

# **Research Briefing | Spain**

Pension system – Iceberg ahead!

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- Spain's demographic outlook is a major concern, even by global standards. Although reforms to the pension system were undertaken in 2011 and 2013 to reduce long-run aging costs, they were not enough. The population pyramid is still akin to a massive iceberg that could eventually sink the country's social security system unless more reforms are forthcoming.
- The past reforms included a progressive increase in the retirement age from 65 to 67 by 2027, an extension in the number of working years required to calculate the pension, a shift from indexation of pension payments to CPI inflation towards a complex system that takes into account the economic cycle and the state of public finances, and finally, incentives to lengthen working life as well as changes to partial retirement.
- While heading in the right direction, these measures will only partially offset the effects of the extremely negative demographic profile. Spain has one of the lowest fertility rates in the world and one of the highest levels of life expectancy. This will cause the elderly dependency ratio the proportion of people too old to be in the labour force compared to those in it to surge well above the European average.
- Simultaneously, the pension system in Spain is generous compared with most OECD countries. The replacement rate – the percentage of pre-retirement income that is paid out by a pension programme upon retirement – is currently 81% in Spain, well above other European countries.
- While not a final solution, the battery of measures implemented will, however, improve the sustainability of the system. These changes buy Spain some time until the political will is found to implement the painful and unpopular but necessary structural reforms to guarantee that the current social security network can be economically feasible in the next decades.
- The increase in the pension age will also have effects beyond improving public finances: by adding more than a million workers to the working age population, potential output will also see a moderate boost. We estimate that potential GDP growth will rise by around an additional 0.2% a year between now and 2040.
- However, despite the changes already in place, expenditure on pensions is still expected to continue to creep up in the coming decades, from around the current 10% of GDP to 15%. Spain can neither compensate for such a large additional burden on the structural deficit through austerity without greatly damaging growth, nor can it sustain this additional fiscal burden without risking the sustainability of its debt profile.

Reforms in 2011 and 2013

Spain has one of the

worst demographic

structures in the

# A demographic nightmare

The Spanish social security system has been under increasing strain given an ageing population and the impact of the economic crisis. In order to address this, the country has undertaken two significant reforms to its pension system in recent years, first in 2011 under the previous Socialist government and then in 2013 under the current administration. The changes were aimed at improving the robustness of the social security system and guarantee the public pension scheme in the long run. The most important changes were:

- A gradual raise in the retirement age from 65 to 67. The retirement age is being raised by one month a year until 2018 (the process began in 2013) and then by two months a year until 67 is reached in 2027.
- Introduction of the sustainability factor and the annual revaluation factor (ARF) as parameters that determine the amount by which pensions increase each year, with the objective of slowing down the nominal growth rate of pensions.
- Extension in the required number of working years in order to calculate the amount receivable at retirement from 15 to 25.
- Increase in the number of working years required to achieve 100% of the salary base used for pension calculation from 35 to 37.
- Stricter requirements in order to qualify for early retirement.
- Incentives to lengthen working life.

All those changes are, in one way or another, directed at achieving two things: increasing the ratio of working population to those receiving a pension, and reducing the amount by which pensions increase every year. While unpopular, these changes are essential as Spain has one of the worst demographic structures in the world and, barring a substantial pick-up in immigration– (such as that experienced during the 2000s when Spain received nearly 5 million people from abroad), it will see a massive shift in its population pyramid in the coming decades (chart 1) that will make the current pension system unsustainable. Spain is currently spending around 10% of GDP, but in absence of more reforms, this percentage will rise to around 15% of GDP by 2050, according to OECD calculations.

#### Chart 1

world...

# Spain: Population structure 2015-2040



Barring strong immigration, Spain will see a massive shift in its population structure in the coming decades, which poses a systemic risk to the country's social security system. Although negative demographics are not specifically a Spanish problem, the scale of this issue in Spain greatly exceeds that of its European neighbours. To illustrate this: the elderly dependency ratio – the proportion of those above the working age compared to those in it – is currently at around 27% in Spain. This is essentially in line with the EU28 average and slightly below countries such as Germany and Italy. However, demographic projections paint a very bleak picture for Spain: by 2050, Spain's elderly dependency rate will nearly triple to above 70%, well above the European average of 50%.

# Elderly dependency ratio



In absence of further reforms, by 2050 the ratio of pensioners to the number of people of working age will have almost tripled.

## Chart 2

# ...owing to idiosyncratic demographic and social factors

Several factors explain why demographic dynamics in Spain are much more negative than in other European countries. At 82 years old, Spain's life expectancy is the second highest in the world, only behind Japan. Furthermore, life expectancy will continue to rise as mortality rates among older cohorts are still falling.

Simultaneously, Spain has a severe fertility problem. At 1.27 children per woman, Spain has one of the lowest fertility rates in the world, well below the EU average of 1.55 and even further below the 2.10 rate that is considered to be the replacement level - the average number of live births per woman required to keep the population size constant in the absence of inward or outward migration. High unemployment combined with some cultural factors mean that the age at which people move out of the parental home in Spain gets pushed several years beyond that in most developed countries, therefore reducing the window of opportunity in which women of fertile age are in a position to have children.



The fertility rate in Spain is among the lowest in the European Union.

## Chart 3

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Finally, the ageing process in Spain moves with a lag compared with most European countries. The reasons for this are twofold: the baby boomer generation in Spain was born about a decade later than in most other developed countries, and Spain also saw massive immigration during the 2000s which helped to rejuvenate the population and provided a temporary relief to the population age structure. In practical terms, what this means is that while the demographic evolution in Spain is now similar compared with its peers, the population pyramid starts to deteriorate at a much faster pace than other European countries from 2030 (chart 2).

# The right changes, but are they enough?

Of the changes to the pension system outlined at the beginning of this piece, two stand out above the rest: the rise in the retirement age from 65 to 67 and a shift from a CPIlinked system for yearly pension increases to a more complex one that takes into account the state of public finances and the economic cycle.

Higher retirement age

The rise in the retirement age follows similar moves taken in most OECD countries, and would appear to be long overdue. In fact, it was the first change to the retirement age since pensions were introduced in 1919, when life expectancy in Spain was...42 years! Back in 1919, only 33% of the population would live beyond that age, whereas this percentage is now over 90%. A century later, and taking that 33% as reference, this would mean raising the retirement age to 89. Obviously, such a move is out of the question, but this clearly illustrates the point that raising the retirement age is not only a financial necessity but also a normal move given the radically different demographic context.

By raising the retirement age, this automatically increases the number of people of working age while simultaneously reducing the number receiving a pension, a purely arithmetical identity. Naturally, this has a positive effect on the evolution of the elderly dependency ratio, which sees a downward shift of around 5% by 2040.



By raising the retirement age, the elderly dependency ratio automatically falls over time.

## Chart 4



inevitable, and while an important part of the solution, it will require additional reforms (which we will outline at the end of the piece) to guarantee the system's sustainability.

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# Stronger potential growth

Raising the retirement age, however, has an interesting side-effect that goes beyond its implications on the country's public finances. An often-overlooked fact in most analyses on the pension system is that by increasing the retirement age, this also increases the economy's potential growth rate.

The rise of the retirement age to 67 years old by 2027 means that, by that year, an estimated additional 1.2 million people will be of working age. Naturally, not all those will be working, and what ultimately determines a country's potential output on the labour side is the number of employed people. However, by making some assumptions on the participation rate – we expect it to remain broadly stable over the forecast horizon – and plugging those numbers into our Global Economic Model, we obtain an estimate of the effect of adding those 1.2 million people to the growth potential. Ultimately, we find that, while not a game changer, the effect is by no means negligible: we estimate potential GDP will raise by an additional 0.2% a year compared with the previous scenario of retirement age of 65.



More people of working age means a larger potential output.

#### **Lower pensions**

Chart 5

The second significant part of the reforms tackles another important issue: pensions were rising at an unsustainable pace. Under the previous system, pensions were guaranteed to be raised by the same amount as inflation, which typically led to a high cost for the system. This effect has been compounded by the fact that new pensioners are typically receiving larger pensions than those before them<sup>1</sup>, given that their salaries before retiring are higher, resulting in higher pensions. As a result, while the number of pensioners is increasing at around 1.5% a year, the total amount spent rose by as much as 3.4% in 2015.

In order to address this problem, the 2013 reform introduced the sustainability factor and the annual revaluation factor (ARF) as parameters that determine the amount that pensions increase each year (see box).

<sup>&</sup>lt;sup>1</sup> As a reference, in 2015 the average monthly payment for new pensioners joining the system was 432 euros higher than those leaving it.

## Box: The sustainability factor and the annual revaluation factor

The sustainability factor – which will start to take effect in 2019 – takes life expectancy and therefore the ageing population into account in calculating pensions. Although the total amount of pension to be received may remain constant, the longer life expectancy means that the monthly payment received is less.

According to projections by the statistical institute, life expectancy at the age of 65 increases by 5% every ten years but, seeing as this measure will only affect new pensioners, its impact on social security expenditure will be noticed very gradually. The government estimates that savings on pension expenditure due to the introduction of this corrective factor will be, annually, 0.1% of GDP by 2030 and will increase to 0.6% of GDP by 2050.

The more immediate change comes from the annual revaluation factor. According to the ARF system, the annual revaluation of public pensions will depend on social security budgetary flows and the economic cycle so that, when these are not favourable, expenditure growth will decrease. The main aim is to equate growth in social security revenues to that in expenditures. To this end, the revaluation rate must coincide with the increase in net revenue from the growth rate in the number of pensions and the substitution effect.

Moreover, a corrective element is added so that, when the social security has a recurring deficit, growth in expenditure will be less than that in revenue, and vice versa. All this is mitigated both by the economic cycle and by the minimum inflation level (0.25%) and maximum level (0.5%) between which the ARF can fluctuate, thereby avoiding excessively sharp variations in the revaluation rate.

In theory, both those factors were introduced with the aim of adjusting pension growth to the economic cycle and the state of public finances. In practice, however, what these changes mean is that pensioners are going to be losing real purchasing power over time. The ARF system has been in place for two years and it has seen pensions rising by the minimum 0.25% level each year. As inflation in Spain was negative in 2014-15, pensioners have seen their real incomes rising. However, as inflation starts to creep up in the coming years, and given the permanent – and increasing – deficits sustained by the social security system, this means that pensions will probably continue to increase by 0.25% a year in the years ahead, resulting in a decline in real purchasing power.

While often a social and political taboo that is not open for rigorous discussion, the reality is that the pension system in Spain is in fact rather generous when compared with most OECD countries. The replacement rate – the percentage of a worker's pre-retirement income that is paid out by a pension programme upon retirement – is currently 81% in Spain, well above that of other European countries.



The Spanish pension system is

generous compared with other

European countries.

#### Chart 6

#### Replacement rate (2014)



While pensioners in Spain would be hard-pressed to agree that they are perhaps receiving too much money, the low salaries in Spain mean that even relatively modest pensions still account for a high percentage of the average wage. Additionally, the maximum pension available (currently  $\in$ 2,560 a month) is clearly a luxury that a country with over 20% unemployment and average salaries that are nearly half of that figure cannot afford.

## What can be done?

Spain needs to have an open and frank debate about its pension system and how to change it. This will require a series of comprehensive reforms that are likely to prove very unpopular, but that are nonetheless necessary in order to guarantee the viability of the social security system.

The demographic picture previously outlined admits no discussion. Either Spain sees a new immigration wave such as the one witnessed in the early-2000s or it needs to take decisive measures to increase the fertility rate. Failure to do will see the ratio of pensioners to working-age people reaching unsustainable levels.

As explained previously, raising the retirement age is a correct measure that will bring some relief to this problem. Along these lines, we think likely that 67 is just the beginning and that that there will be further increases, possibly up to 70, in the medium and long term. This alone, however, will not be able to solve the demographic problem in absence of other changes.

Another way to tackle this issue is to increase the labour force. After all, the key variable for the pension system is the ratio of those employed and those receiving government handouts, so raising the working population age in itself is not a sufficient solution unless accompanied by a similar raise in the labour force. This, however, would require reforms to the labour market that go well beyond the scope of this piece and that will be addressed in more detail in future briefings.

# Painful but necessary reforms

Some other changes would go along the lines of the ones introduced in the recent reforms and could include:

- Introduction of fiscal incentives to promote private pension plans.
- Further disincentives to early retirement (in order to equalise legal and actual retirement ages).
- Further increases in the number of years used for the basis of pension calculation. This will typically reduce the amount payable as workers tend to have larger salaries – which now have a bigger weight in the calculation of the pension – towards the end of their careers.
- Reduction of pensions in the higher brackets.

All these would be gradual changes to the system that would help maintain its financial viability while keeping the overall structure broadly unchanged. While painful and politically unpopular, Spanish society could adapt to them if political parties are able to convey the severity of the problem. Another, much more radical approach, would be to completely rethink the pension system and to determine if it is necessary to move towards a system (such as in the UK) in which the state provides a minimum pension, equal to all workers, which is then complemented through private and company-sponsored pension plans.

The political cost of such a decision would be, however, too large to bear. A move of this kind would be seen as dismantling the welfare state, one of the major accomplishments for Spain's relatively young democracy. With over eight million pensioners (and rising) going to the ballots every four years, no party could survive a move of this kind, so we think this is purely an exercise in economic-policy fiction.

A compromise, however, could be reached; a middle ground between a UK-like system and the current one which puts the burden of the pension system almost entirely on the state's shoulders. While private pension plans are not uncommon in Spain, they still represent a very small fraction of the total. A hybrid system that guarantees the livelihood of pensioners in the lower income brackets but that also incentivises alternative private pension plans would, in our view, be the optimal solution in the long term.