

PwC Golden Age Index

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



Australian Edition

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PwC Golden Age Index
Summary and overview

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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.



Australia has improved outcomes under three consecutive Golden Age Indexes, from 20th in 2003 to 17th in 2007 and now to 15th in 2013. While Australia is in the middle of the pack, New Zealand continues to excel; New Zealand moved from 9th in 2003 to 2nd in both 2007 and 2013.



If Australia's employment rate for workers aged 55-69 grew to be equal to that of New Zealand by 2050, then Australian GDP would be around 4.7% higher in 2050, equivalent to **around \$198 billion** at today's GDP values. This would also help to meet the fiscal costs of an ageing population.



Scandinavian countries perform strongly on the Golden Age Index, similar to the results of the PwC Women in Work index. Iceland leads the way on our index, having retained its top position since 2003, followed by New Zealand and 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. Training and development should not stop at 50. 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.

PwC Golden Age Index
Executive summary

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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

Australia rises from 20th to 15th between 2003 and 2013 but remains 13 places behind NZ





NZ moves to second place behind Iceland

Sources: PwC analysis, OECD

PwC Golden Age Index
Potential boost to Australian GDP

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More older workers should add to total employment and output, rather than just displacing younger workers

-  From the perspective of an individual company at a point in time, it might seem that more older workers could just block progression and new job opportunities for younger workers.
-  However, from a longer term macroeconomic perspective, as we are adopting in this study, this should not be the case. This is because people working for longer will have more income to spend, and this extra spending will feed through into increased demand for labour to produce the additional goods and services that these older workers want to buy.
-  The total number of jobs in the economy should therefore ultimately rise to match the increased supply of labour, with a corresponding rise in output. This is the basis for our calculations of the potential boost to Australian GDP from raising older worker employment rates to New Zealand levels by 2050.
-  This process will be eased, however, if companies can move away from linear seniority-based career paths. This would allow older workers, where appropriate later in their careers, to shift down into part-time or advisory roles, avoiding any possible blockage to the career progression of younger workers.

Potential 4.7% increase in Australian GDP by increasing older worker employment rates to New Zealand levels by 2050






Economic output – or the size of the national ‘pie’ – has three basic drivers:

- **Population:** the number of people there are in the economy
- **Participation:** the percentage of those people who choose to work
- **Productivity:** the value generated by each of the workers

Using PwC’s Integrated Forecasting Model (IFM), which is built of the Commonwealth Treasury’s Intergenerational Report (IGR) shows that progressively (and conservatively) increasing participation among workers aged 55 and above to New Zealand levels by 2050 will:

- generate an additional \$449bn in nominal GDP (equivalent to inflation-adjusted \$198bn of GDP), or 4.7% of GDP in 2050. This translates to an annual average increase of \$24bn in nominal GDP (equivalent to inflation adjusted \$10bn in GDP).
- improve the Commonwealth and state/territory budget position (i.e. the combined operating balance) by 1.7% of GDP in 2050
- reduce net debt by 11% GDP in 2050

Possible lessons from Sweden to promote employment among older workers







-  Sweden has one of the OECD's highest employment rates for older workers, particularly amongst women.
-  This reflects a series of policy measures since the early 1990s to counteract early retirement and support older workers.
-  A new state pension regime introduced in the 1990s provided incentives to keep working beyond 65, supported by tax incentives for both individuals and employers. An evaluation by Laun (2012) estimated that this boosted employment rates for over-65s by 1.5 percentage points.
-  Eligibility criteria for disability pensions have also been tightened significantly since the 1990s, reducing a major incentive for early retirement.
-  Policies to keep women in the workforce after maternity (e.g. generous state-funded childcare and parental leave) also seem to be reflected in longer working lives for women. This may also be influenced by evolving social norms.

PwC Golden Age Index

Implications for public policy and
businesses







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Implications for public policy

-  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. This analysis helps` to identify countries with high scores (e.g. Sweden as discussed above) where there may be useful policies in place that other countries, such as Australia, could consider to boost employment of older workers.
-  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 Australia) 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 (as exists for NICs in the UK for younger 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 superannuation rules 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).

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.

PwC Golden Age Index

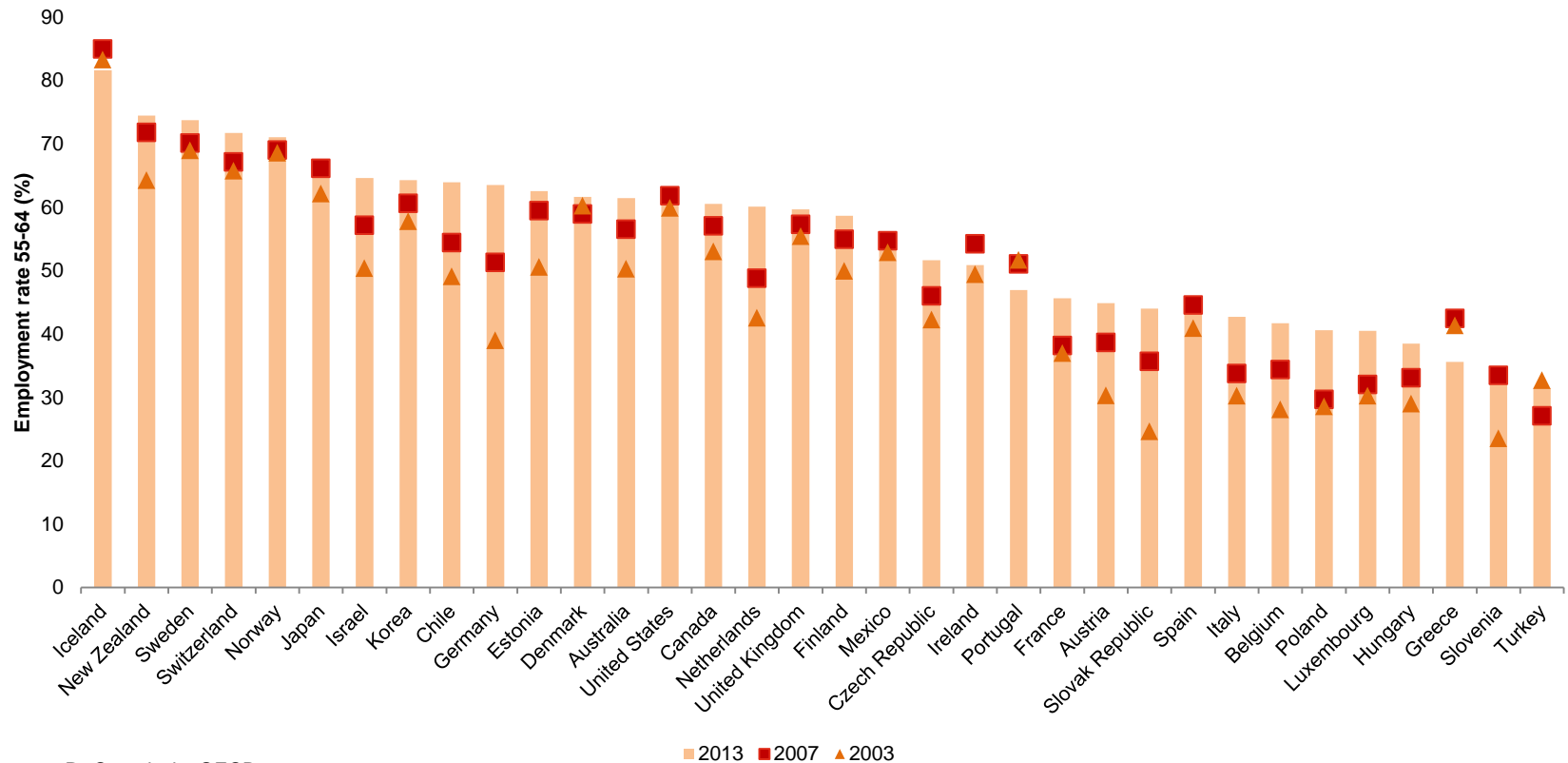
Comparison of individual labour
market indicators

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Figure 2: Employment rate of 55-64 year olds

Employment increased in the majority of OECD countries (including Australia) with the rate in Germany rising particularly rapidly between 2003 and 2013. However, rates fell in Portugal and Greece over this period.

Employment rate 55-64 (%)

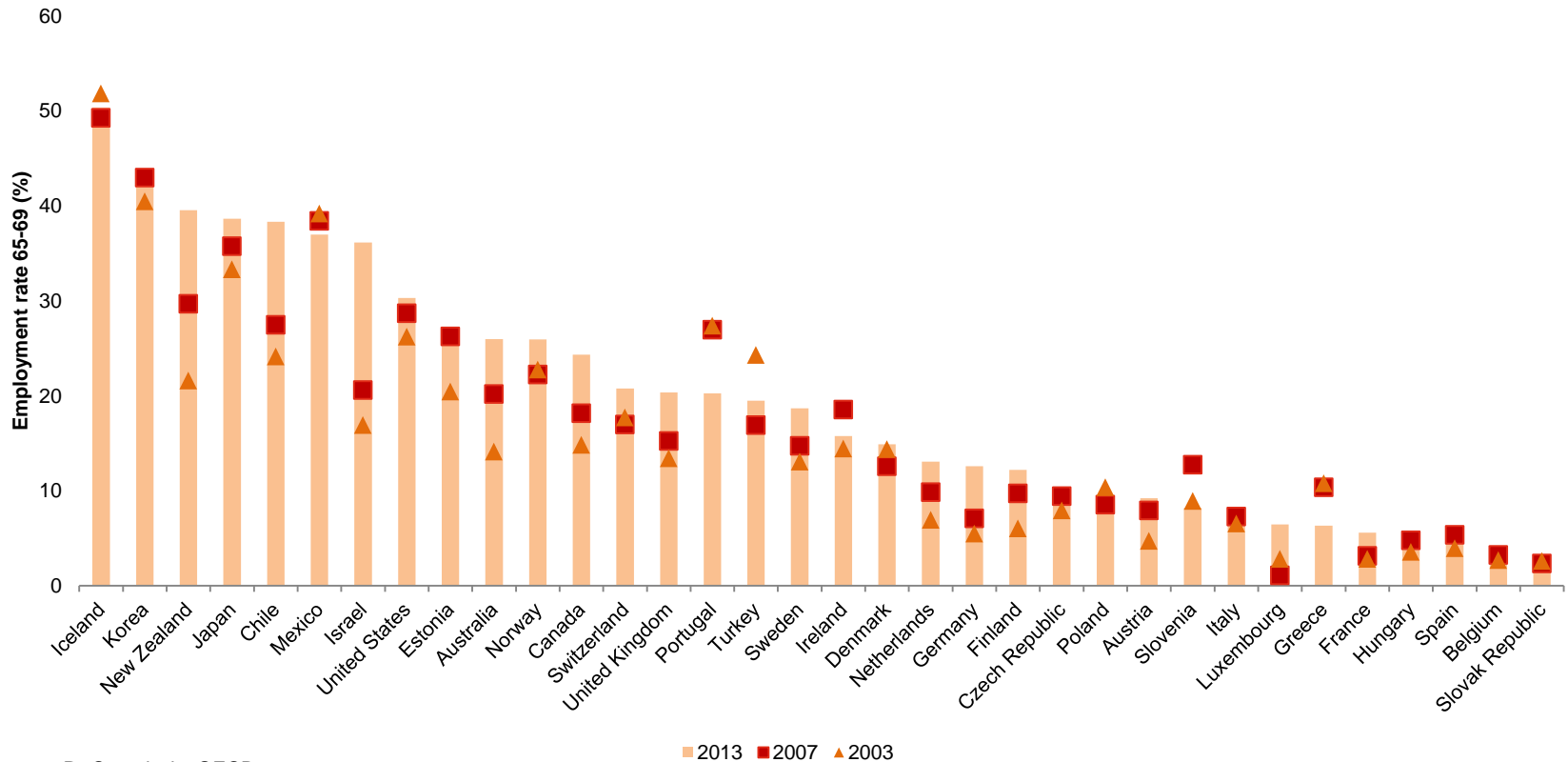


Sources: PwC analysis, OECD

Figure 3: Employment rate of 65-69 year olds

The employment rate of this age group varies significantly across the OECD countries from 50% in Iceland to only 3% in Slovak Republic. Australia has shown a clear upward trend over time, but is still below the top performers.

Employment rate 65-69 (%)

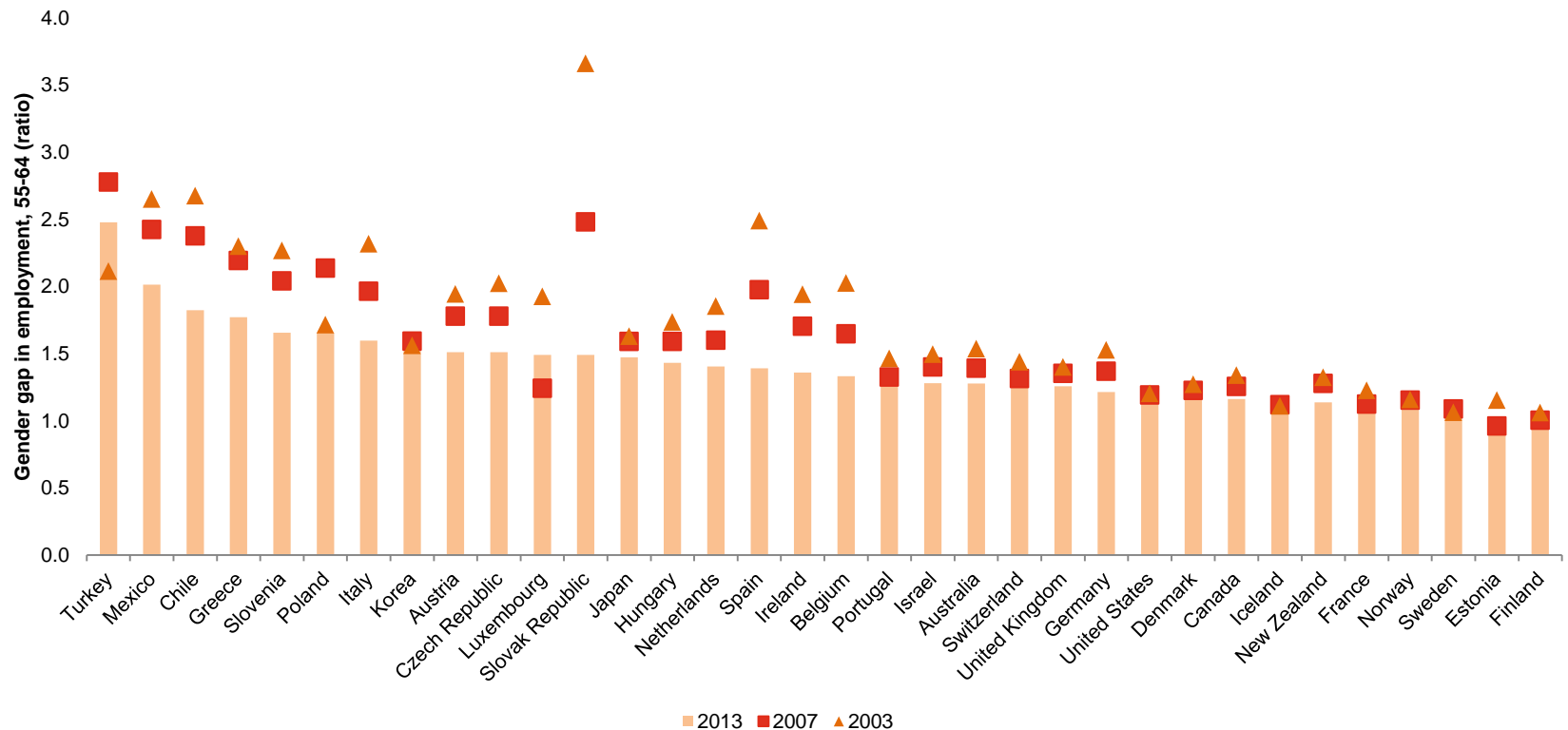


Sources: PwC analysis, OECD

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

The gender gap in employment has decreased in most of the OECD countries with the steepest falls occurring in Slovak Republic and Spain (but only modest progress in Australia on this measure).

Gender gap in employment, 55-64 (ratio)

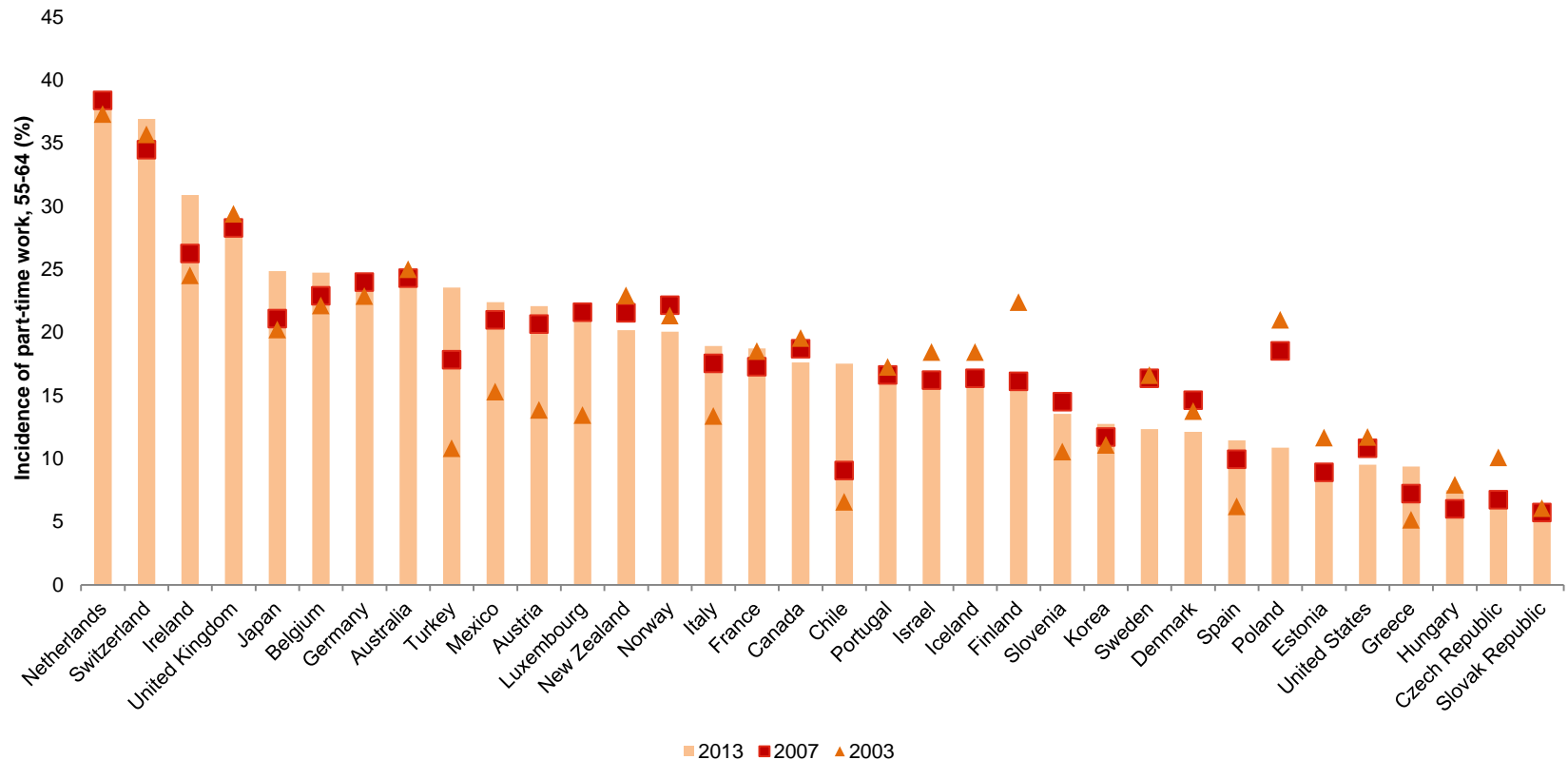


Sources: PwC analysis, OECD

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

Australia has the 8th highest incidence of part-time work for this age group amongst the OECD countries (though this will be what some workers want)

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

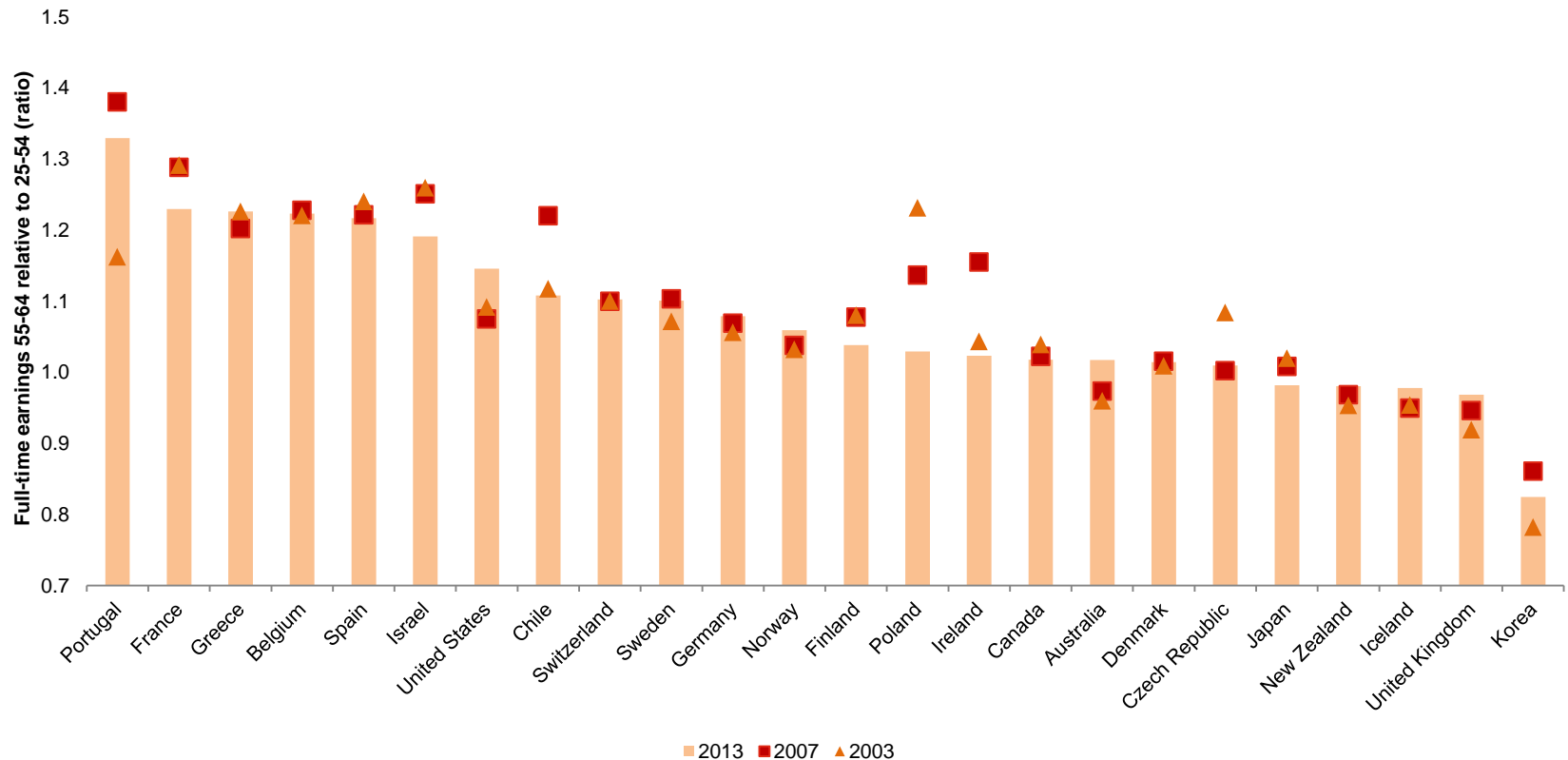


Sources: PwC analysis, OECD

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.

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

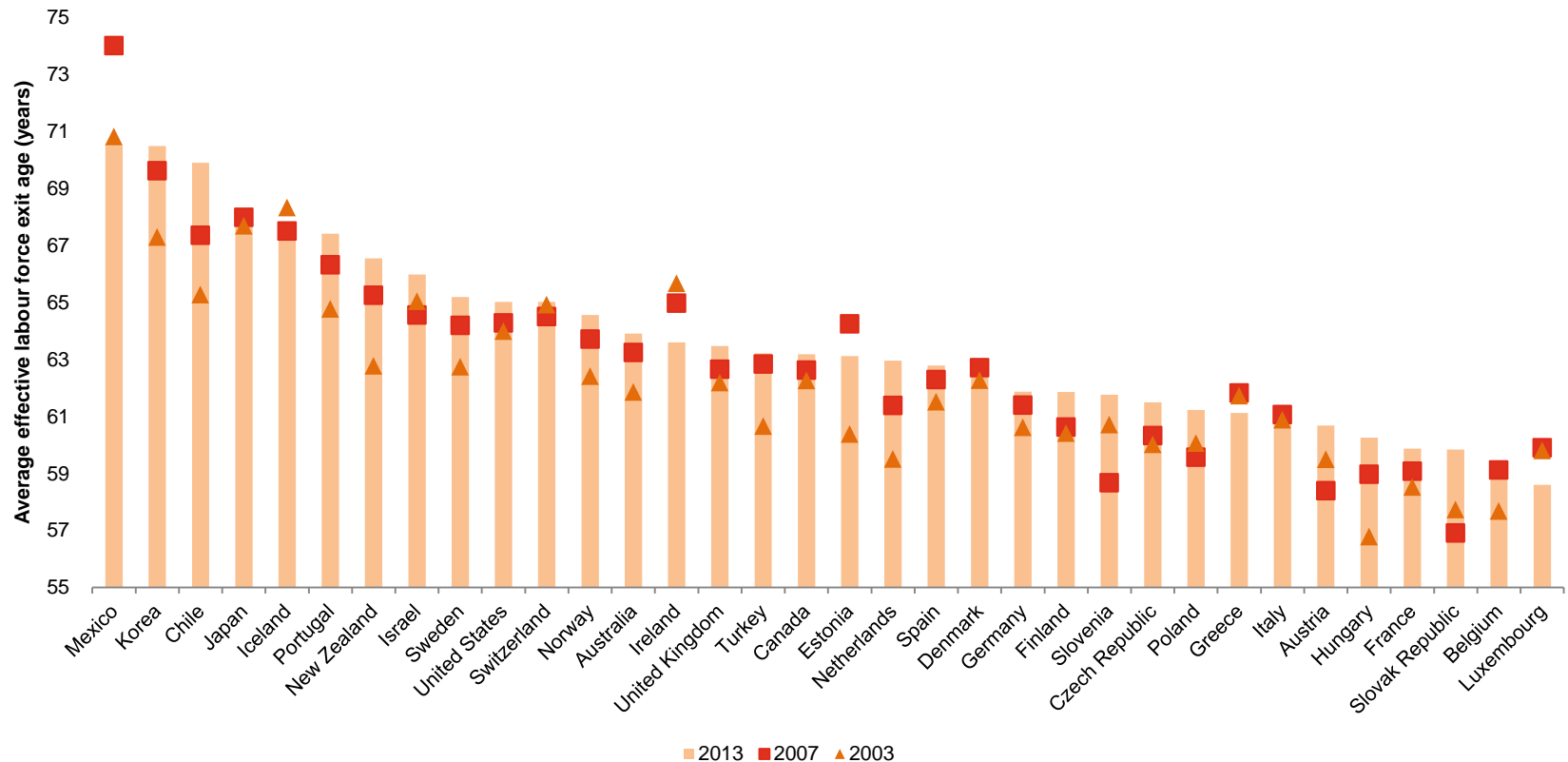


Sources: PwC analysis, OECD

Figure 7: Average effective labour force exit age

The average effective labour force exit age increased in the majority of countries from 2003 to 2013, including Australia, but Mexico and Ireland experienced declines (the former from an exceptionally high level in 2007).

Average effective labour force exit age (years)



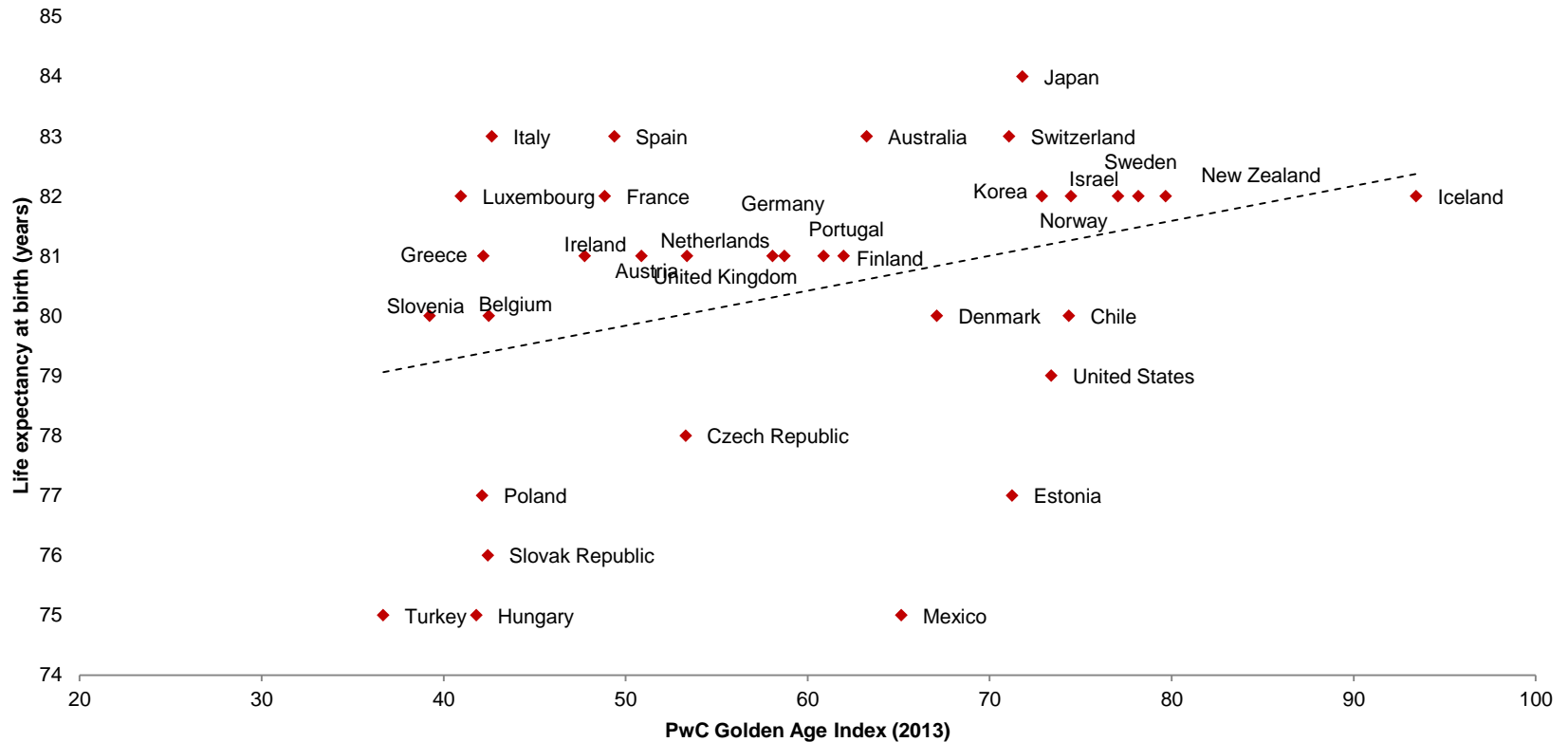
Sources: PwC analysis, OECD

PwC Golden Age Index
Comparison with other measures

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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

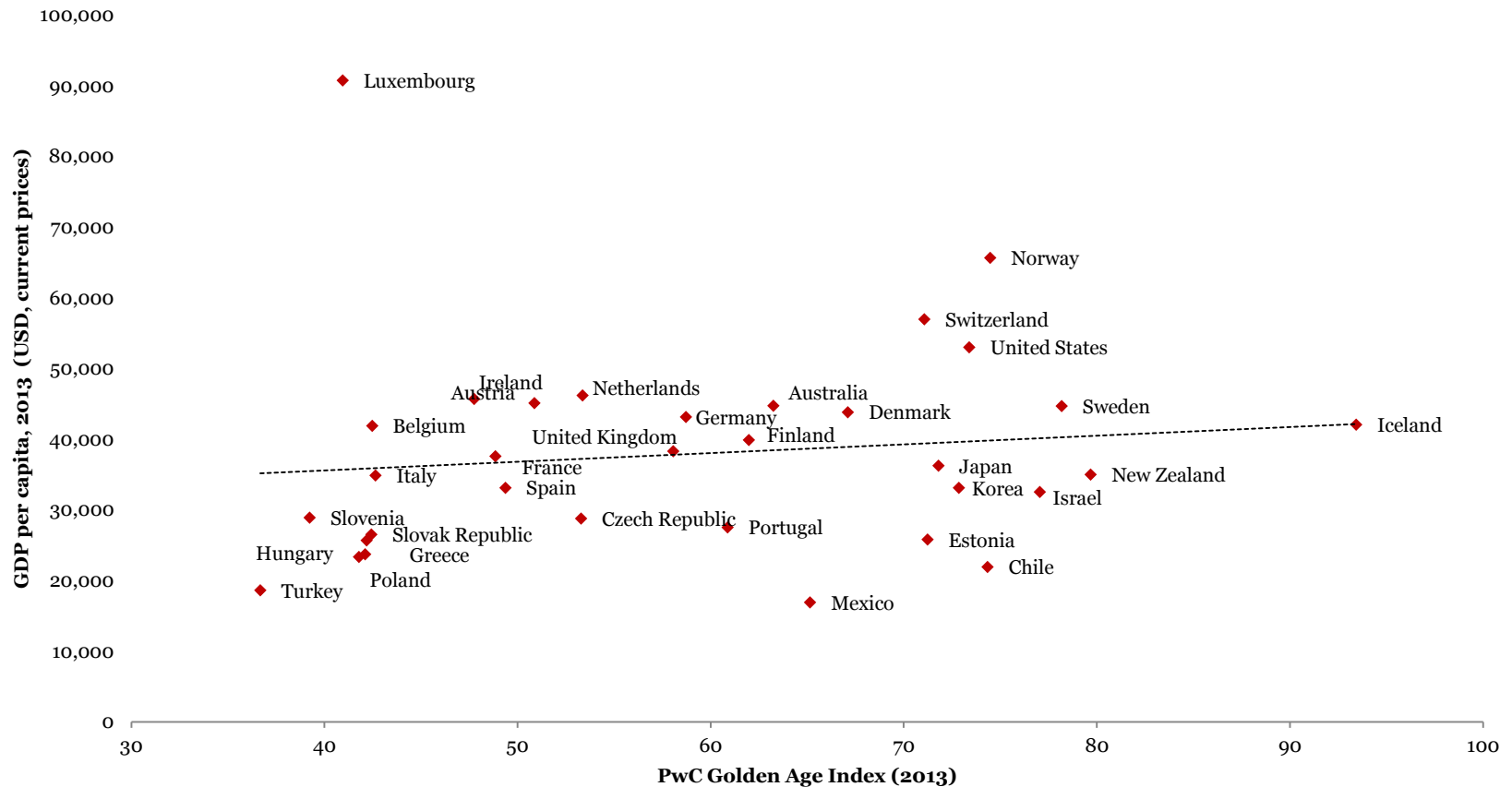
Figure 9: PwC Golden Age Index and life expectancy



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

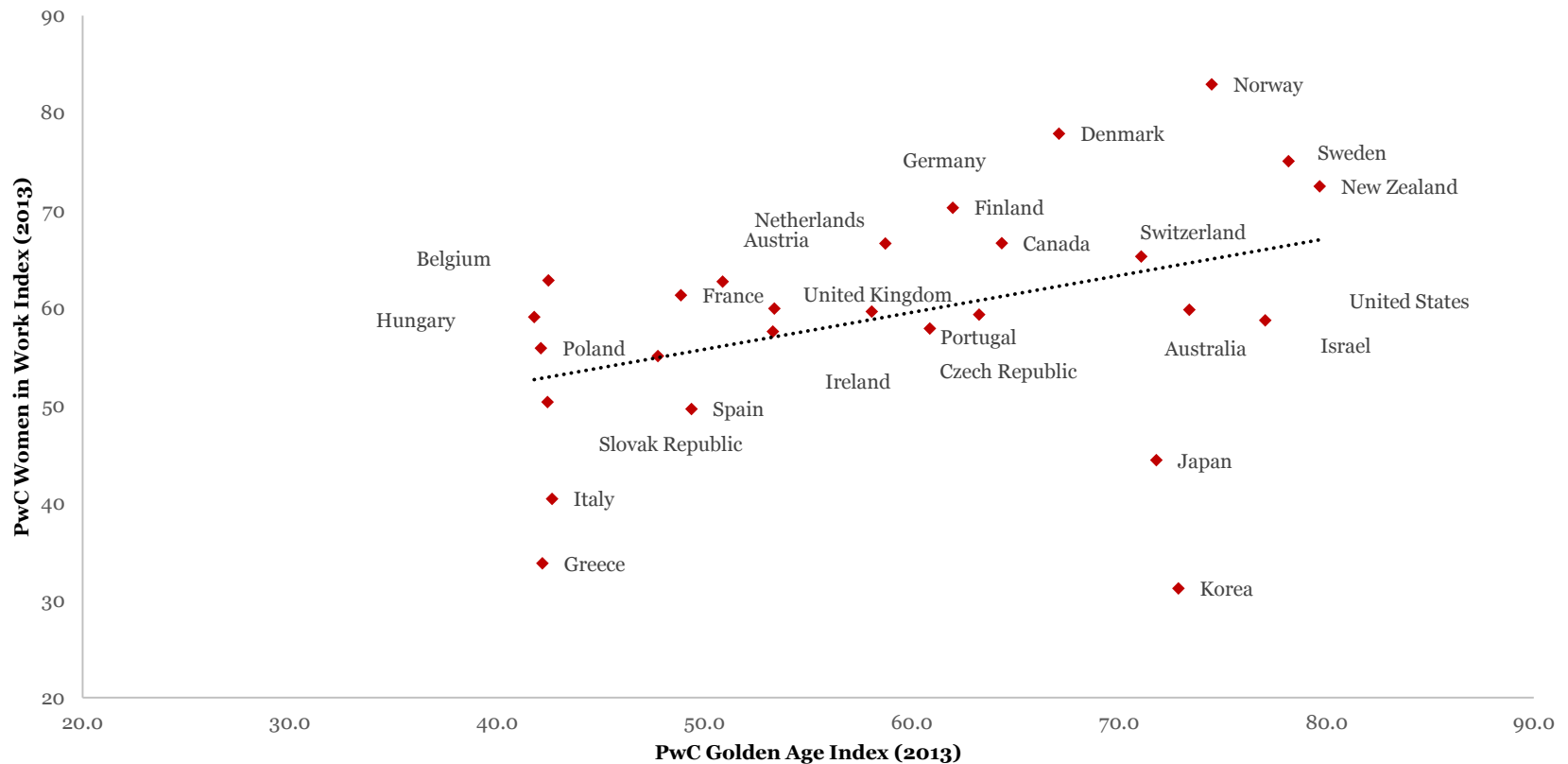
Figure 11: PwC Golden Age Index and GDP per capita



Sources: PwC analysis, OECD

There is a strong, positive correlation between the PwC Golden Age and Women in Work indices, perhaps reflecting common labour market policies and social norms

Figure 12: PwC Golden Age Index and PwC Women in Work Index



Sources: PwC analysis, OECD

PwC Golden Age Index

Annex: Methodology

PwC Golden Age Index Methodology

Variables included in the index

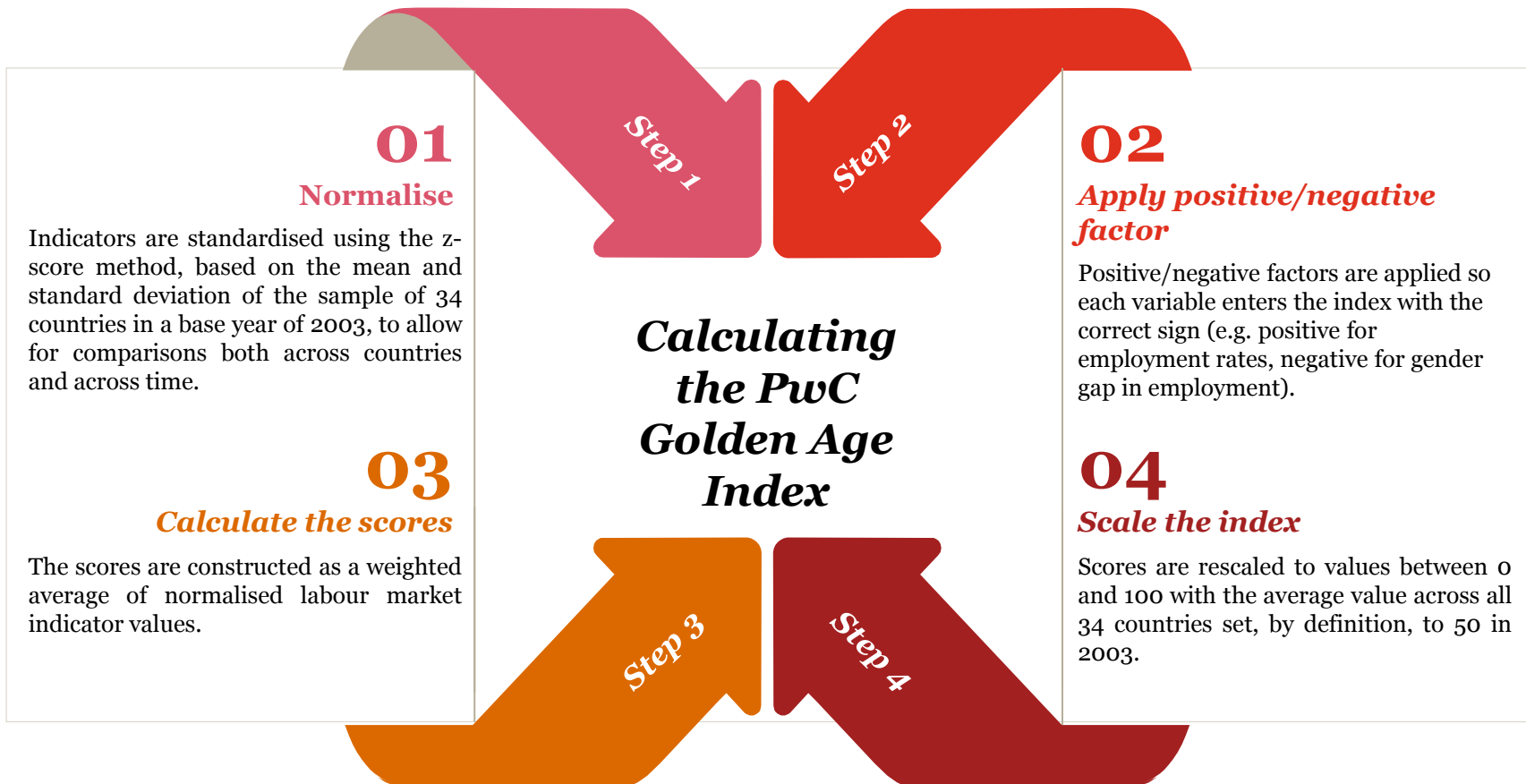
Indicator	Weight	Factor*	Rationale
Employment rate, 55-64 (% of the age group)	40%	1	The proportion of 55-64 year old workers in employment is the most important measure in our index and so has the highest weight of 40%.
Employment rate, 65-69 (% of the age group)	20%	1	The proportion of 65-69 year old 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.



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 Australia's relative ranking.

We also considered alternative weighting schemes, but these did not alter our key results.

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