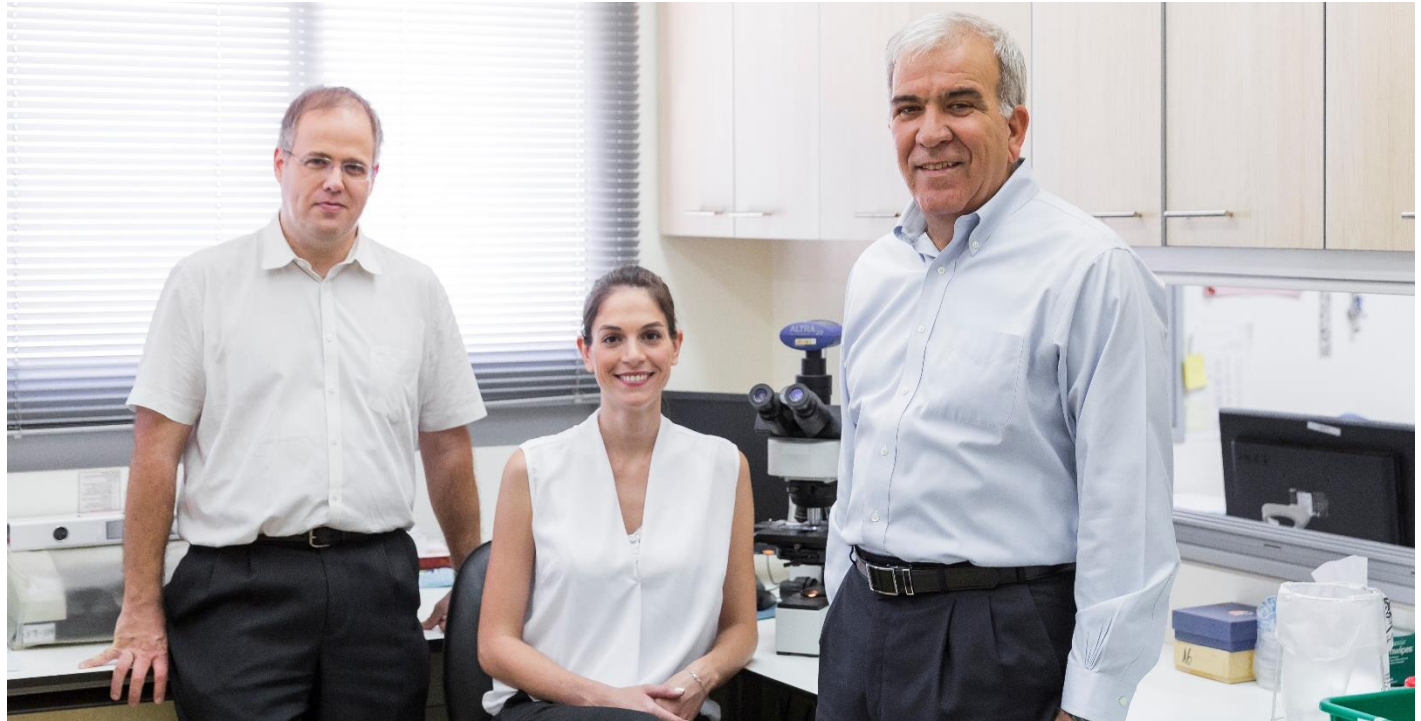


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# *PwC Golden Age Index*

How well are OECD economies adapting to an older workforce?  
July 2015



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# *PwC Golden Age Index*

## Executive summary

# *1*

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# ***PwC Golden Age Index – Executive Summary***

## Headlines



Our **new Golden Age Index** measures how well countries are doing in harnessing the potential of their older workers. The index is a weighted average of seven indicators that reflect the labour market impact of workers aged over 55 in 34 OECD countries, including employment, earnings and training.



**New Zealand performs strongly on the Golden Age Index.** Iceland leads the way on our index, having retained its top position since 2003, followed by New Zealand, and then Sweden, Israel, Norway and Chile also do well.



**Chile and Israel showed the most significant improvement from 2003 to 2013,** driven by their increased employment rate for older workers. Greece and Turkey fell the most in the rankings since 2003, while Eurozone members performed relatively poorly with only 3 in the top half of the rankings.

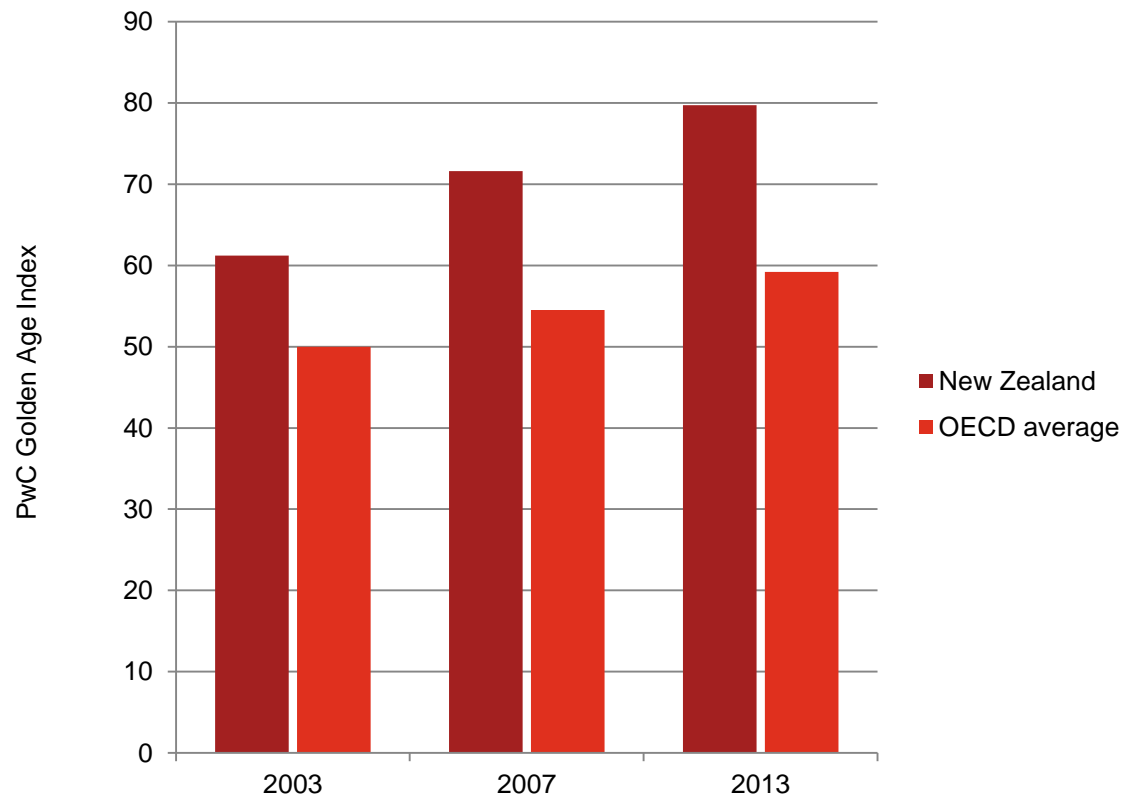


**Government policy measures** to boost index scores could include: offering tax rebates for companies taking on older workers; increasing spending on retraining of older workers including digital skills and apprenticeships; and enforcing age discrimination laws more strictly.



**Businesses** could gain from job redesign and role shifts to enable longer careers and manage the health issues facing older workers. Family crisis leave, career breaks and alumni programmes could all help to utilise the skills of older workers at a time when customer bases are also ageing. Age should be included in diversity audits for companies.

# ***New Zealand has improved its Golden Age Index score over time and remained on second place since 2007 compared to other OECD countries***



## **PwC Golden Age Index**

1. Iceland
2. New Zealand
3. Sweden
- .
15. Australia
- .
19. UK
- .
- .
- .
- .
33. Slovenia
34. Turkey

Sources: PwC analysis, OECD

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# *PwC Golden Age Index*

## Key results

# 2

# About the PwC Golden Age Index

## Labour Market Indicators

The PwC Golden Age Index combines national performance on the following labour market indicators (with relative weights shown in brackets):

- Employment rate 55-64 (40%)
- Employment rate 65-69 (20%)
- Gender gap in employment, 55-64: ratio men/women (10%)
- Incidence of part-time work 55-64 (10%)
- Full time earnings 55-64 relative to 25-54 (10%)
- Average effective exit age from the labour force (5%)
- Participation in training 55-64 (5%)

## Process

These indicators are normalised, weighted and aggregated to generate index scores for each country.

The index scores are on a scale from 0 to 100, with the average OECD value in the base year of 2003 set to 50. However, the average index values for 2007 and 2013 can be higher or lower than this 2003 baseline.

**See Annex for more details of the methodology.**

## Data

All data are taken from the OECD.

We focus mostly on the 55-64 age group as this is the only one where standardised data are available for a broad range of OECD countries.

We do, however, include total employment rates for 65-69 year olds in the index.

The latest data available across the broad range of countries covered are for 2013.

# Figure 1: PwC Golden Age Index – Key results

Rank			Country	Index		
2003	2007	2013		2013	2007	2003
1	1	1	Iceland	93.4	93.7	94.1
9	2	2	New Zealand	79.7	71.6	61.2
3	4	3	Sweden	78.2	70.8	68.1
12	11	4	Israel	77.1	65.7	58.9
2	7	5	Norway	74.5	69.8	69.0
14	13	6	Chile	74.4	65.0	56.2
4	5	7	United States	73.4	70.4	68.0
6	6	8	Korea	72.9	70.3	64.8
5	3	9	Japan	71.8	71.0	67.6
13	8	10	Estonia	71.2	69.0	56.8
7	10	11	Switzerland	71.1	65.7	63.7
10	14	12	Denmark	67.1	62.5	60.4
8	12	13	Mexico	65.1	65.4	63.5
15	15	14	Canada	64.3	58.2	53.7
20	17	15	Australia	63.2	55.3	46.9
17	16	16	Finland	62.0	58.0	49.9
11	9	17	Portugal	60.9	66.3	60.2
25	21	18	Germany	58.7	47.3	37.0
16	19	19	United Kingdom	58.1	53.6	50.3
27	26	20	Netherlands	53.4	42.4	35.3
23	23	21	Czech Republic	53.3	46.1	42.8
28	24	22	Austria	50.9	44.5	33.4
22	20	23	Spain	49.4	48.1	43.1
24	25	24	France	48.9	44.3	42.4
18	18	25	Ireland	47.8	55.1	47.9
29	30	26	Italy	42.7	35.4	32.0
33	29	27	Belgium	42.5	36.5	30.2
34	34	28	Slovak Republic	42.4	31.1	22.4
19	22	29	Greece	42.2	46.7	47.1
26	33	30	Poland	42.1	32.0	35.7
30	28	31	Hungary	41.8	37.6	31.9
31	31	32	Luxembourg	41.0	33.9	31.7
32	27	33	Slovenia	39.2	38.1	30.3
21	32	34	Turkey	36.7	33.0	43.6
Average				59.2	54.5	50.0

New Zealand remains on 2<sup>nd</sup> place since 2007, rising from 9<sup>th</sup> placing in 2003.

Australia has fallen five places from 20<sup>th</sup> to 15<sup>th</sup> between 2003 and 2013.

Sources: PwC analysis, OECD



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## ***PwC Golden Age Index***


Implications for public policy and businesses


3


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## *Implications for public policy where Index is low*


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The PwC Golden Age Index provides a **high level assessment** of OECD countries' labour markets and an overview of their progress over time relative to other countries.
- 

Governments could consider further **reforms of state pension systems** to encourage later retirement. Some countries, including the UK and Sweden, are already phasing in future rises in state pension ages, while in others (including Sweden but not the UK) state pension entitlements are adjusted on the basis of expected life expectancy at the time of retirement. The financial benefits of deferring both state and private pensions should be communicated more widely.
- 

Governments could create greater **financial incentives** for older workers to remain in or re-enter the labour force. For example, as in Sweden, there could be national insurance or payroll tax deductions for employers that take on older workers. There could also be higher income tax allowances for workers over 65, as in Sweden, or 'wage top-ups' for 60-64 year olds who continue to work beyond retirement, as in Japan. Many pensioners may continue to work (at least) part-time in future.
- 

Governments could also introduce new training initiatives to **improve the employability** of older workers. This could include training in digital skills, adult learning loans and some form of retraining-based apprenticeships for older workers of the kind that are commonplace for younger workers in the UK and elsewhere. Job centres should focus on helping with online job search and self-marketing skills.
- 







Governments could remove the barriers to continued employment and **encourage recruitment of older workers** by reviewing current legislation around age discrimination, flexible working and private pensions so they do not incentivise early retirement.
- 

**Boosting employment rates for older women** is also particularly important in some countries, which could include measures to allow flexible working around caring responsibilities (whether for elderly parents or grandchildren).

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## *Implications for businesses*

### *Opportunities and challenges*

-  Our Golden Age index covers a range of labour market indicators that businesses could take into account when **identifying potential business locations**. The index also highlights the **growth potential for businesses** in some countries where employment rates are relatively low for older workers but populations are steadily ageing.
-  Businesses who make better use of the skills and experience of older workers could gain a **competitive advantage** at a time when their customer bases are also ageing. This will, however, require more flexibility in areas such as job design, role shifts and allowance for the **health issues** that older workers may face.
-  Employers may also need to rethink their attitudes to **training and development for older workers**, so that this does not 'stop at 50'. This may also include giving senior staff better training in how to manage older workers, which may involve cultural shifts where there is no longer a strict seniority-based hierarchy.
-  An ageing workforce may also demand **different approaches to reward** in terms of the balance between salaries, pension benefits, holiday entitlements, health insurance and other benefits (e.g. allowing career breaks for long-serving older workers).
-  Changes in **employment legislation** for older workers may have significant business implications in relation to issues such as age discrimination and laws around temporary and flexible working for older workers.
-  Companies would benefit from doing a **comprehensive audit of their age profile** that covers recruitment, retention, training, reward and performance. Age should be treated as an important element in wider diversity audits.

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## ***PwC Golden Age Index***

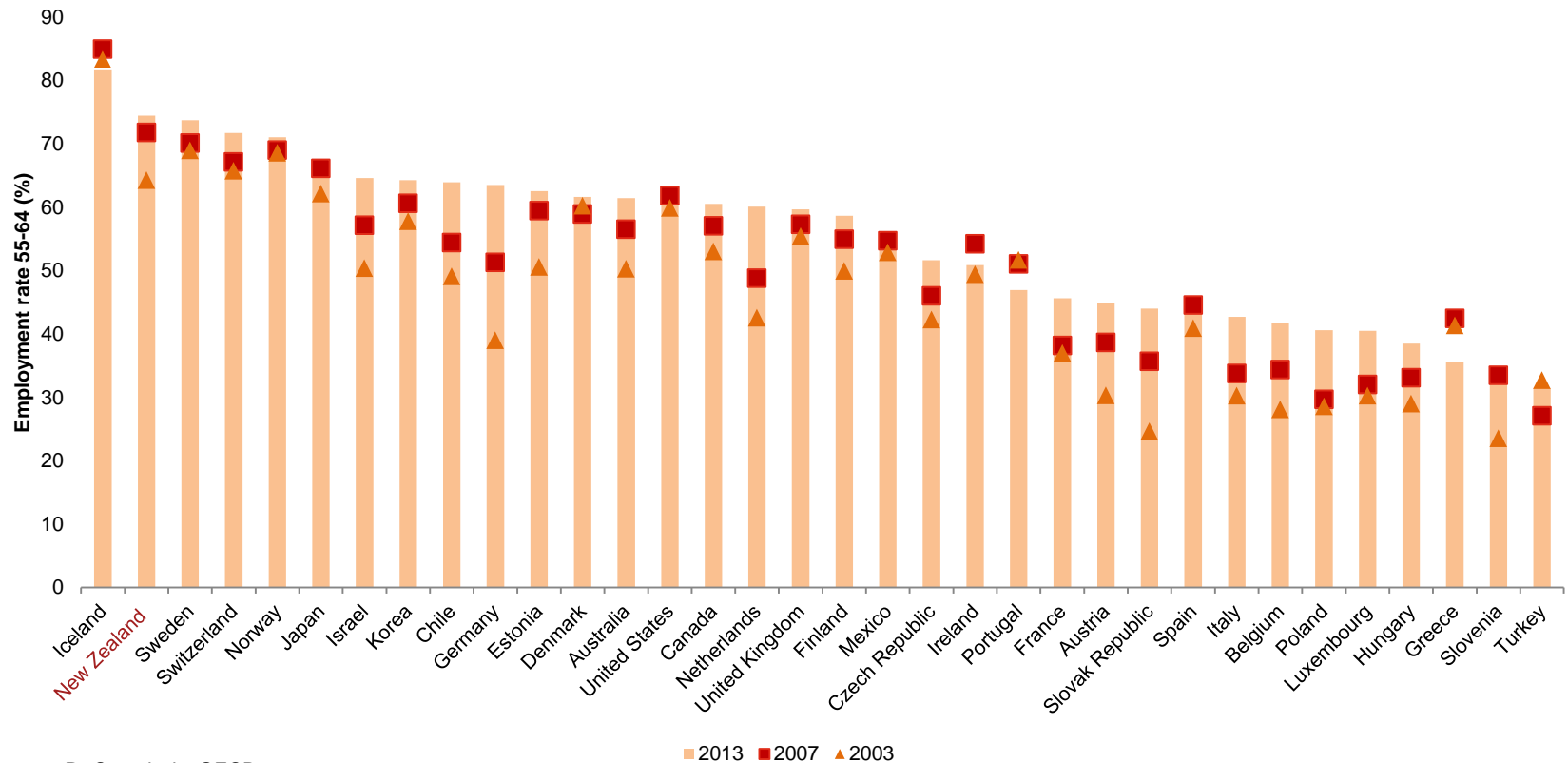
Comparison of individual labour  
market indicators

4

## Figure 2: Employment rate of 55-64 year olds

New Zealand ranks 2<sup>nd</sup> with the second highest employment rates of 55-64 year olds in the 34 OECD countries in 2013. This has increased since 2003.

Employment rate 55-64 (%)

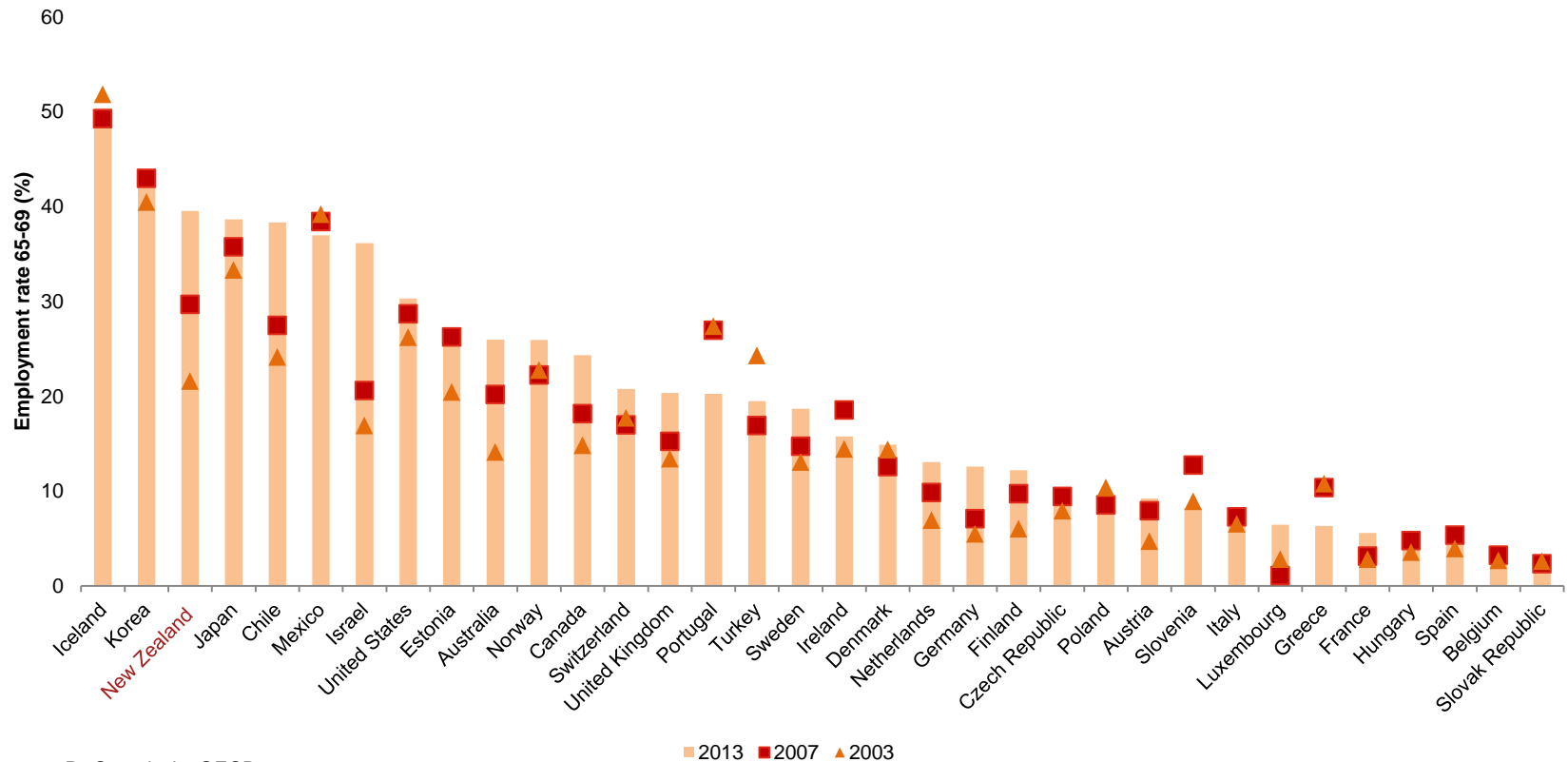


Sources: PwC analysis, OECD

### Figure 3: Employment rate of 65-69 year olds

The employment rate of 65-69 year olds varies significantly across the OECD countries from 50% in Iceland to only 3% in Slovak Republic. New Zealand is among the top performers with particularly rapid rises of employment rates (65-69) from 2003 to 2013.

Employment rate 65-69 (%)

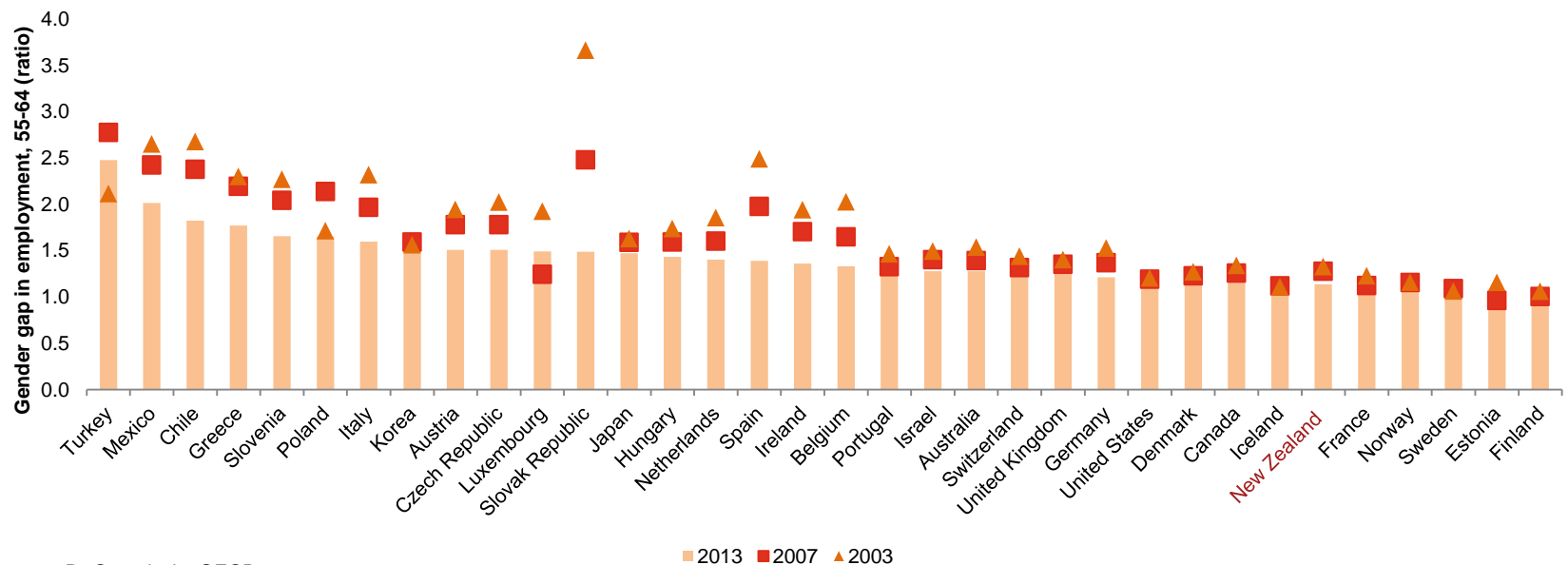


Sources: PwC analysis, OECD

## Figure 4: Gender gap in employment for 55-64 year olds (ratio men/women)

New Zealand's gender gap in employment was relatively similar in 2003 and 2007, however it has decreased during 2007 - 2013 which shows the gap has reduced.

Gender gap in employment, 55-64 (ratio)



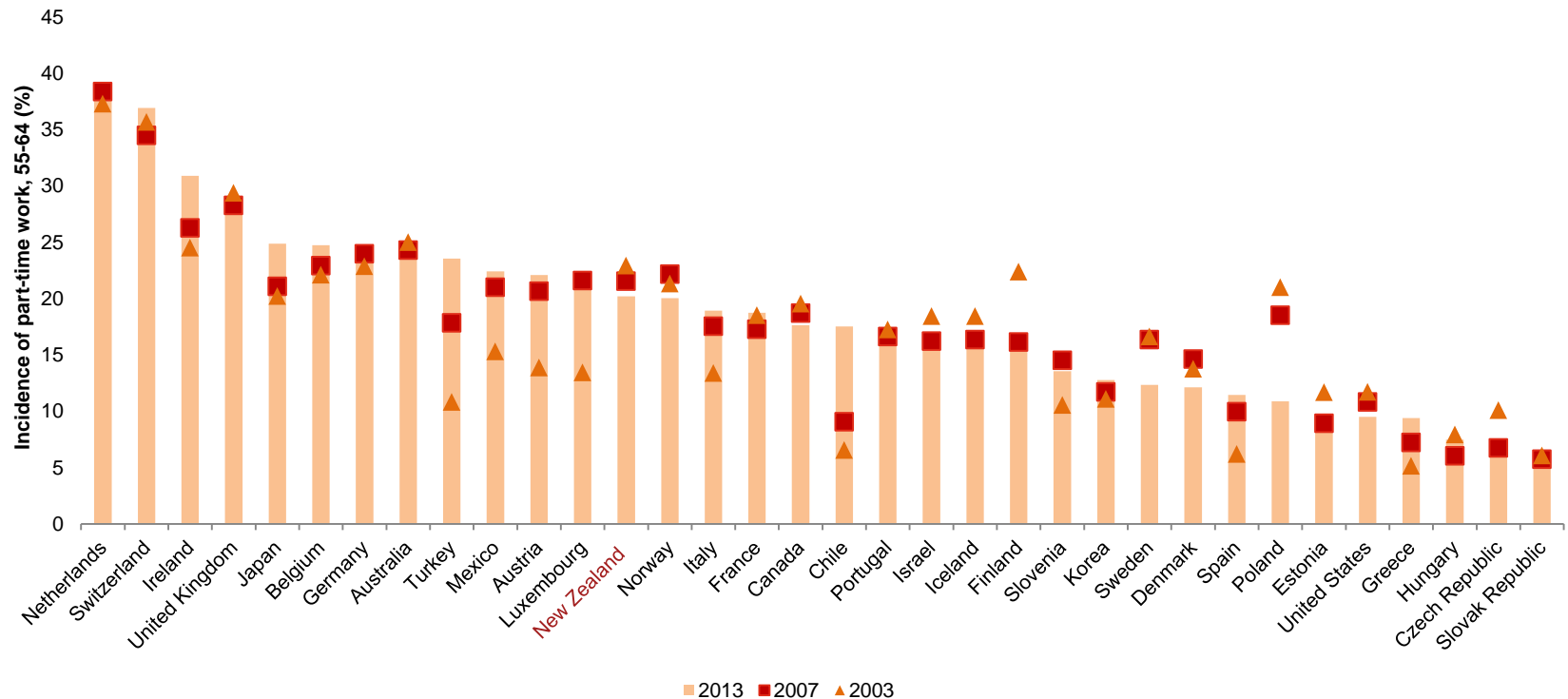
Sources: PwC analysis, OECD

The gender gap in employment is shown as a ratio of male employment 55-64/women employment 55-64, which enters negatively in the Golden Age Index. A higher gender gap ratio implies that the difference between male and female employment is larger so the employment rates are more unequal across genders for this age group. A ratio of 1 would imply equality of gender employment, i.e. that male and female 55-64 employment levels are equal. Therefore, ratio will always be positive.

## Figure 5: Incidence of part-time work for 55-64 year olds

New Zealand's incidence of part time work has slightly decreased from 2003 to 2013, implying that less 55-64 year olds are partaking in part time work. This may be correlated with the increase in full time employment levels of 55-64 year olds but not necessarily casual since other factors may affect this. Some older workers may actually want part-time work as it suits their lifestyle better.

### Incidence of part-time work, 55-64 (%)



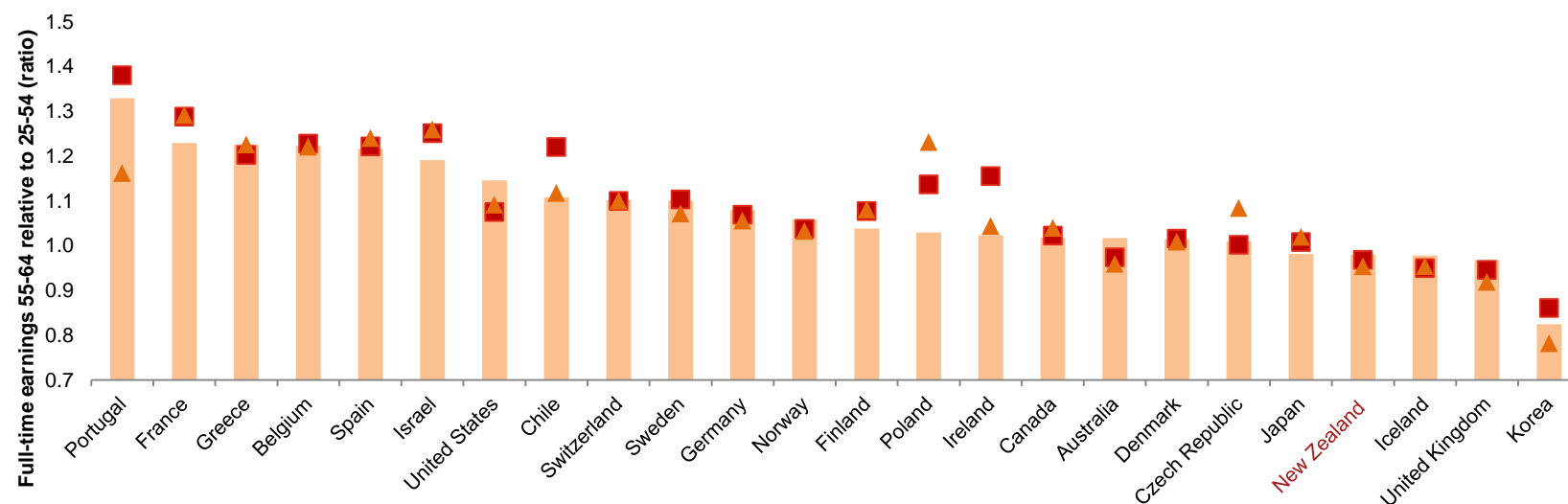
Sources: PwC analysis, OECD



## Figure 6: Full-time earnings of 55-64 year olds relative to 25-54 year olds

Relative full-time earnings across age groups has remained broadly constant since 2003 in most countries. New Zealand has one of the lower ratios here.

Full-time earnings 55-64 relative to 25-54 (ratio)



Sources: PwC analysis, OECD

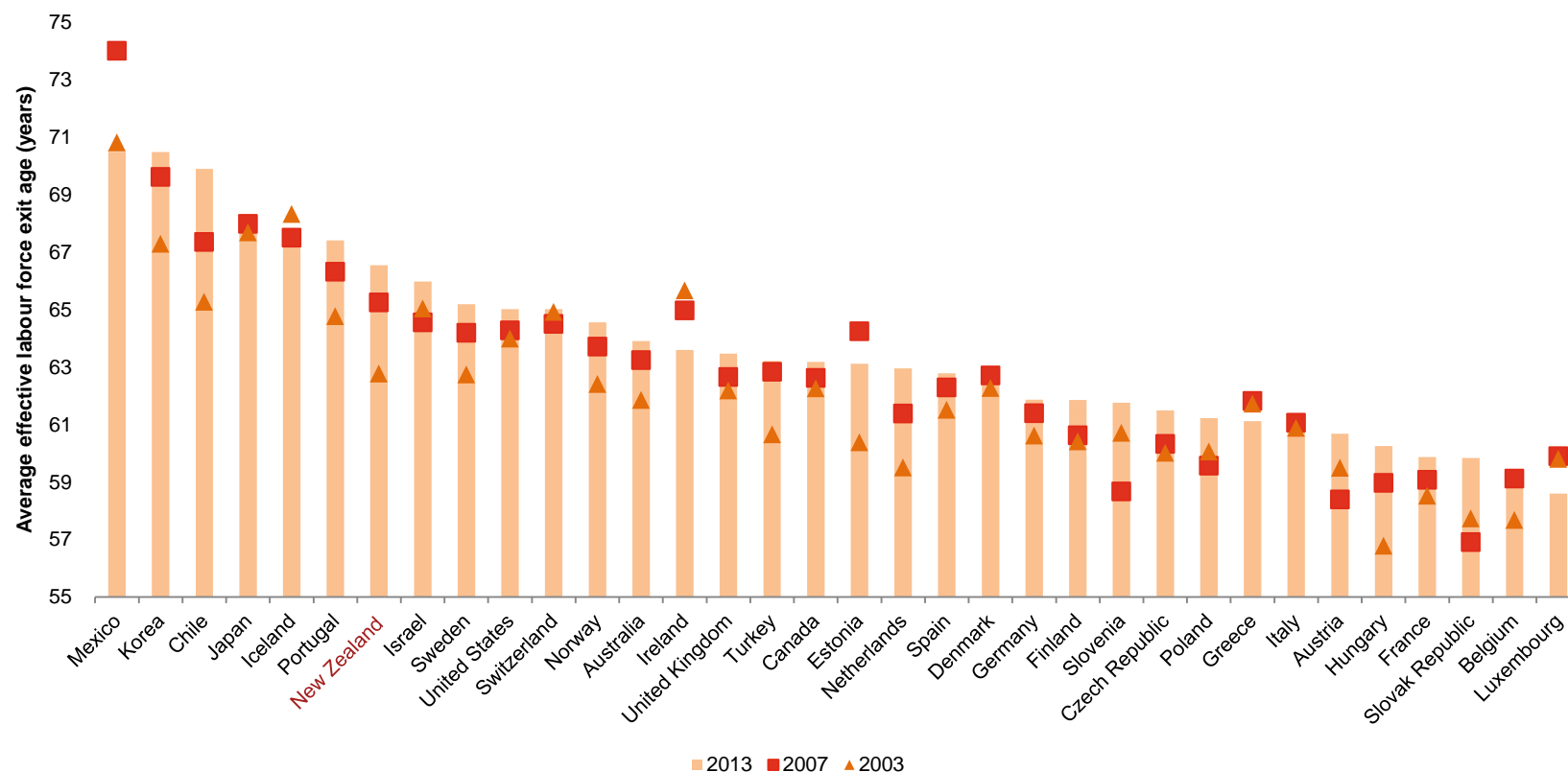
2013 2007 2003

The full time earnings ratio represents the equality in earnings in full time work between 55-64 year olds and 25-54 year olds. The higher the ratio, the more unequal earnings are between these age groups. Positive ratios imply that older workers earn more relative to younger workers. Earnings also imply labour productivity so higher positive ratios would mean that older workers have higher earnings, which could imply higher productivity among other factors affecting earnings.

## Figure 7: Average effective labour force exit age

New Zealand ranks 7th, showing that we have the 7th highest average labour force exit age in 2013. This has increased from 2003 to 2013.

Average effective labour force exit age (years)



Sources: PwC analysis, OECD

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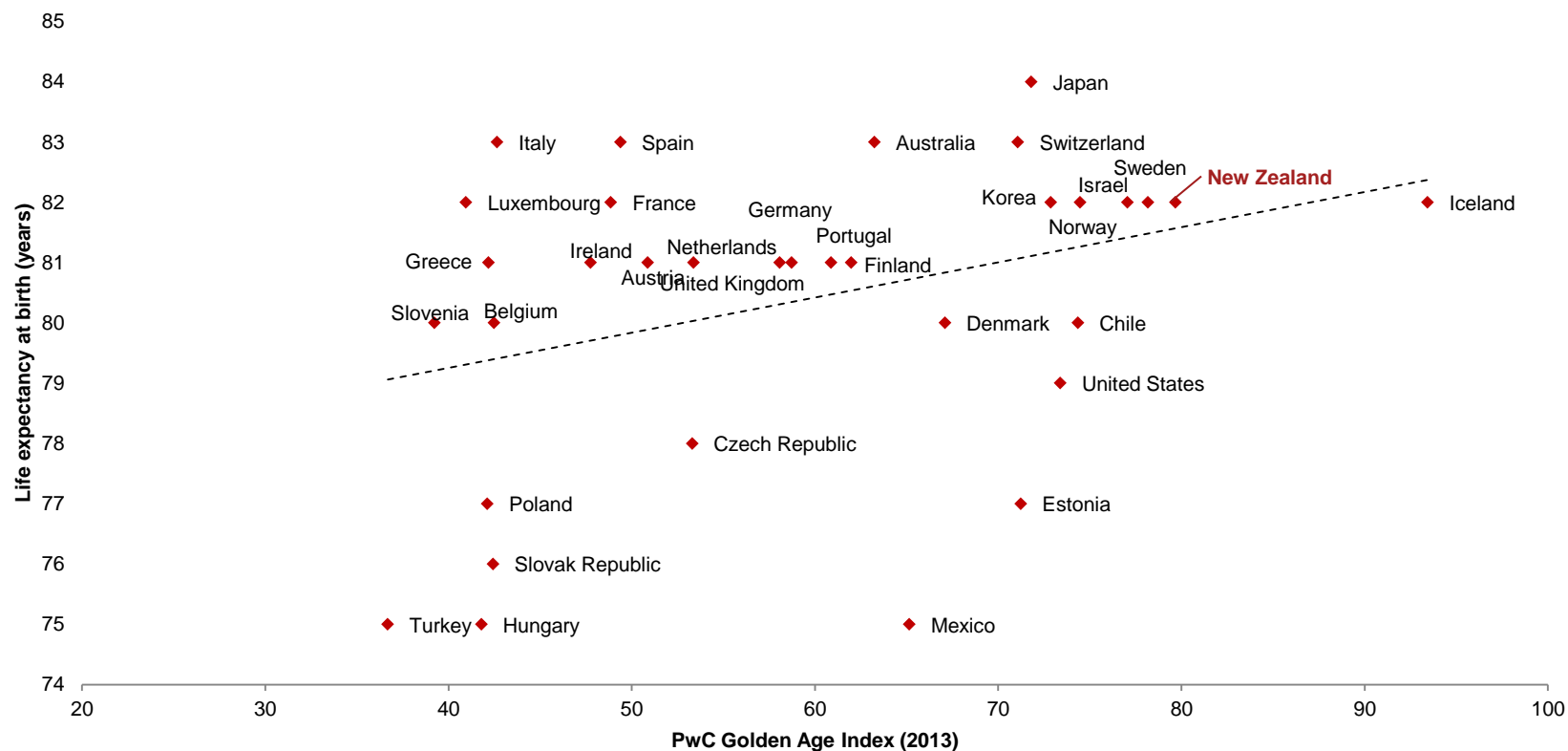
# *PwC Golden Age Index*

## Comparison with other measures

5

***There is a positive correlation between the Golden Age Index and life expectancy, implying that countries where people live for longer also tend to have longer working lives***

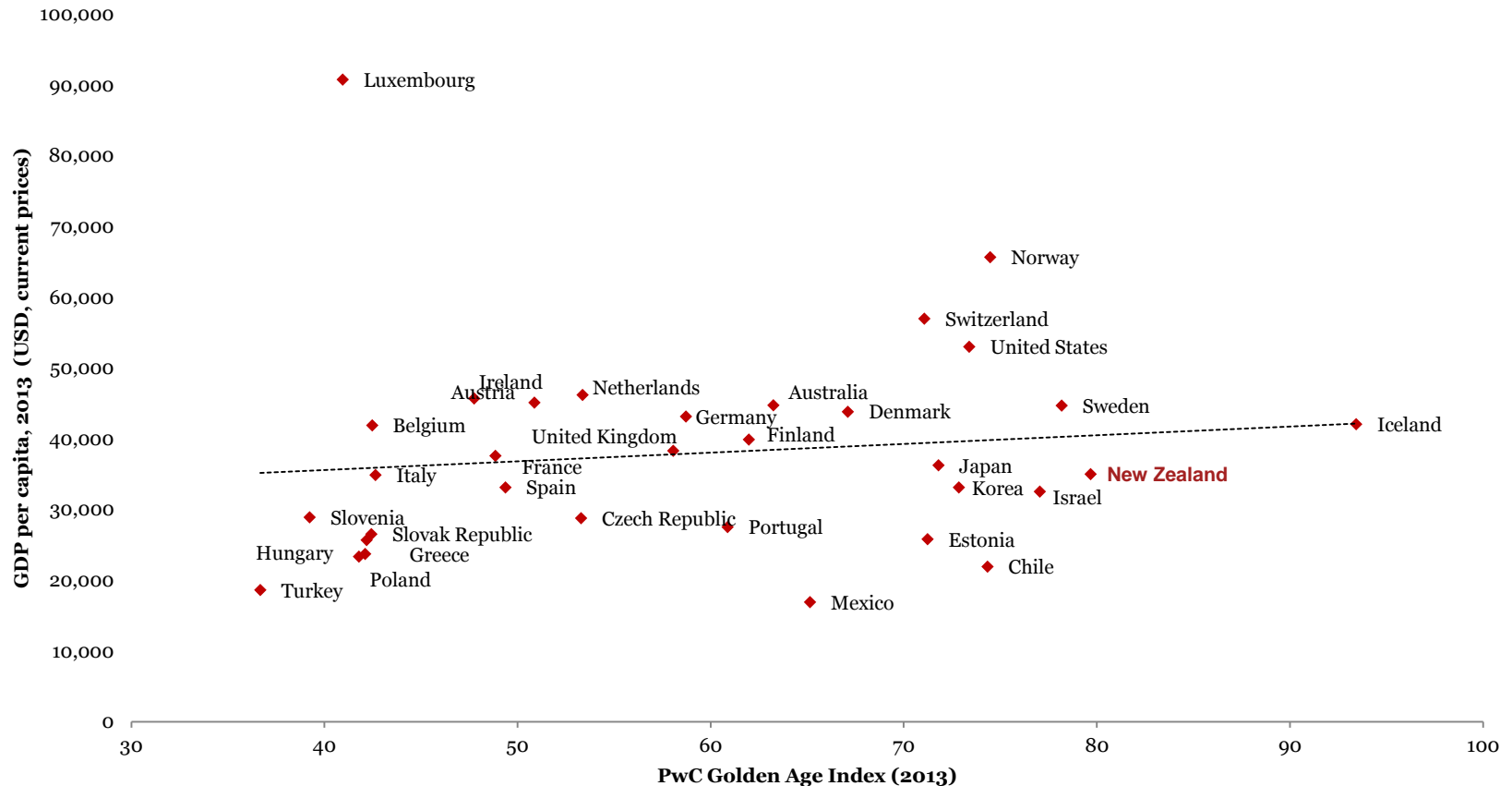
**Figure 9: PwC Golden Age Index and life expectancy**



Sources: PwC analysis, OECD, World Health Organisation

# *The Golden Age Index is positively correlated with GDP per capita within developed economies, but the relationship is relatively weak in statistical terms*

**Figure 11: PwC Golden Age Index and GDP per capita**



Sources: PwC analysis, OECD

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# ***PwC Golden Age Index***

## **Annex: Methodology**

# ***PwC Golden Age Index Methodology***

## **Variables included in the index**

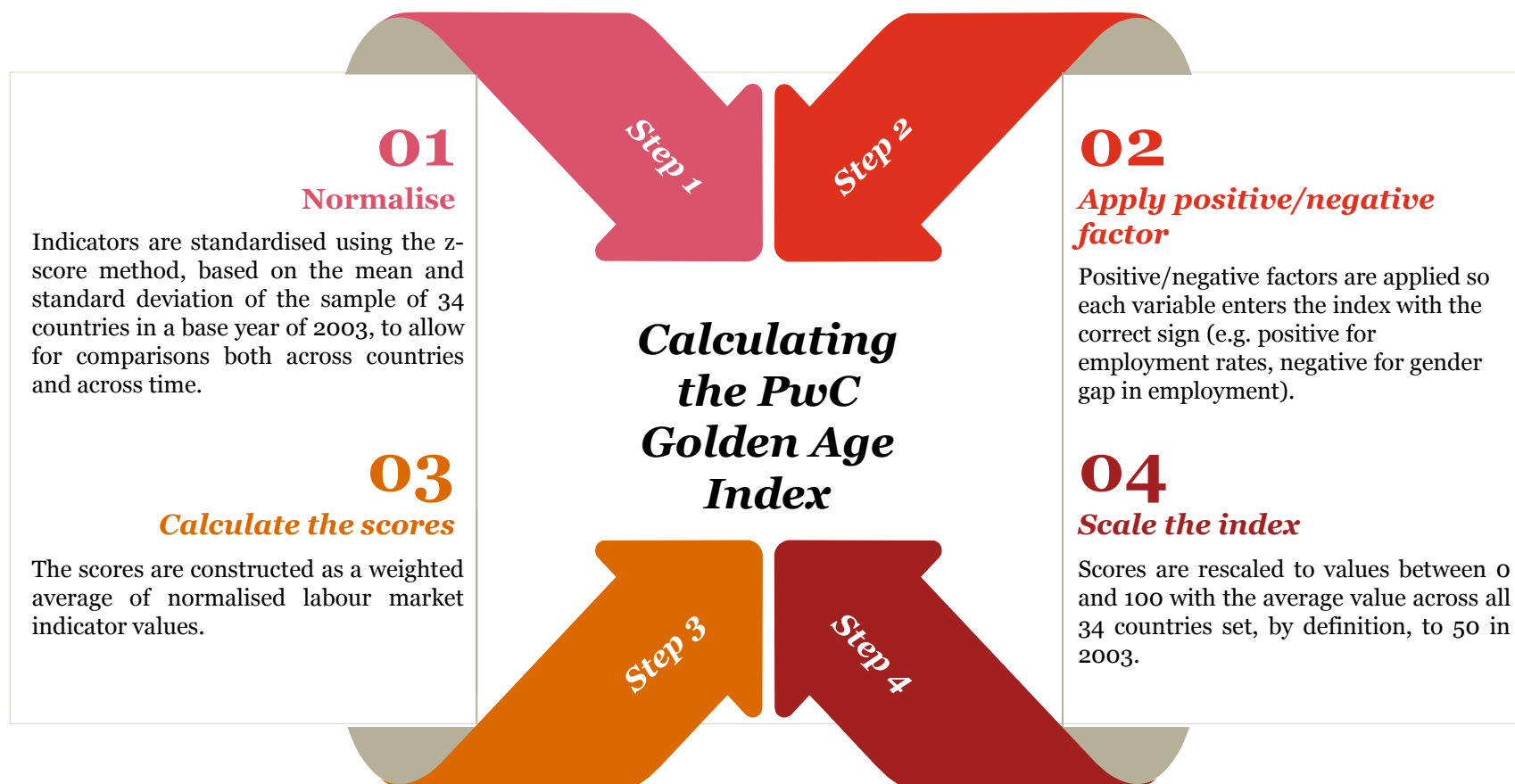
<b>Indicator</b>	<b>Weight</b>	<b>Factor*</b>	<b>Rationale</b>
Employment rate, 55-64 (% of the age group)	40%	1	The proportion of 55-64 year old workers in employment is the most important measure in our index and so has the highest weight of 40%.
Employment rate, 65-69 (% of the age group)	20%	1	The proportion of 65-69 year old workers has half the weighting of that of 55-64 year old workers assuming the 65-69 age group is roughly half as large in terms of population.
Gender gap in employment, 55-64 (ratio men/women)	10%	-1	Gender equality in employment is included here as lower employment rates among older women tend to be a particular feature of many OECD countries.
Incidence of part-time work, 55-64 (% of total employment)	10%	-1	Part-time employment may adversely affect earnings, pensions and job security, but this is given a lower weight in the index since some older workers may prefer part-time work.
Full-time earnings, 55-64 relative to 25-54 (ratio)	10%	1	Earnings equality would represent equal pay across age groups and could also be an indicator of the relative labour productivity of older workers.
Average effective labour force exit age (years)	5%	1	This measures the length of time a worker stays in the labour force before they become economically inactive. However, there is some overlap with other variables such as employment rates so we do not give it too high a weight in the index.
Participation in training of 55-64 age group (% of all employed in the age group)	5%	1	This is an indication of how far older workers keep learning beyond age 55, which will be important in keeping them employable and renewing their skills. But data are lacking for several countries, so we do not give this too high a weight in the index.

\*Indicates whether higher values of an indicator are positively or negatively scored in the index

# ***PwC Golden Age Index Methodology***

## How does it work?

We used a standard method to construct this index, similar to the one used in the PwC Women in Work and ESCAPE indices, and by many other researchers constructing such indices.





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## ***We also tested the robustness of our findings to using some alternative variables and weights***

We considered including unemployment rates as a variable either in absolute terms for the 55-64 age group, or relative to the rate for all age groups. However, this made the index more sensitive to short-term cyclical trends whereas our focus here was more on longer-term structural issues, so we decided not to include unemployment rates in the final index. This would not, however, greatly change the UK's relative ranking.

We also considered alternative weighting schemes, but these did not alter our key results such as:

- Scandinavian countries tending to come at the top of the index together with others such as New Zealand, Israel and Chile.

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