

Investigating Progress in Ease of Doing Business in Low Middle-Income Economies

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Abstract:

Since 2003, the World Bank (WB) evaluates and produces report on ease of doing business (EDB) in 190 economies. However, little is known regarding improvement made on starting business requirement. The purpose of this study is evaluating the progress made regarding starting business score (SBS), starting a business procedure for men (SBPM), starting a business procedure for women (SBPW), starting a business time for men (SBTM), starting a business time for women (SBTW), and starting a business cost for men (SBCM). Secondary data were collected from the World Bank web site regarding low middle-income countries. Data collected were related to 2004 and 2020 periods. Paired sample t-test and paired two-samples Wilcoxon sign ranked tests were used to analyze collected data. Both tests confirmed that low middle-income countries increased significantly SBS. They also reduced significantly SBPM, SBTW, SBTM, SBTW, and SBCM. The study did not analyze the impact of these improvements on business creation in this region.

Keys words: Ease of Doing Business, Doing Business, Starting a Business, World Bank Report, Economic Development, Lower-Middle Income Economies.

Introduction:

In the today's competitive world every country is trying its best to create and improve the environment for doing business and meeting the global standards. The economies are trying their best to meet the global competitiveness by concentrating on things like driving the competitive capabilities and by attaining the sustainable growth. The WB produces annual report since 2003 is indicating to what extent economies are improving their business.

Environment to attain sustainable economic growth in the countries equally among the developed and developing nations there is a need to have proper and

globally accepted regulations for doing business. All the economies are not similar in implementing the regulations same is the case with doing business.

According to WB report (2019), regulations are to protect the employees, safeguard the public, business, and investments. Instead of safeguarding, if the regulations make an entrepreneur inactive and hampers the business growth nation's economy will be affected severely, which in-turn will impact the EDB. (George 2018) indicated EDB is an index which measures and ranks the economic positions of the countries based on their best regulatory practices. WB has started publishing these reports from the year 2003, whereas rankings of the countries were done from 2006 onwards. By ranking the countries WB aims to provide a better understanding of the business regulations in each country and wants to provide scope for improving the regulatory business environment for doing business around the world. The EDB study considers ten parameters for analyzing the small and medium companies in a country that are supposed to influence business areas.

The ten regulations affecting the life of the business are mainly related to starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting minority investors, paying taxes, trading across borders, enforcing contracts, resolving insolvency, employing workers, and contracting with the government (WB 2020). Employing workers and contracting with the government indicators are excluded from measuring the ease of doing business rankings.

Javadekar (2017) stated that the EDB is a stock concept as it covers, the reforms a country should undertake for years to improve their per capita Gross Domestic Product. Whereas, Palan (2018) opined that if a country has to become rich in per capita, it should be ahead in EDB ranking as these ranking predicts either high or low inflation a country may face. Economies should get better rank in order to avoid higher inflation which offers higher corruption, poor legal structure, lack of infrastructure etc. Canare (2018) found that ease of doing business, especially starting business component has positive effect on business creation in 120 countries analyzed. The study by Roman and Rusu (2021) concluded that regulations on

starting a business, registering property, and enforcing contracts were the most significant predictors of setting up new firms in European countries investigated. The WB (2020) indicated that improving in firm entry regulation were associated with higher productivity. Additionally, changes to start-up regulation affected the number and size of firms in the market.

From the statistics of the WB report (2020), we can understand that there is still some gap existing between the low- and high-income economies regarding ease of starting a business. It specified that an entrepreneur from a low-income economy has to spend 50% of income per capital to start a business whereas; an entrepreneur from a high-income economy was spending only 4.2%. It also mentioned that, out of 190 economies, 115 economies have made doing business easier. Economies like Saudi Arabia, Jordan, Bahrain, Togo, Pakistan, Tajikistan, India, China, Kuwait, and Nigeria have shown some notable improvement during 2020 year than the previous years. Latin American economies could not secure the place in the rankings where as two African economies could stand in 50 rankings.

However, the WB does not evaluate to what extent the reforms made by evaluated economies improve their EDB. Additionally, the WB does not evaluate statistically the degree of improvement in starting business made by low middle-income economies. There is a gap of knowledge regarding the improvement made in low middle-income economies concerning improvement on starting business regulation. This study fills this gap by evaluating statistically the extent to which low middle-income economies improved or not starting business requirements.

The main objective of this study is investigating the progress made by low middle-income economies in starting business requirements. Specifically, the study examines the progress made regarding starting business score, starting a business procedures for men, starting a business procedures for women, starting a business time for men, starting a business time for women, and starting a business cost for men.

The main research question of this study is: To what extent low middle-income economies improve starting business requirement? The sub questions of this study are: To what degree starting business score was improved in low middle-income economies?, To what extent starting a business procedures for men was improved in low middle-income economies?, To what extent starting a business procedures for women was changed in low middle-income economies?, To what degree starting a business time for men was improved in low middle-income economies? To what extent starting a business time for women was improved in low middle-income economies, and to what degree starting a business cost for men was improved in low middle-income economies?

This paper is organized in four sections. The first section presents the introduction and the purpose of the study. The second section is related to the analysis of the literature review. The third section presents the method, and the fourth section presents the result and discussion.

Literature Review:

The first paragraph presents the results of prior studies regarding the impact of regulatory on business environment. The second paragraph presents an overview of the reforms made by some countries. As it can be seen countries are doing their best to make ease of doing business to ensure their economic development. The findings establish a strong relationship between regulatory and business environment.

Economic Growth of a country is strongly supported by entrepreneurship development programs undertaken by the country. Entrepreneurship encourages innovation and competitiveness. To faster entrepreneurship economies are simplifying the registration process, reducing the cost and number of days required for completing the procedures in starting a business (klapper, Love 2012). Simplifying the policies and modifying them as per the growth requirements is not an easy task. It requires a proper understanding of the existing environment, and then there is a need to identify the gap between the existing and the required environmental and procedural policies. Only then the economies can design the policies and procedures as per the global

standards. Klapper (2010), investigated the relationship between the regulatory ease of registering a business and actual new business regulations. They even explored the magnitude of reforms in the entry regulation and its significant impact on the new firm registration. Studies also emphasized that no country can decide accurately about the procedural reforms and their implications and the problems an economy face. It is also very unclear for economies regarding the reduction/adjustment/elimination of costs related to starting of a business or any other fee the entrepreneurs need to bear for the establishment of the business.

WB report (2020) specified that out of 190 countries, only 115 economies have done some reforms. Nearly 294 reforms were done in the year 2019 and overall, 722 reforms were done exclusively in starting of business. Reforms in starting of the business is necessary and majority of the economies preferred to implement this in order to encourage entrepreneurship and improve the gross national income percentage by reducing corruption, lowering inflation and others. A study conducted by Fernandes, Ferreira and winter (2018) stated that by simplifying the entry reforms by Portugal in 2005, it has boosted its sectoral competition. They even opined those reforms will increase the competition among the players which leads to higher productivity and improve remuneration by 6% -11%. Alfaro and Chari (2014) proved that small firms will increase productivity and reduce resource allocation distortion.

WB report (2020) has stated that in East Asia & Pacific, economies have made 33 reforms towards EDB. The Sub-Saharan Africa is one of the weakest –performing regions in EDB ranking with a global average of 63. South Asia has done some noteworthy contributions with a total of 17 reforms to improve EDB in different economies. Middle East and North Africa, economies have made 57 reforms towards EDB. WB report (2020) exclaimed that all the regulatory changes will not allow entrepreneurs to do business easily. Nearly 26 economies, who have made 31 reforms overall is the best example for this case. Economies like Croatia, Belarus, Sudan and other countries implemented the reforms which were unsupportive for the entrepreneurs to do business. Heckelman (2020) stated that doing business will be severely impacted by the increased cost for starting a business as it discourages the

new entrants entering into the market. This is evident in 16 economies out of 31 economies that increased the cost of doing business. Insufficient regulations are also one of the reasons why economies cannot perform well and why the entrepreneurs are not able to do business with ease.

3. Methodology

To investigate progress in ease of doing business in low middle-income economies, data were collected from the World Bank web site (<https://www.doingbusiness.org>). Collected data included starting business score (SBS), starting a business procedures men (SBPM), starting a business procedures women (SBPW), starting a business time men (SBTM), starting a business time women (SBTW) starting a business cost men (SBCM), and starting a business cost women (SBCW). The WB (2020) defines these variables as following:

Starting business score (SBS) represents the simple average of the scores for each of the component indicators made by the procedures, time and cost for an entrepreneur to start and formally operate a business, as well as the paid-in minimum capital requirement.

Starting a business procedures men (SBPM) refers to the number of procedures for men records all the procedures required in practice for five male married entrepreneurs to start and operate a local limited liability company. A procedure is any interaction of the company founders with external parties. Both pre- and post-incorporation procedures that are officially required or commonly done in practice are recorded.

Starting a business procedures women (SBPW) is defined as the number of procedures for women records all the procedures required in practice for five female married entrepreneurs to start and operate a local limited liability company.

Starting a business time men (SBTM) captures the median duration that business incorporation experts indicate is required for five male married entrepreneurs to

complete all procedures required to start and operate a business with minimum follow-up and no extra payments. It is calculated in calendar days. The time estimates of all procedures are added to calculate the total time required to start and operate a business, taking into account simultaneity of processes. It is assumed that the minimum time required for each procedure is one day, except for procedures that can be fully completed online, for which the time required is recorded as half a day.

Starting a business time women (SBTW) refers to the median duration that business incorporation experts indicate is necessary for five female married entrepreneurs to complete all procedures required to start and operate a business with minimum follow-up and no extra payments. It is calculated in calendar days. The time estimates of all procedures are added to calculate the total time required to start and operate a business, taking into account simultaneity of processes. It is assumed that the minimum time required for each procedure is one day, except for procedures that can be fully completed online, for which the time required is recorded as half a day.

Starting a business cost men (SBCM): The cost for men is the total cost required for five male married entrepreneurs to complete the procedures to incorporate and operate a business. It is calculated as a percentage of income per capita. All the fees and costs associated with completing the procedures to start a business are recorded, including all official fees and fees for legal and professional services, if such services are required by law or commonly used in practice. Only incorporation costs are counted, which excludes value added taxes and bribes.

To test the progress made for each procedures paired t test was applied. As indicated by Kim (2015), independent t test is used when the two groups under comparison are independent of each other, while the paired t test is used when the two groups under comparison are dependent on each other. The paired t test evaluates the difference between two paired results. In this study, we evaluated the difference between 2004 and 2020 indicators. If there is no difference between those periods, the difference in the results would be close to zero; hence, the difference in the sample

means used for a paired t test would be 0. This implies that there is no progress for the indicator analyzed. As the sample size (38) is large, the normality of the difference was not an issue and paired t-test was applied. For small sample, when the difference between two paired observations is not normally distributed, nonparametric paired two-samples Wilcoxon test is used (Kim 2015). The results of paired t test and paired two-sample Wilcoxon test were presented as they give different information. While the mean provides central tendency of the data, median provides complementary information on the tendency related to the tendency of 50% of the observations. The null hypothesis in the paired t-test is that the pair wise difference between the two groups is zero. The choice of both methods is based on the fact that paired t-test is based on giving general information based on the mean. Paired two-samples Wilcoxon test allows identifying changes occurred in 50 percent of the observations and is based on the median. Jeffrey's Amazing Statistics Program (JASP) version 0.13 was used to perform the analyses.

The sample is constituted by the following countries (52): Angola, Bangladesh, Bangladesh – Dhaka, Bhutan, Bolivia, Cabo Verde, Cambodia, Cameroon, Comoros, Congo Republic, Côte d'Ivoire, Djibouti, Egypt Arab Republic, El Salvador, Eswatini, Ghana, Honduras, India, India – Mumbai, Indonesia, Indonesia – Jakarta, Kenya, Kiribati, Kyrgyz Republic, Lao PDR, Lesotho, Mauritania, Micronesia, Fed. Sts., Moldova, Mongolia, Morocco, Myanmar, Nicaragua, Nigeria, Nigeria – Lagos, Pakistan, Pakistan – Karachi, Papua New Guinea, Philippines, São Tomé and Príncipe, Senegal, Solomon Islands, Sudan, Timor-Leste, Tunisia, Ukraine, Uzbekistan, Vanuatu, Vietnam, West Bank and Gaza, Zambia, and Zimbabwe. After checking for missing data, 14 countries were deleted because data related to 2004 were missing. Countries deleted in the sample are: Bangladesh, Cabo Verde, Comoros, Djibouti, Eswatini, India, Indonesia, Myanmar, Nigeria, Pakistan, São Tomé and Príncipe, Sudan, Timor-Leste, West Bank and Gaza

4. Result and Discussion

4.1. Descriptive Statistics

The following Tables 1-3 presents annual descriptive statistics for each variable. They show mean value, median value, standard deviation, minimum value, and maximum value. When there is a difference between mean and median, it implies a great variance between countries for the indicator analyzed.

Tableau 1: Descriptive statistics for SBS, SBPM and SBTM

| | SBS2004 | SBS2020 | SBPM2004 | SBPM2020 | SBTM2004 | SBTM2020 |
|--------------------|----------------|----------------|-----------------|-----------------|-----------------|-----------------|
| Mean | 53.518 | 82.445 | 10.842 | 7.105 | 60.842 | 23.658 |
| Median | 57.050 | 84.950 | 11.000 | 7.000 | 49.500 | 14.500 |
| Standard Deviation | 19.060 | 9.899 | 2.584 | 2.566 | 39.189 | 30.530 |
| Minimum | 11.600 | 52.400 | 6.000 | 3.000 | 13.000 | 3.000 |
| Maximum | 81.500 | 96.200 | 17.000 | 13.000 | 182.000 | 173.000 |

Tableau 2: Descriptive Statistics for SBCM

| | SBCM2004 | SBCM2020 |
|--------------------|-----------------|-----------------|
| Mean | 131.624 | 24.029 |
| Median | 64.050 | 17.200 |
| Standard deviation | 224.174 | 27.740 |
| Minimum | 11.900 | 0.500 |
| Maximum | 1316.400 | 141.400 |

Tableau 3: Descriptive Statistics for SBTW and SBPW

| | SBTW2004 | SBTW2020 | SBPW2004 | SBPW2020 |
|--|-----------------|-----------------|-----------------|-----------------|
|--|-----------------|-----------------|-----------------|-----------------|

Tableau 3: Descriptive Statistics for SBTW and SBPW

| | SBTW2004 | SBTW2020 | SBPW2004 | SBPW2020 |
|--------------------|-----------------|-----------------|-----------------|-----------------|
| Mean | 60.895 | 23.737 | 10.895 | 7.184 |
| Median | 49.500 | 14.500 | 11.000 | 7.000 |
| Standard Deviation | 39.160 | 30.534 | 2.628 | 2.566 |
| Minimum | 13.000 | 3.000 | 6.000 | 3.000 |
| Maximum | 182.000 | 173.000 | 17.000 | 13.000 |

4.2. Paired Sample Analyses Result

Tableau 4: Paired t test and Paired Wilcoxon signed rank for SBS

| Measure 1 | Measure 2 | Test | Statistic | df | p | Location Parameter | SE Difference | Effect Size |
|------------------|------------------|-------------|------------------|-----------|----------|---------------------------|----------------------|--------------------|
| SBS2004 | - SBS2020 | Student | -9.358 | 37 | < .001 | -28.926 | 3.091 | -1.518 |
| | | Wilcoxon | 4.000 | | < .001 | -28.050 | | -0.989 |

Note. For the Student t-test, effect size is given by Cohen's d . For the Wilcoxon test, effect size is given by the matched rank biserial correlation.

On average SBS in low middle-income economies increased by 28.926 (SE: 3.091) from 2004 (Mean=53.518, SD=19.06) compared to 2020 (Mean=82.445, SD=9.899). A paired samples t-test showed this growth to be statistically significant ($t(37) = -9.358, p < .001$). A Wilcoxon's signed rank test showed that SBS low middle-income economies significantly increased in 2020 (Median = 84.95) compared to 2004 (Median = 57.050), $W=4.000, p < .001$. The location parameter, the Hodges-Lehmann estimate, shows the mean/median difference between 2004 and 2020. The rank-biserial correlation (rB) indicated an effect size and is taken the same as Pearson's r , so 0.48 is a medium to large effect size (Goss-Sampson 2018). The results suggest that low middle-income economies made effort to improve their score of starting business.

Tableau 5: Paired t test and Paired Wilcoxon signed rank for SBPM

| Measure 1 | Measure 2 | Test | Statistic | df | p | Location Parameter | SE Difference | Effect Size |
|-----------|------------|----------|-----------|----|--------|-----------------------|------------------|----------------|
| SBPM2004 | - SBPM2020 | Student | 7.391 | 37 | < .001 | 3.737 | 0.506 | 1.199 |
| | | Wilcoxon | 524.500 | 1 | < .001 | 4.500 | | 0.987 |

Note. For the Student t-test, effect size is given by Cohen's d . For the Wilcoxon test, effect size is given by the matched rank biserial correlation.

On average SBPM in low middle-income economies decreased by 3.737 days (SE: 0.506) from 2004 (Mean=10.842, SD=2.584) compared to 2020 (Mean=7.105, SD= 2.566). A paired samples t-test showed this decrease to be statistically significant ($t(37) = 7.391$, $p < .001$). A Wilcoxon's signed rank test showed that SBPM in low middle-income economies significantly decreased in 2020 (Median = 7) compared to 2004 (Median = 7), $W=524.5$, $p < .001$. The location parameter, the Hodges–Lehmann estimate, shows the mean/median difference between 2004 and 2020. The results suggest that low middle-income economies made effort to reduce starting business procedures for men.

Tableau 6: Paired t test and Paired Wilcoxon signed rank for SBTM

| Measure 1 | Measure 2 | Test | Statistic | df | p | Location Parameter | SE Difference | Effect Size |
|-----------|------------|----------|-----------|----|--------|-----------------------|------------------|----------------|
| SBTM2004 | - SBTM2020 | Student | 5.650 | 37 | < .001 | 37.184 | 6.581 | 0.917 |
| | | Wilcoxon | 699.000 | | < .001 | 31.500 | | 0.887 |

Note. For the Student t-test, effect size is given by Cohen's d . For the Wilcoxon test, effect size is given by the matched rank biserial correlation.

On average SBTM in low middle-income economies decreased by 37.184 days (SE: 6.581) from 2004 (Mean=60.842, SD=39.189) compared to 2020

(Mean=23.658, SD= 30.530). A paired samples t-test showed this decrease to be statistically significant ($t(37) = 5.65$, $p < .001$). A Wilcoxon's signed rank test showed that SBTM in low middle-income economies significantly decreased in 2020 (Median = 14.5) compared to 2004 (Median =49.5), $W=699$, $p < .001$. The location parameter, the Hodges–Lehmann estimate, shows the mean/median difference between 2004 and 2020. The results suggest that low middle-income economies made effort to reduce starting business time for men.

Tableau 7:Paired t test and Paired Wilcoxon signed rank for SBCM

| Measure 1 | Measure 2 | Test | Statistic | df | p | Location Parameter | SE Difference | Effect Size |
|---------------------|-----------|----------|-----------|----|--------|-----------------------|------------------|----------------|
| SBCM2004 - SBCM2020 | | Student | 2.978 | 37 | 0.005 | 107.595 | 36.132 | 0.483 |
| | | Wilcoxon | 712.000 | | < .001 | 65.050 | | 0.922 |

Note. For the Student t-test, effect size is given by Cohen's d . For the Wilcoxon test, effect size is given by the matched rank biserial correlation.

On average SBCM in low middle-income economies decreased by 107.795 \$ (SE: 36.132) from 2004 (Mean=131.624, SD=224.174) compared to 2020 (Mean=24.029, SD= 27.740). A paired samples t-test showed this decrease to be statistically significant ($t(37) = 2.978$, $p < .005$). A Wilcoxon's signed rank test showed that SBCM in low middle-income economies significantly decreased in 2020 (Median = 17.2) compared to 2004 (Median =64.05), $W=712$, $p < .001$. The location parameter, the Hodges–Lehmann estimate, shows the mean/median difference between 2004 and 2020. The results suggest that low middle-income economies made effort to reduce starting business cost for men.

Tableau 8:Paired t test and Paired Wilcoxon signed rank for SBTW

| Measure 1 | Measure 2 | Test | Statistic | Df | p | Location Parameter | SE Difference | Effect Size |
|-----------|-----------|------|-----------|----|---|-----------------------|------------------|----------------|
|-----------|-----------|------|-----------|----|---|-----------------------|------------------|----------------|

Tableau 8: Paired t test and Paired Wilcoxon signed rank for SBTW

| Measure 1 | Measure 2 | Test | Statistic | Df | p | Location Parameter | SE Difference | Effect Size |
|---------------------|-----------|----------|-----------|----|--------|-----------------------|------------------|----------------|
| SBTW2004 - SBTW2020 | | Student | 5.645 | 37 | < .001 | 37.158 | 6.582 | 0.916 |
| | | Wilcoxon | 699.000 | | < .001 | 31.000 | | 0.887 |

Note. For the Student t-test, effect size is given by Cohen's d . For the Wilcoxon test, effect size is given by the matched rank biserial correlation.

On average SBTW in low middle-income economies decreased by 31.158 days (SE: 6.582) from 2004 (Mean=60.895, SD=39.160) compared to 2020 (Mean=23.737, SD= 30.534). A paired samples t-test showed this decrease to be statistically significant ($t(37) = 5.645$, $p < .001$). A Wilcoxon's signed rank test showed that SBTW in low middle-income economies significantly decreased in 2020 (Median = 14.5) compared to 2004 (Median =49.), $W=699$, $p < .001$. The location parameter, the Hodges–Lehmann estimate, shows the mean/median difference between 2004 and 2020. The results suggest that low middle-income economies made effort to reduce starting business time for women.

Tableau 9: Paired t test and Paired Wilcoxon signed rank for SBPW

| Measure 1 | Measure 2 | Test | Statistic | df | p | Location Parameter | SE Difference | Effect Size |
|---------------------|-----------|----------|-----------|----|--------|-----------------------|------------------|----------------|
| SBPW2004 - SBPW2020 | | Student | 7.376 | 37 | < .001 | 3.711 | 0.503 | 1.197 |
| | | Wilcoxon | 524.500 | | < .001 | 4.500 | | 0.987 |

Note. For the Student t-test, effect size is given by Cohen's d . For the Wilcoxon test, effect size is given by the matched rank biserial correlation.

On average SBPW in low middle-income economies decreased by 3.711 days (SE: 0.503) from 2004 (Mean=10.895, SD=2.628) compared to 2020 (Mean=7.184, SD= 2.566). A paired samples t-test showed this decrease to be statistically significant ($t(37) = 7.376$, $p < .001$). A Wilcoxon's signed rank test showed that SBPW in low middle-income economies significantly decreased in 2020 (Median = 7) compared to 2004 (Median =11), $W=524.5$, $p < .001$. The location parameter, the Hodges–Lehmann estimate, shows the mean/median difference between 2004 and 2020. The results

suggest that low middle-income economies made effort to reduce starting business procedure for women.

The improvement of starting a business environment would have a positive impact on business creation, entrepreneurial intentions, economic growth, and job creation. After analyzing the impact of business regulatory reforms in a panel of 172, Haidar (2012) concluded on average, each business regulatory reform was linked with a 0.15% increase in growth rate of gross domestic product. As indicated by Adi, Adriana and Ana (2015) public institutions had impact on the performances of the business environment through regulating companies' activities through the implementation of regulations, norms, taxes and so on. After analyzing 26 member states of the European Union, the findings of these authors indicated, new business registration density per 1000 people was influenced by the cost of business start-up procedures, procedures to enforce a contract, time to export, start-up procedures to register a business, the total tax rate and paid-in minimum capital. Canare (2018) highlighted ease of doing business, including starting business component has positive effect on business creation in 120 countries analyzed. Roman and Rusu (2021) indicated regulations on starting a business, was significant predictor of setting up new firms in European countries investigated. The WB (2020) predicted that improving in firm entry regulation were associated with higher productivity. Additionally, changes to start-up regulation affected the number and size of firms in the market. Davari and Farokhmanesh (2017) concluded that legislation had a positive influence on opportunity to startup. Chambers and Munemo (2019) based on the analysis of a panel of 119 countries concluded that when the number of steps required to start a new business increased by one, entrepreneurial activity decreased between three and Seven percent. Musara and Gwaindepi (2014) found bureaucracy, policy credibility, corruption; policy compliances and labour restrictions are the principal factors within the business regulatory environment that influence the process of starting new businesses.

Anjali Singh and K.K.jaiswal (2018), opined that by adopting Digitalization and e-governance in the registration process, changing labour laws and by improving the judicial systems, Ease of Doing Business can be improved.

Policy implications: Policymakers should communicate these improvements made regarding starting a business to attract entrepreneurs. They should inform foreign investors to attract them to come to invest in low middle-income countries by bringing financial capital and new technology. Policymakers should continue to improve starting business requirements (cost, time, procedure) to make business investment sustainable.

Conclusion:

This research evaluated progress made by improved in low middle-income economies regarding starting business score, starting a business procedures for men, starting a business procedures for women, starting a business time for men, starting a business time for women and starting a business cost for men. The findings of this study showed that there was a statistically significant change in mean and median the variables analyzed between 2004 and 2020. The results are consistent with the WB recommendation regarding reducing stating business time, cost, procedures, etc. This study highlighted the extent to which regulatory reforms made in low middle-income economies are significant. Using 38 countries classified among low middle-income economies, progress made regarding stating a business to improve ease of doing business has been demonstrated in this study.

However, the study did not analyze the impact of these improvements on business creation, economic growth, and job creation as predicted by prior studies. Further research could expand this study by investigating the impact of the mentioned improvements on business creation, job creation, and economic growth. Other study also should analyze the improvement of other indicators analyzed in doing business report like dealing with construction permits, getting electricity, registering property, getting credit, protecting minority investors, paying taxes, trading across borders, enforcing contracts, resolving insolvency, employing workers, and contracting.

References

1. Adi E. T. , Adriana G., Ana M. P. (2015) The impact of regulations upon the startup of new businesses. *Economia Seria Management* 18(1).
2. Alex A. G. (2018) Ease of Doing Business, 'The Rank' Explained, December 5, 2018, Retrieved from: <https://www.clearias.com/ease-of-doing-business-rank/>
3. Alfaro L., Anusha C.(2014). Deregulation, misallocation, and size: Evidence from India. *Journal of Law and Economics* 57 (4): 897–936.
4. Anjali S., Jaiswal K. K. (2018) Ease of doing business in India: a vision of make in India, *Economic Affairs*, 63(1), 129-135, DOI: 10.30954/0424-2513.2018.00150.16
5. Canare T. (2018) The effect of ease of doing business on firm creation. *Annals of Economics and Finance* 19(2): 555-584
6. Davari A. , Farokhmanesh T. (2017) Impact of entrepreneurship policies on opportunity to startup. *Management Science Letters* 7 : 431–438.
7. Davari D. , Farokhmanesh J. (2017) Regulations, institutional quality and entrepreneurship. *Journal of Regulatory Economics* 55(1).
8. Djankov S. , La Porta, R., Lopez-de-Silanes , F., Shleifer A. (2002) The Regulation of entry. *The Quarterly Journal Of Economics*, CXVII (1): 1-37, Retrieved from: https://scholar.harvard.edu/files/shleifer/files/reg_entry.pdf
9. Doing business (2019) Training for reforms, World Bank Flagship Report, Retrieved from https://www.doingbusiness.org/content/dam/doingBusiness/media/Annual-Reports/English/DB2019-report_web-version.pdf
10. Fernandes A. P., Priscila F, Alan W. (2018) The effect of competition on executive compensation and Incentives.” *Journal of Human Resources* 53 (3): 783–824.
11. G. Ani, T. (2015) Effect of Ease of Doing Business to Economic Growth among Selected Countries in Asia. *Asia Pacific Journal of Multidisciplinary*

- Research, 3(5), 139–145. <http://www.apjmr.com/wp-content/uploads/2016/02/APJMR-2015-3.5.2.19.pdf>
12. Goss-Sampson M (2018) Statistical analysis in JASP: a guide for students. Retrieved on <https://static.jasp-stats.org/Statistical%20Analysis%20in%20JASP%20-%20A%20Students%20Guide%20v1.0.pdf>
 13. Haidar J I (2012) The impact of business regulatory reforms on economic growth. Journal of The Japanese and International Economies, 26 :285 -307.
 14. Heckelman J. C. 2000. "Economic Freedom and Economic Growth: A Short-Run Causal Investigation." Journal of Applied Economics 3 (1): 71–91. DOI: 10.1080/15140326.2000.12040546
 15. Javadekar A (2017) Why the ease of doing business matters. Retrieved from <https://www.livemint.com/Opinion/ZFP18NIFA18Up0s8FPQySL/Why-the-ease-of-doing-business-matters.html>.
 16. Kim T. K. (2015) T test as a parametric statistic. Korean Journal of Anesthesiology 68(6): 540 DOI: 10.4097/kjae.2015.68.6.540
 17. Klapper L. , Love I., 2010. "The impact of business environment reforms on new firm registration," Policy Research Working Paper Series 5493, The World Bank.
 18. Musara M., Gwaindepi C. (2014) Factors within the business regulatory environment affecting entrepreneurial activity in South Africa. Mediterranean Journal of Social Sciences 5(6).
 19. Palan, P. (2018) Ease of doing Business- How It Affects Countries, Retrieved from <https://www.linkedin.com/pulse/ease-doing-business-how-affects-countries-parth-palan>.
 20. Roman A, Rusu V.D. (2021) Entrepreneurship and business environment: effects of regulations in European countries. Montenegrin Journal of Economics 17(4):133-144.

21. Serajuddin, U. M. A. R. , Hamadeh, N. A. D. A. (2020). New World Bank country classifications by income level: 2020–2021.
<https://blogs.worldbank.org/opendata/new-world-bank-country-classifications-income-level-2020-2021>
22. Sharma Y. S. (2019) India jumps to 63rd position in World Bank's Ease of Doing Business 2020 report, Retrieved from:
<https://economictimes.indiatimes.com/news/economy/indicators/india-jumps-to-63rd-position-in-world-banks-doing-business-2020-report/articleshow/71731589.cms?from=mdr>
23. The economic Times, English Edition, 6th April 2021, E-Paper, Retrieved from: <https://economictimes.indiatimes.com/definition/Ease-of-Doing-Business>
24. The World Bank (2020) Doing Business 2020 – Sustaining the pace of reforms, Feature Story , Retrieved from:
<https://www.worldbank.org/en/news/feature/2019/10/24/doing-business-2020-sustaining-the-pace-of-reforms>
25. The World Bank (2020) Doing Business 2020, Business reforms made in the Starting a Business - Doing Business, World Bank Group, Retrieved from,
<https://www.doingbusiness.org/en/reforms/overview/topic/starting-a-business>
26. The world bank (2020) Doing Business Doing Business 2020, Comparing Business Regulation in 190 Economies 2020, Retrieved from:
<http://documents1.worldbank.org/curated/en/688761571934946384/pdf/Doing-Business-2020-Comparing-Business-Regulation-in-190-Economies.pdf>
27. The World Bank Report(2019) Start-up procedures to register a business (number) <https://data.worldbank.org/indicator/IC.REG.PROC>
28. World Bank Group (2020) Doing Business 2020, Fact sheet: Middle East & North Africa,
<https://www.doingbusiness.org/content/dam/doingBusiness/pdf/db2020/DB20-FS-MNA.pdf>
29. World Bank Group (2020) Doing Business 2020, Fact sheet: Sub Saharan Africa, [DB20-FS-SSA.pdf](#)

(doingbusiness.org)https://www.doingbusiness.org/content/dam/doingBusiness/pdf/db2020/DB20-FS-SSA.pdf

30. World Bank Group (2020), Doing Business 2020, Fact sheet: South Asia, (doingbusiness.org)https://www.doingbusiness.org/content/dam/doingBusiness/pdf/db2020/DB20-FS-SAR.pdf
31. World Bank. (2020), Doing business 2020- Comparing Business Regulation in 190 Economies. http://documents1.worldbank.org/curated/en/688761571934946384/pdf/Doing-Business-2020-Comparing-Business-Regulation-in-190-Economies.pdf