Mind The Gap

Quantifying the Pension Savings Gap in Ireland

September 2016

AVIVA

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- We employ 1,086 people across our three locations in Dublin, Galway and Cork.
- We are one of Ireland's largest insurers and part of Aviva Group, which has 33 million customers across 16 markets in Europe, Asia and Canada.
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- Aviva helps people save for the future and manage the risks of everyday life; across the Group we paid out £30.7 billion in benefits and claims in 2015.
- By serving our customers well we are building a strong and sustainable business that our people are proud to work for and that makes a positive contribution to society.
- For further information please contact
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Foreword

Aviva's first Mind the Gap Report was published in 2010 at the height of the worst financial crisis in the history of the European Union. Ireland was at the epicentre of that crisis and many of its citizens saw the value of their savings and investments as well as their homes greatly reduced.

The good news is that Ireland has made an extraordinary recovery and, according to the European Commission, is projected to remain the fastest growing economy in the EU this year. The financial system is relatively stable, the public finances have been put on a sustainable footing, employment is increasing, and the debt to GDP ratio is on a downward trajectory.

Households too have been repairing their balance sheets. Investment in financial assets rose further during Q4 2015, reaching €1.9bn, their highest level since Q3 2009 and household debt is now at its lowest level since 2006.

One issue that remains to be addressed is the adequacy of pension provision as the population ages. The findings of this Report show that Ireland's annual pension savings gap has increased from €20.2 billion in 2010 to €27.8 billion in 2016.

Aviva recognises there is no simple solution to the problem of pension adequacy and coverage. We believe there are a number of compelling actions that policymakers and the pensions' industry can take to harness the return of households to savings so that we begin the work of closing the pension savings gap.

Despite the pressure on the public finances throughout the crisis, the Government maintained tax relief on pension savings. Notwithstanding this, pension coverage has fallen from 51.2% in 2009 to 46.7% in 2016. We note the recently announced consultation process by the Pensions Authority and the Minister for Social Protection's commitment to the development and introduction of a universal workplace retirement savings system. We believe a system of auto-enrolment that will gain broad acceptance among the population should be introduced without delay. Such systems have been proven effective in other countries around the world.

We are also calling on the government to promote a campaign to encourage young people to save - built around a simple message about how much they need to put aside at every stage throughout their working lives to provide for their retirement. This message could be reinforced by issuing an annual pension statement to all citizens from the time they enter the work force. We believe strongly in the power of education to foster an understanding of the importance of financial planning. We propose the introduction of a specific personal finance module in the second level Civic, Social and Political Education (CSPE) curriculum to foster financial literacy from a young age.

We are all living longer, more active lives and our quality of life is constantly being enhanced by advances in health care and technology. Unless we take swift and decisive measures our financial capacity, and that of our children, to enjoy these benefits of human endeavour hang in the balance. The time to act is now.

Gary Marshall
Managing Director, Aviva Life & Pensions Ireland

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1. Introduction

This report updates the landmark Mind the Gap analysis of Europe's pension savings gap, including Ireland, which was first published by Aviva in 2010.

The pension savings gap quantifies the amount those retiring between 2017 and 2057 need to save each year to achieve an adequate standard of living in retirement.

Europe needs to save an extra €2 trillion a year to close the pension savings gap. This has increased by 6% in the 6 years since 2010.

Ireland needs to save an extra €27.8bn a year to close its pension savings gap. This has increased by 38% in the 6 years since 2010.

As a percentage of GDP the pension savings gap in Ireland is 13%, the same as in the UK. Spain has the largest gap as a proportion of GDP at 17% and Italy has the lowest at 6%.

This report confines itself to retirement savings and does not take into account any non pension investments.

The OECD has described as reasonable "a 70% replacement rate as the adequate retirement income benchmark for the average individual". It said such an income allows the individual to "enjoy a standard of living in retirement that is similar to the standard he or she enjoyed prior to retirement"[1]. To establish a base case, we have adjusted the replacement rate by income to provide a weighted average rate of 70%[2].

The pension savings gap identified in this report presents a significant challenge for Ireland. Everyone at all stages of their working lives should be aware of the need to make appropriate provision for their retirement.

Aviva is uniquely placed to contribute to the Irish pensions' debate. We have businesses in 16 markets across 3 continents: Europe, Asia and North America and we help our 33 million customers save for the future and manage the risks of everyday life. As a pension provider, it is our duty to help our customers recognise the gap between their savings and their desired retirement income. This report is a crucial part of that work.

What is a replacement rate?

It is the percentage of your final salary that you will continue to need in retirement. Generally, outgoings such as mortgages will have been substantially reduced or paid off and children will be less financially dependent. This means that the level of income required to fund retirement willl be lower than pre retirement.

1 Private Pensions Outlook, OECD, 2008
2 This research uses a target replacement rate of 90% for the bottom 30% of incomes, 65% for the middle 40% of incomes and 55% for the top 30% of incomes.

2. Key findings for Ireland

Ireland is ageing. The older population (those aged 65 years and over) is projected to increase from its level of 532,000 in 2011 to over 1.4 million by 2046[3].

Ireland's current generation of retirees – those retiring between 2017 and 2057 – need collectively to save an additional €27.8bn per annum to provide an adequate income in retirement. This gap has increased from €20.2bn in 2010. There are a number of reasons driving this increase:

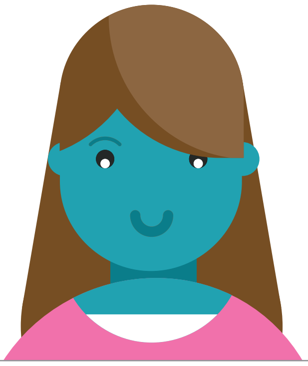
1. People are living longer. Labour force participation has yet to adjust to this reality, leading to increasing pressure on retirement income funding.
2. Falling bond yields have caused annuity rates to decrease, thereby impacting the income which retirees can expect from their pension funds.
3. State Pension benefit was frozen between 2010 and 2015 and is now predicted to lag behind salaries. Research has also questioned the sustainability of the state pension system.[4]
4. The 2010 Mind the Gap study assumed a 5% return on savings for pension fund assets. To reflect a low interest rate environment and in line with Actuarial Standard Practices, the projected investment growth rate forecast has been reduced to 3%.

While averages typically mask the impacts on the most vulnerable, the €27.8bn annual pension savings gap equates to an average of €12,200 per retiree or €1,017 per month for individuals retiring between 2017 and 2057. The pension savings gap is defined as the additional amount which individuals need to save to ensure an adequate lifestyle in retirement. This gap is calculated on the basis that the individual is relying solely on pension savings.

Compared to other European countries, the size of Ireland's pension savings gap per individual ranks in the top 3, behind the UK and just ahead of Germany.

Table 1: Savings and Retirement Income Gap for Individuals Retiring 2017-57.

Country	Annual pensions savings gap per person (€000s) 2016	Annual pensions savings gap per person (€000s) 2010	Annual pensions savings gap by country (€bn) 2016	Annual pensions savings gap by country (€bn) 2010
United Kingdom	13.2	12.3	365.0	379.0
Republic of Ireland	12.2	9.1	27.8	20.2
Germany	11.5	11.6	461.0	468.8
Spain	7.7	7.0	191.5	170.5
France	7.3	6.1	241.0	243.5
Lithuania	4.0	3.0	5.4	5.0
Italy	3.9	3.1	98.7	97.6
Poland	3.6	1.9	64.7	68.8
Turkey	3.2	5.7	125.2	91.0



Does everyone need the same income in retirement?

This depends on how much you earn before you retire. Those on lower incomes tend to rely on their salary for day-to-day living: for the purposes of this report we have applied a 90% replacement rate for low earners. For mid-income earners we have applied 65%. High earners will have levels of disposable income beyond their everyday needs. Accordingly, we have applied a replacement rate 55% of their final salary to this group.

3 Source: Population and Labour Force Projections 2016 – 2046, Central Statistics Office
4 Research Report on the Financial Sustainability of the State Pension in Ireland by Milliman, Society of Actuaries in Ireland and PublicPolicy.ie, August 2015.

The retirement landscape has changed dramatically since 2010. Annuity rates have fallen due to a decline in long term yields and increasing longevity among the population. The current prevailing retirement age is 65; however, the qualifying age for the State Pension has increased to 66 and will increase further to 67 in 2021 and 68 in 2028.

Our research has found that over the next 30 years, Irish dependency ratios will move towards the European norm. In 2010, the dependency ratio was 6 to 1. It now stands at 5 to 1. As longevity increases, the ratio is predicted to reduce to 2.25 to 1 by 2045. European rates currently stand at 3 to 1 and are predicted to reduce to 2 to 1 by 2045. These numbers highlight the significant challenge facing our pension system. It is also clear that many will need to work beyond retirement age to fund their retirement income needs.

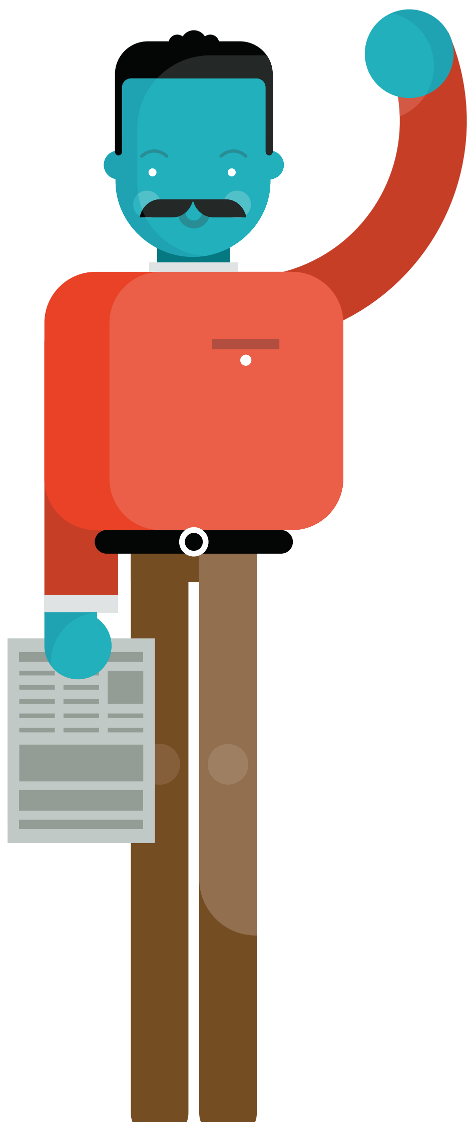
Table 2 shows that those who are younger face a smaller gap in pension savings, reinforcing the benefits of starting pension provision at a younger age. But the shortfall for all age cohorts has widened over the last six years. For many in the cohort closer to retirement, the gap may be insurmountable and their expectations at retirement will need to moderate accordingly. Everyone needs to understand their own gap and its implications for their retirement income.

Table 2: Average per person annual pension gap in Ireland by age – 2016 compared to 2010

Age in 2016					
All those retiring 2017-57 up to age 65	20	30	40	50	60
€12,200	€4,400	€5,100	€6,700	€9,700	€28,000
Age in 2010					
All those retiring 2017-57 up to age 65	20	30	40	50	60
€9,100	€1,700	€2,500	€3,900	€6,900	€21,100

What is a dependency ratio?

Dependency ratio is the percentage of the total working age population, that will support the rest of the nonworking age population.



Our base case rate is used in Table 2. In Table 3 below, we show the impact on the savings gap when different replacement rates are selected. Choosing a replacement rate that best fits an individual's financial needs and expectations in retirement is an important step in estimating the necessary level of pension contribution.

Education about the need to save for retirement is key and it is important that the necessary information and tools are available to enable people to determine their own pension gap and the measures necessary to close it.

Table 3: How the pension gap changes depending on chosen replacement rate (€000)

Age in 2016						
All those retiring 2017-57 up to age 65		20	30	40	50	60
Base case	12.2	4.4	5.1	6.7	9.7	28.0
70% flat replacement rate	16.8	4.4	6.8	9.0	13.2	43.2
60% flat replacement rate	10.4	3.9	4.5	5.9	8.4	22.2
50% flat replacement rate	4.0	2.0	2.1	2.8	3.5	1.2

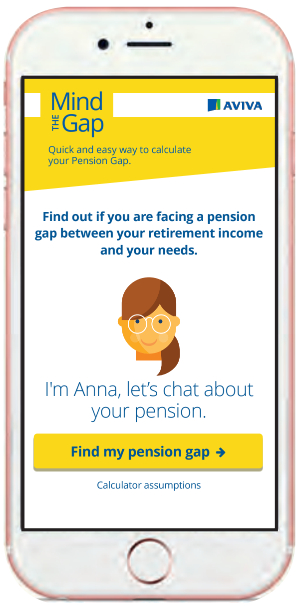
Real Lives Emmet, Single, 30

Emmet lives in the family home and plans to move out soon. He works as a consultant with a company in the energy sector. He believes it is up to the individual to start a pension as all the information is out there.

"I've a lot of friends… that don't have a pension, they've no interest in investing in a pension with no foresight that if they get to retirement what do they do then…you have your state pension but it's not really enough to get you through the week."

"The area that I'm living in… it's not a very affluent part of Dublin and pensions wouldn't be on a lot of people's mind….. they wouldn't know the ins or outs….there's really good information out there and I'd like to see more from employers as well."

Our Mind the Gap calculator available on **www.aviva.ie** and **www.mindthepensiongap.ie** will allow you to determine your personal gap.



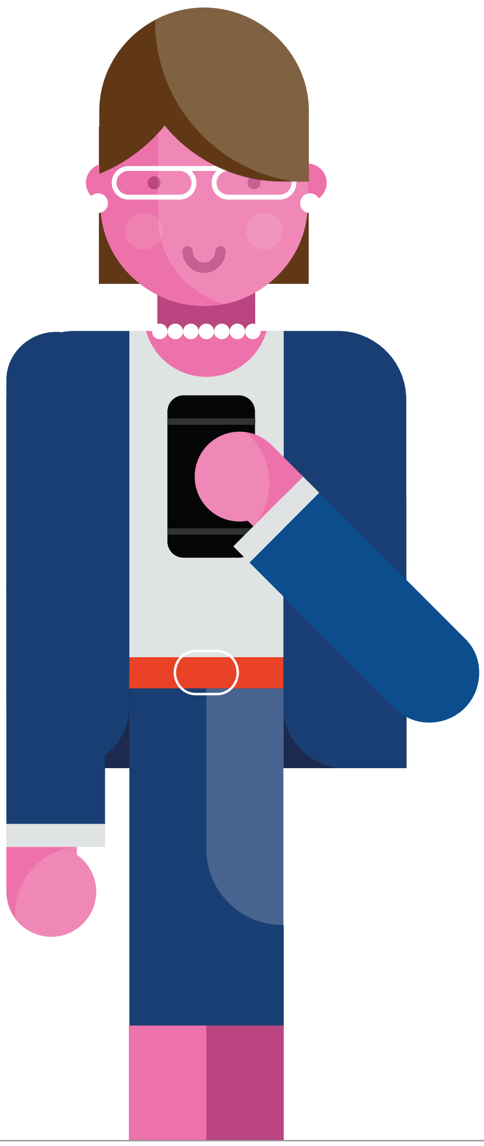
3. Attitudes in Ireland towards saving

In this report, we focus exclusively on pension savings as the primary source of income in retirement. Throughout their working lives, individuals have many reasons for saving, both short term and long term.

Many of us consider other assets such as the family home or investment assets as part of our plans for a secure retirement. But to what extent can these non-pension assets be relied upon to supplement retirement income?

The property crash and financial crisis clearly demonstrated how the value of assets - property or investment – can be rapidly eroded. The experience of the recession has made us both debt and risk averse and returned us to the habit of saving. Household debt fell to its lowest level in a decade in Q1 2016, falling by €1.1bn to €148.5bn. This represents a household debt per capita of €31,216 [5]. Having dealt with the immediate fallout of the recent recession, we now need to turn our attention to saving specifically for retirement.

When considering Ireland's pension savings gap and how it can be bridged, it helps to look at our current attitude towards saving for retirement. Since 2004, Aviva has been conducting a regular Consumer Attitudes Survey (CAS) in all of our markets. In that time, we have asked over 300,000 people about their concerns and attitudes to savings, investments, risk and retirement. This gives us a wealth of information that allows us, not only to understand our customers' needs and circumstances, but also to look back at how these have changed over time.



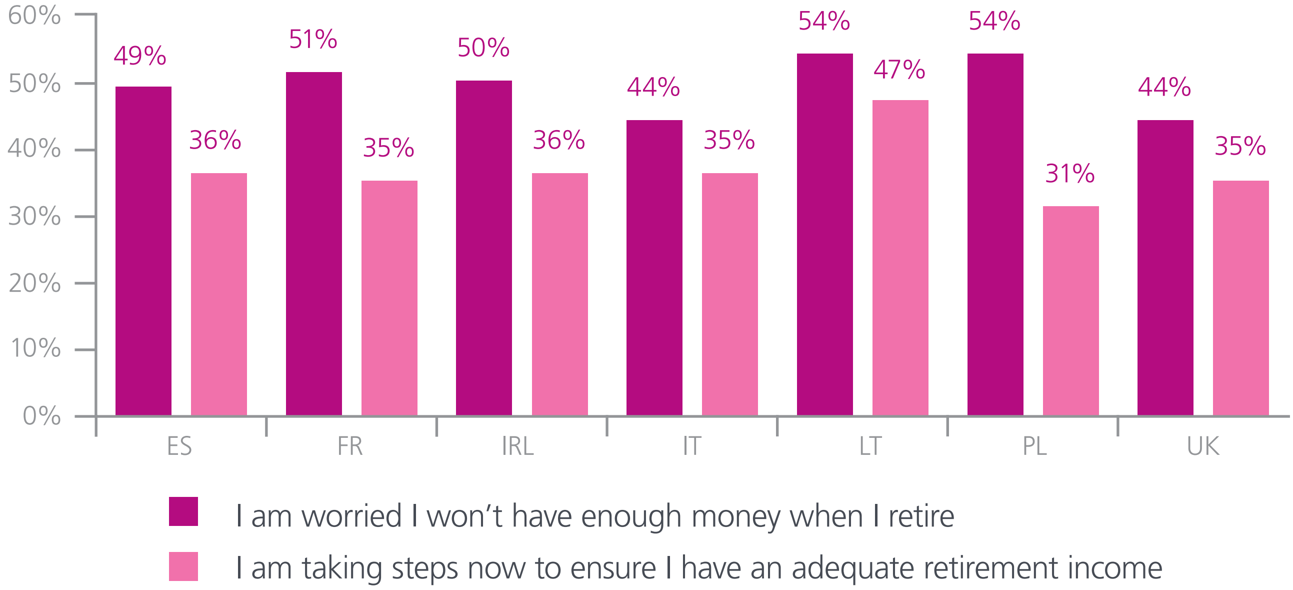
Jacinta, married 47, explains her attitude to investing for her future:

"I am putting my energies into establishing my business…. That way I can drive the financial security I need to pay for life after retirement… that's the hope… it has the potential to grow… I am very careful that I can control my investments and understand the return before committing to more investment. The days of throwing the roulette dice are gone."

5 Central Bank of Ireland, Statistical Release – Quarterly Financial Accounts Q1 2016

Across Europe, half of those surveyed are worried they won't have enough money when they retire, but only a third are taking steps to address it. We call this the "Worry-Action Gap".

Table 4: Worry - Action gap



Source: Consumer Attitudes Survey (Aviva, March/Nov 2015)

Real Lives Catriona, married, 33

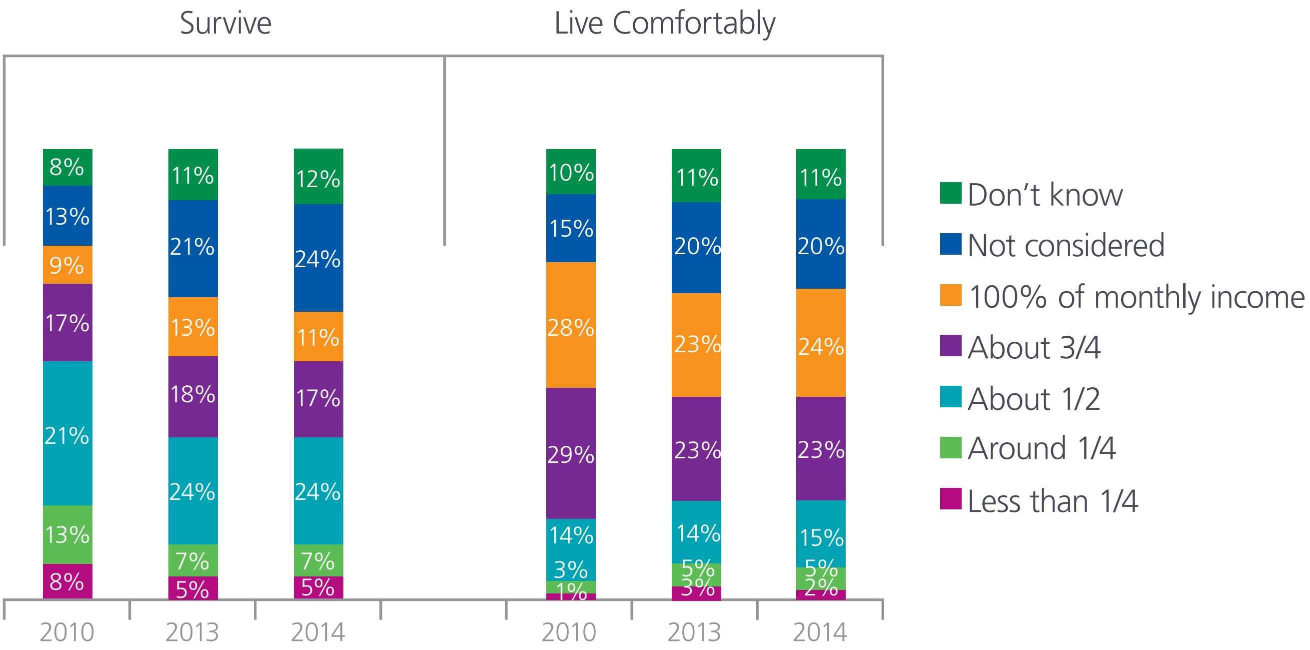
Catriona has just had a baby and is busy with 3 young children. She had a pension in a previous job which she stopped when her salary was cut during the recession. Her employer played a big part in her pension arrangements. "They did everything: set up salary deduction and advised on contribution amounts. HR made it very easy, provided all the information."

Catriona says that now when looking for information,

"I'd probably go to friends, see what they were doing but moneywise I'd be clueless about what to put in… If you don't have a pension set up... you're looking at the state pension … and you just can't live off that … I don't have a figure in my head … that makes me panic …I want to have an idea... When I hit 65 what is the plan?... I see my parents who have a very good pension.... I want to be comfortable and be able to say this is something I can fall back on ... I want that security of having a pension."

"You do have dreams … you want to be comfortable and you want to have something nice set up ... so that you can do all the things that you couldn't in all the years that you were working."

Table 5: Shifting expectations of retirement.



Source: Consumer Attitudes Survey (Aviva, Mar/Nov 2015)

Table 5 shows that the number of respondents who do not know or have not considered what they will require in retirement, has increased over recent years.

CAS research also found that respondents would most like to retire when they are just under 60 years of age but accept they will not be able to do so until they are nearly 66. This reality and the increase in the age for receipt of the State Pension requires all stakeholders to reconsider the appropriate retirement age, as well as mechanisms to facilitate longer participation in the workforce. In this regard, we welcome the recent publication by the Minister for Public Expenditure and Reform, Paschal Donohoe TD, of the report of the *Interdepartmental Working Group on Fuller Working Lives.* We look forward to the speedy implementation of its recommendations.

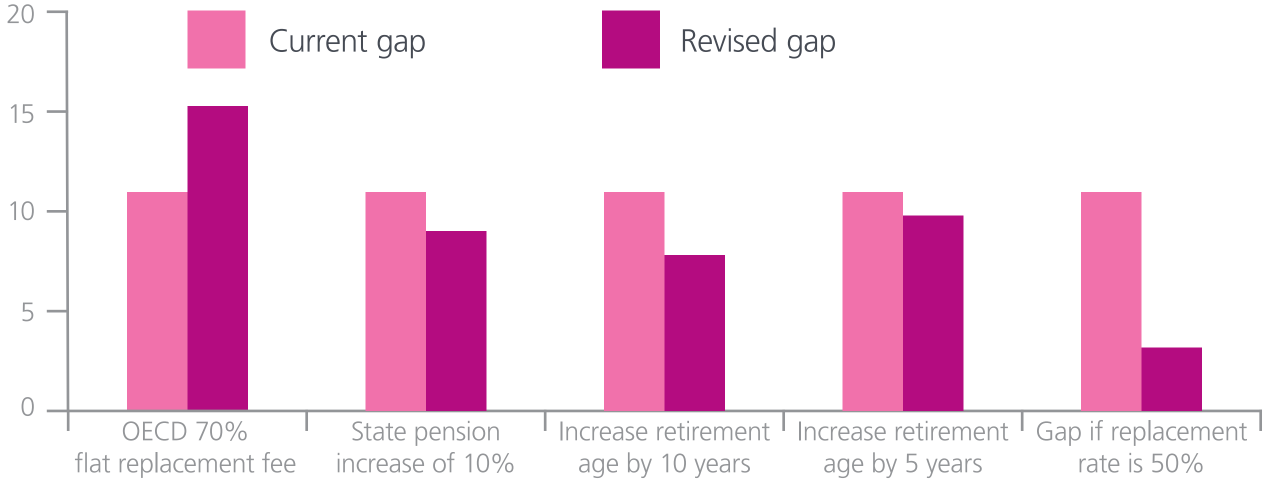
The CAS research also indicates that as many as a third of respondents are 'choosing' to work beyond retirement. Among the reasons given for doing so, are the desire to contribute and for a sense of purpose. While some may be happy to work beyond retirement age, 35% said they were doing so because they needed the money. This suggests that the recession has eclipsed the importance of saving for retirement as respondents come to terms with working later in life than they would have wished. These findings point to the need for more information and public awareness to allow individuals make informed decisions.

All of these findings paint a picture of a country, having survived the worst financial and economic collapse in its history, grappling with the new realities of retirement in an age of increasing longevity and low interest rate savings environment.

4. Actions to address the pension savings gap

In the research for this report, Aviva examined the impact of different remedial actions on the 2016 pension savings gap and the results for Ireland are shown in table 6.

Table 6: Total state pension income as a % of GDP



- Increasing the State Pension by 10% does not materially reduce the gap and with an ageing population may well be fiscally problematic.
- Increasing the retirement age does reduce the gap but postponing retirement until the age of 75 may be unacceptable to those who have planned for an earlier pension, or impossible for those who are not well enough to continue in the workplace.
- Aiming for a 50% flat replacement rate significantly reduces the gap but may require individuals to revise downwards their expected standard of living in retirement.
- No single policy measure will address the pension savings gap on its own. A combination of long and short term measures is needed, including raising awareness amongst consumers, encouraging them to save and increasing the pension age.

5. Key Implications for Government, the Pensions Industry and Consumers

The OECD's Review of the Irish Pension System (2013), emphasised the need for action on Ireland's looming pension crisis. In response, the then Government established a Pensions Council and the Universal Retirement Savings Group to bring forward recommendations for the introduction of a universal pension scheme. By now, all stakeholders have made their views known including:

- Insurance Ireland,
- Pensions Authority,
- Society of Actuaries,
- IAPF,
- IBEC, ISME and SFA,
- Consumer groups and trade unions.

In July, the Pensions Authority announced its consultation process on reform and simplification of supplementary funded private pensions and the Minister for Social Protection, Leo Varadkar TD, said: "The current situation where a majority of our citizens rely solely on the state pension in retirement is unsustainable and we have a duty to ensure that a better system is now put in place, … I regard the development and introduction of a new, universal workplace retirement saving system for those workers without supplementary pensions as an essential objective of mine".

Aviva also notes the public consultation by the EU Commission on a EU personal pension framework.

As our research shows, reform is now urgent. The pension savings gap in Ireland is daunting. We know that countries which have taken action have largely succeeded in containing their gap, for example the UK. We must learn from their experience by making decisions now that will ensure that our pension savings gap does not increase and can be reduced.

Three measures that collectively we can take to tackle the Irish pension savings gap:

1. Auto-Enrolment

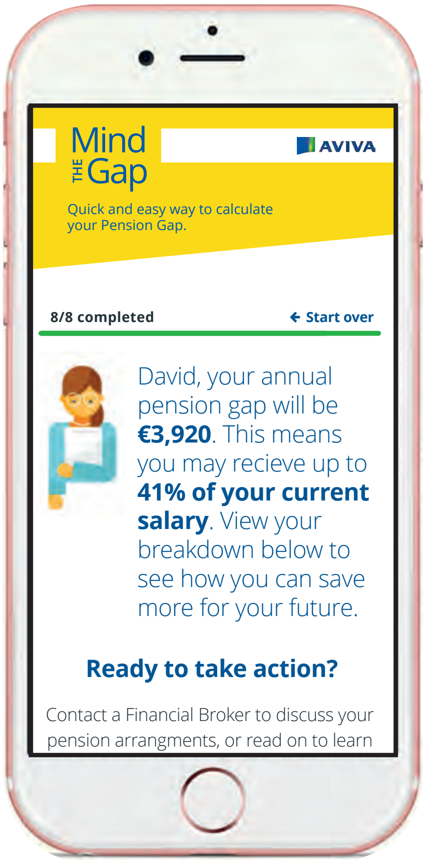
Introduce auto-enrolment without delay in a manner that will gain broad acceptance. For example, a portion of what workers already pay in Universal Social Charge (USC) could be ring fenced as a Universal Pension Contribution (UPC), thereby minimising the financial impact of introducing auto-enrolment.

The debate about the introduction of a 'Universal Pension' has been running for a number of years. Its introduction is undoubtedly complex but it is now time to take action.

2. Communication

Create and promote a campaign to change the behaviour of those who most need encouragement to save, built around a simple message about how much they need to save throughout their working lives. We know that people are saving more: the call to action is 'don't save at the expense of your pension'.

- Across Europe, governments provide information through pension dashboards or universal statements. As a first step, Aviva is calling on the Government to issue an annual State Pension benefit statement to all workers so that they are fully informed about the basic level of income this benefit provides for their retirement.
- Digital technology – In 2010 Aviva introduced the first 'Mind the Gap' calculator to support engagement and education. For this report we have new digital tools which allow people to assess their pension savings position and to plan accordingly.



3. Education

Education about the importance of contributing to a pension needs to begin in schools.

- A personal finance module in the second level Civic, Social and Political Education (CSPE) curriculum. This would empower future generations and ensure financial literacy for all citizens.

Real Lives Sabina, married, 37

Sabina has two children. She works full time with young people from disadvantaged areas. Sabina contributes a 'small amount' to her pension.

She heard about the pension through a work colleague and thanks to a review with a financial broker, is confident she made the right decisions with her pension fund.

"I know I'm not paying enough and will have to have eggs in other baskets to fund my retirement."

Sabina sees her retirement as a continuation of her current life.

Sabina is concerned about the lack of financial understanding among the people she works with. She is a strong advocate of practical education and feels the benefit of this would be enormous. She would like to see policymakers being more creative in attracting people to save for pensions:

"Financial literacy with young people is so important – understanding pensions and financially planning for your future."

6. Conclusion

As a generation, it is our good fortune to live longer more active lives. This should not become a burden. An enlightened approach to retirement planning should allow us to enjoy the fruits of our working lives while continuing to play our part in the communities in which we live.

The responsibility for making Ireland a better place in which to retire belongs to us all:

- The pensions' industry must offer simple, transparently priced products that meet consumers' needs and encourage them to save.
- The government needs to continue to support retirement saving and to introduce a universal pension system to raise the level of pension coverage across the population.
- Employers need to fulfil their responsibilities by facilitating their employees to contribute and save into their pensions.
- Consumers themselves need to take responsibility for their own retirement saving from an early stage in their working lives.

The findings of Aviva's long running Consumer Attitudes to Savings (CAS) research used in this report, paint a picture of a country grappling with the reality of inadequate pension provision in a low interest rate, post financial crash environment.

Ireland's recovery from the worst financial and economic collapse in its history has been remarkable. Household savings are at their highest level in a decade. Household debt is being paid down. Now is the time to tackle our pension savings gap.

The findings of this report are a wake-up call for all stakeholders to play their part in providing the education, information, public policy solutions, and the consumer products that will help us to realise our aspirations for retirement.

Appendix: The Technical Details - Quantifying the pensions gap

Methodology

We've worked with Deloitte to ensure this research uses recent, established sources and a robust methodology to estimate the pension savings gap across Europe as a whole, and in nine specific countries. It aims to provide a broad estimate of the gap across Europe to stimulate debate on the scale of the challenge and how to solve it. Since it applies to a number of different countries, with their varying pension systems, the model necessarily makes a number of assumptions (noted below), and in some cases, simplifications but it still aims to reach a fair and reasonable comparison for discussion.

The methodology employed to quantify the pension savings gap is based on bottom up analysis of Germany, Spain, France, Ireland, Italy, Lithuania, Poland, Turkey, and the UK. The report focuses on pensions as they are designed to enable people to save for retirement over the long term. The report does not take account of other assets such as housing, cash deposits or other investments. Individuals may use these assets instead of, or on top of, pensions to provide an adequate retirement income.

The heterogeneity of pensions systems across Europe necessitated some degree of simplification to allow for meaningful cross-country analysis. We have classified pension's schemes into three categories:

- State pensions
- Mandatory and voluntary private sector Defined Benefit (DB) pensions
- Mandatory and voluntary private sector Defined Contribution (DC) pensions

Non-pensions products that are solely used to provide retirement income are also included in the analysis under the 'private DC pension' category. Only two examples of this were identified:

- In Germany and Spain where insurance contracts are used specifically to provide retirement income (Private Lebensversicherung and Planes de Previsión Asegurados respectively)

The pension savings gap estimates were based on current legislation and did not include proposed or possible future reforms if not on the statute books at point of publication.

Data
The inputs for this analysis were based on a programme of secondary research conducted by Deloitte and review sessions held with Aviva country contacts. Data availability varied by country however and in some cases was incomplete. To overcome this a range of proxies were developed to estimate the required inputs for the model.

Replacement rate
In Private Pensions and the Financial Crisis: How to Ensure Adequate Retirement Income from DC Pension Plans (OECD, 2009) the OECD advises that:

> "A general rule of thumb is a target replacement rate of 70%, based on assuming that mortgage costs amount to one third of income and that they are generally paid off just before retiring. This target replacement rate may have to be higher for low-income people, for example 100%."

To establish our base case we have adjusted the replacement rate by income:

Low income (bottom 30% of incomes)	90%
Mid income (middle 40% of incomes)	65%
High income (top 30% of incomes)	55%

Return on savings
The 2010 Mind the Gap study assumed a 5% return on savings for pension fund assets. To reflect a low interest rate environment the 2016 research made a slightly more modest assumption of 4% growth. The exception is for Ireland which used 3% in line with Actuarial Standard Practices.

Retirement age
The retirement age used is the average age of retirement in each country. For Ireland age 65 was used.

Annuity rates
Mind the Gap 2010 used market specific annuity rates and reflected the rates used by Aviva at the time.

To enable more consistency and comparability between countries Mind the Gap 2016 sought to use the same annuity rate of 5% across countries. This rate reflects the reality that people are unlikely to lock into low annuity rates which are based on risk free assets. Instead, the majority of retirement funds are likely to remain invested in real return assets including credit, equity and property. The 5% annuity rate reflects this assumption.

The exceptions to the 5% annuity rate are the French and Polish estimates which used the annuity rates set in national legislation. Additionally Irish estimates assumed a return of 4.5% for Approved Retirement Funds and UK pensions were assumed to deliver a return of 4.2%.

Consumer Attitudes to Saving

The Aviva Consumer Attitudes Survey has been conducted every year since 2004. It is a global quantitative study of consumer attitudes to such topics as risk, advice, investment and retirement. It is a nationally representative survey of adults aged 18 plus to identify and track consumer attitudes to savings and to provide a high level assessment of the consumer issues in each country.

The data in this report was extracted from surveys conducted in June 2014 and March, June and November 2015, surveying consumers up to 17 countries including Ireland, UK, France, Poland, Spain, Italy, Turkey, China, Singapore, Hong Kong, Indonesia, Canada and USA. The research was carried out by Ipsos in accordance with the requirements of the International Quality Standard for Market Research. ISO 20252-2012.

Interviewing was conducted among adults aged 18 years and over and was completed online in all markets except China and India where a mixed methodology of online and face to face research was undertaken. Data has been weighted to reflect the adult population aged 18 years and over and to ensure consistency with previous waves. Research in Taiwan, Vietnam, Lithuania and Hong Kong was concentrated on urban areas.

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