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## THE EFFECT OF REGULATORY PERFORMANCE ON ECONOMIC GROWTH\*

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**Abstract.** The tendency to fall into a middle-income trap position due to weak regulatory performance remains a longstanding issue faced by the majority of upper-middle-income economies (UMIE). Although regulatory performance is considered as one of the most vital factors that determine the financial progression and stability of a nation, this variable is often overlooked in previous economic growth literature. Hence, this study aims to examine the important role of regulatory performance in accelerating the economic growth of 30 upper-middle-income economies countries within the timeframe of 2000 to 2018. Using the two-step system Generalised Method of Moments (GMM), the findings reported that regulatory performance is indeed essential in stimulating economic growth. The results also indicated that lengthy procedures and waiting period involved in opening and registering new businesses are a common predicament for start-up firms. This proves to be a demotivating factor for new investors, indirectly slowing down the economic performance of the UMIE. As this study leads to various policy implications, future studies can consider advancing research in this area by further examining the link between regulatory performances and economic growth for individual countries based on a time series analysis.

**Keywords:** middle-income trap; upper-middle-income economies; regulatory performance; economic growth; system GMM

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## 1. Introduction

The World Bank Group (2018a) announced that the upper-middle-income economies (UMIE) tend to fall into a middle-income trap position for a long period. This usually happens when countries are not progressing economically at a promising rate and are unable to catch up with the developmental pace of high-income economies (HIE). One of the main contributing factors to this situation is the weak regulatory performance of these countries. Generally, the regulatory performance is measured using the ease of starting business (EOSB) score. The score captures the gap of the individual economy of countries that are known for their best regulatory performance achievement (The World Bank Group, 2019). The value of the score varies from 0 (the worst regulatory performance) to 100 (the best regulatory performance). The calculation of this score is based on a simple average of four business indicators components in setting up a business, namely the number of procedures involved, the number of days involved, costs involved as well as paid-up minimum capital required to set up a business (The World Bank Group, 2019). A higher score indicates that the country's regulatory performance is at a good stage and is capable of attracting new firms to set up businesses in the country.

Reviewing the statistics on countries' classification tabulated by the World Bank Group (2019), on average, business operations are easier to handle in HIE (average score of 89.28 in 2018) due to their favourable regulatory performance. In 2018, the average score obtained by UMIE was 81.28. Although the average score for UMIE then was more than 80, nineteen countries within the UMIE received a score of less than 80. This implies the issues underpinning business operations in these countries. Among the countries that fell into this category were Venezuela (25), Bosnia and Herzegovina (59), Suriname (60) and Brazil (64). Since the regulatory environment in these countries were far from conducive, businesses were reluctant to start up or even operate there.

Attracting new investors to invest in the UMIE is a daunting task which requires the macroeconomic foundation of a country to be stable and resilient enough in confronting unexpected downturns. Both public and private sectors should assume the role as the engine of growth in transforming the nation's economy by attracting a higher level of investments into the country. This must be done to avoid UMIE from experiencing economic stagnation where they are trapped in the middle-income economy level for an extended time. When this happens, UMIE will find it even more difficult to move up from their current economic level as most investors would already be disinterested to invest in a country whose economy is stagnated.

The lower inflow of investments is bound to affect the economy of a country in various manners. Generally, the country's economy, on the whole, may experience slower technological progress as a result of a reduction in capital and investment meant for scientific research and innovation. The reliance on the public sector to inject more capital into the economy will naturally be higher (Hanif, Rakhman, Nurkholis, Pirzada, 2019). However, governments would need to prioritise the welfare of citizen over larger financial matters. The lack of progress in all areas including research innovations and infrastructure development may lead to a reduction of job opportunities for the public. Consequently, fresh graduates may be unable to secure better jobs despite having established academic background. This situation prompts migration to other countries that provide better opportunities especially for those with financial means, knowledge, skills and talent. This issue, known as "brain drain", exacerbates further the current economic crisis with the loss of local talents to lead and drive the economy. Subsequently, the income inequality between nations continues to widen, rendering it more difficult for the economies to maintain the status of UMIE when such conditions persist for an extended time. If the situation ceases to be monitored, most UMIE may not be able to accomplish the Industrial Revolution 4.0 (IR4.0) as the IR4.0 necessitates countries to equip themselves with sufficient investments in capital, technological advancement as well as human capital (Lee, Wong, Intarakumnerd, 2019).

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Therefore, this study intends to examine the importance of regulatory performance in enhancing the economic growth of the UMIE. This study is highly significant as it is closely related to the accomplishment of the fourth industrial revolution. The findings of the study can be used by policymakers to re-design the business regulatory environment to enhance the roles of the private sector, both domestic and foreign investors, as the engine of economic growth (Yacoub, Lestari, 2019).

This study contributes to the existing literature in several ways. The existing literature on growth encompasses emerging economies (Kharusi & Mbah, 2018), middle-income countries (Benali et al., 2018), lower-middle-income economies (Akhanolu et al., 2018), low-middle-income economies (Moore & Thomas, 2010), developed economies (Mencinger et al., 2015), developing economies (Karadam, 2018), industrial economies (Karadam, 2018) and mixed economies (Intartaglia et al., 2018). This study contributes to the existing literature by focusing on UMIE, which is rarely focused upon by previous researchers. Previous studies often categorise LMIE and UMIE as middle-income economies (Akhanolu et al., 2018; Benali et al., 2018).

Furthermore, the notion of EOSB was not fully utilised in the elucidation of its direct relationship with economic growth (S. Asongu & Odhiambo, 2018; Bonga & Mahuni, 2018; Ncube et al., 2019). This variable is often viewed as a less important variable in the growth literature where its direct relationship on economic growth is yet to receive significant attention (Krammer, 2015). The establishment of its link to economic growth due provides an insight into the understanding of different factors affecting the financial status and development of a country.

## **2. Literature review**

Globally, some countries with an abundance of natural and physical resources such as Sub-Saharan Africa are still unable to achieve high economic growth (The World Bank Group, 2018b). In contrast, countries with limited resources such as Japan and Singapore charted significant rapid growth, overtaking the lead from resource-abundant countries. This implies that the abundance of physical and natural resources does not guarantee the economic growth and stability of a country. Based on this proposition, Hibbs (2001) developed the politicisation of growth theory to improve existing growth models by adding the element of the institutional quality. Since regulatory performance is an element in the institutional quality, this theory is adopted in this study to elucidate the relationship between regulatory performance and economic growth.

### **2.1 The politicization of growth theory**

This theory is developed by Hibbs (2001) to emphasise the importance of institutions as part of economic growth. The idea was initially postulated by Adam Smith, the father of economics, in his popular book of the Wealth of Nations. He stressed the importance of property rights and institutions in accelerating economic growth. Adam Smith's idea was then explored by Hibbs (2001) to include politics, institutional quality and policy as additional factors in creating a conducive economic environment for businesses and investors. These variables were included because the traditional factors were identified to be insufficient in ensuring economic development.

One of the variables which demonstrate institutional quality is the regulatory performance (The World Bank Group, 2019). In measuring regulatory performance, the World Bank Group was able to initiate an index to determine the ease of business start-up partly by using the elements in Hibbs (2001). The index is used to rank countries based on their regulatory performance besides highlighting the institutional quality elements of a country. Institutional quality is defined as the quality of the public sector in running the nation's economy. The

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quality of public institutions is imposed by formal and informal constraints (Snowdon & Vane, 2005). The formal constraints can be in the form of laws and contract enforcement while the informal constraints involve customs, conventions and self-imposed conduct. Naturally, both constraints should complement each other. Certain institutions with specific constraints allow individuals and firms to conduct activities in a country by using the same repetitive procedures (Hibbs, 2001). These procedures are tedious and may hinder economic growth by distorting a country's reputation.

Countries with a good reputation will inevitably attract more business start-ups, thus leading to higher employment opportunities, national productivity and economic prosperity. On the contrary, business owners who had to succumbed to slow and tedious procedures will be affected by this bad impression and may choose to cease business ties in the country. This indirectly tarnishes the country's reputation. As a result, other potential business investors may also be reluctant to invest in the country so as to avoid the bureaucracy and tedious procedures imposed by the government (Husaini, Pirzada, Saiful, 2020). Consequently, private sectors are forced to contribute lesser to economic development due to the lack of participation from firms and investors. Undoubtedly, the ease of starting a business is one of the most important elements under institutional qualities.

## **2.2 Empirical review**

The role of the private sector in boosting economic growth is undeniable. Increased participation of firms means more job opportunities, improved standard of living as well as an increased national income via exports, investments and private consumptions. Nevertheless, attracting more participation from firms in doing business is not an easy task and requires full supports from the public sector, especially in easing the regulatory performance such as reducing costs, time and procedures involved in starting up a business. As mentioned earlier, in measuring the ease of starting a business, The World Bank has calculated a score for each country. The best countries to start-up business are those that have the highest score value. This score indicates less complexity in conduct business, strong legal institutions as well as lower costs of regulatory processes. These costs involve both time and money in handling bureaucracy and administrative procedures.

The ease of doing business is a measure of the regulatory performance and is normally used as an independent variable to directly explain entrepreneurial well-being (Abreu et al., 2018), entrepreneurial intention (Griffiths et al., 2009), foreign direct investment (Asongu, 2013; Aziz, 2018; Bournakis et al., 2018; Corcoran & Gillanders, 2015), domestic investment (Asongu, 2013, 2015), exports (Wang & Le, 2018), business creation (Canare, 2018) as well as the growth of both small and medium enterprises (Obadić, 2015). However, within the growth literature, the ease of doing business and its direct relationship with economic growth remains underexplored (Asongu & Odhiambo, 2018; Bonga & Mahuni, 2018; Ncube et al., 2019). Investigating the relationship between these two variables is deemed vital as it involves the formation of new businesses and the role of new investors in developing the economy of a country.

The direct effect of the ease of doing business on economic growth has been investigated in the cases of the Western European and transitional countries from 1990 to 2009 (Krammer, 2015), in Russia (Matveev et al., 2018) as well as in African countries (Bonga & Mahuni, 2018; Ncube et al., 2019). Finding shows that Western countries that are more have a higher level of economic growth as compared to transitional economies as business operations tend to be easier to conduct (Krammer, 2015). Investors are happy to conduct businesses in Western countries since the business regulatory environment is uncomplicated. The conducive environment creates a positive ripple effect as new firms are attracted to join the market due to lower regulatory costs (Canare, 2018). A higher number of firms in the market will create more employment opportunities for the citizens which is a

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stepping stone to economic vitality (Asongu & Odhiambo, 2018). Although the ease of doing business is rarely used in growth models (Coe et al., 2009), its impact on the economy is large and significant. A previous study reported that the magnitude for the ease of doing business variable is even larger than other common control variables in growth models such as inflation and secondary level education (Djankov et al., 2006). This may be attributed to the fact that the ease of doing business contributes to the economy via private consumptions and private investments (Asongu & Odhiambo, 2018). Doing business in an uncomplicated and comfortable environment aid investors and entrepreneurs in focusing on inventing and innovating products based on customers' demands. With the increase in demands, higher profits can be obtained by firms, thus, allowing new employment or distribution of profits to existing employees. This, in turn, will contribute to an improved standard of living besides encouraging private consumptions. In the long run, this practice may also encourage knowledge and skills transfer between local firms and new investors, prompting a more efficient and larger production of goods and services.

### 3. Research methodology

The model derived in this study is based on the grand theory of the economic growth, known as the endogenous growth model (Lucas, 1988; Romer, 1986) which stressed the importance of labour, capital and human capital in accelerating the economic growth (Pirzada, 2016). Therefore, the specifications and standards developed in this study were based on this common model.

#### 3.1 Model specification and sources of data

Based on Barro (2003), Barro and Sala-I-Martin (1992), as well as Ibrahim and Law (2016), the baseline regression for the growth model using panel data specification, is as follows:

$$\ln y_{it} = \alpha + \rho \ln y_{it-1} + \beta \ln x_{it} + \mu_i + \varepsilon_{it} \quad (1)$$

where  $\ln y_{it}$  is the real GDP growth per capita (in logarithm form),  $\alpha$  is a constant term,  $\ln y_{it-1}$  is the initial real GDP per capita (in logarithm form),  $\ln x_{it}$  is a vector of explanatory variables (in logarithm form),  $\mu_i$  is the individual-specific effects,  $\varepsilon_{it}$  is the error term while  $i$  and  $t$  represent country and time, respectively. Meanwhile,  $\beta$  is a coefficient that measures the change in the real GDP growth per capita due to a unit change in the control variables,  $\rho$  measures how the countries converge to its steady-state level. In line with the convergence hypothesis (Robert Joseph Barro, 1991; Robert Joseph Barro & Sala-i-Martin, 2004), the  $\rho$  is expected to be negative. Lower-income countries with lower initial levels of technology and capital tend to chart rapid growth as compared to advanced economies. This is due to product imitation and diffusion of technology in advanced countries. This inclusion of this effect is essential as it evaluates the ability of the economy to reach its equilibrium state and develop in the long run.

In ensuring the validity of the estimation, the  $x_{it}$  as the vector of explanatory variables includes both, the variable of interest and the control variables. The variable of interest is the ease of starting business score (EOSB) which also acts as a measure of the regulatory performance. Meanwhile, the control variables included in the estimation models are parallel to the grand theory of the endogenous growth model and previous literature. The baseline growth model in equation (1) is expanded into the following model specification.

$$\ln y_{it} = \alpha + \rho \ln y_{it-1} + \beta_1 \text{EOSB}_{it} + \beta_2 \ln \text{POPG}_{it} + \beta_3 \ln \text{INV}_{it} + \beta_4 \ln \text{HC}_{it} + \beta_5 \ln \text{TO}_{it} + \beta_6 \ln \text{INF}_{it} + \beta_7 \text{EDEBT}_{it} + \mu_i + \varepsilon_{it} \quad (2)$$

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where lnPOPG, lnINV and lnHC are the control variables parallel to the endogenous growth model, while the remaining variables (lnTO, lnINF and EDEBT) are the control variables following previous growth literature.

Detailed explanation of the variables is shown in Table 1.

**Table 1.** List of all variables and sources of data

No.	Type of variable	Notation	Description	Proxy	Sources of Data
1	Dependent variable	lny	Growth of real GDP per capita (in logarithm form)	Economic growth	World Development Indicators (WDI)
2	Convergence variable	lnyit-1	Initial real GDP per capita (in logarithm form)	Convergence variable	World Development Indicators (WDI)
3	Variable of interest	EOSB	Ease of starting business score	Regulatory performance	Doing Business Statistics, by The World Bank
4	Control variable	lnPOPG	Population growth (in logarithm form)	Labour	World Development Indicators (WDI)
5	Control variable	lnINV	Gross capital formation to GDP (in logarithm form)	Capital	World Development Indicators (WDI)
6	Control variable	lnHC	Human capital index (in logarithm form)	Human capital	Penn World Table
7	Control variable	lnTO	Sum of exports and imports to GDP (in logarithm form)	Trade openness	World Development Indicators (WDI)
8	Control variable	lnINF	Inflation rate, measured by the consumer price index (in logarithm form)	Macroeconomic stability	International Financial Statistics (IFS)
9	Control variable	EDEBT	External debt to GDP (in logarithm form)	Public debt	International Debt Statistics (IDS)

### 3.2 Hypothesis

Consistent with the Politicisation of Growth Theory, firms and investors would naturally be interested in conducting business and investing in a country with good institutional qualities (Hibbs, 2001), particularly, in terms of the regulatory performance. Investors prefer standard tasks and procedures for handling start-ups and business operations. Countries with the best regulatory performance will experience higher private sector participation while countries with weak regulatory performance might not have strong private sector participation. This may deplete governmental funding which is used to cater to welfare as well as the stimulation of the economy. Reviewing these arguments, the hypothesis of the current study is postulated as the regulatory performance of UMIE has a significant positive relationship with its economic growth.

### 3.3 Scope of study

The current study involved 30 countries under UMIE, spanning from the year 1990 to 2018. UMIE was chosen for two reasons. Firstly, limited studies have been done in specifically examining the economic growth of UMIE. Previous research grouped UMIE alongside other developing countries which belonged to the lower-middle-income economies (LMIE). Secondly, countries in UMIE remained stagnant in the middle-income trap position due to a slow growth rate. Thus, it is deemed relevant to investigate the relationship between regulatory performance and economic growth of UMIE.

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In order to avoid any structural break in the data, a non-overlapping five-year data averaging for all data points following the procedures by Ahlborn and Schweickert (2018), Ewaida (2017) and Islam (1995) was conducted. Considering the period of estimation between 2000 to 2018 and five-year data averaging, the four data (time) points of each country are (1) 2000 to 2004, (2) 2005 to 2009, (3) 2010 to 2014 and (4) 2015 to 2018.

By referring to the variables used throughout the estimation models, the subscript notation of  $t$  refers to the four-time points as stated before, while the subscript of  $t-1$  in the convergence variable refers to the initial value of the per capita income. For instance, if  $t = 1$  refers to 2000 to 2004,  $t-1$  is the initial value of per capita income in 2000. This is in line with the procedure by Barro (2003).

### 3.4 Estimation method

Since this study utilises panel data that consists of a large number of cross-sections (30) with limited points for time (4), the best viable method in tackling this data type is the Generalised Method of Moments (GMM) (Arellano & Bond, 1991). GMM also allows potential heterogeneity across countries by including the specific individual effect ( $\mu_i$ ) in the model specification (Ibrahim & Law, 2016). Adding  $\mu_i$  addresses the omitted variable bias which may arise from the unobserved characteristics of countries under investigation.

In addition, GMM permits the model to be dynamic. The dynamic model is when the lag dependent variable ( $y_{it-1}$ ) is added to the regression model as one of the independent variables. In the growth model, the inclusion of the lag dependent variable is consistent with the convergence hypothesis (Barro, 1991; Barro & Sala-i-Martin, 2004). Other traditional panel models, such as POLS and least-square dummy variable (LSDV) are biased when the dynamic term is present in the estimation model (Ibrahim & Law, 2016; Nickell, 1981).

There are two variants of the GMM system namely, one-step and two-step system GMM. The difference between these two variants is on the use of weighting matrices. The one-step estimator uses weighting matrices that are independent of the estimated parameters, while the two-step estimator uses optimal matrices, in which the moment conditions are weighted by a consistent estimate of the covariance matrix. In this study, the two-step variant was employed as the results are projected to be more consistent compared to the one-step variant.

The use of the GMM system requires careful selection of instruments. By default, the instruments are selected by using all available lags. Too many lags will lead to a high number of instruments and may cause estimation bias (Roodman, 2009). To avoid this situation, the number of instruments should be lower than the number of cross-sections (Roodman, 2009). Alternatively, the number of lags can be reduced by restricting the lags or by collapsing the instruments.

In ensuring the validity of the instruments, the Hansen J test is used to confirm whether the instruments appear to be exogenous or not (Hansen, 1982). The test is to ensure that the null hypothesis is not rejected (overidentifying restrictions are valid). If this is the case, then the overidentifying conditions need to be correctly specified to ensure the instruments are valid.

Moreover, the GMM estimator only allows for the first-order serial correlation if the error terms are serially independent (Arellano & Bond, 1991). This is allowed as the model is a combination of both level and first difference variables. A higher order of serial correlation illustrates the specification error in the model. Therefore, to test for the second-order serial correlation, Arellano-Bond test is conducted using a null hypothesis of no

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second-order serial correlation for the disturbances in the first-difference equation. In order to ensure there is no specification error, the null hypothesis should not be rejected.

#### 4 Results and discussion

Descriptive statistics were used to understand the essential information in all dataset used in this research. Table 2 shows the results of the descriptive statistics for all the variables.

**Table 2.** Descriptive statistics

No.	Variable	Mean	Standard Deviation	Minimum	Maximum
1	y	2.3247	3.1574	-12.5759 (Armenia)	11.2728 (Armenia)
2	yit-1	8.5216	0.5431	6.5918 (China)	9.5362 (Turkey)
3	EOSB	73.8754	13.2300	23.7500 (Jordan)	95.7200 (Jamaica)
4	POPG	1.1773	1.1354	-1.5050 (Kazakhstan)	5.2075 (Jordan)
5	INV	24.6799	6.6374	12.6640 (Guatemala)	49.9950 (Algeria)
6	HC	2.5260	0.4273	1.4676 (Iran)	3.4891 (Belize)
7	TO	72.0504	33.6360	15.5664 (Argentina)	205.5394 (Malaysia)
8	INF	1290.6270	16878.6200	-0.1210 (Argentina)	232662.3000 (Venezuela)
9	EDEBT	45.1043	26.8919	1.4447 (Iran)	166.1601 (Jordan)

As illustrated in Table 2, the minimum and the maximum values for all variables demonstrated an increasing trend. Additionally, there were huge differences between the minimum and the maximum values of TO, INF and EDEBT. This indicates the possible existence of outliers as the data might have extreme values. For instance, the minimum and the maximum values of INF were -0.1210 and 23266.3000, respectively. Since the mean is 1290.6270, outliers may exist for countries that have recorded extremely high INF values such as Venezuela (232662.30000 in 2015 to 2018), Armenia (4502.6300 per cent in 1990 to 1994) and Brazil (1667.1300 per cent in 1990 to 1994). Similarly, the maximum values for TO (205.5394) and EDEBT (166.1601) were very far from the mean values (72.0504 and 45.1043, respectively). Hence, the removal of outliers is necessary to ensure robust estimation results.

The removal of outliers was conducted using the Cook's D test. Based on the number of observations, the cut-off distance for the Cook's D test was 0.0333. It was derived by dividing four with the number of observations. Hence, five observations were removed because the Cook's D for those observations were greater than the cut-off distance, leading to a total of 103 observations. Based on the model specification as stated in equation (2), the results of the two-step system GMM are shown in Table 3.



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**Table 2.** Panel data estimation using two-step system GMM

	Notation	Coefficient	Robust Standard Error
Initial GDP per capita	Inyit-1	-0.1249***	0.045
Regulatory performance	EOSB	-0.0025**	0.001
Population growth	lnPOPG	-0.1801***	0.022
Gross capital formation	lnINV2	0.1007***	0.035
Human capital	lnHC	0.4109**	0.180
Trade openness	lnTO	-0.0588	0.042
Inflation	lnINF	-0.0169	0.014
External debt	EDEBT	-0.0022***	0.001
Constant		3.812***	0.347
Observations			103
Number of countries			30
No. of instruments			29
AR2 p-value			0.430
Hansen p-value			0.303

Note: \*\*\* and \*\* indicate significance at 1% and 5%, respectively. The maximum lags used as instruments were three for lagged dependent variable and other endogenous variables.

The above results were robust due to the following reasons. Firstly, the coefficient of Inyit-1 is consistent with previous research on developing countries which claimed that the value of the convergence variable ranged between 0 to 1 (Lee, 2020). Secondly, four control variables, namely lnPOPG, lnINV, lnJC and EDEBT were found to be significant and met the expected signs. Thirdly, the number of instruments for both models did not exceed the number of countries. This indicates that both results were free from any estimation bias (Roodman, 2009). Finally, the p-values for both AR and Hansen tests were reported to be greater than 0.05. This implies that both models have no specification error and the instruments used were valid.

The EOSB, which acts as a measure of the regulatory performance (The World Bank Group, 2019) was found to have a significant negative relationship with the economic growth of the UMIE. The coefficient value of EOSB was -0.0025, and it is statistically significant at the five per cent significance level. It is surprising to find that the EOSB was negatively significant. This is because of the early postulation that EOSB would have a positive relationship with the economic growth since it reflects the quality of the public sector in improving the business environment in UMIE through law and regulations (Krammer, 2015).

Nonetheless, looking at the average statistics of EOSB in UMIE from 2004 to 2018, the score of EOSB received by UMIE was 76.03. This is comparatively low when pitched against high-income economies such as New Zealand (98.51), Canada (97.08), Australia (96.38), Hong Kong (94.49), Singapore (94.43) and Sweden (92.13). Given zero as the lowest score (illustrating the worst regulatory performance) and 100 as the highest score (representing the best regulatory performance), the score of 76.03 for the UMIE is relatively acceptable. However, a more precise analysis on individual countries in UMIE revealed that only 37.5 per cent of the countries (equivalent to 12 countries) in the UMIE has an average EOSB score which is higher than 80 in 2004 to 2018. Among these countries were the Russian Federation (91.62), Jamaica (90.55), Romania (88.93), Mauritius (88.75), Armenia (88.65) and Mexico (86.44). The remaining 62.5 per cent of countries (equivalent to 20 countries) scored an average EOSB of less than 80, with the lowest average score of 45.45 by Venezuela (The World Bank Group, 2019).

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The reason for the negative relationship between EOSB and the economic growth of UMIE perhaps lie in the difficulties in of starting businesses. The justification is supported by the claim put forth in the previous paragraph where the average EOSB for UMIE from 2014 to 2018 was less than 80. This implies that firms in the UMIE were having difficulties in starting up their new ventures. Furthermore, the sub-components of the EOSB reported that twenty countries in the UMIE had low scores in the EOSB (less than 80) due to weak regulatory performance. Most public sector in UMIE requires new firms to undergo multiple procedures in setting up businesses. These procedures are time and effort consuming. This further supported by the data in Table 4 which illustrates the weakness of regulatory performance in the UMIE based on its sub-components. There was a total of twenty-three countries in the UMIE which adopted lengthy procedures.

Therefore, consistent with the Politicisation Of Growth Theory (Hibbs, 2001), it can be concluded that tedious and lengthy procedures will hinder economic progression. New firms are less likely to be attracted to begin their business venture in UMIE with such hassles. This signifies a lost opportunity for UMIE as they lose out on new business prospects which enables the creation of job opportunities, contribution of higher tax revenues and funding for economic growth and development.

## **5 Conclusion and policy implications**

Weak regulatory performance in the UMIE may be one of the possible reasons why UMIE experience slow economic growth and remain trap in the middle-income position. The weak regulatory performance is identified as the lengthy procedures required for new business ventures. Overcoming this issue is necessary if UMIE desires to keep its global competitive advantage. Investors would most likely choose not to invest in UMIE if it continues recording a stagnant growth rate. This will further hinder UMIE governments in implementing appropriate economic transformation plans which are aligned with the fourth industrial revolution for future progression.

The findings of this research have various policy implications. Governments should consider reducing bureaucracy and documentation to improve the regulatory performance of UMIE. Policies should be implemented where new firms are allowed to operate their businesses within a short period without the hassle of tedious paperwork and procedures. When the regulatory performance is improved and in place, both policymakers and the Central Bank need to closely monitor the inflationary condition as the improvement in the regulatory performance might lead to this issue. Should this occur, direct measures need to be imposed to minimise the effects of the private sector's contribution to economic growth. These measures can include the imposition of the price control and subsidies to control price hike. The imposition of the fiscal and monetary policy instruments should only be enforced when the inflationary condition is beyond control. This is because indirect measures as such promote adverse effects to the private sector participation in the long run.

## **Limitations of the study**

This study is not without its limitations. Firstly, the scope of this study is limited to only 30 countries in the UMIE. It does not include all 62 countries under the UMIE due to limited data availability. Secondly, this research also did not manage to provide a comparison based on group of countries or group of economies. Thirdly, this study also used regulatory performance as an institutional variable which can influence economic growth. It does not include other institutional variables since there is only one variable which can represent the business regulatory performance (The World Bank Group, 2019), namely the ease of starting a business. The rest of the institutional variables were also not included as part of the study. Finally, the findings of this research were

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generalised for all 30 countries under this investigation. Since this study is using a panel data analysis, the researcher is unable to derive the findings for 30 individual countries separately. Therefore, it is suggested that future research extend this study by focusing on overcoming these limitations.

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