



THE EXTENSION OF WORKING AGE IN LABOUR FORCE ANALYSIS

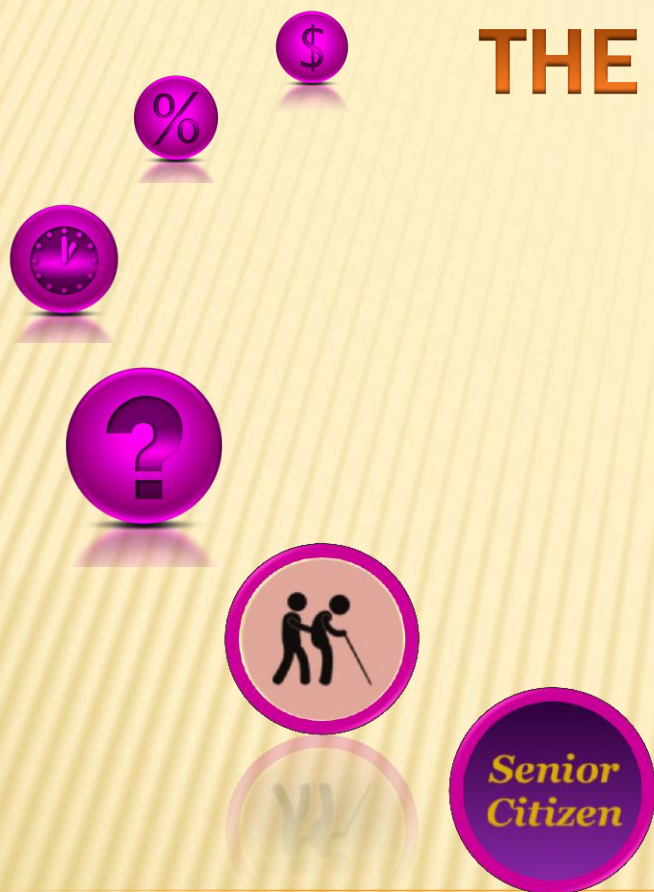
Is Malaysia Ready?

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Outline

1

Introduction

2

Literature Review

3

Methodology

4

Findings & Analysis

5

International Findings

6

Conclusion

7

Way Forward

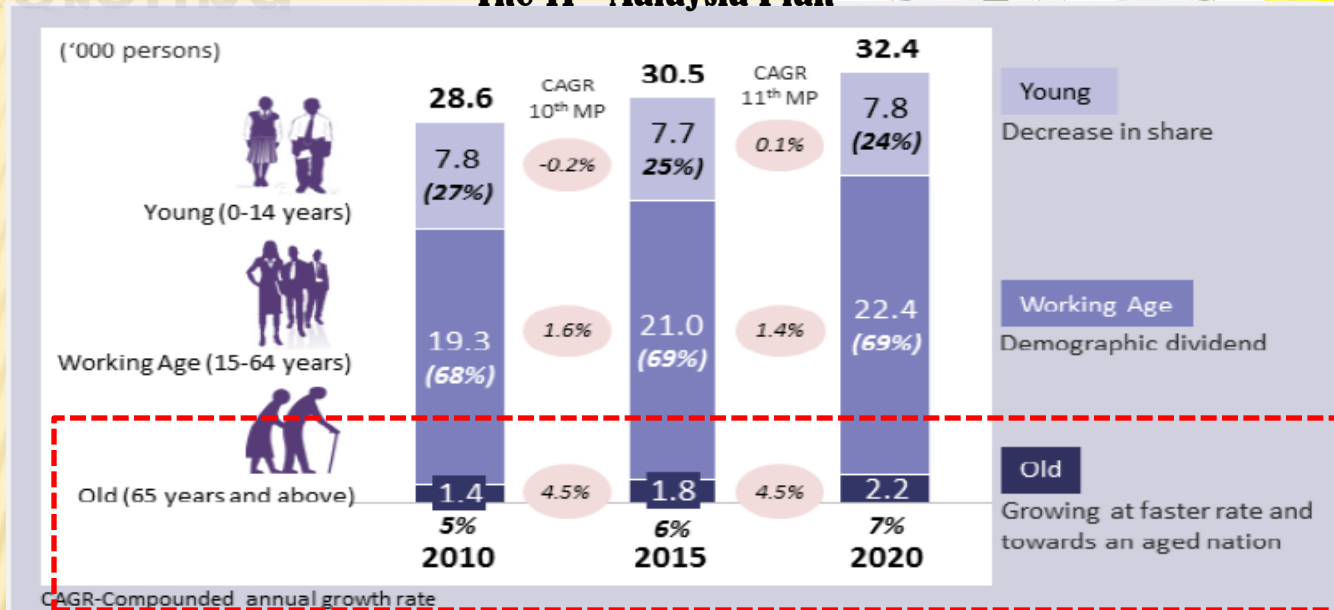
INTRODUCTION

- Background
- Problem Statement
- Research Questions
- Research Objectives

Background

The 11th Malaysia Plan

SNAPSHOT



- ▶ In the Eleventh Malaysia Plan, it is reported that the older population (65 years and above) is growing at a faster rate and Malaysia is going towards ageing nation.
- ▶ Reported by [United Nations](#), Malaysia is expected to become an aged nation by 2025 to 2030.
- ▶ As the number of older people expected to increase in the next 5-10 years, is Malaysia ready to expand the working age population? Will this changes affect the Labour Force Participation Rate (LFPR) and Unemployment Rate (UR) in Malaysia?

Background

SNAPSHOT



The **young** population (0-14 years) is expected to decrease from 7.8 million in 2010 to 7.7 million in 2015, as a result of the decline in fertility rate.


The **working age** population (15-64 years) is expected to increase from 19.3 million to 21 million during the same period, contributing to demographic dividend³. As a result, the dependency ratio⁴ is expected to reduce gradually from 47.8% in 2010 to 45.4% in 2015.

Life expectancy is expected to improve from 72 years in 2010 to 74 in 2020 for males and 77 to 79 for females. As a result, the **older** population (65 years and above) is expected to register highest growth of 4.5% per annum to reach 1.8 million (5% of total population) in 2015, heading towards an aged nation⁵. Malaysia is expected to become an aged nation by 2035, where the composition of population aged 60 and above reach 15% of the total population.

How The World Will Age By 2030


Country	2015	2020	2025	2030
Japan	26.4	28.6	29.6	30.7
Germany	21.4	23.1	25.1	28.2
Greece	20.2	21.5	23.2	24.8
Singapore	11.2	13.9	17.3	20.5
United States	14.7	16.6	18.6	20.1
New Zealand	14.7	16.2	18.1	20.1
Australia	15	16.4	17.8	19.2
United Kingdom	18.1	18.9	20	21.7
South Korea	13	15.5	19.4	23.4
France	18.7	20.3	21.7	23.2
China	9.5	11.7	13.5	16.2
Thailand	10.4	13	16.1	19.5
Malaysia	5.8	6.9	8.3	9.7
Indonesia	5.4	6.3	7.7	9.2
India	5.5	6.3	7.2	8.2
Kuwait	2.4	2.6	3.3	4
Philippines	4.1	4.9	5.6	6.3

% Over 65

 Super aged

 Aged

 Aging

 Not aging

NOTE

UN definitions:

A society is considered to be 'ageing' if over-65s make up at least 7 per cent of the population, 'aged' when the figure is at least 14 per cent, and when it tops 20 per cent it is considered to be a 'super-aged' society

Problem Statement



Extension of working age in Labour Force will affect the current Labour Force Participation Rate(LFPR) and Unemployment Rate(UR)

Research Questions



Will extending the working age in labour force analysis increase LFPR?



Will extending the working age in labour force analysis decrease UR?

Research Objectives



To identify the effects of the extension of working age group in the analysis of labour force in to the LFPR and UR

LITERATURE REVIEW

Literature Review

Author(s) (Year)	Topics	Summary of findings
Braedyn Kromer & David Howard (2013)	Labour Force Participation and Work Status of People 65 Years and Older	The LFPR increase for those 65 years and older is due to inadequate finances, needing to make up losses in the stock market and ability to participate given longer life spans.
Mitra Toosi (2006)	A New Look at Long Term Labor Force Projections to 2050	The impact of the baby-boom generation on the position and growth of the labour force will continue to be a key factor. As this large cohort ages, the increase in the share of the older labour force and, eventually, the exit of the baby-boom cohort from the workforce will be the main factor in lowering the growth of the labour force.

Literature Review

Author(s) (Year)	Topics	Summary of findings
Robert L. Clark ¹ , E. Anne York & Richard Anker (1999)	Economic development and labor force participation of older persons	An older population is associated with lower participation rates for older men and higher widow rates produce higher participation rates among older women. Industrial changes such as a decline in the proportion of the labor force employed in agriculture lower the proportion of older persons in the labor force. Finally, national social security policies are shown to impact the proportion of older persons that remains in the labor force.
Kevin Kinsella and Yvone J.Gist (1995)	Older Workers, Retirement, and Pensions – A comparative International Chartbook	The aggregate labour force participation rate of older persons(aged 55 and over) has fallen in developed countries since the late 1960's. Since mid 1980's, however decline has stopped in some nations (eg. Australia, United States and Japan), and data from the early 1990's suggest that the aggregate rate may be inching upward in several nations.

METHODOLOGY

- Methodology LFS
- LFS Framework
- Data Sources
- Definitions

Methodology

Research Design

- Quantitative study

Data source

- Annual Labour Force Survey (LFS) micro data
- Five years periods (2010-2014).

Technique of analysis

- Descriptive statistics to examine LFPR and UR
 - by sex, strata
 - for three working age groups (15-64, 15-74 and 15 and over)

Tools and Software

- SPSS version 22 → Complex sample
- Microsoft Excel

Methodology LFS



Covers both urban and rural areas of all states in Malaysia.



The survey population is defined to cover persons who live in private living quarters only including citizens and non citizens; excludes persons residing in institutional LQs (hotels, hostels, hospitals, prisons, boarding houses and construction worksite).



The LFS uses the age limit of 15 to 64 years. LFS comprises the economically active and inactive population (employed, unemployed and outside labour force).

Definition



Working Age

- Refers to those who are between 15 to 64 years (in completed years at last birthday) during the reference week, and who are either in the labour force or outside the labour force.



Labour Force

- Labour force refers to those who, during the reference week, are in the 15 to 64 years (in completed years at last birthday) and who are either employed or unemployed.



Employed

- All persons who, at any time during the reference week worked at least one hour for pay, profit or family gain (as an employer, employee, own-account worker or unpaid family worker.

Definition



Unemployment

- The unemployment are classified into two groups :
- **actively unemployed** – all persons who did not work during the reference week but were available for work and were actively looking for work during the reference week.
- **inactively unemployed** – persons who did not look for work, not been for bad weather, waiting for job applications, person who looked for work prior to the reference week.



Labour Force Participation Rate (LFPR)

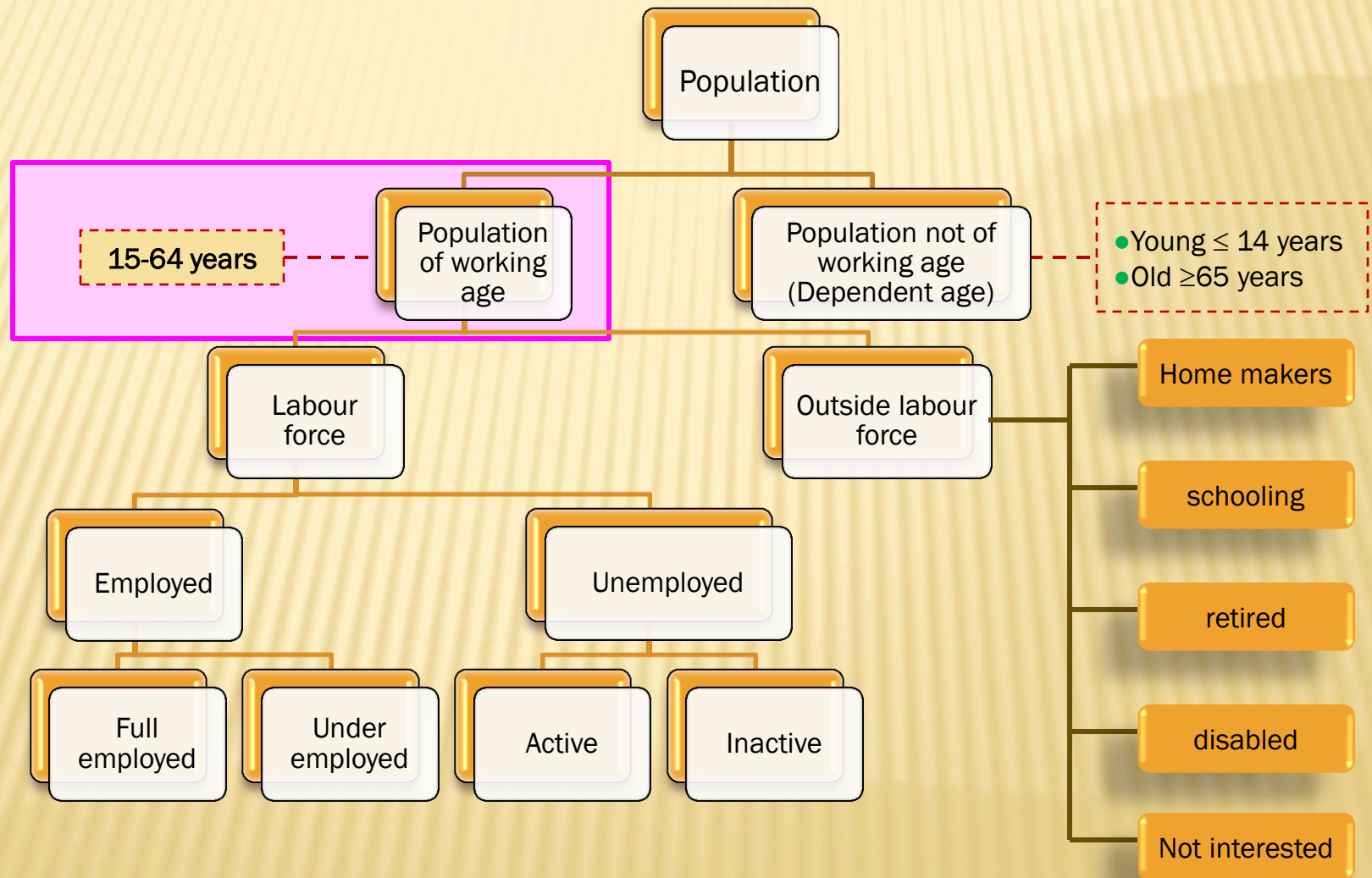
- LFPR is the number of people in the labour force as a proportion aged 15 years to 64 years.
- $LFPR = \text{Labour Force} / \text{Working age population}$



Unemployment Rate (UR)

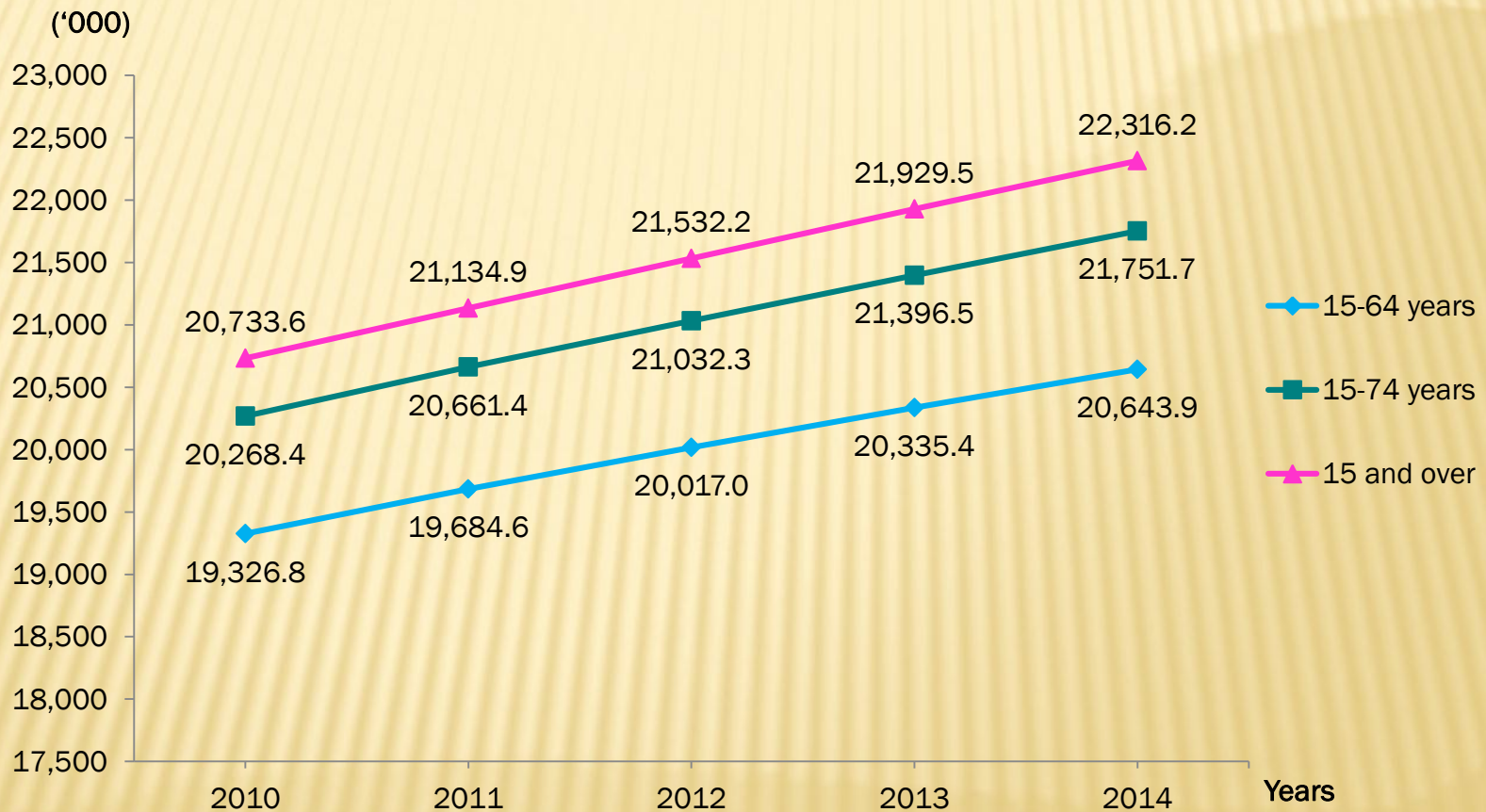
- UR is the proportion of unemployed population to the total population in labour force. This rate measures the percentage of unemployed population in the labour force.
- $UR = \text{Unemployed} / \text{Labour Force}$

Labour Force Survey Framework, Malaysia

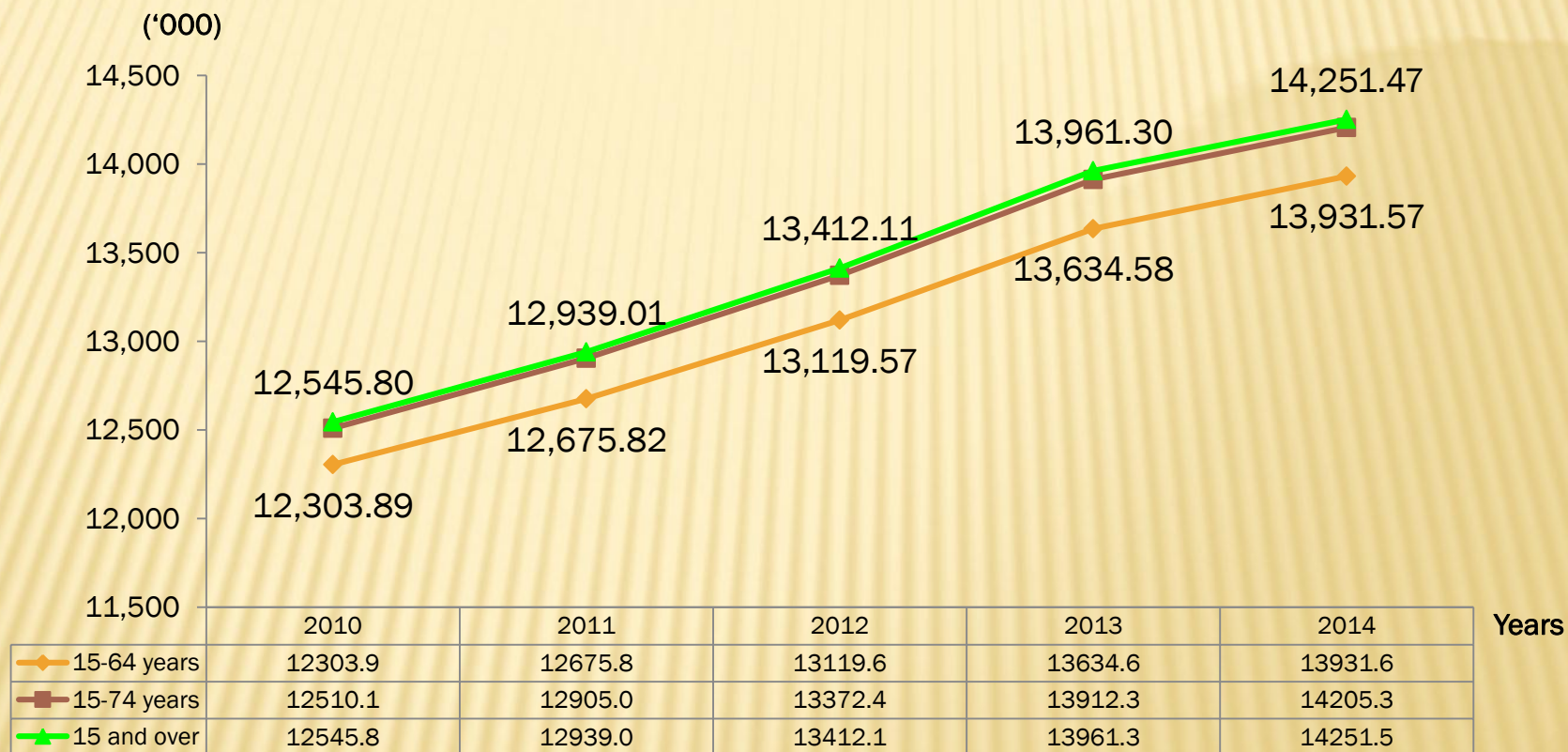


FINDINGS & ANALYSIS

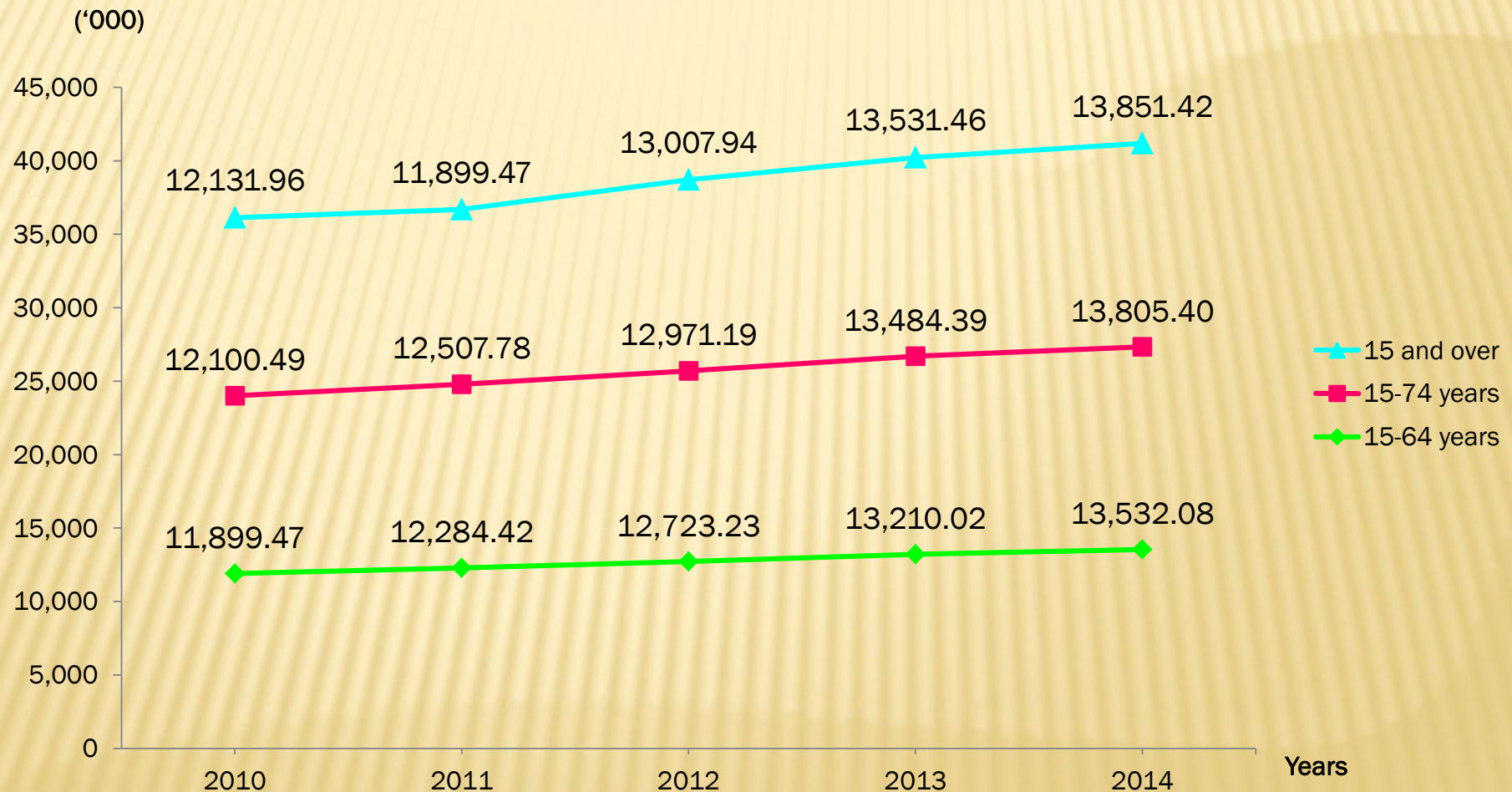
Working Age Population, Malaysia 2010-2014



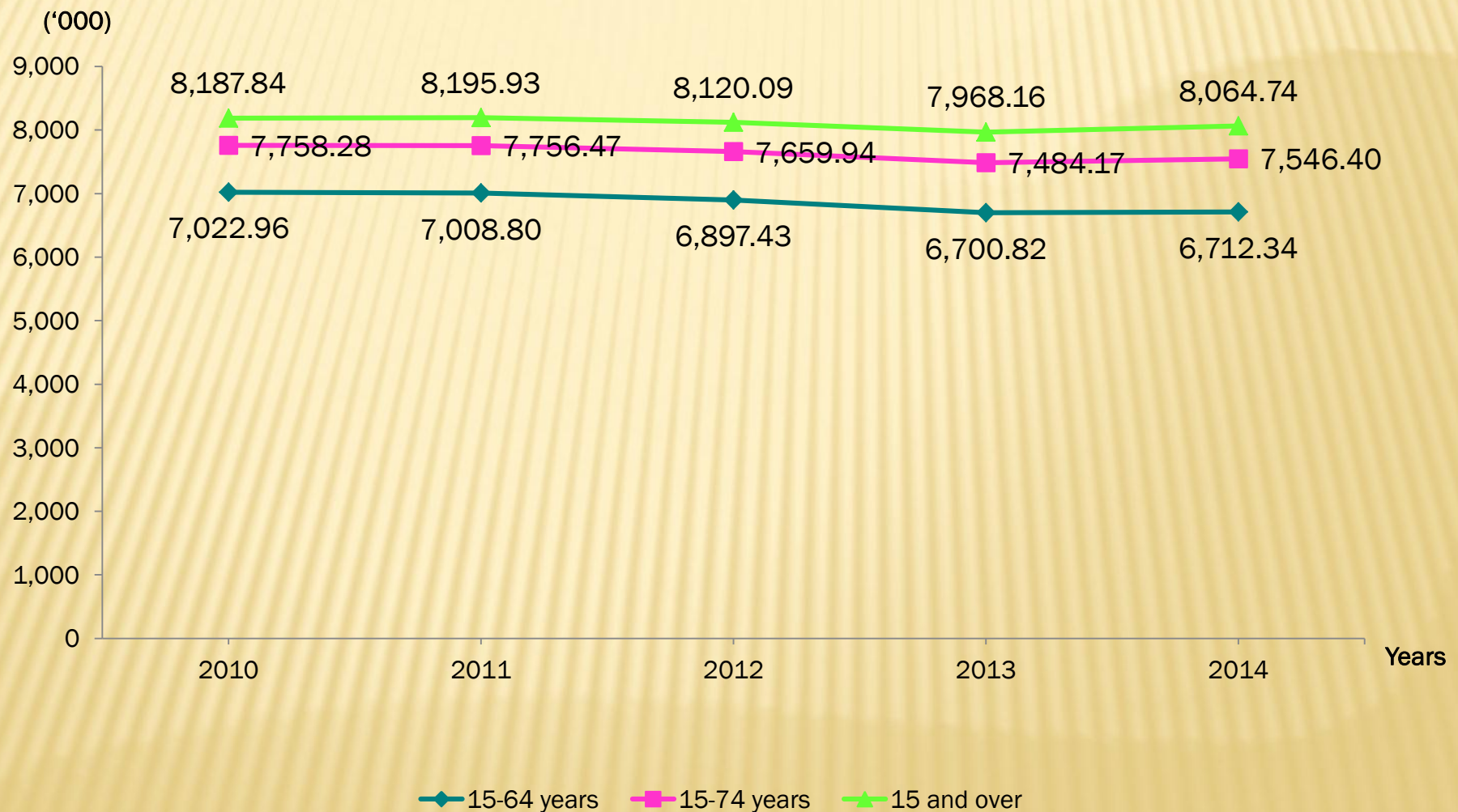
Labour Force, Malaysia 2010-2014



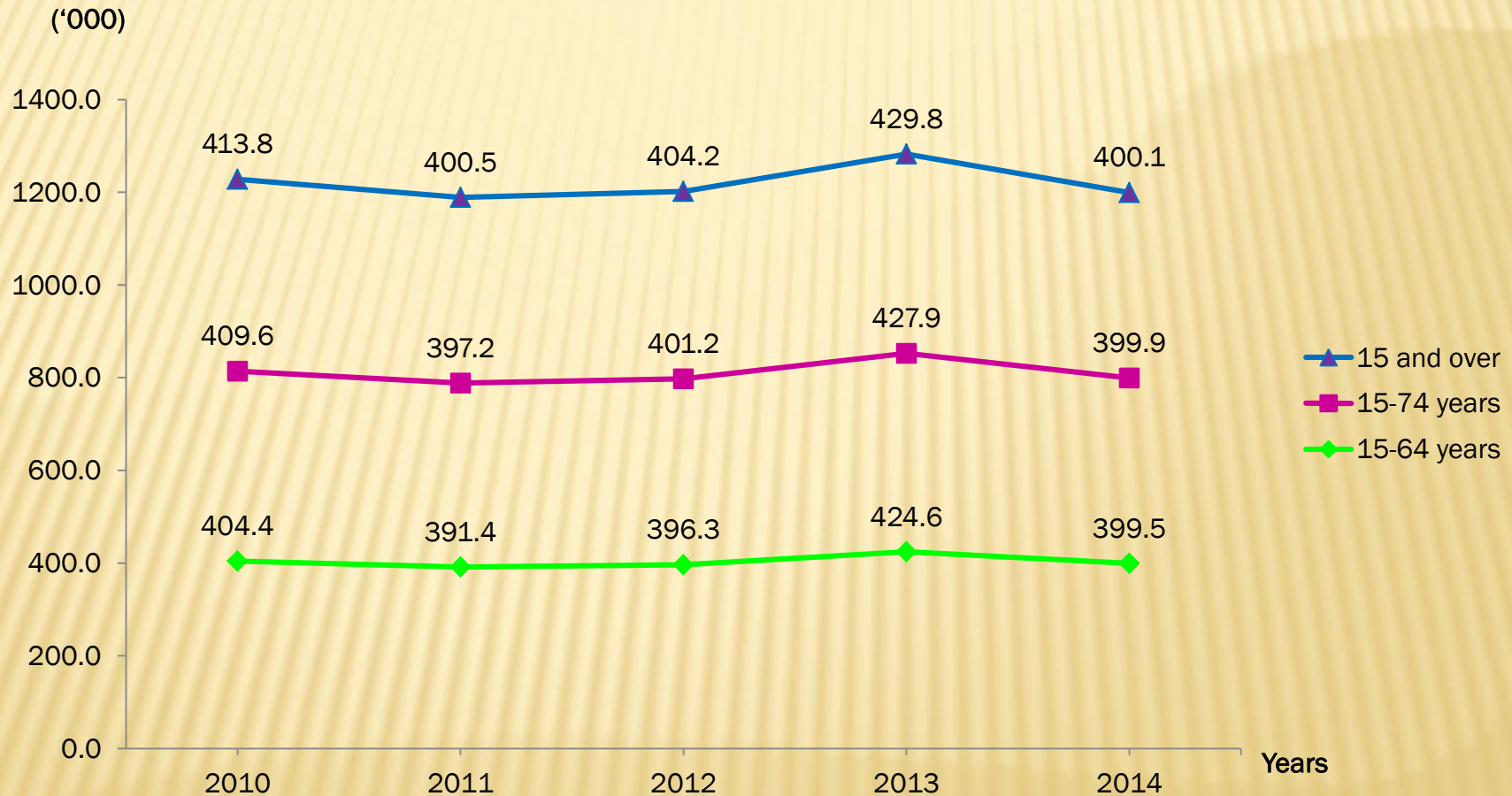
Employed, Malaysia 2010-2014



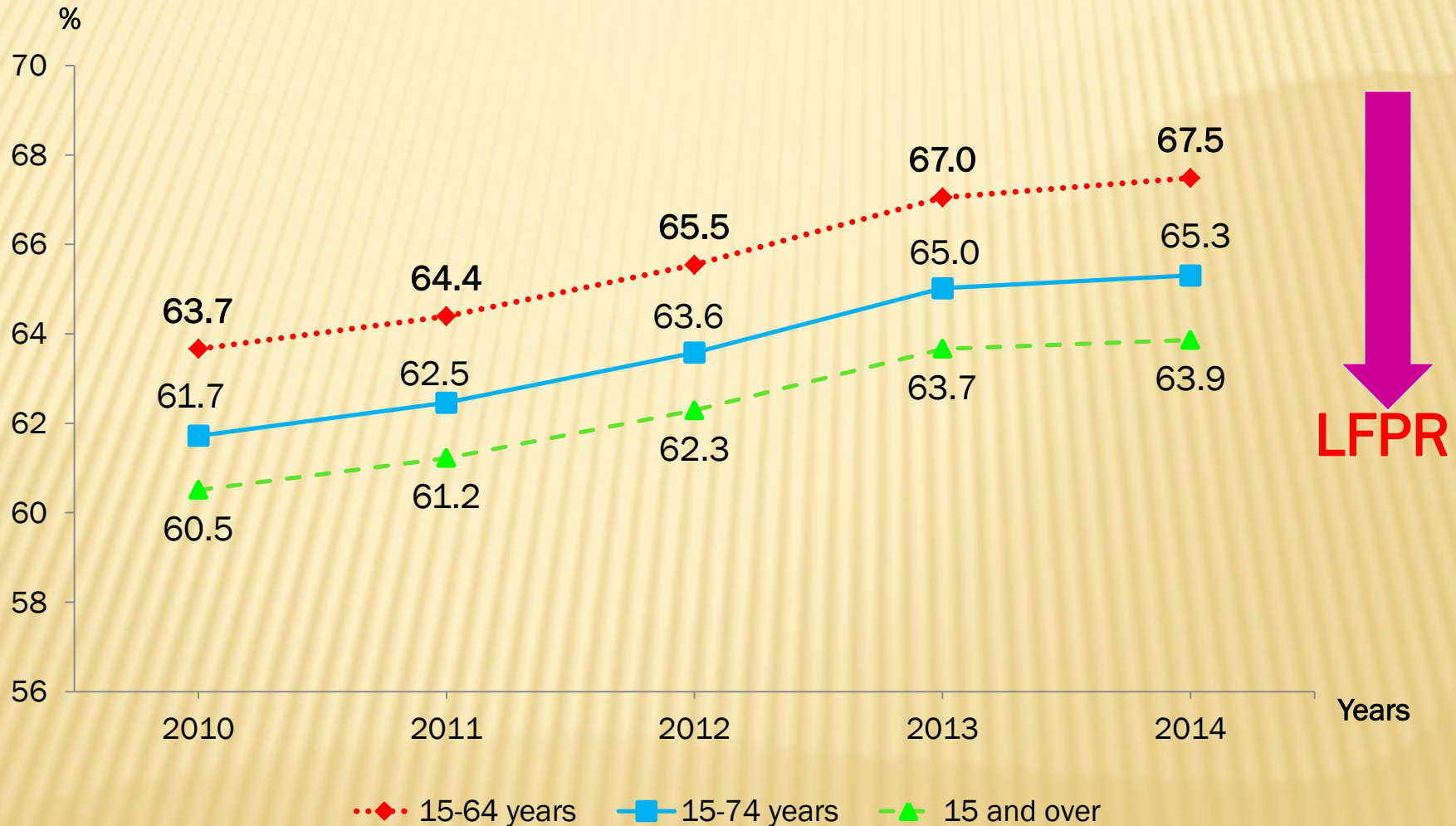
Outside Labour Force, Malaysia 2010-2014



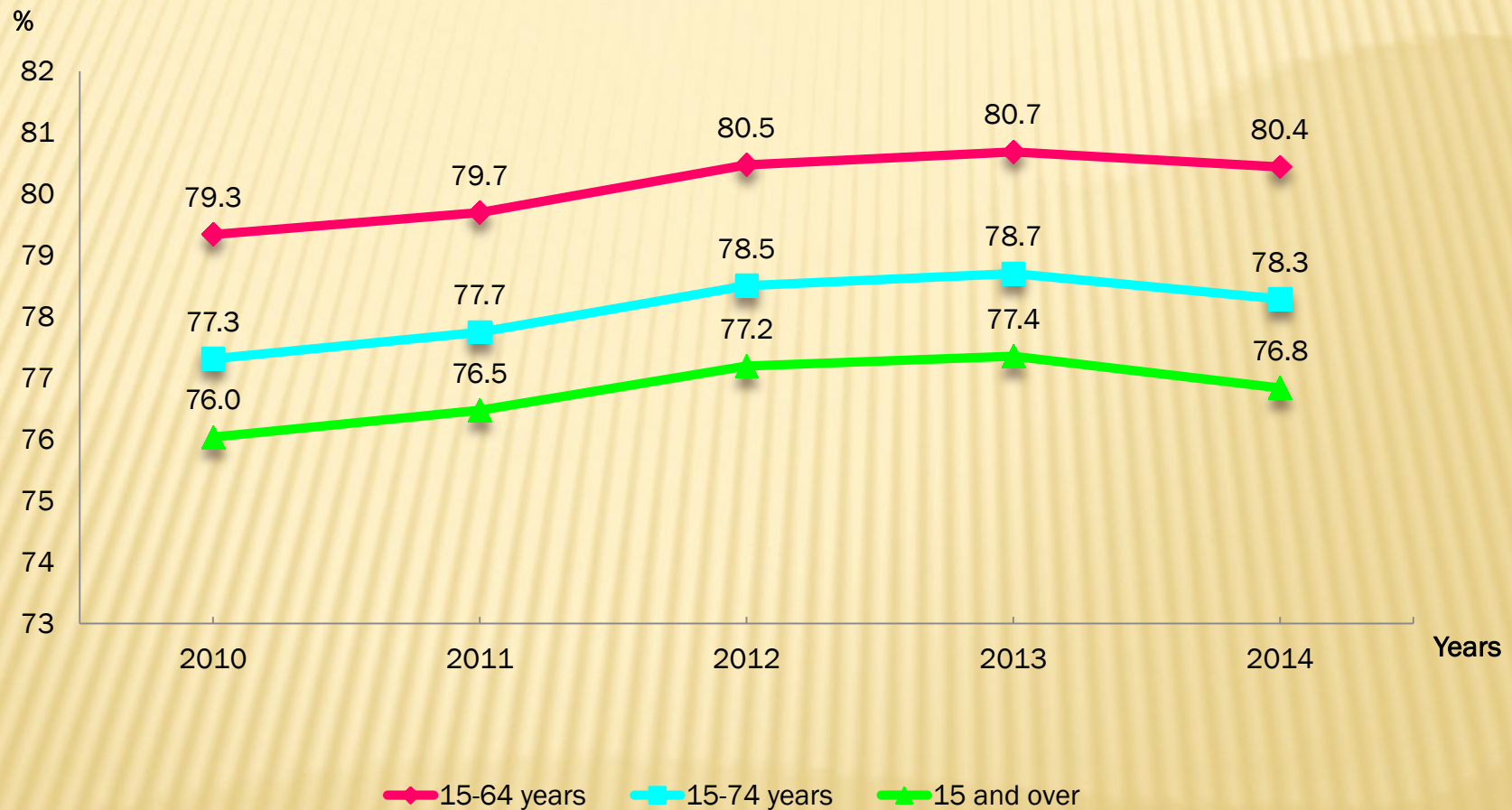
Unemployment, Malaysia 2010-2014



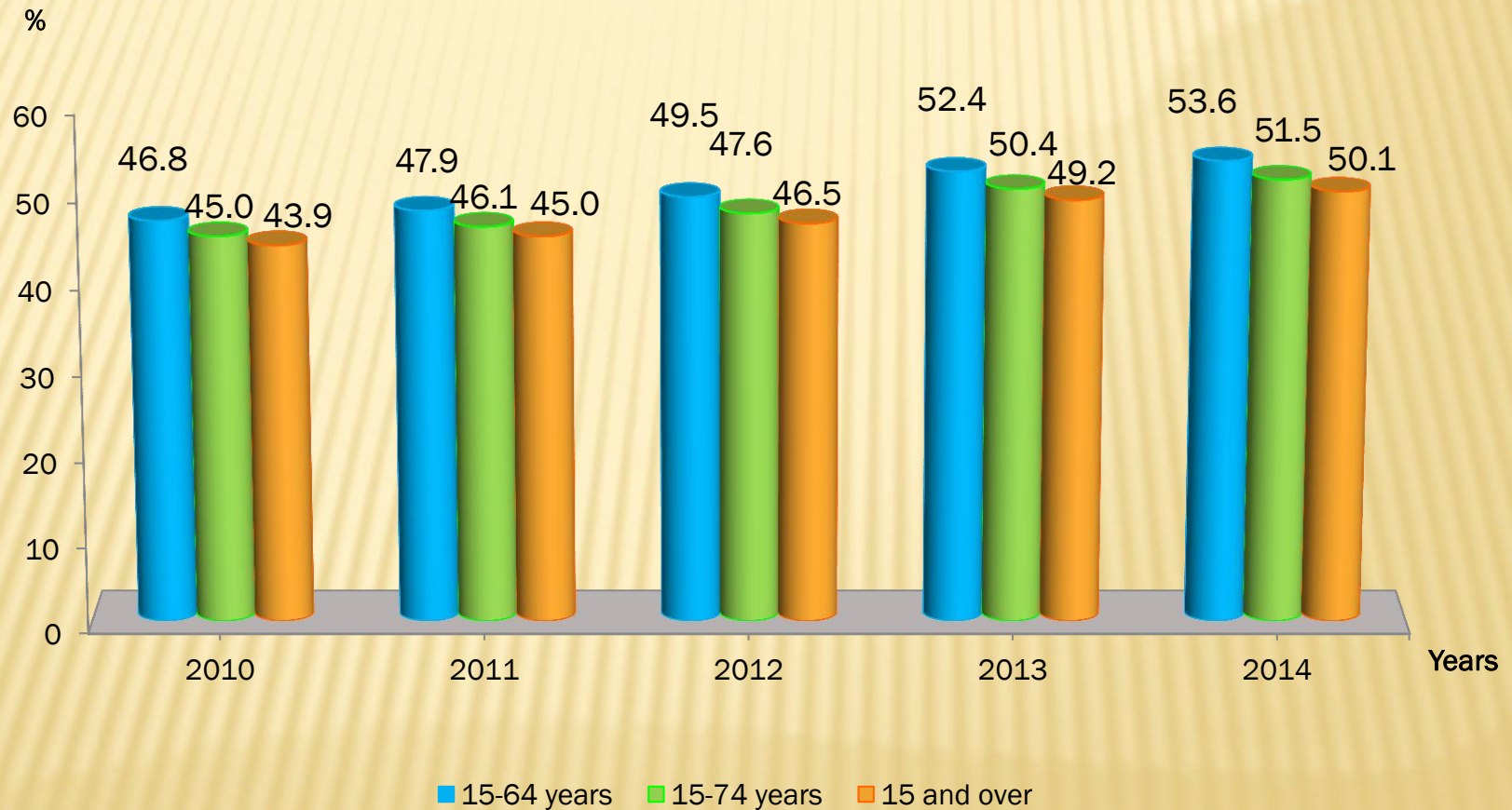
Labour Force Participation Rate(Total), Malaysia, 2010-2014



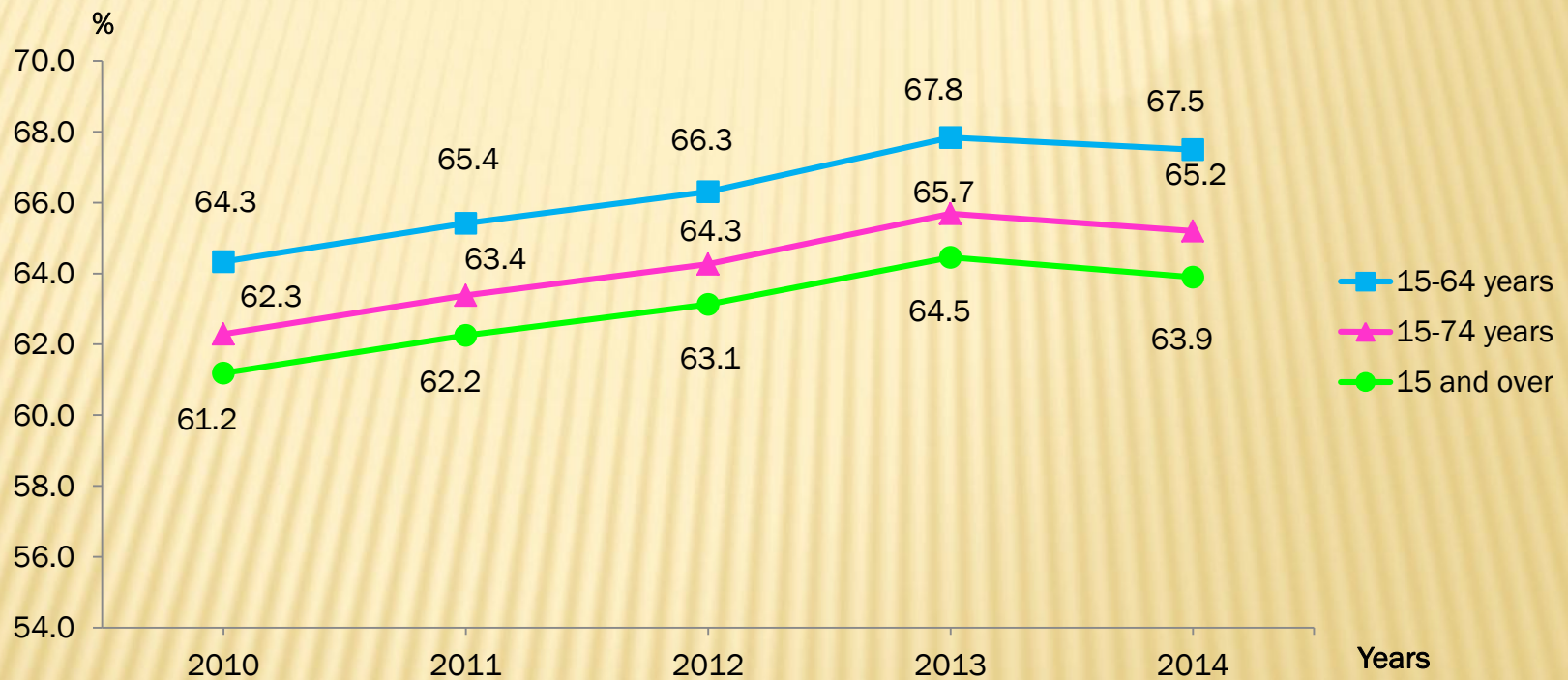
Labour Force Participation Rate (Male), Malaysia, 2010-2014



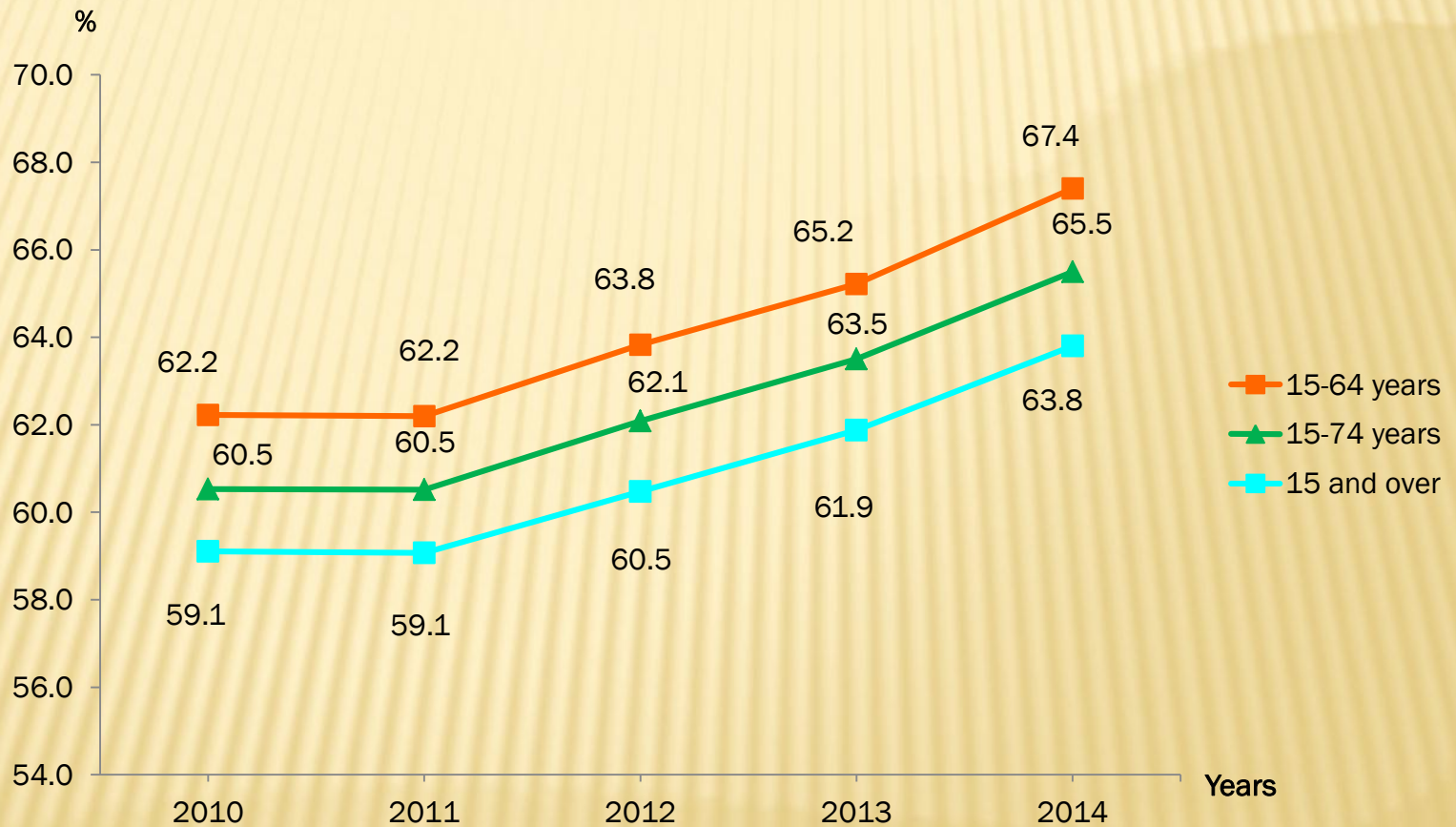
Labour Force Participation Rate(Female), Malaysia, 2010-2014



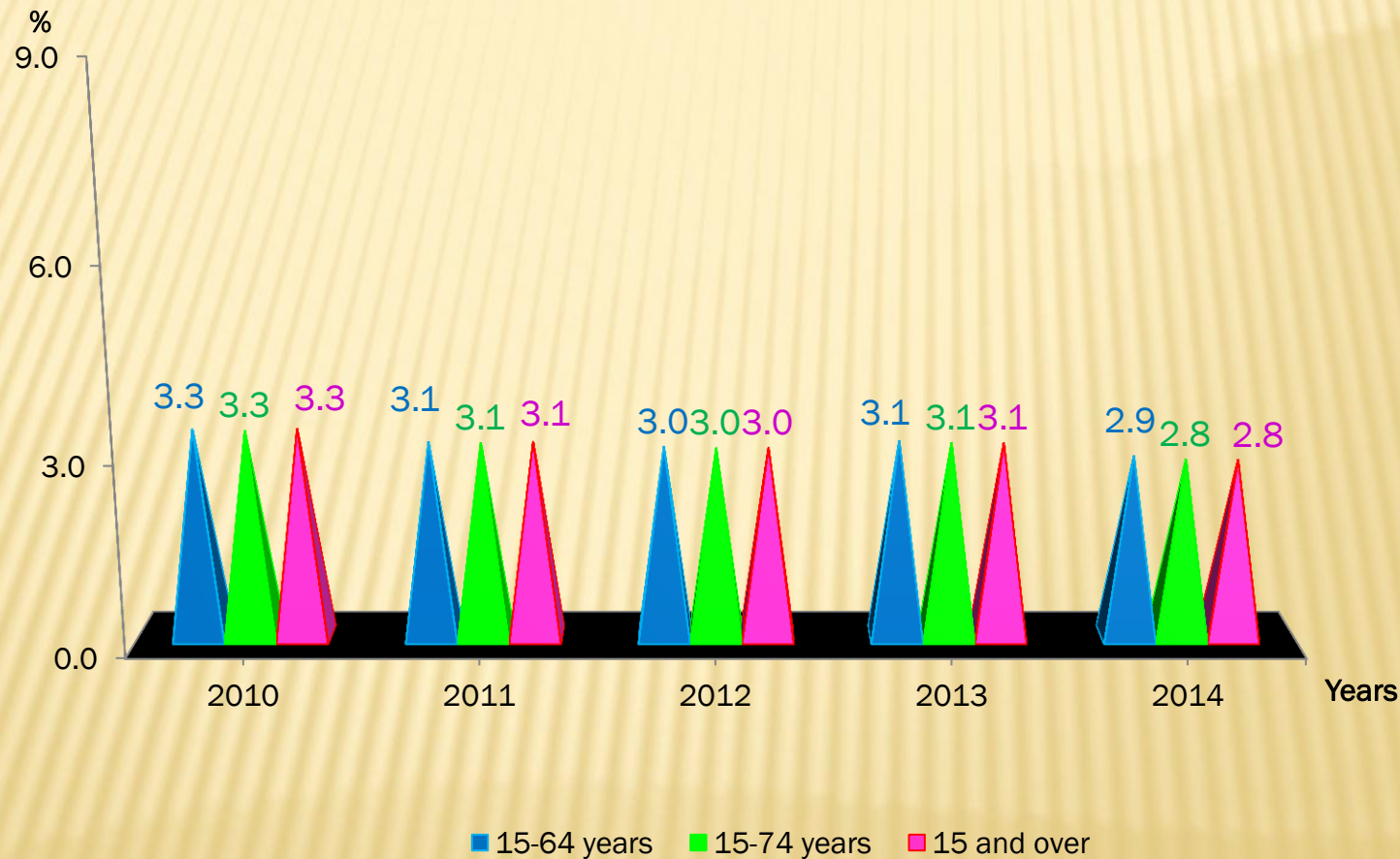
Labour Force Participation Rate(Urban), Malaysia, 2010-2014



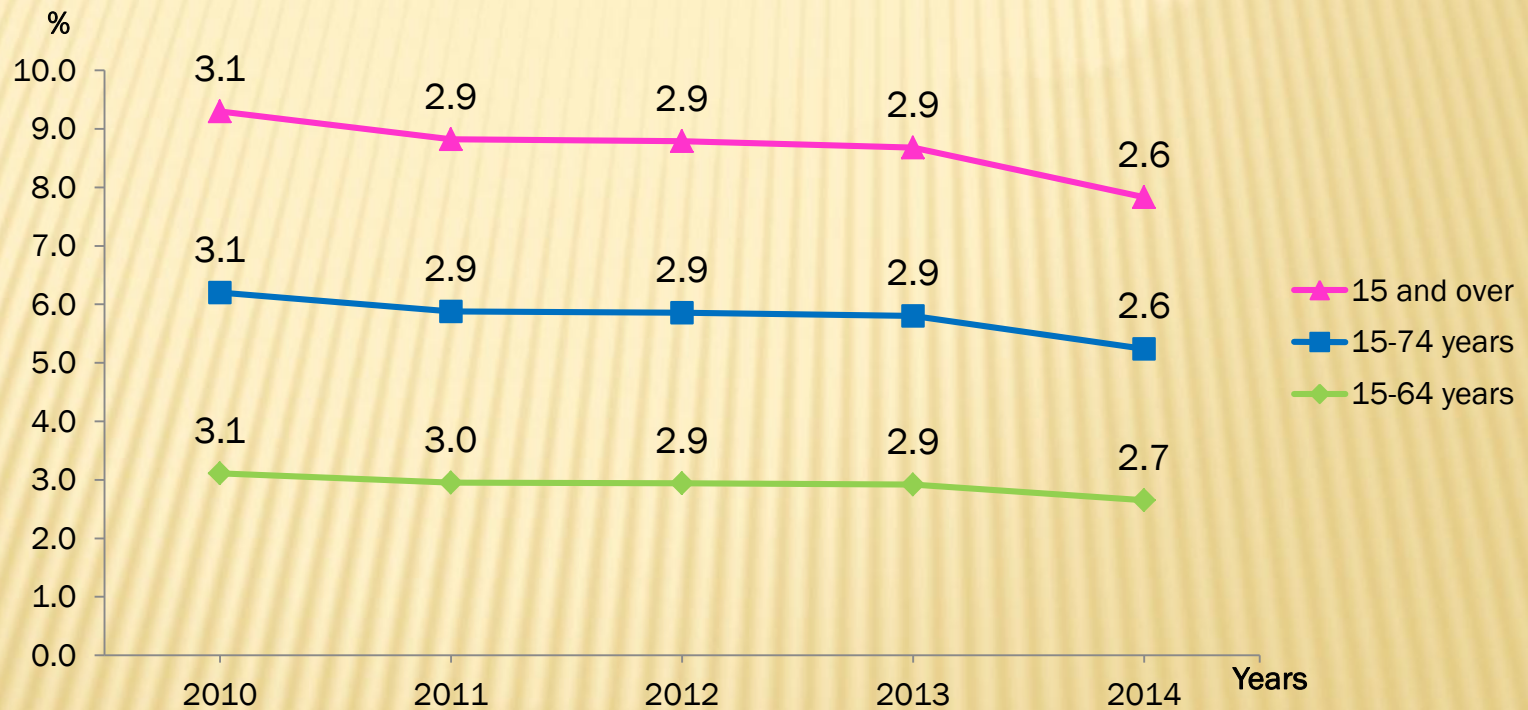
Labour Force Participation Rate(Rural), Malaysia, 2010-2014



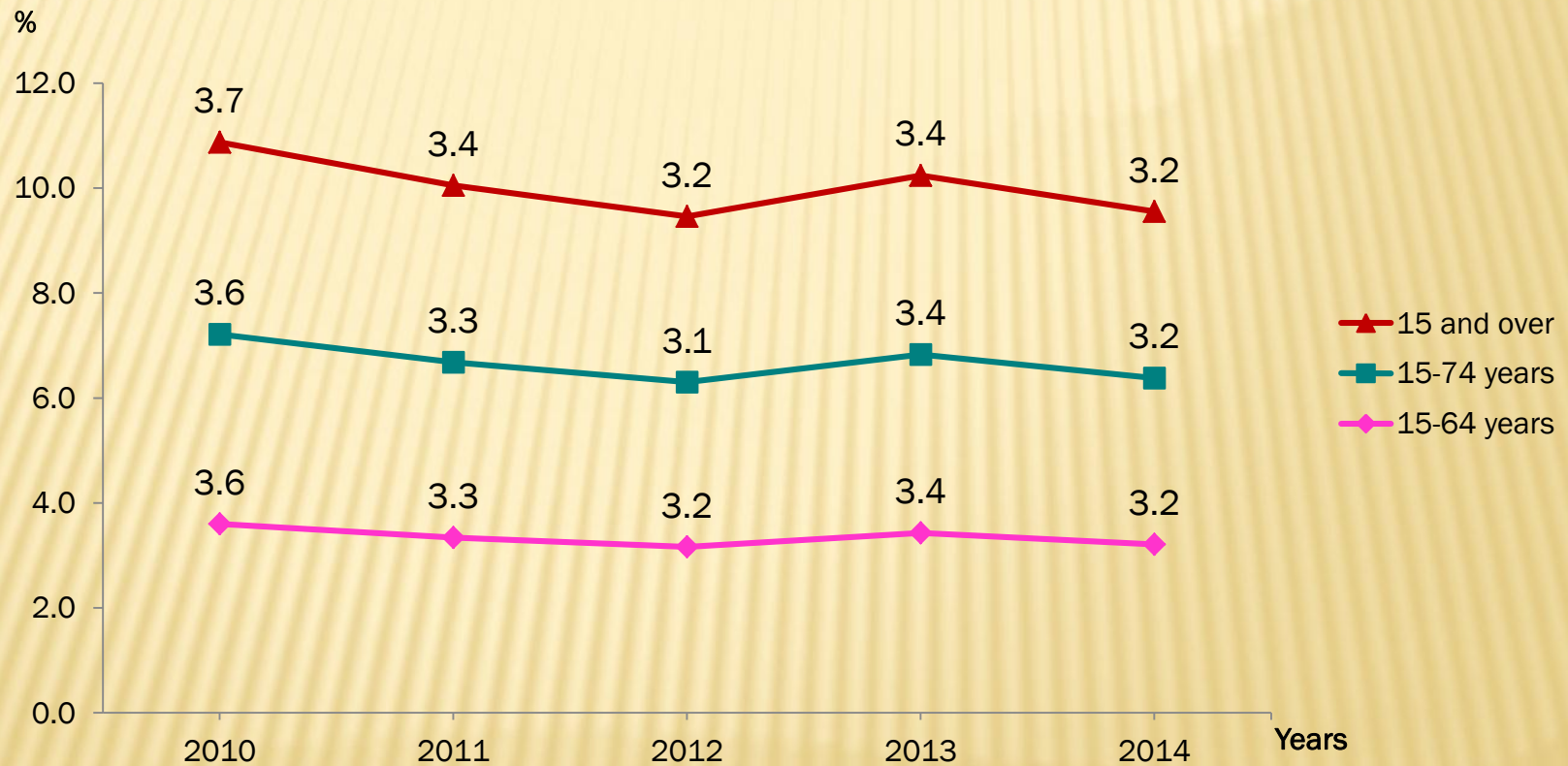
Unemployment Rate(Total), Malaysia, 2010-2014



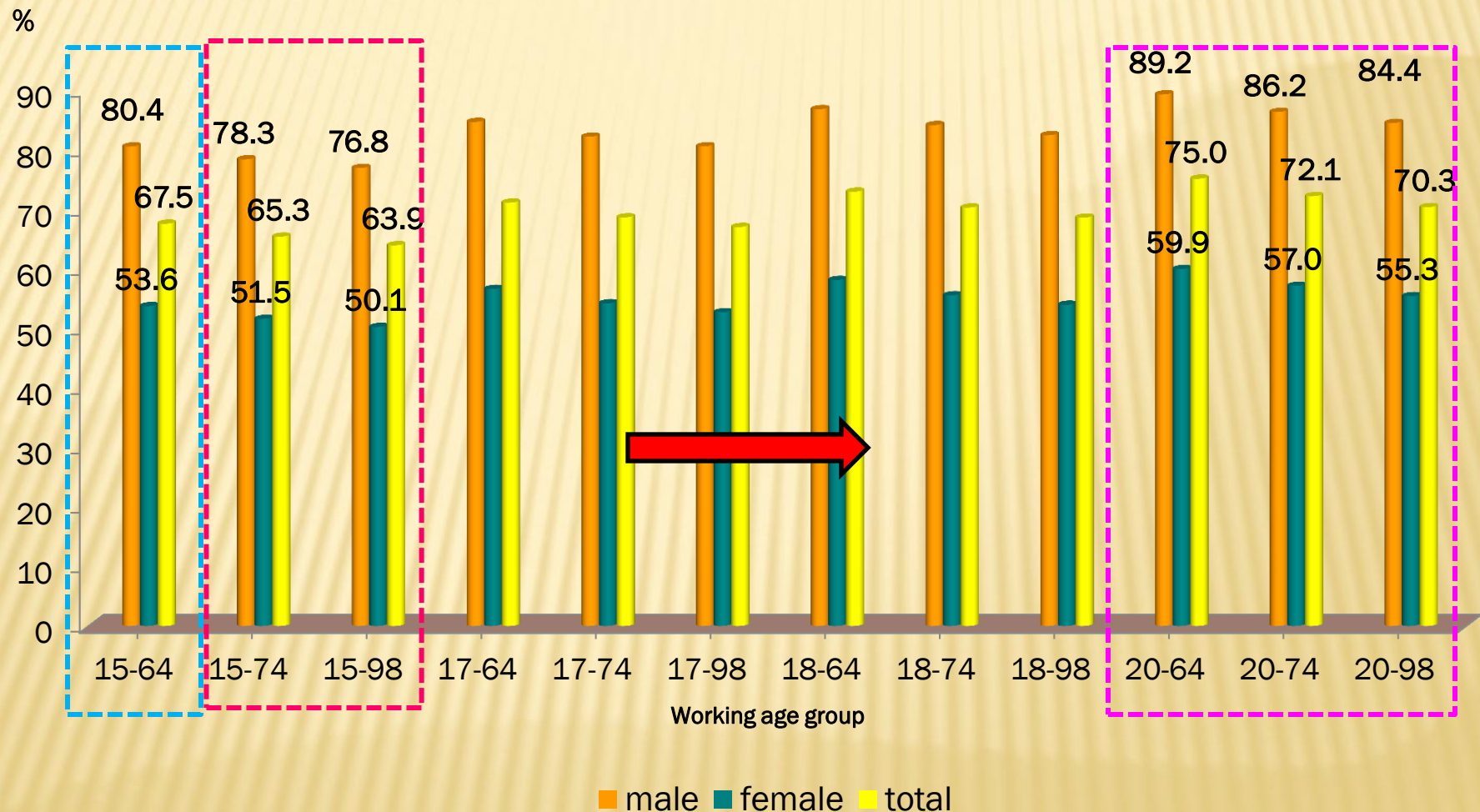
Unemployment Rate(Male), Malaysia, 2010-2014



Unemployment Rate(Female), Malaysia, 2010-2014



4.5 LFPR analysis by different age cohort, Malaysia, 2014



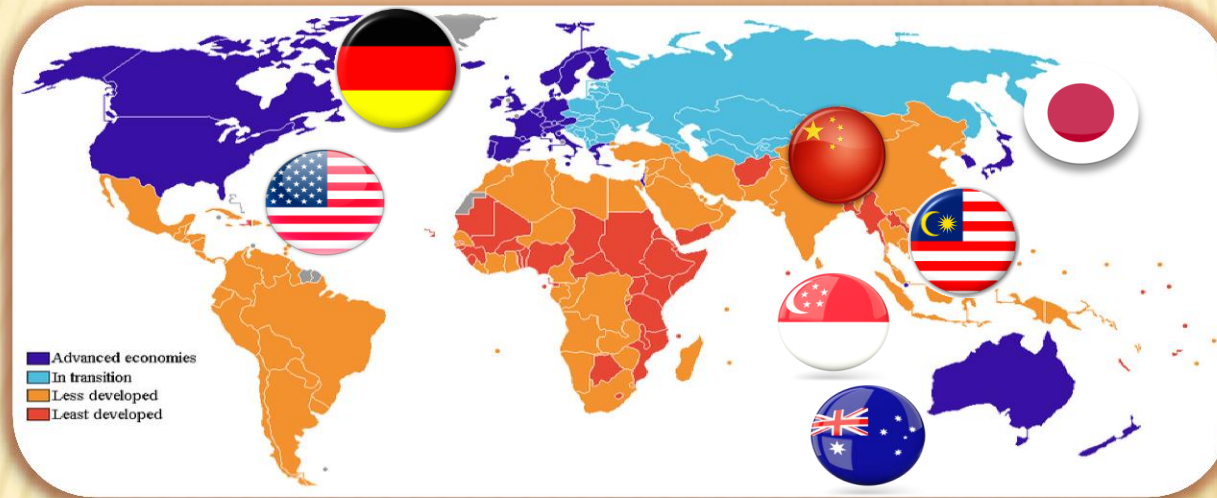
INTERNATIONAL FINDINGS

Why Expanding Working Age?



- ▶ Because of the **decline in fertility rates** and the increase in life expectancy in a growing number of countries, the world population will **age much faster** in the next decades than previously.
- ▶ In Malaysia, **life expectancy** is expected to improve from 72 years (2010) to 74(2020) for male 77 and female 79.
- ▶ These demographic developments have important consequences for labour markets.
- ▶ According to Blau & Goodstein (2010), increase in normal retirement age explained the increase of LFPR among older workers.
- ▶ Maestas & Zissimopoulos (2010) stated that retirees in recent years are more educated.
- ▶ Thus, for some **ageing** countries had increased their working age to older age.
- ▶ Other factors including improvement in **health and technology**.

Main Indicators for Selected Countries



Countries	Working age (years)	LFPR (%)	Unemployment Rate (%)	Retirement Age	Life Expectancy
Japan	15 ++	59.6	3.3	61	84.74
Germany	15++	59.9	4.5	65.3	81
Australia	20-74	65.1	6.2	F: 64.5, M:65	82.15
United States	16 ++	62.6	5.1	66	78.80
Singapore	15 ++	67.0	2.0	62	84.68
Malaysia	15-64	67.5	3.2	60	74.75
China	15-64	61.5	4.04	F: 50, M: 60	75.0



Japan Experience

1953-2015

- The average LFPR of ¹64% (1955 : 74%, 2012 : 58.5%)
- Work force is shrinking²
- Aging population affects the LFPR
 - Ground for concern → May affect economic growth

2006

- Introduction of law
 - urging companies raise the mandatory retirement age from 60 to 65
 - could increase LFPR of persons aged 60-65 by about 10 percentage points.



Germany Experience

1970-2000

- Early retirements reduce the labour supply (Buchholz et al. 2013)
- Implemented new policies to extend working life
- People work longer to design future labour market and pension reforms and avoid rise in social inequalities

2015

- Germany emphasis on retention of older workers through age management and employment protection (David Wright, 2015)
- From the study, it concludes that the greater employment protection for older workers in Germany enabled the employment rate for older workers to increase even during the recent recession



Australia Experience

1978-2015

- The average LFPR of 63.1% (1983:60.15%, 2010:65.8%)

2015

- The 20-74 year age group has been chosen for a number of reasons:
 - Those in the 15-19 year age group are working part time and studying, not yet in the labour force
 - During last decade, life expectancy has increased for all Australians and those aged over 64 years can expect to live longer and more likely to be employed



United States Experience

1950-2015

- The average LFPR of 63% (1954:58.1%, 2000:67.3%)
- 1980, US experiencing increased rates of older workers in their labour market
- US LFPR has dropped and has fallen 3% points since Great Recession due to population ageing
- The decline also largely about demographics → **aging baby boomers are retiring**

2007-2015

- Federal Reserve Bank of St. Louis reported that the drop of LFPR in US is all about demographics and not a sign that the labour market is sicker.
- The productivity could be increased by improving the health of skilled, experienced older people by improvements in biotechnology, nanotechnology and medicine (Manton et. Al, 2007)



Singapore Experience

1970-1996

- 1982→conducted study on elderly citizens including ageing labour force.
- 1983→National Survey of Senior Citizens reveals that increasing number of retirees prefer to work after retirement.
- 1996→"Characteristics of the Aged Labour Force in Singapore" ; In order that older workers can continue to be economically efficient in the workforce, education and re-training have important roles to play.

2003-2014

- The average LFPR of 64% (1970:55.3%, 2014:67%)
- 2014→"Government policies, external factors helped raises LFPR"; the higher employers' CPF contribution for older workers and the raising of the reemployment age from 62 to 65 have encourages older workers to return to the workforce.



China Experience

1979

- Growing number of the ageing in the labour force
- Shrinking number of people entering the labour force
- The one Child Policy is largely responsible for these problem

2009-2012

- China plan to raise the retirement age and this could also boost the shrinking labour force (Zhang & Zhao, 2012, Gruber Wise, 2009)
- 2010 : 110 mil (aged 65 above)
- 2030 : >250 mil (aged 65 above)
- 2050 : 25% of the population will be over 65

Conclusion

CONCLUSION

The extension of working age in Labour Force will decrease the overall LFPR while unemployment rate remains the same. Therefore, the current working age group remain at 15-64 years.

Way Forward



To further explore and analyze the impact of extending the working age in labour force analysis by using the appropriate statistical tests

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Thank You