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Abstract - One of the problems faced by SMEs is the lack of use of information technology. They are not able to build their database, which makes it impossible for them to expand their business, protect their company from risk. A survey was conducted to increase the company's productivity and improve its financial condition using statistics from the last 27 years, selecting companies that are making a valuable contribution to the business and operating in the mining and transportation sectors. This will allow the company to expand its operations by using information technology to increase productivity and anticipate and address operational issues. This study investigates the factors that affect women's employment in developing Asian countries and the effect of employment on economic growth. As a result, there is a lack of research on real GDP per capita and women's employment growth have been studied and significant factors for the increase have been detected including the Asian 20 countries (Bangladesh, Bhutan, Cambodia, China, India, Indonesia, Kazakhstan, Kyrgyzstan, Lao PDR, Malaysia, Mongolia, Myanmar, Nepal, Pakistan, Philippines, Sri Lanka, Tajikistan, Thailand, Uzbekistan, and Vietnam) as such these research papers during 1995-2019. The research work has been conducted based on the Asian developing 20 countries – data and the empiric analysis has done through stata16 on model 1, model 2, and model 3, respectively. There emphasized a model1 in which are women's pre-education for school for GDP per capita as well as women's business and legal index score, their employment in the sector of manufacturing, and woman-employer have been positively affected, on the contrary, research has determined the number of women – employees in agriculture is decreasing since the economy is raised. In model 2, there was investigated how to correlate birth growth with per capita GDP and hereby found out estimation, decreasing the birth growth since the economic advancement is definitely as for the Asian developing countries. As a result of the research, it has respectively confirmed that a model3, marriage status, and religious influence are negatively affected the participation rate for women's employment, on the other hand, the birth growth, the status of the women's business, and legal index aren't affected to a participation rate for the women's labor force.

Keywords – Asian Developing Countries, Women's Labor Force Participation, Per capita GDP

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1. INTRODUCTION

Throughout the 20th century, women's employment, education, and family were transformed by what economist Claudia Goldin called a "quiet revolution." Women began to gain a greater sense of self-worth from being able to contribute to the family, the workplace, and society, and their incomes became more of a compliment than a substitute for spousal income. But women in developing countries remain far from experiencing such a shift, as around 60 percent of them are employed in the informal sector. Bringing more women into the formal labor force is critical for economic development. One of the changes that have taken place around the world in recent years has been a significant increase in women's participation in the wage labor market. Women's labor market participation varies from country to country, and this study intends to study women's labor market participation in developing Asian countries in more detail. Although the increased Asian economy as well as decreased the poverty rate raised inequality and abandoned major groups of society because they couldn't be allocated economic and social prosperity efficiently. A certain example of them is the Asian developing countries' women. The Asian developing or highly developed countries' women are interested in employment until older age, but they have faced the economic structural readjustment bigger consequences from pre-education for school to retiring on a pension growing older.

The women consist of a majority of the labor force which has been oriented to the Asian developing countries' exports even there are potentially a little wage and acquired non-fluent skills where are in the manufacturing of agriculture, textile, shoes, and electronics. They have resided in living difficult conditions, getting allocated wages at the minimum rate, and working in the workplace without any legal assurances. Due to them, there have mainly focused on the Asian developing countries, particularly, women's employment, also, the birth increase as well as have implemented organization multivariety of working. On the one hand, it examines how women's employment is growing and increasing year by year as economic growth and GDP per capita growth. Although women have contributed to all chains of production for centuries, they first present their effort due to the industrial revolution.

Despite the above-mentioned relevance of women's employment, in literature, there exists negligibly study of factors determining economic growth and women's labor force participation in developing Asian countries. The objective of conducting this study was to make a telling contribution to the literature by examining the effect of women's labor force participation on economic growth from both theoretical and practical points of view. In this study, for the foregoing objective economic growth of the Asian developing countries and factor analysis research for determining a participation rate for the women's labor force was analyzed.

Amaia Altuzarra and Catalina Gálvez-Gálvez [1] studied the association between women's labor involvement and economic development in the 28 countries of the European Union between 1990 and 2016 and found that the results of all European countries (EU-28) included women's labor force involvement and economic development. Confirmed that there is a U-shaped relationship between government development.

Researchers Paolo Verme, Abdoul Gadiry Barry, and Jamal Guennouni [2] conducted a study between 1999 and 2012 and found that women's labor participation in the Arab world was lower than in the Arab world. The paper finds marriage, household inactivity rates, secondary education, and domestic product per capita to lower female labor involvement contingents. It also finds that the category of city-educated females with secondary education explains more excellent than others, the low level of women labor involvement. These wonderful searching are robust to other estimators, endogeneity tests, other specifications of female labor participation equations, and other sources of data. Economic growth has generated few jobs, has not been labor-intensive, and has not been in women-friendly sectors, resulting in feeble requirements for women, usually cityeducated women with secondary education. And when men and females compete for scarce jobs, men may have top priority access because of employers' and household choices.

Fatma Fehime AYDIN and Ekrem ERDEM [3] conducted a study using board data between 1998 and 2008 to study the impact of women's employment on competitiveness and economic growth. According to the International Institute for Management Development (IMD) and Turkey, the study compares the impact of women's employment on competitiveness and economic growth among the most competitive countries. The analysis concluded that women's labor force participation had a positive effect on the competitiveness of highly competitive countries, whereas women's labor force participation had little effect on competitiveness in all the countries under discussion and less competitive countries. The participation of women in the workforce has a positive impact on economic growth for all these groups.

The study, based on data from Alison Vásconez Rodríguez [4] (2003-2010), examines the relationship between women's labor force participation level and labor market femininity (relative growth in women's labor supply) and economic growth in other Latin American countries. The results show that the feminization of the labor force has a positive effect on growth, but not on the growth of labor supply (measured in hours).

Our study also examined the impact of women's employment opportunities in countries of religious affiliation, and the nature of relationships may be different in countries of different religions (Muslims and Christians) that respect different cultural, social norms, attitudes, and institutional factors (Fernandez)., 2013) [5]. In Islam countries, for example, well-founded U-shaped relationships may be lost because women are not allowed to enter the labor market due to religious restrictions.

Increasing women's participation in the workforce has a positive impact on women's well-being, economic independence, effective demand, and growth, as well as the impact on the business cycle of gender relations [6]. This process goes through at least two empirically proven mechanisms: (1) unpaid domestic work that bears the cost of social reproduction; and (2) paid work by women who produce the same average wage as men. A labor market channel. The growing participation of women in the workforce could have a positive effect via a reduction in wage costs (a greater supply of labor at lower wages will cause average wages to decline) owing to gender-based wage inequalities. On the

other hand, the effect of the pay gap and the downward pressure on average wages may harm effective demand.

As a result, the economy of developing countries in Asia, including women's employment, as well as the growth of fertility, is being diversified. There is a lack of research on real GDP per capita and women's employment growth have been studied and significant factors for the increase have been detected including the Asian 20 countries (Bangladesh, Bhutan, Cambodia, China, India, Indonesia, Kazakhstan, Kyrgyzstan, Lao PDR, Malaysia, Mongolia, Myanmar, Nepal, Pakistan, Philippines, Sri Lanka, Tajikistan, Thailand, Uzbekistan, Vietnam) as such these research papers during 1995-2019. The research work has been conducted based on the Asian developing 20 countries - data and the empiric analysis has done through stata16 on model1, model2, and model3, respectively. The study examines three hypotheses, the first of which examines the impact of girls' pre-school enrollment, women's business and law index, women's employment in agriculture, and women's industrial employment on GDP per capita. It then examines whether the fertility rate affects GDP per capita, while the latter hypothesize whether the labor force participation rate is affected by the fertility rate, women's business, and law index, religious status, and the number of married women. The study consists of five parts, the first part is an introduction and the second part is a theoretical study. The third section presents the data and methodology and shows. the fourth section the results of the figures. The last in the fifth section provides a summary and references.

2. THEORETICAL RESEARCH

2.1. RESEARCH ON ECONOMIC GROWTH AND WOMEN'S EMPLOYMENT

One of the changes that have taken place around the world in recent years is a significant increase in the participation of women in the wage labor market. As the country's economy grows year by year, the number of females employed in the country is increasing, but the graph below shows that in developing Asian countries, male employment is still high. While men and women each make up about half of all of our societies, in many countries, and especially in Asian developing countries, female participation in the workforce is considerably lower. The results are that many women have quite restricted opportunities in social, economic, and political participation; restricted opportunities for self-fulfillment; and limited opportunities to contribute to the development of their societies. All of this can, in turn, reinforce the stereotype that women are less valuable members of society than men.

The study highlights the fact that Pakistan has a relatively low level of female employment compared to other countries. Having hovered around 10 percent for over 20 years, female labor force participation (FLFP) in urban Pakistan is among the lowest in the world. Many women have been forced to drop out of school due to security concerns or financial constraints, and some fear that they will face opposition from family and the community if they seek work outside the home. Thus, the graph shows that Pakistan, still one of the developing countries in Asia, has a much higher employment rate for men than for women. The labor market participation of women is remarkably high in Viet Nam. Such a high level of female economic activity may be mistaken as an indicator of relatively limited gender inequality in the country. The findings show that women in Viet Nam carry a disproportionate double burden, and they face multiple and persistent inequalities.

Women are on average found in lower-quality employment than men. Female workers are overrepresented in vulnerable employment, particularly in contributing family work. They tend to earn less than men, despite comparable working hours and the progressive elimination of gender gaps in educational achievement. From the graph above, it can be seen that Vietnam has higher female employment compared to other countries, but in reality, it is because the level of education of women is low, the level of industrial labor is high, and the participation of women in decision-making is insufficient.

Researchers attribute this change in the growth of female participation in the labor market to the strong women's movement in the 1960s. It is also associated with the widespread use of contraceptives, changes in consumer products, easier domestic labor, and increased demand for labor in the labor market due to changes in new technologies [7].

Some researchers have linked the growth of women's paid employment to a "new knowledge-based economy". This is due to fact that the knowledge-based economy has shifted the direction of competition between people, causing people to live under heavy workloads, leading women to abandon childbearing and focus on paid employment.



[Figure. 1] GDP growth, male and female labor growth between 1995 and 2019

Tzannatos [8] argues that protecting the continued development of the women's labor market and closing the gender gap can increase the productivity and well-being of men and women. He believes economic growth will benefit all workers, especially women, in the short term. However, the results show that women will often benefit from economic growth.

Dollar and Gatti [9] say that reducing investment in women as human capital is not an effective preference for developing countries and that inequalities in training, wages, and employment will also have negative consequences. These researchers' interpretation of their findings suggests that when men and women have the same qualities and equally distribute skills and abilities, the existence of inequality will potentially result in the exclusion of highly skilled women and the inclusion of less-skilled men. indicates. This study focuses on one of the fundamental principles of the human capital theory that there is a direct correlation between investment in education and economic growth. Thus, while the results of these studies show that educational inequality can be detrimental in terms of growth, they can inevitably demonstrate that women can achieve higher income levels or access more productive jobs if they invest in education.

David Atkinin [10] the developing world today, the high participation of females in the labor force is attributed primarily to the manufacturing and service sectors. Research has shown that because the manufacturing sector can make use of low-skilled labor, factories draw female workers from surrounding areas. Then Pratimā Pāla-Majumadāra and Anwara Begum [11] Much of the literature focuses specifically on the benefits of garment manufacturing. For example, in Bangladesh, females labor in the garment sector is empirically shown to have decreased the gender gap in labor, social positioning, income, and decision making. Because manufacturing is a low-skilled industry, poor and desperate women have often fulfilled this newfound demand for their labor.

Mobarak [12] found that, despite harsh working conditions, the growth of the garment sector has encouraged families to invest in higher education levels and to delay marriage for their daughters. Therefore, in this study lively and inconclusive debate about religion as a predictor of female labor force participation. Researchers find that confounding variables, such as economics and socio-cultural factors, diminish the influence of religion on female labor force participation. Michael Ross [13] females have made less progress toward gender equality in the Middle East than in any other region. Published perhaps the most influential piece in this regard, demonstrating that low women labor force participation in Muslim countries is a result of high levels of oil production, not Islamic belief systems by themselves.

Joel W. Simmons [14] By demonstrating his argument in other oil-rich, non-Muslim countries, Ross exposed a significant confounding variable. While some critics have argued that cultural differences may overpower this gender-based resource curse, Joel Simmons demonstrates that "oil wealth reduces the demand for women working by hurting the export-oriented industries that employ women labor intensively thereby undermining the positive effect of gender egalitarianism on FLFP".

Although existing work on female labor force participation is vast spanning a range of periods and methodologies it is almost always conducted on a national level comparing countries. Therefore, this time study investigates the factors that affect women's employment in developing Asian countries and the effect of employment on economic growth.

3. RESEARCH METHODOLOGY

This study is an empirical study of how certain variables affect economic growth in developing Asian countries and how they affect women's employment. The study period is 1995-2019 and includes 20 developing Asian countries (Bangladesh, Bhutan, Cambodia, China, India, Indonesia, Kazakhstan, Kyrgyzstan, Lao PDR, Malaysia, Mongolia, Myanmar, Nepal, Pakistan, Philippines, Sri Lanka, Tajikistan, Thailand, Uzbekistan, and Vietnam). The data used in this study are from the World Data Indicator Database and (UNCTADstate). All data units are denominated in US dollars. The next section summarizes the above, discusses the results of the analysis, and collects data on the above variables for each country from 1995 to 2019.

There are 20 groups of 20 countries with a total of 500 observations. The following models1, model2, and model3 were used in each model1, model2, and 3 based on the fixed effect, random effect, and Hausman test to use dashboard information (STATA16) to accurately translate the variables that affect economic growth or GDP per capita and the role of women in employment.

Template1 As shown in the table above, it is as follows. Analysis model of variables affecting GDP per capita

$lnYit = \beta_0 + \beta_1 lnh_{it} + \beta_2 lnLawScore_{it} + \beta_3 lnAgriculture_{it} + \beta_4 lnIndustry_{it} + \mu_i + \varepsilon_{it}$ (1)

In the above equation (Model 1), i represents the developing countries of Asia (i = 1, 2, 3... .. 20), and t represents the year (t = 1995, 1996,..., 2019). μ_i is an individual effect and ε_i is an error term.

1. Model 1, dependent variable and independent variables

Dependent variable	Independent variables		
	1. School enrollment, preprimary, female		
	Preschool education is an early stage in organized learning		
	aimed at introducing young children to a school-like		
	environment and bridging the gap between home and school.		
Gross domestic product per capita	2. Women Business and the Law Index		
	The index measures how laws and regulations affect		
	women's economic opportunities.		
	3. Employment in agriculture, female		
	The agriculture sector consists of activities in agriculture, hunting, forestry, and fishing.		
	4. Employment in industry, female		
	The industry sector consists of mining and quarrying,		
	manufacturing, construction, and public utilities (electricity,		
	gas, and water), following divisions 2-5 (ISIC 2) or categories		
	C-F (ISIC 3) or categories B-F		
	(ISIC 4).		

[Table 1] Variables in Model 1

To test Model 1, an empirical analysis was able to confirm which random effects and fixed effects were appropriate for the Hausman test, and which showed that the random effect model was more suitable. Simple minimum square regression, fixed effects, and random effects were then analyzed to determine how the independent variables affected per capita GDP.

Template2 As shown in the table above, it is as follows. Analysis model2 of variables affecting GDP per capita

$lnYit = \beta_0 + \beta_1 lnFertilityrate_{it} + \mu_i + \varepsilon_{it}$

(2)

In the above equation (Model 2), i represents the developing countries of Asia (i = 1, 2, 3... ... 20), and t represents the year (t = 1995, 1996,..., 2019). μ i is an individual effect and ε_i is an error term.

2. Model2, dependent variable and independent variable

[Table 2] Variables in Model 2

Dependent variable	Independent variable
Gross domestic product per capita	1. The fertility rate The total fertility rate is the ratio of the number of children born to a woman by the end of her life according to a certain age in a year.

To test Model 2, an empirical analysis was able to confirm which random effects and fixed effects were appropriate for the Hausman test, and which showed that the random effect model was more suitable. Simple minimum square regression, fixed effects, and random effects were then analyzed to determine how the independent variables affected per capita GDP.

Template3 As shown in the table above, it is as follows.

Model3 of variables influencing the level of women's labor force participation

*lnLabor*it

 $= \beta_0 + \beta_1 lnMarried_{it} + \beta_2 lnLawScore_{it} + \beta_3 lnFertilityrate_{it} + \beta_4 Dummy_{it} + \mu_i + \varepsilon_{it}$

In the above equation (Model 3), i represents the developing countries of Asia (i = 1, 2, 3... 20), and t represents the year (t = 1995, 1996,..., 2019). μ_i is an individual effect and ε_i is an error term.

3. Model 3, dependent variable and independent variables

Dependent variable	Independent variables		
	1. The fertility rate		
	The total fertility rate is the ratio of the number of children born		
	to a woman by the end of her life according to a certain age in a		
	year.		
Labor force participation rate in	2. Women Business and the Law Index		
women:	This index measures how legislation affects women's economic		
Labor force participation rate is	opportunities.		
the proportion of the population	3. Religion and status		
ages 15-64 that is economically	There are many Buddhist and Muslim countries in the		
active: all people who supply	developing countries of Asia, and dummy variables have been		
labor for the production of goods	studied to see how religion affects economic growth.		
and services during a specified	The study categorized Buddhist and Muslim countries as 1 and		
period.	non-religious or voluntary countries as zero.		
	4. Married women		
	Number of married women aged 15-24		

[Table 3] Variables in Model 3

To test Model 3, an empirical analysis was able to confirm which random effects and fixed effects were appropriate for the Hausman test, and which showed that the random effect model was more suitable. Simple minimum square regression, fixed effects, and random effects were then analyzed to determine how the independent variables affected women's labor force participation.

4. ANALYSIS

Since time series data and cross-section data are combined panel data, if there is a country-specific effect or a time-specific effect in the model, general Simple minimum square regression and the calculation speed is very fast and has many good properties if certain conditions are satisfied, so it is often used to quickly test the model without being strict. Since it is a very basic method, we will look at Simple minimum square regression, and then we will learn about analysis techniques such as the fixed-effect model and the random-effect model. Panel data analysis has the advantage of being able to dynamically see the static relationships between variables seen in cross-sectional data and taking into account invisible heterogeneity between entities in the model. In other words, in time series analysis, heterogeneous characteristics that do not change with time may be omitted from the regression model, but this can be reflected in panel data analysis, thereby eliminating bias. In addition, even if there is a strong correlation between the two explanatory variables, it provides more variable information and variability than cross-sectional and time-series data. It can be reduced to obtain an efficient estimator. Panel data analysis techniques include a fixed-effect model and a random-effect model.

First, the fixed-effect model (FE): In the multi-layered model, the parameter estimate for the relationship between the independent variable and the dependent variable is called the 'fixed effect'. Therefore, the fixed effect is the same concept as the regression coefficient. Unobserved heterogeneity in developing Asian countries can be correlated with country-specific unobserved characteristics with explanatory variables in the model. One of the possible options for dealing with unobserved heterogeneity is to use fixed effects (FE) to control unobserved effects. Therefore, the method of the regression equation assumes a constant but non-uniform country-specific effect, so it becomes a fixed effect (FE) model. Assuming that unobserved heterogeneity between countries results in only parameter shifts in the regression function and is correlated with one or more explanatory variables, then the fixed effects (FE) model is the best fit (Wooldridge, 2002). Jeffrey M. Wooldridge 2002, Econometric Analysis of Cross Section and Panel Data

Second, Random Effect Model (RE): The variance according to the group in cluster data and the variance according to the individual in the time series data are called 'random effect'. The effect here refers to the relationship between variables and variables. The random effect (RE) model is a regression analysis method. In the case of the random effect model, it is assumed that there is no non-uniform country-specific effect and no time effect. For the random-effects model, assuming that the error terms of each country are randomly distributed across countries and that the unobserved effects are not related to each other, the unobservable heterogeneity can be controlled through the general least-squares estimation (GLS) process.

The accuracy of the Hausman test is an important issue in panel data analysis. Propose and implement procedures for estimating the properties of tests when dealing with specific data. Therefore, in this study, the Hausman test was conducted to distinguish the fixed effect and the random effect between the variables of Models 1, 2, and 3.

Model1:

$lnYit = \beta_0 + \beta_1 lnh_{it} + \beta_2 lnLawScore_{it} + \beta_3 lnAgriculture_{it} + \beta_4 lnIndustry_{it} + \mu_i + \varepsilon_{it}$

To test Model 1, an empirical analysis was able to confirm which random effects and fixed effects were appropriate for the Hausman test, and which showed that the random effect model was more suitable. Simple minimum square regression, fixed effects, and random effects were then analyzed to determine how the independent variables affected per capita GDP.

Simple minimum square regression:

- 1. Pre-school education, women's business, agriculture, and the law index score have had a positive impact on per capita GDP. A 10-percent increase in preschool education is expected to increase GDP per capita by 1.34 percent, and a 10-percent increase in women's business and legal index will increase GDP per capita by 5.49 percent.
- Conversely, an increase in the number of women working in agriculture and employers in females per capita has harmed GDP. If the number of women working in agriculture increases by 10%, GDP per capita will decrease by 11.63%. As the number of female employers increases by 10%, per capita GDP, will decrease by 0.86%.
- 3. Finally, it was found that industry is had no statistically significant effect on the real GDP growth rate.

Random effects:

- 1. Preschool education, women's industrial employment, women's business, the law index score, and female employers have been shown to have a statistically significant effect on per capita GDP. A closer look at the impact of individual variables shows that a 10% increase in preschool education increases per capita GDP by approximately 1.64%. While women's industrial employment grew by 10%, per capita GDP increased by 0.970%, employers' female by 10% increases per capita GDP by approximately 0.64%. Research has shown that per capita GDP tends to increase by 8.98% when the women's business and law index increases by 10%.
- 2. On the other hand, women's employment in agriculture has been shown to have a negative impact. A 10% increase in women's employment in agriculture has resulted in a 7.66% decrease in per capita GDP.

Fixed effects:

- 1. Research shows that women's pre-school education and women's industrial employment, female employers, women's business, and the law index score have a positive impact on per capita GDP. When women's pre-school education increases by 10%, per capita GDP increases by 1.65%. According to the study, per capita GDP will increase by 0.920% due to a 10% increase in industrial employment. The study also found that per capita GDP tends to increase by 9.14% when the women's business and law index increases by 10%, employers female by 10% increases per capita GDP by approximately 0.66%.
- 2. Conversely, women's employment in agriculture has been shown to have a negative impact. A 10% increase in women's employment in agriculture has resulted in a 7.56% decrease in per capita GDP.

	(1)	(2)	(3)
VARIABLES	OLS	Random Effects	Fixed Effects
	0.134***	0.164***	0.165***
lnh	(0.0366)	(0.0205)	(0.0208)
	0.549***	0.898***	0.914***
InLawScore	(0.140)	(0.120)	(0.123)
	-1.163***	-0.766***	-0.756***
InAgriculture	(0.0741)	(0.0530)	(0.0541)
	0.110	0.0970**	0.0920*
lnIndustry	(0.0768)	(0.0477)	(0.0484)
	-0.0867**	0.0646***	0.0661***
InEmployersfemale	(0.0367)	(0.0167)	(0.0168)
	8.752***	5.894***	5.770***
Constant	(0.702)	(0.554)	(0.552)
Observations	322	322	322
R-squared	0.683	0.853	0.853
Number of countries1		18	18
Country RE		YES.	
Standard errors in parentheses			
*** p<0.01, ** p<0.05, * p<0.1			

[Table 4] The results of variables affecting GDP per capita

Model2:

$lnYit = \beta_0 + \beta_1 lnFertilityrate_{it} + \mu_i + \varepsilon_{it}$

To test Model 2, an empirical analysis was able to confirm which random effects and fixed effects were appropriate for the Hausman test, and which showed that the random effect model was more suitable. Simple minimum square regression, fixed effects, and random effects were then analyzed to determine how the independent variables affected per capita GDP.

To test Model 2, an empirical analysis was able to confirm which random effects and fixed effects were appropriate for the Hausman test, and which showed the random effect model. The fertility rate has been shown to harm per GDP capita. A 10% increase in fertility reduces GDP per capita by 12.20%.

	(1)	(2)	(3)
VARIABLES	OLS	Random Effects	Fixed Effects
	-1.699***	-1.220***	-1.206***
InFertilityrate	(0.114)	(0.0906)	(0.0915)
	9.012***	8.548***	8.534***
Constant	(0.115)	(0.178)	(0.0899)
Observations	500	500	500
R-squared	0.308	0.266	0.266
Number of countries1		20	20
Country RE		YES.	
Standard errors in parentheses	•		
*** p<0.01, ** p<0.05, * p<0.1			

[Table 5] The results of variables affecting women's labor force participation

Model3:

$lnLawScoreit = \beta_0 + \beta_1 lnMarried_{it} + \beta_2 ln LawScore_{it} + \beta_3 lnFertilityrate_{it} + \beta_4 Dummy_{it} + \mu_i + \varepsilon_{it}$

To test Model 3, an empirical analysis was able to confirm which random effects and fixed effects were appropriate for the Hausman test, and which showed that the random effect model was more suitable. Simple minimum square regression, fixed effects, and random effects were then analyzed to determine how the independent variables affected women's labor force participation.

Simple minimum square regression:

- 1. Studies have shown that fertility rate and dummy variables are harmed women's labor force participation If the fertility rate increased by 10%, the female labor force participation rate decreased by 2.97%, whereas if the dummy variable increased by 10%, the female labor force participation rate decreased by 4.95%.
- 2. Studies show that marriage and women's business and legal index scores do not affect women's labor force participation.

Random effects:

- 1. Studies show that women's marriages and religious status harm women's participation in the labor force. A 10% increase in women's marriages reduces women's labor force participation by 0.474%, and a 10% increase in religious status reduces women's labor force participation by 4.57%.
- 2. The study also found that maternity and women's business and legal indices did not affect the participation of women in the labor force in 20 developing Asian countries.

Fixed effects:

- 1. The effects of regularity suggest that women's marriages negatively affect women's participation in the labor force. This suggests that women's labor force participation will decline by 0.498% if marriages increase by 10%.
- 2. It was also found that the fertility rate, women's business and legal index scores, and religious status did not affect the level of women's labor force participation.

	(1)	(2)	(3)
VARIABLES	OLS	Random Effects	Fixed Effects
	-0.0551	-0.0474**	-0.0498*
InMarried	(0.0354)	(0.0222)	(0.0245)
	-0.297*	-0.102	-0.0940
InFertilityratetotalbirthspe	(0.170)	(0.0737)	(0.0785)
	0.0783	0.0391	0.0357
lnLawScore	(0.280)	(0.0991)	(0.103)
	-0.495***	-0.457***	-0.459
dummy	(0.103)	(0.176)	(0.181)
Constant	4.199***	4.124***	3.960***
	(1.243)	(0.472)	(0.474)
Observations	52	52	52
R-squared	0.496	0.279	0.278
Number of countries1		16	16
Country RE		YES	
Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1			

[Table 6] Results of variables influencing the level of women's labor force participation

5. CONCLUSION

Taking a joint consideration into the aforementioned research outcomes, there demonstrated that a gender discrepancy is still in the area of economic and living another field under monitoring employment up to the present day in Asian developing countries, also, gender equality in labor relations, and a normal concept acknowledged in

society. There is also a study result showing that women's participation in economic growth is increasing year by year.

Model 1: It demonstrated1 that there is raised economic growth since advancing the women's education rate [15]. The study, there has validated that investment by women incorporating the human capital is significantly influenced to increase economic growth and GDP per capita in Asian developing countries. Therefore, as much more than gone up the investment by women incorporating the human capital, the emerging outcome is to bring multi positive effects such as decreasing maternal mortality, increasing the women's average age, and going up several women, acquiring tertiary education except for economic growth as well as it is observable of many inferences to pay attention the women's education from each country, also, create economic growth as a result of them. Additionally, there was detected the estimated increasing GDP per capita since improving the women's business and legal index. For them, followed a policy to restrict on how to advance an accurate step in the legal range from the country and as their tendency, couldn't be under business pressure /for example, in the range of taxation policy and workplace pressure related to women/ - are brought a potential economic growth. Then, research demonstrated that GDP per capita is raised by increasing women's employment in the sector of manufacturing, at the same time. Also, the economic growth is indeed decreased since going up the number of women who have been employed in agriculture. This is to demonstrate that workplace condition for women's employment in the sector of manufacturing is at a potential level, and dynamic quality inclusive is more positive effects in comparison with some women, who have been employed in agriculture. It may be a distinction for more acquisition potential as engaged the manufacturing employment and/or obtained them an advanced opportunity. Therefore, should be a potential to develop more economic growth, in this case, respectively, the country may be jointly implemented a program for reflecting on the legal new amendment of labor law, improving legal regulations on the labor flexible condition, furthermore, to be advanced the women's skills preparing to likely implement a transformation in the future career.

Model 2: The study has been confirmed that economic growth is gone down since increasing the birth rate. It may be in connection with the women are not able to work since going up the birth rate and their living standard is diminished, simultaneously. Except for the living standard, only, it should explain the correlation with an institution, society, and state policy. As for poor countries as well as the Asian developing countries in which the legal regulations have developed at a worse level, on the one hand, the birth seems to be invested in the country, on the other hand, they have been expected self-risk. Therefore, it demonstrated that should be consisting of a legal convenient environment to follow a promotion policy for women in the countries. Then, the women's birth has gone up, on the one hand, they may be the potential to invest in the country and create a more peaceful condition for youth. In highly developed countries as to economic, economic growth is increased since going up birth rate and population. Hence, it demonstrated that as a result of the outcome, birth growth hasn't enabled economic growth in the Asian developing countries.

Model 3: The research is validated that marriage or religious status are decreased the participation rate of the women's labor force. Found a positive effect to increase the participation rate for the women's labor force, since decreasing the number of marriages

in the Asian developing countries. On the one hand, as taken into consideration in our survey in the Asian countries, there have gone up a number of some hostesses being become distant from social communication such as diminishing their employment rate after getting married, also, giving birth. Also, religious status is negatively affected the participation rate of the women's labor force. Women – employees are going down since the religion is expanded. Countries with different religions (Islamic and Christian) have respected a multi-variety of social principles, approaches, and cultural and institutional aspects are diverse as to the communication nature [5]. In Islamic countries, women are not enabled to freely enter the labor market due to religious restrictions, therefore, a participation rate in women's labor force is still banned. Thus, half of the countries included in the survey are Muslim. It demonstrated that for the Asian developing 20 countries, there should be an increase in the women's education rate, entirely ensure a related jurisdiction for the women working in the business areas, and increase the number of women, working in the manufacturing sector.

It should be demonstrated that ensuring a marriage appropriate condition and acquiring a school education, for them how to likely prepare a family planning, organize a lesson on giving birth, and be recognized risky aspects would be brought to increase a participation rate in the women's labor force and economic growth, at the same time. This study was data deficient and was not conducted in a single country due to international research. According to a study of 20 developing countries in Asia, the study of women's employment and related factors shows that the era of women is near. We hope to expand women's participation in decision-making in an increasingly powerful era.

REFERENCES

- Amaia Altuzarra, Catalina Gálvez-Gálvez. "Economic Development and Female Labour Force Participation: The Case of European Union Countries". Sustainability of MDPI journal 11.7 (2019): 1-18
- [2] Paolo Verme, Abdoul Gadiry Barry, Jamal Guennouni. "Female Labor Participation in the Arab World Some Evidence from Panel Data in Morocco". World Bank Policy Research Working Paper 7031 (2014).
- [3] Fatma Fehime Aydin, Ekrem Erdem. "The Effect of Women'S Employment On Competitiveness And Economic Growth: A Comparison Of Turkey And The Most Competitive Countries". Erciyes University Faculty of Economics and Management 44.57 (2014): 1-14.
- [4] Alison Vásconez Rodríguez. "Economic growth and gender inequality: an analysis of panel data for five Latin American countries". CEPAL Review 122 (2017): 79-106.
- [5] Ana González-Fernández. "Weak cognitive image of cultural tourism destinations". International Journal of Methodology 47.2 (2013): 881-895.
- [6] Dutt, A.K. "Growth, Distribution and Uneven Development". Cambridge, Cambridge University Press (1990). ECLAC (Economic Commission for Latin America and the Caribbean), "Statistical appendix", Social Panorama of Latin America (2009) 2423. Bhaduri, A. "On the dynamics of profit-led and wage-led growth". Cambridge Journal of Economics 32.1 (2007).
- [7] Sarah Jenkins. "Gender, Place and the Labour Market". International Journal of Urban and Regional Research 32.3 (2008): 749-750.

- [8] Tzannatos, Zachariadis. "Women and Labor Market Changes in the Global Economy: Growth Helps, Inequalities Hurt and Public Policy Matters" World Development 27.3 (1999): 551-569.
- [9] Dollar David, Roberta Gatti. "Gender Inequality, Income and Growth: Are Good Times Good for Women". Policy Research Report on Gender and Development Working Paper Series 1 (1999): 1-40.
- [10] David Atkin. "Working for the Future: Female Factory Work and Child Health in Mexico". Unpublished Manuscript, Yale University (2009).
- [11] Pratimā Pāla-Majumadāra, Anwara Begum. "Engendering Garment Industry: The Bangladesh Context". University Press Limited (2006).
- [12] Rachel Heath, Mushfiq Mobarak. "Manufacturing Growth and the Lives of Bangladeshi Women" Journal of Development Economics 115 (2015): 1-15.
- [13] Michael L. Ross. "Oil, Islam, and Women". American Political Science Review 102.1 (2008): 107-123.
- [14] Joel W. Simmons. "Does oil substitute for patriarchy?". Economics and Politics 31.3 (2019): 293-322.
- [15] Torabi, Fatemeh, Abbasi-Shavazi, Mohammad Jalal. "Women's Human Capital and Economic Growth in the Middle East and North Africa". The Journal of International Women's Studies 16.3 (2015): 237-261.
- [16] [16] Chamintsetseg Narantsetseg, Anna Dunay, Tsoodol Nyamdulam "The Role of Information Technology for Small Medium Enterprises: Focusing on Vehicle Companies in Mongolia", International Journal of Social Science and Humanities Research –MIYR, 1.1 (2021): 1-10.
- [17] [17] Enkhbaatar Enkhbold, Gantumur Khongorzul "A Study on The Satisfaction of Korean Universities: Focusing on Mongolian Students" International Journal of Social Science and Humanities Research – MIYR, 1.1 (2021): 24-37.
- [18] [18] Gandulam Ganbold, Enkh-Otgon Dorjgotov, Hyeong Yu Jang "Employees' Entrepreneurship and Organizational Innovation: Case of Korean Private Hospitals", International Journal of Social Science and Humanities Research –MIYR, 1.1 (2021): 38-51.

AUTHOR'S INTRODUCTION

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