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The Nexus of Female Labour Force Participation, Economic Growth, Education and Fertility Rate: Empirical Evidence in Malaysia

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Abstract

Malaysia, a fast-growing developing country in Asia, has envisioned Shared Prosperity Vision 2030 to become a developed economy with high income via sustainable and inclusive economic growth by the year 2030. To accomplish this vision, female labour participation is needed as the female population constitutes almost half of Malaysia's total population. However, female labour participation rate is way lower than Malaysia's overall labour force participation rate. The relatively low female labour participation rate can be a barrier to Malaysia's economic development and thus the realization of its goal of a high income nation. Therefore, this paper makes an attempt to examine empirically the long-run causal association among female labour force participation, economic growth, education, and fertility rate. The interrelationships among the variables are examined using the bounds test and Toda-Yamamoto granger non-causality methodology. The result of the study indicates a strong evidence of long-run relationship among the variables. Besides, we have found a significant inverted-U-shaped association linking the female labour force participation to the economic growth in Malaysia. The results of Granger causality tests further confirm that there is a strong evidence of bidirectional causality from education to economic growth as well as female labour

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participation. Besides, the results also show significant unidirectional causality from female labour force participation and fertility to economic growth.

Keywords:
Economic growth, Education, Female labour participation, Fertility rate
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1. Introduction

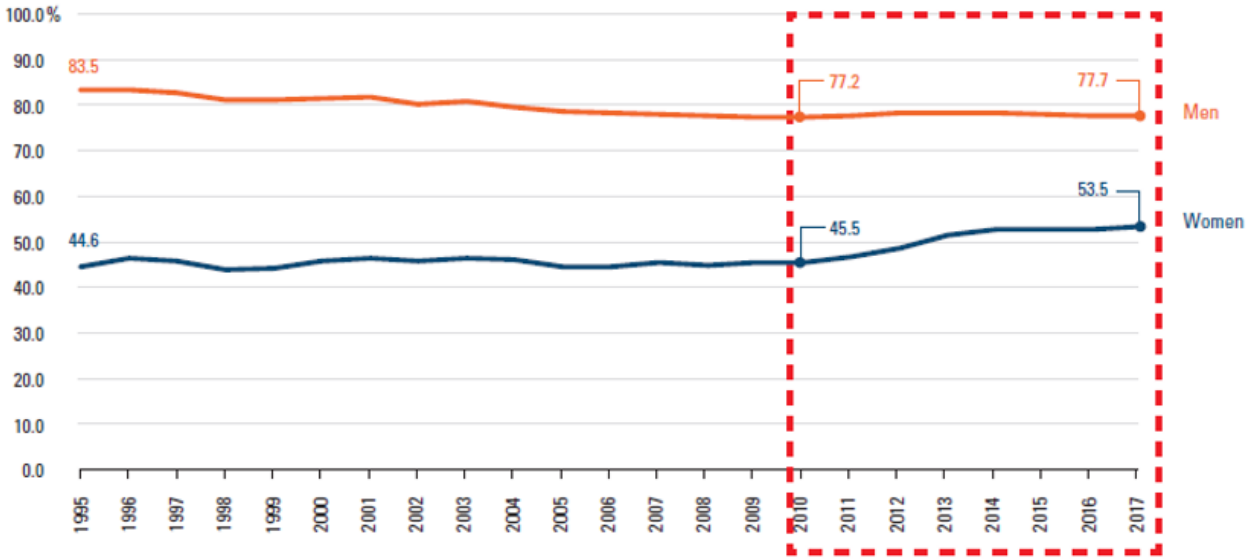
The female workforce had made impressive and inspiring progress in various occupations and professions globally (Mujahid, 2013). The contribution of the female workforce was as substantial as the male workforce, if not more. Malaysia, a developing nation with robust economic growth, has experienced a dramatic change in its employment structure ever since there was a rapid expansion in the manufacturing sector during Sixth Malaysia Plan (from 1990 to 1995). Employment has increased sharply, as evidenced by the reduction of the unemployment rate from 3.8% in 1995 to 2.6% in 1996 (Department of Statistics Malaysia, 2016). During that phase of growth, Malaysia was known as a newly industrialised country, documented higher women participation rate than many industrialised nations in Asia and the Pacific region.

Figure 1 demonstrates the percentage of the population by gender in Malaysia from 1950 to 2015. The difference in the percentage of the female and male population has been marginal over the years. In the years 2010 and 2015, the female population recorded higher than that of male in Malaysia by 0.74% and 0.92%, respectively (World Population Review, 2015). Nevertheless, the female labour participation rate in Malaysia has historically been lower than the male's for the past 2 decades (Figure 2). As exhibited in Figure 2, there was 44.6% of the labour force participation rate of female in 1995 while the rate of male was 83.5%. In 2010, the labour force participation rate of female increased marginally to 45.5% while the male was 77.2%. In 2017, the difference between the male and female labour force participation rates had narrowed further to 24.2% from 31.7% in 2010.

Figure 1. Percentage of Population by Gender in Malaysia

Source: http://worldpopulationreview.com/countries/malaysia-population/

Figure 2. Labour force participation rate (LFPR) by gender in Malaysia, 1995-2017



Source: CEIC

As argued by Tan & Subramaniam (2013), changes in education, literacy levels and lifestyle in Malaysia might cause more women to join the labour force. However, this seems to be in contradiction in some cases in Malaysia. While female education level has generally improved in the past decades, the female labour participation rate does not increase as much as their improved education level. According to a press statement made by the Minister of Family and Community Development, Malaysia in May 2014, the female labour participation rate was 52.4% in 2013 while the intake of female new students into the local public higher learning institutions for the year 2013/2014 was around 68%. A labour force survey conducted by the Department of Statistics Malaysia in 2014 concurred and highlighted that women managers made up of merely 3.2% of the total labour force, while women professionals were barely 14.8%. This finding is similar to chapter two of Khazanah Research Institute's report on The Malaysian Workforce, where women managers consist of 3.1% of the total employed female workforce in 2017 (Khazanah Research Institute, 2018).

As Malaysia is progressing towards achieving its vision of a developed economy with high income, sustainable and inclusive, female labour participation is needed. The female population in Malaysia constitutes almost half of the total population and in recent

years, the female population is increasing much quicker than that of the male population. See Figure 1 for details.

Based on the Malaysian Human Development Report 2019 published by the United Nations Development Programme (UNDP, 2019), in 2018, female labour participation rate was 50.9% as compared to the male participation of 77.4%. World Bank Group's report entitled "Breaking Barriers: Toward Better Economic Opportunities for Women in Malaysia" indicated that Malaysia's per capita income could grow by 26.2% if all barriers to female workers were removed (World Bank Knowledge and Research, 2019). The low female labour participation rate can be a barrier to Malaysia's economic development and the realisation of its goal of a high income nation.

Studies associated with the labour force participation of female were conducted by Yakubu (2010), Bbaale & Mpuga (2011), Azam and Rafiq (2014), Siah & Lee (2015) as well as Akhtar, Masud and Rana (2020). However, due to data limitation, these literatures did not analyse the association between economic growth and the labour force participation of female in the presence of female education and fertility rate using time series data. Therefore, this study seeks to fill the literature gap on the supply of female workforce in Malaysia by investigating empirically the long-run relationship among female labour participation, education, fertility rate, and economic growth. The variables in this study are identified based on previous studies on female labour participation in Malaysia (Siah & Lee, 2015; Akhtar, et al., 2020). This study shall further identify the bidirectional causal relationship among the variables mentioned. Besides, this study has focused on Malaysia, a single country, in order to apply the time series analysis, rather than the analysis of panel data applied for a number of countries. The time series estimation model applied in this study provides a better understanding of the interrelationships among variables.

The rest of this paper is organised as follows. Section 2 depicts the empirical review of existing literature on female labour supply while Section 3 describes the methodology used in this study. In Section 4, the empirical results are discussed whereas in Section 5, conclusion and policy implications are presented.

2. Literature review

Empirically, most of the researchers have substantiated the importance of education on the female labour force participation rate. A study by Yakubu (2010) based on the Human Capital Theory (HCT) to investigate the dynamics of labour force in South Africa claimed that there is a positive relationship between women's education and their likelihood of labour force participation. Another study carried out by Liu, Dong & Zheng (2010) in China demonstrated that women who had advanced education were more probably to be in the labour market. Bbaale & Mpuga (2011) carried out a study in Uganda where they used maximum likelihood models to examine how the education of female influenced the female participation of labour force as well as their choice of the employment type. They found out that the probability of both female participation of labour force and their being engaged in wage employment is increased due to female education (at post-secondary level). Besides, a research by Ince (2010) in Turkey indicated that increasing the education of women can be linked positively to female employment and their literacy while negatively to the fertility and mortality rates. Additionally, educated women were said to be able to increase their problem solving, life skills, flexibility and open-mindedness. Khan & Khan (2009) studied married women participation in labour market in Punjab by using cluster sampling technique. They showed that married women's education in Punjab has a positive relationship with their involvement in the labour force. According to the authors, education may improve their working skills through trainings and thus, better-trained female workers would lead to higher productivity and at the same time, higher wages as well. Using cross-country analysis, Cameron, Dowling & Worswick (2001) revealed that women with tertiary education had a greater likelihood of 49 percent than women without education to be employed in the labour market. Besides, Azam and Rafiq (2014) using models of logit and probit to study women's participation in the labour force in Pakistan argued that there are higher chances of women's engagement in the labour force provided that they are let off their child-care burden and are simultaneously granted a chance to pursue their education in a formal educational institution.

In Malaysia, there is limited study on female labour force participation applying time series analysis. Akhtar, Masud and Rana (2020) applied logit model on the primary data collected through questionnaire and found that education plays a significant part in

the women's participation in the labour force where women who are educated and living in a joint family, due to financial obligations, are keener to join the labour force.

There have been mixed results concluded on the effect of fertility rate on female employment, which relies on the relative strength of the following effects. The studies by Rindfuss, Benjamin, & Morgan (2000), Rica & Ferrero (2003), Cruces & Galiani (2007) uncovered an inverse correlation between fertility and female labour force participation consistent with role incompatibility hypothesis which proposed that the negative association between fertility and female employment was due to women being in a quandary over concurrently carrying out the role of employee and mother (Bowen & Finegan, 1969; Narayan & Smyth, 2006). Generally, those gainfully employed women are inclined to have smaller number of children and that women with children tend to apportion less time to their work. Conversely, the arrival of little kids can cause the family in dire need of extra financial support and this may be one of the reasons to urge the mother to seek employment outside. There have been several studies suggesting that women's fertility levels are positively linked to their participation rate in the labour market such as Rindfuss & Brewster (1996), Pinnelli (1995), and Bernhardt (1993). However, in the study of fertility rate on female labour supply carried out in Malaysian by Siah & Lee (2015), they found no evidence of long-run relationship between these two variables.

Economic growth of a country can also have an impact on the female participation of labour force. The link between women's employment and economic development is a debatable empirical issue either in time series or cross country writings. Mujahid (2013) studied the relationship between economic growth and the female labour force participation rate in Pakistan. The author found a positive long-run linear relationship between economic growth and the female labour supply. This result was supported with evidence where during 2008 till 2009 (i.e. high economic crisis period), the GDP growth rate was very low (i.e. 2%) which caused a decrease in the female participation in labour force in Pakistan. In some cases of cross-country studies, researchers, such as Kottis (1990), Goldin (1994), Tansel (2002), Fatima & Sultana (2009), unveiled a U-shaped affiliation linking economic development to the female employment. Female labour participation rate was hypothesised to fall initially, leveling off then increasing again. The researchers reasoned that such U shape was owing to the changes in the structure of

the economy, shifting sway of substitution and income effects (Goldin 1994). However, there was a study carried out by Lahoti & Swaminathan (2013) in India demonstrating that instead of U-shaped, women's participation in labour force and economic growth showed an inverted U-shaped relationship. According to the authors, while both manufacturing and agriculture sectors are characteristically labour concentrated, the service sector being the main thrust of economic growth entails high skills in which the majority of women are lacking. This inverted U-shaped relationship persisted even when the data were analysed by different areas (rural vs urban), type of jobs (paid vs unpaid) and by individual survey time periods. The result clearly pointed to the fact that the increase in women's economic activity is not merely due to the economic growth itself.

3. Methodology

For the purpose of this study, annual data for female labour force participation rate (FLFPR) (%), GDP per capita growth rate (GDPG) (%), total fertility rate (births per woman) (FR) and female secondary school enrollment (EDU) (%) in Malaysia from 1990 to 2018 are extracted from the World Development Indicators, World Bank. The relationship between female labour force participation, female secondary education attainment, fertility rate and economic growth can be established as below:

$$FLFPR_t = f(EDU_t, FR_t, GDPG_t, GDPG2_t)$$

where FLFPR is the female labour force participation rate, EDU is female secondary education attainment, FR refers to fertility rate, GDPG and GDPG2 represent GDP per capita growth rate and its square term respectively.

We employed autoregressive distributed lag (ARDL) technique by Pesaran et al. (2001) as the number of annual observations for this study is 29 (1990–2018), a small sample size. The ARDL model is considered to be more superior than other traditional tests for cointegration in the sense that it can examine the long-run association between variables in levels, no matter whether the causal regressors are *I*(0) or *I*(1) (Pesaran et al.,2001; Pesaran & Shin, 1999). Besides, for small sample sizes, this model shows not only the consistent estimators of short-run parameters but also the super-consistent estimators of long-run parameters (Pesaran & Shin, 1999).

Applying the bounds test advanced by Pesaran et al. (2001) to check for cointegration, the model of this study can be estimated as follows:

$$\Delta FLFPR_t = \beta_0 + \beta_1 FLFPR_{t-1} + \beta_2 EDU_{t-1} + \beta_3 FR_{t-1} + \beta_4 GDPG_{t-1} + \beta_5 GDPG2_{t-1} + \sum_{i=1}^{P} \alpha_1 \Delta FLFPR_{t-i} + \sum_{i=0}^{P} \alpha_2 \Delta EDU_{t-i} + \sum_{i=0}^{P} \alpha_3 \Delta FR_{t-i} + \sum_{i=0}^{P} \alpha_4 \Delta GDPG_{t-i} + \sum_{i=0}^{P} \alpha_5 \Delta GDPG2_{t-i} + \varepsilon_t \quad (1)$$

where Δ is the first difference operator and ε_t is the white noise error term, we assess the joint significance of the lagged levels in the Equation (1) utilising the *F*-test on the null hypothesis of no cointegration ($H_0 : \beta_1 = \beta_2 = \beta_3 = \beta_4 = \beta_5 = 0$) in opposition to its alternate hypothesis of a cointegration relationship in the long run ($H_1 : \beta_1 \neq \beta_2 \neq \beta_3 \neq \beta_4 \neq \beta_5 \neq 0$).

If the estimated *F*-statistic value is above the critical value of upper bounds, we can reject the null hypothesis of no cointegration, regardless of whether the variable is *I*(0) or *I*(1). Interestingly, when the *F*-statistic value is not as much as the critical value of lower bounds, we cannot reject the null hypothesis and presume that there is no long-run level connection between the variables under investigation. Notwithstanding, if the estimated *F*-statistic value falls within the range of critical values of lower and upper bounds, there is an indeterminate deduction.

As a further investigation, we additionally evaluate dynamic causal relationships between the variables under examination utilising Toda and Yamamoto's (1995) non-causality test. Instead of the first differences as in the traditional Granger causality tests, the non-causality test modifies a conventional vector autoregressive model in the levels of variables in this way, limiting the risks related to the likelihood of erroneously identifying the series' integration order (Mavrotas & Kelly, 2001). To perform Toda and Yamamoto (1995) Granger non-causality test, we examined the causal influences on female labour force participation from its determinants using the following Equation:

$$FLFPR_t = \beta_0 + \sum_{i=1}^{k+d\max} \beta_{1i} FLFPR_{t-i} + \sum_{i=1}^{k+d\max} \beta_{2i} EDU_{t-i} + \sum_{i=1}^{k+d\max} \beta_{3i} FR_{t-i} + \sum_{i=1}^{k+d\max} \beta_{4i} GDPG_{t-i} + \sum_{i=1}^{k+d\max} \beta_{5i} GDPG2_{t-i} + \omega_t \quad (2)$$

where all variables are as described above, *k* is the optimal length of the lag, while *dmax* stands for the maximum integration order for the group of time-series. The test is embraced due to its plainness devoid of the need to place restrictions on the long-run parameter as well as the knowledge of the variables' cointegration properties. Additionally, the test is employable, notwithstanding when the stability and rank conditions are not satisfied provided that *dmax* ≤ the literal length of lag.

We apply a modified Wald (MWALD) test statistic to examine the causal relations between the variables under study by testing the null hypothesis of no causality. From the analysis, we can detect four possible directions of causality arising from two variables (say female labour force participation and economic growth), to be specific, (i) Independent causality; (ii) unidirectional causality from economic growth to female labour force participation; (iii) unidirectional causality from female labour force participation to economic growth; and (iv) causality with feedback between female labour force participation and economic growth. The causal associations from other variables to female labour force participation can be performed similarly. Moreover, we can likewise test the causal impacts on female secondary education attainment, fertility rate, economic growth rate and its square term from other variables in the model.

4. Findings

Table 1 presents the correlation matrix for the key variables used in our estimation. As expected, the female labour force participation rate shows a strong, significant and positive correlation with female secondary education attainment but is significantly and negatively correlated with fertility rate. The correlation between GDP per capita growth rate and female labour force participation rate is negative but rather weak and insignificant. Besides, as shown in Table 1, there is a negative correlation, which is significant, between female secondary education attainment and fertility rate.

The unit root tests results of ADF and KPSS are presented in Table 2. Both the tests indicate that all series except GDP per capital growth rate and its square term are non-stationary (has a unit root) at their level. However, all series show stationarity at their first difference. In conclusion, while GDPG and GDPG2 are integrated of order 0, i.e. $I(0)$ variables, all the remaining series are $I(1)$ variables.

Table 1
Correlation coefficient matrix

	FLFPR	EDU	FR	GDPG
FLFPR	1			
EDU	0.730[a]	1		
FR	-0.802[a]	-0.880[a]	1	
GDPG	-0.048	-0.337	0.219	1

[a] Correlation is significant at the 1% levels of significance (2 tailed).

Table 2
Unit root tests

Test/ variable	**ADF**		**KPSS**	
	Level	**First difference**	**Level**	**First difference**
FLFPR	-0.776761	-12.84708***	0.628630**	0.305246
EDU	-0.946810	-6.670073***	0.526299**	0.125202
FR	-1.569872	-7.098571***	0.646616**	0.333200
GDPG	-3.933624***	-7.140999***	0.210851	0.134674
GDPG2	-3.081383**	-13.56658***	0.338823	0.141474

Note: The critical values of ADF are referred to McKinnon. The optimum lag is picked in view of Schwarz Information Criterion (SC). For KPSS, the optimal lag is chosen on the basis of Newey-West Bandwidth. The null hypothesis for the ADF is that a series has a unit root (i.e. non-stationary) while for KPSS, a series is stationary. Asterisks (*), (**) and (***) denote significant at 10%, 5% and 1% levels, respectively.

To investigate the long-run association between female labour force participation and its determinants, we apply the Bounds test and the results are presented in Table 3. The estimated *F*-statistics for female labour force participation equation implies a firm denial of the null hypothesis of no cointegration. The result demonstrates a statistically significant long-run relationship between female labour force participation, female education achievement, fertility rate, economic growth rate and its square term as follows.

$$FLFPR_t = -30.622 + 0.898EDU_t + 12.279FR_t + 0.373GDPG_t - 0.416GDPG2_t$$
$$= \text{(-2.22)**} \quad \text{(7.98)***} \quad \text{(4.43)***} \quad \text{(2.40)**} \quad \text{(-6.14)***} \qquad (3)$$

Note: *, ** and *** denote significance at 10%, 5% and 1% levels, respectively. Figures in parenthesis are t-statistics.

Table 3

Bounds test results

Model			Computed *F*-statistic	
FLFPR = *f* (EDU, FR, GDPG, GDPG2)			7.903***[(a) & (b)] K = 4, n = 29	
Pesaran et al. (2001)[a]			**Narayan** (2005)[b]	
Critical value	Lower bound value	Upper bound value	Lower bound value	Upper bound value
1 percent	3.29	4.37	4.59	6.37
5 percent	2.56	3.49	3.28	4.63
10 percent	2.20	3.09	2.70	3.90

*, ** and *** indicate significance at 10%, 5% and 1% levels, respectively.
[a] Critical values are referred to Pesaran et al. (2001), Table CI (iii) Case III: unrestricted intercept and no trend, p.300.
[b] Critical values are referred to Narayan (2005), Table Case III: unrestricted intercept and no trend, p.10.

The estimated long-term coefficient of female secondary education attainment is found to be positively significant at 1% level of significance. The finding of a positive sign between female labour force participation and female education is in line with Akhtar, Masud and Rana (2020), Yakubu (2010), Azam and Rafiq (2014), Liu, Dong & Zheng (2010). Education is generally considered as a sound investment as it can enhance one's skills, knowledge and productivity, thus allowing one to easily engage in a job assigned. As female education attainment in Malaysia increases over the years, the human resource development of women supports their ability to participate in the labour market and thus contributing significantly to national and economic development.

For fertility rate, it shows a positive effect on the female labour force participation, which is statistically significant at 1% level. Our finding supports the notion that the presence of children seemed to positively influence the decision of women to enter the labour force owing to financial obligation, which contrasted with the finding of Siah & Lee (2015). The result is consistent with Dev (2004), Naqvi, Shahnaz, and Arif (2002), Rindfuss & Brewster (1996), Pinnelli (1995), and Bernhardt (1993).

Looking at the GDPG (a proxy of economic growth), the coefficient is positive and statistically significant at 5 % significance level. The estimated coefficient of square term of GDPG (GDPG2) has a negative sign, which indicates an inverted U-shaped association between economic growth and female labour force participation where the

female labour force participation increases at a low GDP growth rate, and then declines as the GDP growth rate increases. This finding is not deemed as part of "normal" development process but is supported by Lahoti & Swaminathan (2013). To a certain extent, this inverted U-Shaped relationship echoed the Malaysian Human Development Report 2019 by the United Nations Development Programme (UNDP) that the female labour force participation was much lower than Malaysia's overall labour force participation rate. One possible reason to justify this is due to a majority of women are believed to be lacked of necessary skills required by in the service sector. Moreover, according to a study by Pfeffer & Ross (1982), the wife-as-resource perspective argued that a married male employee secured extra resources to be invested in his employment from his wife, and that these potential additional resources would ebb away when the wife worked. In other words, married men were able to devote all their time and energy to managing well their careers and jobs because their wives, especially those who chose to stay out of labour market, provided their husbands with additional resources by taking care of children and helping out their husbands' endeavours simultaneously. This would probably make a partial explanation in justification of such inverted U-shaped relationship found in Malaysia.

The model is satisfactory since the model passes diagnostic tests such as the Jarque–Bera (normality) test, the Breusch–Godfrey LM test (serial correlation), and the ARCH test (heteroscedasticity) as shown in Table 4. Besides, the plot of cumulative sum of squares (CUSUMSQ) statistics demonstrates a stability over the sample period of all the estimated coefficients in the regression equation of female labour force participation (Figure 3). In short, the diagnostic tests are generally supportive of the statistical validity of the long-run model for female labour force participation and its determinants.

Table 4
Diagnostic tests for the female labour supply equation

Diagnostic test	**Null hypothesis**	**Statistics**	**Decision**
Jarque-Bera test	H_0 : Normality of error term	χ^2 = 0.2905 [0.8648]	Do not reject H_0
Breusch-Godfrey serial correlation LM test	H_0 : No autocorrelation	F(1) = 1.2389 [0.2875]	Do not reject H_0
ARCH test	H_0 : Homoskedasticity	F(2) = 0.4507 [0.6442]	Do not reject H_0

Note: Figures in brackets indicate probability of the test statistics.

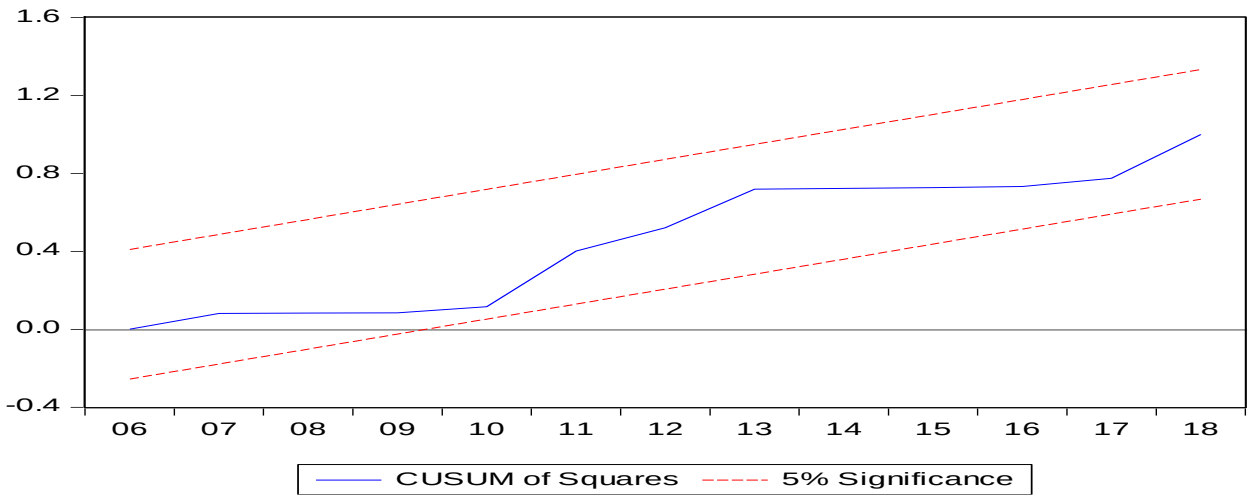


Figure 3. Plot of CUSUM of squares test for the female labour force participation equation.

Table 5
Results of Toda-Yamamoto granger non-causality test.

Dependent variable	**Lagged right-hand-side variables**				
	FLFPR	EDU	FR	GDPG	GDPG2
FLFPR	-----	8.564**	2.521	2.231	12.891***
		[0.014]	[0.284]	[0.328]	[0.002]
EDU	11.379***	-----	5.134*	6.626**	8.294**
	[0.003]		[0.077]	[0.036]	[0.016]
FR	0.754	0.464	-----	0.935	5.569*
	[0.686]	[0.793]		[0.627]	[0.062]
GDPG	9.830***	7.903**	12.170***	-----	9.375***
	[0.007]	[0.019]	[0.166]		[0.009]
GDPG2	2.240	2.398	15.989***	11.093***	-----
	[0.326]	[0.302]	[0.000]	[0.004]	

Note: Figures in brackets are p-values. The optimal lag order for the VAR is 2.
*, ** and *** indicate significance at 10%, 5% and 1% levels, respectively.

Table 5 displays the results of Toda-Yamamoto granger non-causality test. All the variables are revealed to be endogenous, except FR. There is bidirectional causality flowing from female secondary education attainment to female labour force participation rate and GDP per capita growth rate. The results reaffirmed the validity of relationship between female education and female labour force participation in Malaysia besides the importance of education as human capital to the success of the Shared Prosperity Vision 2030 which aims to turn the nation into a quality country. Besides, the Granger-causal effects from female labour force participation rate and fertility rate to GDP per capital growth rate without feedback implies that the arrival of little kids causes the family in need of extra financial support and hence the women's participation in the labour market. As a result, the higher participation of women in the labour force guarantees higher economic growth in Malaysia.

5. Conclusion

This study is intended to explore the long term and causal relations linking economic growth to the female labour force participation in Malaysia by incorporating two additional explanatory variables (female education and total fertility rate) into consideration from 1990 to 2018. Using autoregressive distributed lag (ARDL) bounds test and Toda-Yamamoto granger non-causality test, we found a strong evidence of long-

run relationship among the variables. The result demonstrates a significant and positive relationship between female education and female labour force participation. There is also a positive and significant effect of fertility on the female labour force participation. Instead of the hypothesised U-shaped relationship, our result shows a significant inverted-U-shaped association between economic growth and female labour force participation in Malaysia. Nonetheless, it should be noted that the female education and total fertility rate data used for this analysis has its limitation. The data for both female education and total fertility rate of those in the labour force only is not available in the study.

Furthermore, there is strong evidence of a bidirectional causality from female education to female labour force participation and economic growth. The one-way Granger causality effect is also found from female labour force participation and fertility to economic growth.

Therefore, it is essential for policymakers to design policies that support women with children to take part in the labour market following the validity of the long-run coefficient of fertility to female labour force participation. It is worth adducing that for the sake of facilitating the return of women on career breaks to the labour market, the Ministry of Women, Family and Community Development and Talent Corporation Malaysia collaborated to introduce the flexWorkLife.my incentive in 2013. Moreover, in the Malaysian budget of 2020, the government has further announced a series of initiatives to promote women's participation in the workforce, among other, a 90-days maternity leave and RM30 million for childcare facilities (Kaur, 2020). However, it is proposed that the policymakers must work closer on proactive approaches with the local entities such as NGOs, women's groups and educational institutions to further increase the female labour force participation. Besides, the government could also take the initiative to encourage women to partake in the economic activities by offering required educational facilities, such as the provision of vocational training to the women to enhance their skills and assist them in coping with the prerequisites of the labour market. According to a recent World Bank Group's report, Malaysia's per capita income could grow by 26.2% if all barrier to female workers were removed (World Bank Knowledge and Research, 2019). No doubt, as the economy goes on with the long-run challenges such as rapid technological advancement with an aging population, there is an increasing

crucialness to reach an inclusive and equitable labour market. As such, tackling the conflict between women's economic participation and care responsibilities in Malaysia has thus become greatly momentous for the continuity of its economic growth model by assuring the taking care of the well-being of all.

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