

Box Article 1:**The Other Side of the Coin: Outside Labour Force and its Potential**

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Background

The International Labour Organization [ILO] (2021) stated that working-age population is generally defined as persons aged 15 years and older, though the upper and lower limit may differ between countries as they realign the purpose with the legal and policy framework of the respective countries. For the purpose of comparability across countries, the lower limit of 15 years old is used at the global front.

The ability to earn is more often than not used to monitor a nation's well-being. In doing this, involvement in the production of goods and services for pay or profit can often provide insights into the health of the labour force. Additionally, the other portion of the labour force not at work but had expressed ability to work and were actively engaged in job search known is identified as unemployed. A country's labour market performance is gauged from the widely used and quoted indicator of unemployment. Further to that, recent revisions in the concepts and definitions by the ILO in the 19th International Conference of Labour Statisticians [ICLS] have allowed for in-depth analysis of employment situation by measuring the indicators of labour underutilization (ILO, 2013). Many countries have transitioned to the recommended indicators in looking at the well-being of the labour supply, in line with the eighth goal of the 2030 Sustainable Development Agenda to promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all (United Nations [UN], 2021).

Labour force or those actively engaged in employment or seeking to be employed are assessed in terms of the participation of this group in the labour market. Hence, another labour market indicator to measure involvement of the working age population is the labour force participation rate (LFPR). The ILO (2021; 2016) believed that the LFPR is integral to measure the determinants of a country's human resources and in making projections of the future supply of labour. Further to this, formulations of labour market and human capital policies and programmes also rely heavily upon the LFPR (ILO, 2016).

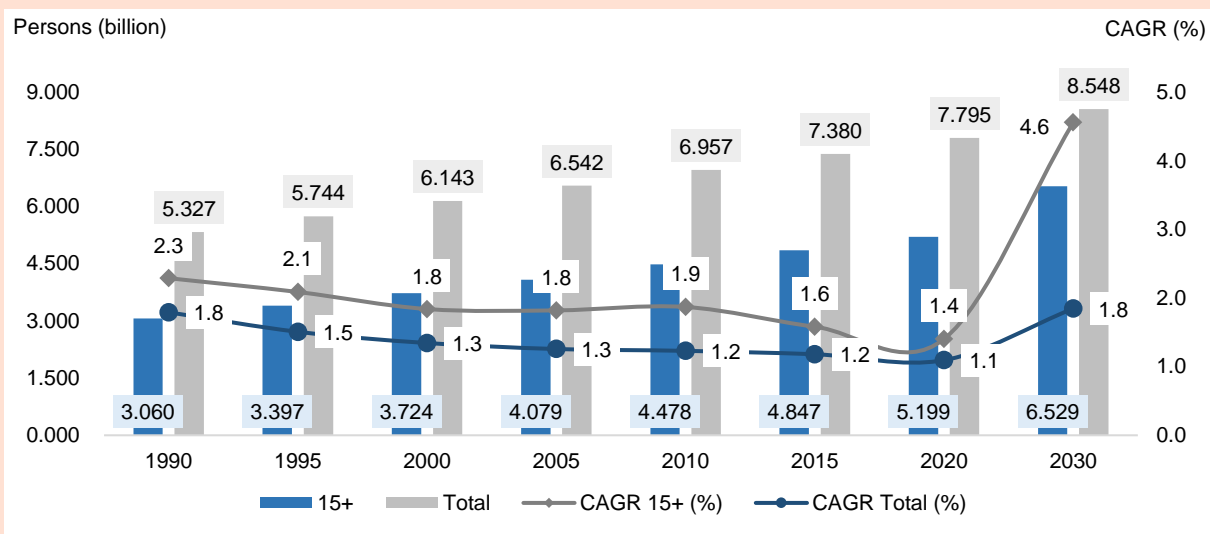
Krueger (2017) investigated the declining trend of LFPR in United States of America. Recently, Coibion, Gorodnichenko & Weber (2020) used the LFPR as one of the three indicators of labour market in the United States of America in time of COVID-19 crisis besides job losses and unemployment. In studying the factors influencing economic growth of North Sumatera Province, Maipita (2020) also included LFPR as one of the indicators of human resource utilisation.

Nevertheless, while assessing the LFPR would definitely provide perspectives of the labour supply, more importance should also be given to the complimentary measure of LFPR i.e. outside labour force. ILO (2021; 2016) viewed the growing needs to analyse the characteristics of persons outside labour force in ensuring increased opportunities of decent and productive employment. In their study on Malaysia's female LFPR, Riyanti & Nur Layali (2019) also recommended that future studies should also examine the characteristics of female outside labour force.

ILO (2016) defined outside labour force as individuals in the working age who are neither employed nor unemployed while the inactivity rate is equal to 100 minus the LFPR ILO (2021). According to Gammarano (2019), population ageing and the surge in the inactivity rates across the years are challenges that need to be addressed for a sustainable future. Thus, Gammarano (2019) analysed global inactivity and later explored the components of outside labour force with attachment to the labour market or better known as the potential labour supply.

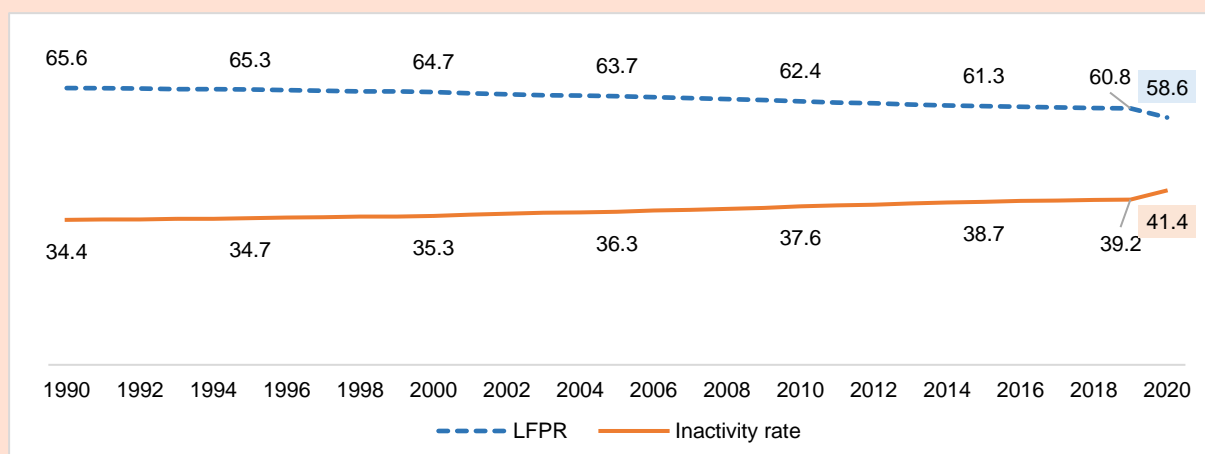
United Nations Department of Economic and Social Affairs [UNDESA] (2021) estimated those in the working age of 15 years and over comprised of 57.4 per cent of 5.3 billion world population in 1990, which was equivalent to 3.1 billion. As of 2020, the share has expanded to 66.7 per cent or 5.2 billion out of 7.8 billion global populations (UNDESA, 2021). Over the period of 1990 to 2020, UN estimates revealed that the growth rates of the working age population were much higher than the growth rates of total population. According to the projection of UNDESA (2021), as the world population rises by 1.8 per cent annually within the five-year period to record 8.5 billion in 2030, the share of working age population will also increase by 4.6 per cent per annum between 2020 to 2030. Ultimately, UNDESA (2021) projected that population aged 15 years and over will encompassed 76.4 per cent or 6.5 billion in 2030. **[Chart 1.A]**

Chart 1.A: World population - all ages & aged 15 +, 1990 - 2030



Source: UNDESA, 2021

According to the ILO estimates as reported by the World Bank (2021), the world LFPR had decreased noticeably over the period of 30 years. The global LFPR which stood at 65.6 per cent in 1990 dropped 4.8 percentage points to 60.8 per cent in 2019 (World Bank, 2021). Sudden shock to the economy due to the global public health crisis which had also affected the labour market as 2020 saw the LFPR dropped further by 2.2 percentage points to 58.6 per cent. On the contrary, the inactivity rates which is also known as the share of outside labour force continued to trend upwards over the period of 1990 to 2020. As evident from the ILO estimates (World Bank, 2021), 34 out of everyone hundred working age population in 1990 was outside the labour force, posting the inactivity rate of 34.4 per cent. The rate surged to 39.2 per cent in 2019 and increased further to 41.4 per cent in 2020 (World Bank, 2021). **[Chart 1.B]**

Chart 1.B: World LFPR and inactivity rate (%), 1990 - 2020

Source: World Bank, 2021

In 2020, Malaysia's population has reached 32.7 million, where working age population aged 15 to 64 years made up 69.7 per cent of the country's population (DOSM, 2020). According to the report by DOSM (2020), if the upper limit is removed, the share of working age population 15 years and over comprised of 76.7 per cent of Malaysia's population. DOSM (2016) projected that Malaysia will be populated by 38.2 million persons by 2030 with 78.7 percent in the 15 years and over age group. In the meantime, those aged 15 to 64 years is estimated to account for 68.0 per cent of the population.

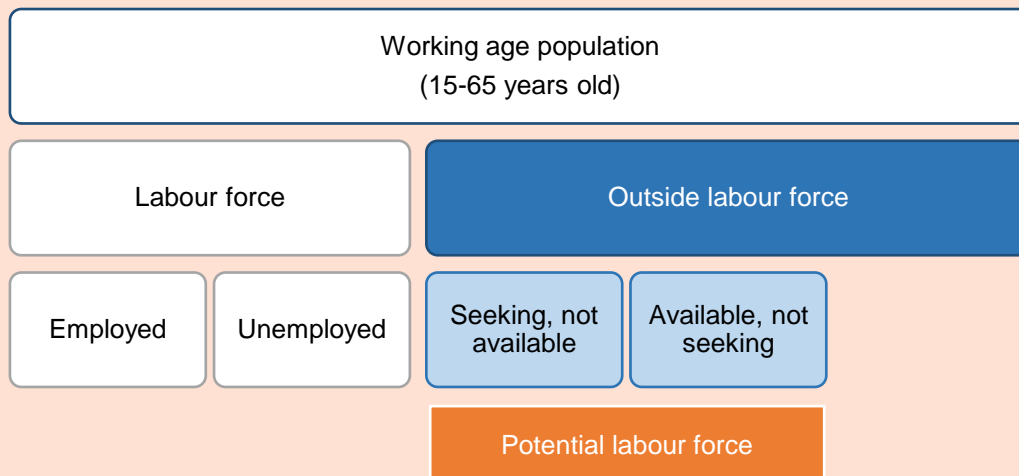
With the continuous increase in the number of working age population, this article aimed to identify the number and share of this group in and outside the labour force; and subsequently study the trend and characteristics of persons outside labour force. In doing so, it is hoped that we can better locate the potential labour force group among those outside the labour force. Additionally, by understanding the trend and pattern of outside labour force will also provide knowledge, insights and understanding for efficient absorption of potential labour supply into the job market.

Methodology

The data sources for this study are Current Population Estimates and Labour Force Survey (LFS) from DOSM. LFS was a household survey conducted every month to collect information on the structure and the distribution of the working age population as well as to gauge the most recent labour supply situation in Malaysia. LFS uses the personal interview method to collect demographic information on all household members and labour force particulars of household members aged 15 years and over. The survey adopted a stratified two stage sampling design. The first stage unit of sample selection is the enumeration blocks (EBs) consisting of 80 to 120 living quarters (LQs), while the second stage unit was the LQs within the EBs. The sample units were systematically drawn with equal probability of being selected at every stage of selection. DOSM (2021) documented the detailed methodology of LFS in terms of sample design, concepts and definitions as well as the estimation procedures. The LFPR as well as demographic profile of persons outside labour force including sex, age and educational attainment were tabulated from LFS data between the years 1990 to 2020.

The framework for data analysis of this study is as in **Figure 1.A**. Following DOSM (2021), working age population refers to the population of Malaysia between the age of 15 to 64 years old. Working age population comprised of persons in the labour force and outside the labour force. Labour force refers to all persons in the working age who are either employed or unemployed. LFPR which is used to measure the involvement of working age population in the labour market, is the ratio of labour force to the working age population expressed in terms of percentage.

Figure 1.A: Labour force framework



In the meantime, working aged population persons who were not classified as employed or unemployed was classified as outside labour force. This category consists of housewives, students (including those going for further studies), retirees, disabled person and those not interested in looking for jobs. Hence, the inactivity rate is measured as the ratio of outside labour force to the working age population in percentage form. Among persons outside the labour force, the potential labour force can be identified as those who express interests to be employed but for whom existing conditions limit their active job search or their availability. According to Nurfarahin & Muhammad Shafiq (2020), DOSM has started to measure this category since LFS 2019.

Education attainment refers to the highest level in which a person has completed schooling or is currently attending, in a public or private educational institution that provide formal education. There are four levels of education attainment which are no formal education, primary, secondary and tertiary.

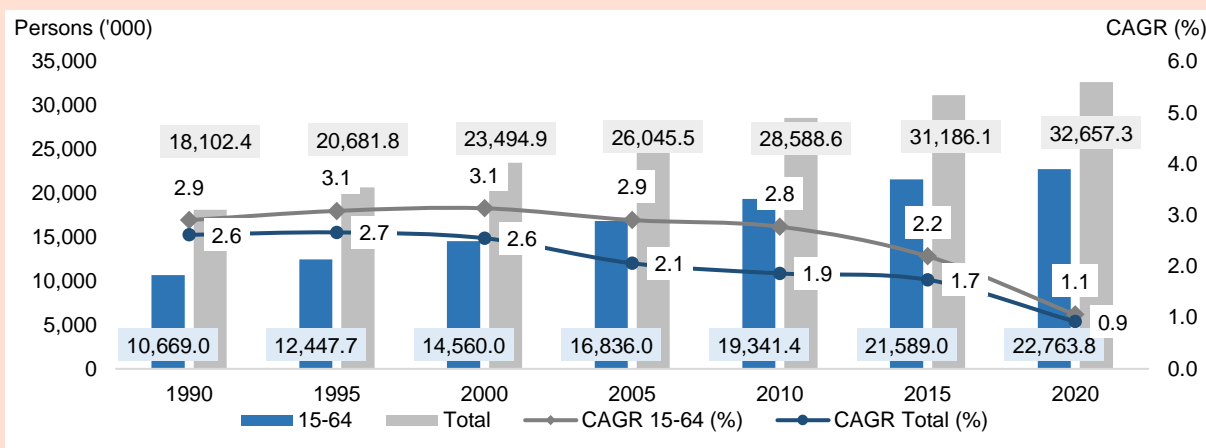
Data analysis was conducted with Microsoft Office Excel and Statistical Package for Social Science (SPSS version 24). Descriptive data analysis techniques were utilised to identify the trend of LFPR as well as to profile the demographic characteristics of populations outside the labour force. The survey data was weighted to infer the sample to the national population.

Results

Malaysia’s population in 1990 was 18.1 million with working age population aged 15 to 64 taking up a share of 58.9 per cent or 10.7 million persons. After 30 years, the population grew at the rate of 2.0 per cent per annum to record 32.7 million in 1990. Meanwhile, the working

age population expanded at a higher annual rate of 2.5 per cent to 22.7 million persons, comprising a growing share of 69.7 per cent. Although both total population and those in the working age posted a slower growth rate over time since the year 2000, working age population increased at a slightly higher growth rate of 1.1 per cent as compared to the population growth (0.9%). [Chart 1.C]

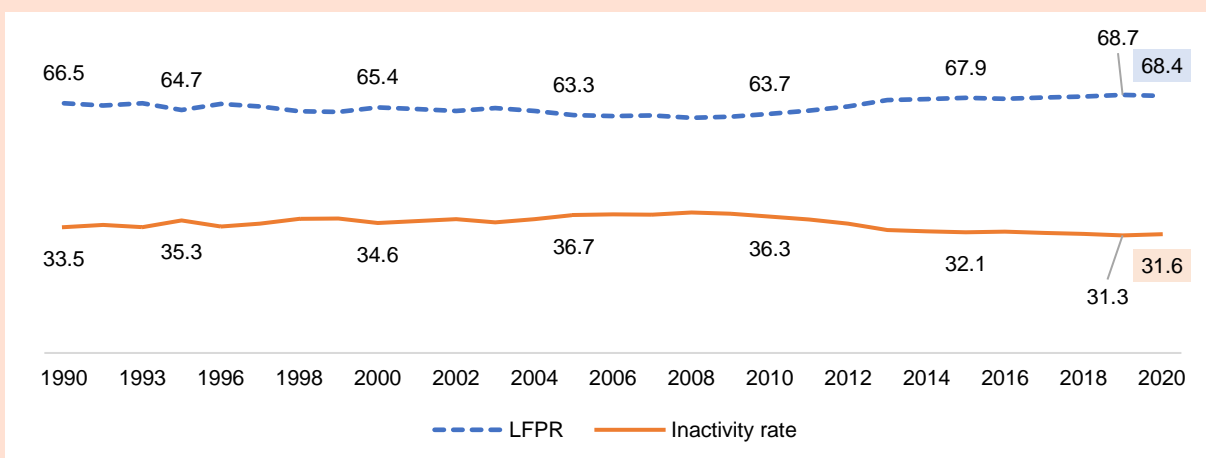
Chart 1.C: Malaysia’s population - all ages & aged 15 - 64 years, 1990 - 2020



Source: Current Population Estimates, DOSM

In evaluating the participation of working age population in the labour market, the lowest LFPR recorded in Malaysia between the 30-year period was 63.3 per cent in 2005. Later, LFPR was seen to pick up gradually, until registering 68.7 per cent in 2019. Following the unprecedented global health crisis in 2020 which took a toll on the economy and the labour market event, the LFPR was downed by 0.3 percentage points from the year 2019 to record 68.4 per cent in 2020. On the contrary, inactivity rate peaked in 2005 at 36.7 per cent along with the decline of LFPR during the year. In 2020, the rate of inactivity increased marginally to 31.6 per cent. [Chart 1.D]

Chart 1.D: LFPR and inactivity rate (%), Malaysia, 1990 – 2020

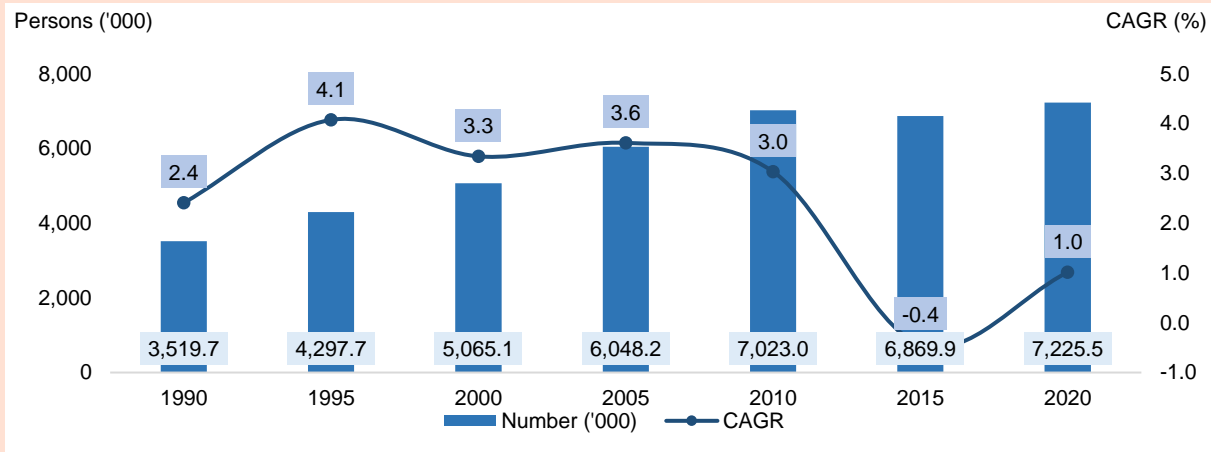


Source: LFS, DOSM

Note: LFS was not conducted in 1991 and 1994

The number of outside labour force was observed to be on the increasing trend from 3.5 million persons in 1990 to 7.0 million persons in 2010. However, 2015 observed the number of persons outside the labour force dropped marginally as against 2010 to 6.8 million persons. Later, throughout 2015 to 2020 the number has expanded at a slower rate of 1.0 per cent annually. [Chart 1.E]

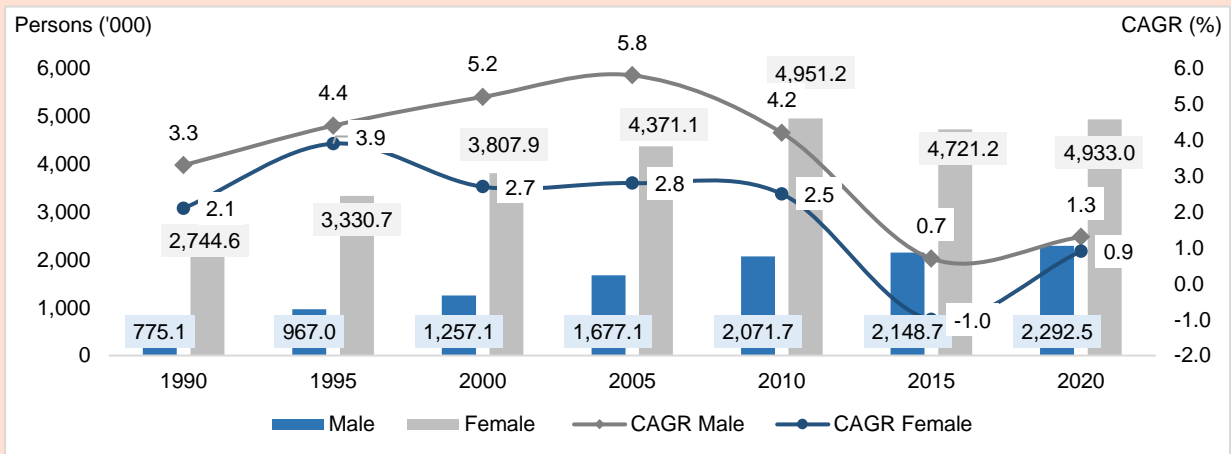
Chart 1.E: Outside labour force, 1990 – 2020



Source: LFS, DOSM

As for disaggregation by sex, persons outside labour force are predominantly females. The share of female outside labour force was 78.0 per cent in 1990, equivalent to 2.7 million persons as compared to male at 775.1 thousand persons. Over the years, the share has been declining giving way to increasing share of male outside the labour force. In 2020, a total of 4.9 million females were outside labour force, encompassing a share of 68.3 per cent. Accordingly, the share of male was 31.7 per cent with 2.3 million persons. Interestingly, despite the higher share of female outside the labour force, the number of male increased at a higher rate compared to female. [Chart 1.F]

Chart 1.F: Outside labour force by gender, 1990 – 2020



Source: LFS, DOSM

The largest share of outside labour force was youth aged 15 to 24 years. This group made up 42.0 per cent in 1990, and later increased to 48.2 per cent in 2020. The share of those in the 25-34 years' age group shrank from 20.9 per cent (1990) to 12.3 per cent (2020). Meanwhile, the composition of older age group i.e. 55 to 64 years continues to grow, recording 17.9 per cent in 2020 as compared to 12.0 per cent in 1990.

Among male population outside the labour force, youth dominated to record more than 70 per cent throughout the years, except in 2020 where this group comprised of 69.2 per cent. In comparison, the share of youth among females outside labour force ranged between 30 to 40 per cent. **[Table 1.A]**

Table 1.A: Outside labour force by sex and age group, Malaysia, 1990 – 2020

(Percentage Share)

Sex	Year	Age group				
		15-24	25-34	35-44	45-54	55-64
Total	1990	42.0	20.9	14.7	10.4	12.0
	1995	41.4	19.3	15.6	11.2	12.5
	2000	44.9	16.5	14.9	11.5	12.2
	2005	46.1	13.7	14.2	12.7	13.3
	2010	47.5	13.0	12.2	12.1	15.2
	2015	50.2	12.5	9.9	11.0	16.4
	2020	48.2	12.3	10.6	10.9	17.9
Male	1990	74.6	3.5	1.7	3.7	16.6
	1995	74.7	3.3	2.2	3.6	16.1
	2000	76.3	3.0	2.0	3.5	15.1
	2005	74.3	3.3	2.0	4.1	16.3
	2010	71.9	4.4	2.0	4.5	17.3
	2015	72.5	4.5	2.3	4.0	16.6
	2020	69.2	6.3	2.5	4.2	17.8
Female	1990	32.8	25.8	18.4	12.3	10.7
	1995	31.7	24.0	19.4	13.4	11.4
	2000	34.5	20.9	19.2	14.2	11.3
	2005	35.4	17.8	18.8	15.9	12.1
	2010	37.3	16.6	16.5	15.4	14.3
	2015	40.1	16.2	13.4	14.1	16.2
	2020	38.5	15.1	14.5	14.1	17.9

Source: LFS, DOSM

When the reasons for not at work were analysed, majority of the male population were outside labour force because they were attending school or training programme. From 1990 up to 2015, this group comprised around 62 to 69 per cent. However, a noticeable reduction to 59.7 per cent occurred in 2020. Retirement came off second at 12.9 per cent in 1990. The percentage share of male outside labour force due to retirement increased gradually to the highest share of 17.1 per cent in 2010. The group encompassed 15.4 per cent in 2020. In the meantime, the percentage share of male outside labour force because of housework or family responsibilities depicted a declining trend from 1990 to 2015. Nevertheless, in 2020, the share of male in this category rose rather significantly to 13.4 per cent.

The largest proportion of female was outside the labour force due to housework or family responsibilities. Though, the share of this group has lessen over time from 78.7 per cent in 1990 to 60.5 per cent in 2020. Meanwhile, the composition of female being outside the labour

force because of schooling or training indicated an upward trend from 17.3 per cent (1990) to 31.8 per cent (2020). [Table 1.B]

Table 1.B: Outside labour force by sex and reasons for not at work, Malaysia, 1990 – 2020

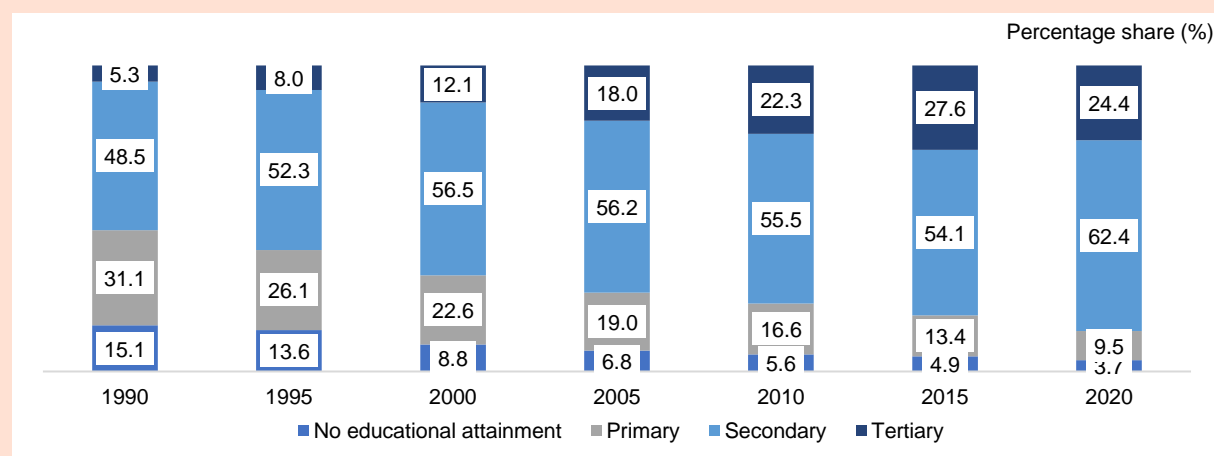
(Percentage Share)

Sex	Reasons for not at work						
	Schooling or training	Housework or family responsibilities	Going for further studies	Disabled	Not interested	Retired	Others
Male							
1990	62.8	4.5	2.6	5.1	1.7	12.9	10.4
1995	65.9	4.3	2.1	5.9	2.3	13.1	6.5
2000	68.5	3.5	1.5	3.8	1.5	14.2	7.0
2005	66.4	2.6	2.2	4.3	1.2	15.4	8.0
2010	65.2	2.1	2.8	4.4	1.5	17.1	6.8
2015	66.8	2.4	3.4	8.2	2.7	16.5	-
2020	59.7	13.4	1.8	8.0	1.7	15.4	-
Female							
1990	17.3	78.7	0.6	0.8	0.5	0.3	1.8
1995	19.7	76.6	0.6	0.9	0.5	0.5	1.3
2000	24.1	72.4	0.5	0.7	0.2	0.7	1.4
2005	26.3	68.8	1.0	0.8	0.2	1.0	1.8
2010	28.5	66.1	1.2	0.8	0.3	1.3	1.8
2015	31.9	60.0	1.7	1.9	0.6	3.9	-
2020	31.8	60.5	1.8	1.7	0.7	3.6	-

Source: LFS, DOSM

Looking at the educational attainment of those outside the labour force, a remarkable shift is observed whereby the share of those with tertiary education experienced gradual increase from 5.3 per cent in 1990 to 27.6 per cent in 2015. Although the share decreased slightly to 24.4 per cent in 2020, it was relatively higher than the proportion recorded in 2010. Those with secondary education which made up the largest share of persons outside labour force also illustrated a steady rise from 48.5 per cent (1990) to 62.4 per cent (2020). Meanwhile, the shares of outside labour force with primary education and no formal education were seen to decline over time. [Chart 1.G]

Chart 1.G: Outside labour force by educational attainment, Malaysia, 1990 - 2020



Source: LFS, DOSM

Based on recent data collection through LFS, it was estimated that the share of potential labour force whom express interest to be in employment made up 3.2 per cent in 2019 from total labour force during the year, comprising of 224.9 thousand persons. The share and number both went down to 2.9 per cent and 209.5 thousand persons respectively, albeit increase in the number of outside labour force during the period. [Table 1.C]

Table 1.C: Outside labour force & potential labour force, Malaysia, 2019 & 2020

Year	Outside labour force ('000)	Potential labour force ('000)	Share of potential labour force (%)
2019	7,103.5	224.9	3.2
2020	7,225.5	209.5	2.9

Source: Authors' calculation based on LFS, DOSM

Discussion and Conclusion

In overall, the LFPR and inactivity rate in Malaysia did not conform to the global increasing trend over the years. In fact, the numbers and rates were seen to be fluctuating within a rather close range throughout the period of 30 years, except for particular years where LFPR dropped, hence causing the inactivity rate to surge. The close proximity of inactivity rate over the years indicated that the growth in number of persons outside labour force were in line with the growth in population and the working age population, which tend to be slower in recent years as compared to earlier years.

Female made up more than two third of the population outside labour force, largely concentrated within the ages 15 to 34 years old. Although the majority of female were outside the labour force to take up the role of child-bearing, child-rearing, caregivers and nurturers, the proportion who were in school or training continued to increase. Promoting greater participation of female in the labour market was included as the strategy in the medium-term development plan since 2006. Additionally, in the Eleventh Malaysia Plan (2016-2020), the government has targeted an increase in the female labour force participation rate to 57 per cent by the year 2020 (Economic Planning Unit, 2015). Among female outside the labour force due to housework and family reasons, the government through various efforts has continued its commitment to lure the group into the labour market given their potential talents and contributions towards the economic progress. An instance of this was Career Comeback Tax Exemption for women who return to work after taking career break, which was initiated by Talent Corporation in 2015 (TalentCorp, 2015). Through this initiative, programmes and interventions to were implemented to encourage female to return to employment; and for employers to hire career comeback female.

As much as large proportion of male outside labour force was in the youth age group due to schooling or training, it is interesting to note the share of those involved in housework and responsibility which has increased noticeably in 2020. The odd pattern and sudden increase could be attributed to the unprecedented circumstances in 2020 with the prolonged public health crisis. While this may be perceived as a positive development where impartiality was exercised in terms of the roles of caregivers and nurtures among male, flexible working arrangement, remote working as well as digitalisation might be some of the possible solutions

to increase the labour force participation of both male and female who are taking up family responsibility. This will indirectly provide opportunity of income generation activity as well as ensure contributions towards the economic progress and recovery. It is in line with Malaysia Digital Economy Blueprint (MyDIGITAL) that aims to boost economic competitiveness through digitalisation (Economic Planning Unit, 2021).

A relatively high number of young people aged 25 to 34 years old nonparticipation in the labour force could be due to longer duration of education. This can be seen as a positive development for Malaysia as more potential labour force were attaining higher education. The odd of this group to subsequently join the labour market is definitely higher once they complete training or schooling. As a matter of fact, this category would usually fall under skilled category and more often than not would attain tertiary educations or certified in specific trades. Quality labour force is needed to promote Malaysia's growth and position its excellence in the global marketplace. In turn, Malaysia can realise its Shared Prosperity Vision 2030 to increase the incomes which later transform Malaysia into high income nation (Ministry of Economic Affairs, 2019). However, in order to achieve the vision, it is imperative to give greater focus to skilled job creations that can match with their educational attainment and qualifications. This would require crucial roles and responsibilities of various parties to gradually consider innovation, technological adoption and automation that will move the economic structure to a high value-added economy which may cause higher business returns. Ultimately, this may be one of the solutions to ensure skilled labour absorption and ultimately increased real and nominal wage.

In conclusion, a relatively high number of persons outside labour force have a vast potential of joining the labour force, specifically to be in employment. The collaboration of key parties such as the government, industries and academia are vital in realising this potential. Nevertheless, carefully thoughts and well-planned strategies should be set in place to ensure continuous efforts to empower both supply and demand sides i.e. high-quality labour supply coupled with high demand and absorptions of skilled labour.

Disclaimer

The views expressed are those of the authors and do not necessarily represent the view of the DOSM.

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