its government. The UAE have also made a lot of innovations and technological advancements in almost every sector, which results in the attraction of increasing numbers of tourists and people from all over the world visiting. (Huang, Wu, & Deng, 2016; Köhler, 2019). This also has added to the economic development and growth of that country. The UAE have also moved towards e-government because they are very stable financially and thus, can afford all the expenses that are related to the innovative practices and technologies of e-government. It is the goal of their government to provide the latest e-government services to their citizens whenever they need it and thus improve the quality of life and well-being of their people. Sá, Rocha, and Cota (2016) conclude that this ultimately will increase the happiness levels of their citizens. In addition to that, the government of the UAE has created a ministry known as the Ministry of Happiness. The objective of this ministry, is to identify and create different innovative and technological projects that may increase the life quality and thus, the happiness of their citizens. From this

discussion, we can conclude that the adoption of e-government has a significant impact on the happiness of the citizens of any country. The following hypothesis is generated:

H 1: E-Government adoption has significant impact on Levels of Happiness in ASEAN Countries

Impact of Political Stability on Levels of Happiness

A county is stable if the laws and regulations are abided by the people, the government is working without any pressure and threat of being removed and the political conditions of the government are stable (Oswald, Proto, & Sgroi, 2015). These are the most important and basic aspects of political stability. If a government has strong connections and relationships with its citizens, its political conditions also affect the people various ways. When there are proper laws and regulations that ensure every aspect of the country is peaceful, this increases the satisfaction and happiness levels of its citizens. In the same way, Schnoll (2015) argue that if the government is stable and working independently without any pressure, it will ultimately develop new ideas involving technology and other improvements that are in the best interests of, and improve citizens' quality of life. This not only increases citizens' well-being, but also levels of happiness. Studies conducted by Tokuda, Fujii, & Inoguchi (2017) and Uchida and Oishi (2016) show that if a government is politically stable and there are no non-peaceful events taking place in the country, it will improve the satisfaction levels of its people and they feel contented living there. So overall, people living in a peaceful country are happier, as compared to other countries that are not peaceful. If people are happier, they also take part in supporting the government to become stable and also contribute towards the growth and development of their country (Venkatesh, Thong, Chan, & Hu, 2016; Von Vorys, 2015). From the above discussion we can conclude that a governments political stability has significant impact on the levels of happiness of its citizens. The following hypothesis is generated:

H 2: Political Stability has a significant impact on levels of happiness in ASEAN Countries.

Methodology

Data

Data collection or data gathering is one of the most important tasks or steps of a research process. It is this data, which becomes the basis of all the results of the researchers. In order to conduct an accurate and reliable study it is necessary to collect data from the most reliable sources available. In this regard, the author has collected data about the variables of this study that include e-government adoption, political stability, and happiness along with two control variables i.e. GDP growth and literacy rate. The data collected regarding these variables is

comprised of 29 years of research and was collected from reliable sources such as the World Bank, World development indicators and E-government development index. In this way reliable research, with effective results can be conducted. The data was collected from all countries of ASEAN region.

Model Specification

It is very evident that there are two independent variables of this study i.e. e-government adoption and political stability along with a single dependent variable i.e. level of happiness. In addition, two control variables are used in the study, which may affect the dependent variable. These control variables include literacy rate and GDP growth. The main aim of this study is to identify the impact of independent variables on dependent variables in the presence of control variables. All the variables included in this study, have their own importance and measurement units. These measurement units are discussed here in detail. The first independent variable, e-government adoption (EGOV) is measured as the percentage of individuals adopting the concept of e-government. The second independent variable, political stability (POL) is measured in the form of a political stability index. The dependent variable of this study, happiness (HAP) is measured as satisfaction with life scale. The first control variable, GDP growth (GDP), is measured in terms of change in GDP over the years. The other control variable, literacy rate (LIT) is measured in terms of the percentage of the number of people that are literate in a country. All these variables have their own importance in the study and they can be used to derive the regression equation for this study. This regression equation is given below:

$$HAP_{it} = \alpha + \beta_1 EGOV_{it} + \beta_2 POL_{it} + \beta_3 GDP_{it} + \beta_4 LIT_{it} + \varepsilon_{it} \quad (1)$$

Where, HAP is level of happiness, EGOV is e-government adoption, POL is political stability, GDP is GDP growth, LIT is literacy rate, α is used to denote constant, i shows cross sectional data, t represents time series data and ε_{it} is a term that represents the error.

Estimation Procedure

After data collection, the next most important step is to critically evaluate and test it for the purposes of this research. In order to serve the aim of the study and to confirm the final status of the hypotheses produced in the study, various techniques and approaches have been applied to the data. These approaches include a panel unit root test, a cointegration test, a coefficient estimation test and the Granger casualty test (Pedroni, 1999). The results derived from these techniques and approaches result in the evaluation of various hypotheses of the study and finalise their acceptance or rejection status. All the tests and approaches along with their benefits and general equations are discussed in this section.

Panel Unit Root Test

The basic step in the evaluation of data is to determine whether the data is stationary or not. For this purpose, the test employed in this study is a panel unit root test, which is more beneficial from the conventional test, based on its more accurate and reliable results. A panel unit root tests consist of two important tests namely LLC and IPS. Both of them are the extensions or modification of Dickey-Fuller unit root tests as elaborated by Pedroni (2001a). The individual benefit of IPS unit root test is that it provides heterogeneous results of autoregressive processes run for the cross sectional data. Conversely, LLC provides homogeneous autoregressive results in the same scenario. The collective benefits of these tests include the provision of standard normal distribution of data, as well as the identification of stationary or non-stationary state of the concerned data. In addition to standard normal distribution, these tests also provide more accurate and exact values for the result. This is due to the fact that variation and non-stationarity state of data increases the power of panel unit root tests, as compared to the old and traditional unit root tests, which provide approximated results. The variation in the data must not only be confined to the variation in the observation, because it also involves the numbers or values of the data collected. The integration among variables can also be evaluated with the help of this test. The author has applied a LLC test in this study whose equation is provided below:

$$\Delta y_{i,t} = \alpha_i + \rho y_{i,t} - 1 + \sum_{j=1}^{pi} \alpha_j \Delta y_{i,t-j} + \varepsilon_{i,t} \quad (2)$$

Panel Cointegration Test

Once the integration, and stationary and non-stationary state of the data is confirmed, the research process leads towards the next step, which is to know whether the variables are in cointegration or not. The stationarity of data has a significant role in this regard. The non-stationary data having certain variations in data, shifts to the stationary data, in first difference series. For this purpose, the test employed in this study is called a panel cointegration test. This is not a single test, instead it consists of two types of tests i.e. Kao and Pedroni, which are the extracts of Engle-Granger cointegration tests (Pedroni, 2001b). These cointegration tests measure the statistic values of two approaches i.e. “within dimension” and “between dimension” approaches. The within approach has four types of statistics in this regard, which include panel v statistic, panel rho statistic, panel PP statistic (non-parametric) and panel ADF statistic (parametric). Contrarily, the dimension approach has three values of statistics i.e. group rho statistic, group PP statistic (nonparametric) and group ADF statistic (parametric). In this particular study, the author has used a Kao approach to study cointegration between variables. The general equation of this test is given as:

$$y_{i,t} = \alpha_i + \delta_{i,t} + \beta_1 X_{1,i,t} + \beta_2 X_{2,i,t} + \dots + \beta_n X_{n,i,t} + \varepsilon_{i,t} \quad (3)$$

Coefficient Estimation Test

After having evaluated the integration and cointegration of variables included in the study i.e. e-government adoption, political stability, level of happiness, GDP growth and literacy rate, the research process leads towards the estimation of coefficients of these variables. Two techniques FMOLS and DOLS are generally in use for this purpose. According to Pedroni (2001b), FMOLS is actually a non-parametric technique, while DOLS is a parametric technique used for this purpose. Both these techniques are the derivatives of a traditional OLS technique that did not provide authentic results. In this particular study, the technique used by the author is DOLS, for which the general equation is presented below:

$$\hat{\beta}_{FM} = \left(\sum_{i=1}^N \sum_{t=1}^T (x_{i,t} - \bar{x}_i)^2 \right)^{-1} \sum_{i=1}^N \left(\sum_{t=1}^T (x_{i,t} - \bar{x}_i) HAP_{i,t} - T \hat{\delta}_{\epsilon u} \right) \quad (4)$$

Here $HAP_{i,t}$ is the transformed variable of level of happiness

Granger Casualty Test

After finding out the cointegration between several variables of the study, the author identified any casual relationships existing amongst them. Pedroni (2004) illustrated that these casual relationships can be probed by using Dumitrescu and Hurlin Granger casualty test, with the equations as follows:

$$x_t = \sum_{i=1}^{\infty} a_i x(t-i) + c_1 + \mu_{1(t)} \quad (5)$$

$$x_t = \sum_{i=1}^{\infty} a_i x(t-i) + \sum_{j=1}^{\infty} b_j y(t-j) + c_2 + \mu_{2(t)} \quad (6)$$

Empirical Analysis

Results of Unit Root Test

The author used a panel unit root test in order to check the integration and stationary and non-stationary state of the data related to various variables of this study. This test has shown the results given in table 1. This table depicts that the null hypothesis of the data of level series cannot be rejected, and thus the data is considered to be stationary. In addition, the variables are integrated to the order zero. After the level series, the results of the same test for a first difference series showed that the “null hypothesis” can be rejected and thus the data will be considered as non-stationary. The rejection of null hypothesis shows significance levels of both one percent and five percent randomly for all the variables. Along with this, the variables are integrated with order one, due to no unit roots, at the first difference series. In short, we can say that the data at level series is stationary and has unit root, while the data at first difference series is non stationary and without unit root.

Table 1: Panel Unit Root Test

Variable	Level	First Difference
HAP	-1.73655(0.1735)	-3.68316** (0.0014)
EGOV	-2.81365(0.3816)	-2.18367* (0.0007)
POL	-2.36815(0.7318)	-1.17752**(0.0063)
GDP	-1.17383(0.3618)	-2.56371* (0.0032)
LIT	-0.83165 (0.3151)	-0.71358**(0.0046)

Results of Panel Cointegration Test

After discovering the integration of several variables of this study, the next test in the research process is to perform the panel cointegration test. This test is performed in order to check the cointegration among different variables, as well as to check the steadiness of these variables. In this study, the author has used the Kao test, the results of which are given in table 2. These results show that in the within dimension section in the table, three out four statistic values have been rejected (panel rho statistic, panel PP statistic, panel ADF statistic) with significance levels of one for each statistic. Other than that, in between the dimension section, two out of three statistic values have been rejected (group rho statistic, group ADF statistic), with the significance levels of five, for both values. Considering the overall values, five out of seven statistic values have not accepted the null hypothesis. As parametric and non-parametric statistical values are very important in this regard, therefore the conclusion drawn is that the variables are in cointegration with each other.

Table 2: Panel Cointegration Test

Dimension	Tests	Statistics	T-value
Within Dimension	Panel v statistic	-2.28642	-1.61813
	Panel rho statistic	-1.86428*	-3.38161
	Panel PP statistic	-0.82463*	-2.91373
	Panel ADF statistic	-1.71361*	-2.37161
Between Dimension	Group rho statistic	-2.38136**	-3.39136
	Group PP statistic	-1.57211	-1.46861
	Group ADF statistic	-2.36816**	-3.17384

Coefficient Estimation Test

Until now, the cointegration of the variables has been identified by the author. The next step in this process is to estimate and calculate the coefficients of several variables of this study. For this purpose, coefficient estimation test DOLS, has been performed by the author, for both pooled and grouped versions. The results of the DOLS test are presented in table 3. The table shows that the coefficients of e-government are 0.826 and 1.257 for pooled and grouped

versions respectively. The significance levels of these values are one and five percent respectively. This shows that e-government adoption has significant impact on peoples' level of happiness. The coefficients of the other independent variable, political stability are 1.256 and 1.428 for pooled and grouped versions respectively, with significance levels of five and one percent respectively. This result shows that political stability also has significant impact on people's levels of happiness. Other than independent variables, the result of the coefficient estimation for the first variable GDP growth, shows significant impact in this study. However, the other control variable, literacy rate does not show significant impact in this study. Overall, the two major hypotheses of this study are accepted along with the control variable, GDP growth. The impact of the other control variable cannot be accepted.

Table 3: Coefficient Estimation Test

Variables	Pooled	Grouped
EGOV	0.826*(2.173)	1.357**(2.294)
POL	1.256**(3.347)	1.428*(2.408)
GDP	0.725*(3.508)	-0.013*(-2.052)
LIT	-1.381(-0.792)	1.311(0.863)
R-Squared Adj.	0.836	0.793

Results of Granger Casualty Test

As the integration and cointegration have been identified between the variables of this study, the next and final step is to find any existing casual relationships between the variables i.e. e-government adoption, political stability, level of happiness, literacy rate and GDP growth. For this purpose, the author has used a Granger casualty test. The results of this study are shown in the table 4. The table shows that several variables have certain casual relationships with each other. These relationships include the following; happiness level and political stability, e-government and happiness level, e-government and GDP growth, political stability and happiness level, political stability and e-government, GDP growth and happiness level, GDP growth and political stability and finally literacy rate and GDP growth. All the above mentioned variables have certain casual relationships.

Table 4: Granger Casualty Test

	HAP	EGOV	POL	GDP	LIT
HAP	-	0.6381	0.1375*	0.8161	0.0238
EGOV	0.1973*	-	0.3862	0.3861*	0.3571
POL	0.3736*	0.3818*	-	0.9163	0.3711
GDP	0.9284**	0.4681	0.8246*	-	0.8367*
LIT	0.8163	0.3811	0.0722	0.4932*	-

Discussion and Conclusion

Discussion

The main purpose of this study is to identify the impact of e-government adoption and political stability on level of happiness in the presence of control variables i.e. literacy rate and GDP growth of a country. Various hypothesis were produced and tested by using various techniques and tools and were either accepted or rejected as a result. The first hypothesis of this study was that e-government adoption has significant impact on level of happiness of people in ASEAN countries. This hypothesis was tested by using different approaches and was considered to be accepted. The reason for this is that the use of e-government makes it easier for people to use government services, resulting in increase of satisfaction and thus happiness. A past study by Arendsen, Peters, Ter Hedde, and Van Dijk (2014) has also shown the same result in this scenario. The next hypothesis was that political stability has significant impact on level of happiness in ASEAN countries. This hypothesis was also tested in the same way, using different approaches, as a result of which it was also accepted. A countries political stability increases the satisfaction level its people. The same result has been shown by a past study conducted by Jiménez-Rodríguez* & Sánchez (2005). After testing these major hypotheses, there were two control variables i.e. literacy rate and GDP growth. The impact of literacy rate has been rejected in this study, after applying different tests and techniques. This is the same result shown by researchers Padela & Heisler (2010). The impact of the last control variable GDP growth, has been accepted as a result of different tests and approaches because greater GDP results in the increased well-being of citizens. This is the same approach shown by Steckel (1983).

Conclusion

The adoption of E-government, such as new technology in various government services and information management aspects, increases efficiency and effectiveness of these services for a country's citizens. Political stability means the peaceful conditions in the politics and governmental affairs of the country. Happiness is a state of mind in which a person does not engage with negative thoughts or life's tensions, and is surrounded by a complete atmosphere of positivity. The basic aim of this study was to identify the impact of e-government and political stability on the level of happiness of people in the presence of two control variables, literacy rate and GDP growth. Data was collected from ASEAN countries from 29 years of research about the concerned variables. In order to evaluate the data collected, several techniques and approaches were used such as a panel unit root test, a cointegration test, coefficient estimation test and the Granger casualty test. As a result of these tests, the impact of e-government and political stability along with a control variable, GDP growth on happiness level of people has been accepted, while the impact of a control variable, literacy rate has been

rejected. This study has several benefits and implications related to theoretical and practical aspects, as well as for policy making by the government.

Implications

This study has several theoretical, practical and policy making benefits and implications. This study will provide detailed literature and information about the important aspects of the adoption of e-government and political stability, and their impact on level of happiness. In addition to this, the research provides governments with reasons for adopting e-government and its usage and to stabilize the political conditions of a country. This study also provides assistance for governments in constructing policies and regulations that are favourable and improve the usage of e-government, as well as arguing for stabilizing political conditions. This will not only increase the happiness level of people. It will also increase the productivity, growth and development of the country and its economy.

Limitations and Future Indications

As this study is not completely established, there are various limitations of the study. The most important limitations include smaller sample size, focusing only on countries of the ASEAN region, usage of only a few selected approaches and techniques for evaluating the collected data, and emphasis on selected variables only. These limitations and gaps can be included by future researchers. In this regard, future researchers may increase sample to provide a broader interpretation. In addition, they can also focus on other regions or sets of countries in regard data collection. In future , authors can use approaches and techniques other than a panel unit root test, panel cointegration test, coefficient estimation test and Granger casualty test, to evaluate the hypotheses. Finally, future researchers can also use variables other than those used in this study.

REFERENCES

- Abu-Shanab, E. A. (2017). E-government familiarity influence on Jordanians' perceptions. *Telematics and Informatics*, 34(1), 103-113.
- Al-Hujran, O., Al-Debei, M. M., Chatfield, A., & Migdadi, M. (2015). The imperative of influencing citizen attitude toward e-government adoption and use. *Computers in Human Behavior*, 53, 189-203.
- Al-Mulali, U., & Ozturk, I. (2015). The effect of energy consumption, urbanization, trade openness, industrial output, and the political stability on the environmental degradation in the MENA (Middle East and North African) region. *Energy*, 84, 382-389.
- Al-Seheel, A. Y., & Noor, N. M. (2016). Effects of an Islamic-based gratitude strategy on Muslim students' level of happiness. *Mental Health, Religion & Culture*, 19(7), 686-703.
- Alam, M. B. (2017). e-Government in India *Public Administration in South Asia* (pp. 173-192): Routledge.
- Anthopoulos, L., Reddick, C. G., Giannakidou, I., & Mavridis, N. (2016). Why e-government projects fail? An analysis of the Healthcare.gov website. *Government Information Quarterly*, 33(1), 161-173.
- Arab, M., Rafiei, H., Safarizadeh, M. H., Ahmadi, J. S., & Safarizadeh, M. M. (2016). Stress, anxiety and depression among medical university students and its relationship with their level of happiness. *J Nurs Health Sci*, 5, 44-47.
- Arendsen, R., Peters, O., Ter Hedde, M., & Van Dijk, J. (2014). Does e-government reduce the administrative burden of businesses? An assessment of business-to-government systems usage in the Netherlands. *Government Information Quarterly*, 31(1), 160-169.
- Bai, Y., & Jia, R. (2016). Elite recruitment and political stability: the impact of the abolition of china's civil service exam. *Econometrica*, 84(2), 677-733.
- Buffat, A. (2015). Street-level bureaucracy and e-government. *Public Management Review*, 17(1), 149-161.
- Camp, R. A. (2019). *Mexico's political stability: the next five years*: Routledge.
- Caselli, F., & Tesei, A. (2016). Resource windfalls, political regimes, and political stability. *Review of Economics and Statistics*, 98(3), 573-590.
- Cordero, J. M., Salinas-Jiménez, J., & Salinas-Jiménez, M. M. (2017). Exploring factors affecting the level of happiness across countries: A conditional robust nonparametric frontier analysis. *European Journal of Operational Research*, 256(2), 663-672.



- Cox, G. W., & Weingast, B. R. (2018). Executive constraint, political stability, and economic growth. *Comparative Political Studies*, 51(3), 279-303.
- Drakopoulos, S. A. (1991). *Values and economic theory: The case of hedonism*: Avebury Aldershot.
- Flory, T. (2015). *Judge and Jury in Imperial Brazil, 1808–1871: Social Control and Political Stability in the New State* (Vol. 53): University of Texas Press.
- Güler, M., Mukul, E., & Büyüközkan, G. (2019). *Analysis of e-government strategies with hesitant fuzzy linguistic multi-criteria decision making techniques*. Paper presented at the International Conference on Intelligent and Fuzzy Systems.
- Hardgrave, R. L. (2019). *India under pressure: Prospects for political stability*: Routledge.
- Huang, J., Wu, S., & Deng, S. (2016). Relative income, relative assets, and happiness in urban China. *Social indicators research*, 126(3), 971-985.
- Jiménez-Rodríguez*, R., & Sánchez, M. (2005). Oil price shocks and real GDP growth: empirical evidence for some OECD countries. *Applied economics*, 37(2), 201-228.
- Köhler, A. (2019). Employee Happiness in an Activity-based Work Environment: An Explorative Study of Different Interventions to Understand the Interrelation between Acoustic Privacy and Personalisation and the Employees' Level of Happiness.
- Kurfalı, M., Arifoğlu, A., Tokdemir, G., & Paçın, Y. (2017). Adoption of e-government services in Turkey. *Computers in Human Behavior*, 66, 168-178.
- Okong'o, K., & Kyobe, M. (2019). E-Governance as an Alternative Antecedent to a Lean Public Sector: Theory and Evidence. *The African Journal of Information Systems*, 11(1), 4.
- Oswald, A. J., Proto, E., & Sgroi, D. (2015). Happiness and productivity. *Journal of Labor Economics*, 33(4), 789-822.
- Padela, A. I., & Heisler, M. (2010). The association of perceived abuse and discrimination after September 11, 2001, with psychological distress, level of happiness, and health status among Arab Americans. *American journal of public health*, 100(2), 284-291.
- Pedroni, P. (1999). Critical values for cointegration tests in heterogeneous panels with multiple regressors. *Oxford Bulletin of Economics and statistics*, 61(S1), 653-670.
- Pedroni, P. (2001a). Fully modified OLS for heterogeneous cointegrated panels *Nonstationary panels, panel cointegration, and dynamic panels* (pp. 93-130): Emerald Group Publishing Limited.



- Pedroni, P. (2001b). Purchasing power parity tests in cointegrated panels. *Review of Economics and Statistics*, 83(4), 727-731.
- Pedroni, P. (2004). Panel cointegration: asymptotic and finite sample properties of pooled time series tests with an application to the PPP hypothesis. *Econometric theory*, 20(3), 597-625.
- Sá, F., Rocha, Á., & Cota, M. P. (2016). Potential dimensions for a local e-Government services quality model. *Telematics and Informatics*, 33(2), 270-276.
- Schnoll, H. J. (2015). *E-Government: Information, Technology, and Transformation: Information, Technology, and Transformation*: Routledge.
- Soper, K. (2014). Alternative hedonism, cultural theory and the role of aesthetic revisioning *Cultural Studies and Anti-Consumerism* (pp. 59-79): Routledge.
- Steckel, R. H. (1983). Height and per capita income. *Historical Methods: A Journal of Quantitative and Interdisciplinary History*, 16(1), 1-7.
- Tokuda, Y., Fujii, S., & Inoguchi, T. (2017). Individual and Country-Level Effects of Social Trust on Happiness: The Asia Barometer Survey *Trust with Asian Characteristics* (pp. 123-139): Springer.
- Uchida, Y., & Oishi, S. (2016). The happiness of individuals and the collective. *Japanese Psychological Research*, 58(1), 125-141.
- Venkatesh, V., Thong, J. Y., Chan, F. K., & Hu, P. J. (2016). Managing citizens' uncertainty in e-government services: The mediating and moderating roles of transparency and trust. *Information Systems Research*, 27(1), 87-111.
- Von Vorys, K. (2015). *Democracy without consensus: Communalism and political stability in Malaysia*: Princeton University Press.