

Mark Gregory

Slide 1 Title

Good Morning, and thank you for giving me the opportunity today to explore one of Legal & General's five macro-drivers of growth: ageing populations.

Slide 2 Forward-looking disclaimers

Some of the material I'll cover today will be forward-looking – the usual disclaimers apply.

Slide 3 Ageing Populations

It's very difficult to argue against a demographic trend... and equally difficult to over-estimate the importance of demographic shifts to economic performance and indeed business strategy.

Thomas Malthus, who famously explored the relationship between population and economics in the early 19th century – and whose work came to be known as "Malthusian" – died two years before Legal & General was established in 1836. His theory was that population grew geometrically, doubling every 25 years, and his fear was that population growth would outstrip the supply of food.

This was a genuine fear for most of the 19th and 20th centuries – the world's population doubled, twice, in the 20th century. As recently as 2012, the year in which, according to the United Nations, the global population passed 7bn, there was a genuine, if not very well-informed debate, about whether the human population now living outnumbered the human population, now dead.

For those who are interested, it seems they do not – the global population would need to be above 100bn for that to happen - although for most of human history, there is no reliable data!

We do however have reliable data for what is happening today. And it's not what Malthus predicted. Global population is not rising at a geometric rate because of rising birth rates. In much of the world, birth rates are slowing or falling.

In every continent except Africa, populations are ageing as we have fewer children but we live significantly longer. Dependency ratios are deteriorating: from having 16 people aged over 65 to every 100 workers in 2010, we will be moving to having 26 retired people per 100 workers by 2035. And within those global statistics, we see particular issues, for example in Western Europe and most notably, Japan.

Anecdotally, we've moved on from discussing whether the living outnumber the dead, to discussing whether more nappies are sold in Japan for old people than for babies – and incidentally the latter does now seem to be the case.

For economic policymakers, this raises a whole raft of difficult questions. Most obviously, about productivity... more controversially about the desirability of migration to top-up the productive workforce with younger people... and most notably about how a reduced number of workers and taxpayers can fund the provision of pensions, healthcare and social services for a hugely expanded cohort of retired people, living longer, but not necessarily in better health.

Slide 4 Four Opportunities, Four skillsets

There are no easy answers in policy terms. But for a long-term business like Legal & General, the ageing population creates an obvious set of long-term, positive drivers for the business, to which we have matched skillsets:

- First, longer lives in retirement, coupled with care needs and constrained government resources, create a need for individuals to save more for old age and for health in old age. This is positive for pensions auto-enrolment, where we are one of the largest providers in the UK, and more broadly for our DC savings business.

- Second, it creates opportunities for Pension Risk Transfer as the historic providers of Defined Benefit pensions – company pensions schemes – seek to de-risk longevity. For us, the provision of de-risking solutions is a continuum running from LGIM's Liability-Driven Investment products through to longevity insurance and bulk pension annuity buy-ins and buy-outs.
- Third, for individual customers, longer lives in retirement create savings decumulation requirements which go beyond the traditional individual annuity or drawdown – these include utilising housing equity through lifetime mortgages: a market we entered last year.
- And fourth, ageing populations create a need for new assets, for example in healthcare, retirement housing and carehomes, which we can fill through the direct investment programme in L&G Capital and indeed through the asset side of our £45bn annuity book.

Slide 5 Our longevity expertise

And because of our long history and large customer-base in the UK, we have massive access to relevant data on longevity, mortality and morbidity to inform our business decisions.

This goes back through 29 years in the bulk annuity market... but data management and analysis is also a significant part of our DNA as a result of our extensive business and long history on the individual annuity and life sides of the business.

We bring this longevity expertise together and resource it with a dedicated team backed by independent academic expertise and a high level of modelling capability.

The other side of the coin is the access we have through investment management to institutional and corporate business, and to large swathes of the UK retail market for whom we are a familiar and trusted brand.

Slide 6 Financial Resilience

It is not just the demographic change that creates these opportunities. It's also the fact that, certainly in the UK, most of the population is under-saved and lacking in financial resilience.

This is a prosperous audience here today, and these issues may feel remote. But when one person in the UK is declared insolvent every seven minutes, and when the “deadline to the breadline” – the time from loss of earnings due to illness or redundancy to reliance on state benefits - is around three weeks for the average family, then we do need to worry about resilience.

But as well as worrying about resilience, we are in a position to do something about it – and this is an opportunity for our protection or insurance business.

Slide 7 Auto-enrolment a huge success

Turning now to look at these issues and more detail... first, pensions – and I will focus on the UK.

Legal & General’s Workplace Pensions business had £14.7bn of assets under administration as at the 2015 year-end – with around 1.8 million individuals auto-enrolled by employers including household names such as Tesco, John Lewis and Marks & Spencer.

For non-UK attendees, it is worth highlighting that Workplace Pensions in the UK are delivered by employers, for whom having a scheme is compulsory, and their employees are automatically enrolled, although they can choose to opt out. Currently only around 7% choose not to participate. The minimum contribution rates are legally set to escalate to a total of 8% by 2019.

This is a growth business, and set to grow further out of necessity, including through the new Lifetime ISA arrangements announced in the last Budget. UK State Pensions account for 44% of all welfare spending – and will grow to just under half of the total by 2021.

Auto enrolment has been a huge policy success on a standalone basis, but it sits in the broader context of the growth in Defined Contribution or DC savings. LGIM's DC assets under management at the year-end were £46bn and we – like most analysts - expect the UK market to grow to around £3trillion by the end of the next decade. This is moreover not just a UK phenomenon, it's global as more people respond to the ageing population issue by saving more for retirement – either voluntarily or as a result of government "nudges".

Slide 8 Typical Cost of Retirement

To put this into context at an individual level, here you see the component parts of the typical cost of retirement in the UK. Note the basic cost of living – £250,000 - no luxuries here, the annual income for the almost 19 years of retirement is around half the average national income – and the significant £117,000 cost of end-of life care.

A “no-frills retirement costs around £370,000, and many pensioners live in greater poverty than this.

Slide 9 Typical personal balance sheet at retirement

Here is the other side of the equation: total assets of slightly over £500,000 at the point of retirement. Current retirees with DB pension schemes may have slightly more, future retirees with DC pensions less. Net savings will vary, but the really interesting point is the value of the family home.

UK retirees own housing equity worth an estimated £1.3 trillion... and for the individual at the point of retirement, the house is frequently one of the largest assets in the individual balance sheet: the state pension is worth around £200,000, the average private pension (DB or DC) is around £80,000, and the house typically around £190,000 – much more in London.

It is unsurprising therefore that the equity release, reverse mortgage or lifetime mortgage market grew by 29% in 2014 and is expected to grow from around £1.5bn to almost £2.5bn by 2019.

Slide 10 Lifetime Mortgages

This is a market L&G entered last year – we wrote just over £200m of business, and are targetting to deliver £500m this year.

As the individual annuity market is much reduced, with annuitisation no longer compulsory, this was one of the answers for us in terms of replacing that revenue stream – and the answer for growing numbers of customers.

Slide 11 UK Pension Reform Key to reducing welfare spend

Stepping back to look at the macro view, it becomes very clear that for a government running a budget deficit, the cost of state pensions with guaranteed uplifts and tax breaks for private pensions are not affordable on a sustained basis.

The cost of tax reliefs remains an unresolved issue – but whether the ultimate solution is a traditional pensions model, an ISA model or a combination, the net effect of budgetary pressure will be to require more people to save more, for longer.

Slide12 Further opportunities to privatisate welfare

The pressure that is put on government finances as a result of population ageing also means that governments have to make savings elsewhere... including in benefits for people of working age.

In Germany, Angela Merkel has commented very publicly on the unsustainable nature of a welfare state that grows disproportionately versus GDP... and in the UK this means that the Welfare State created by William Beveridge in 1946 is due for a review.

This is sensitive territory for politicians, but the lesson of auto-enrolment is that a state system and a private system sanctioned by the state can co-exist comfortably... this is possible also in areas such as income protection in the event of sickness or job-loss. We call this idea "Beveridge 2.0" – in fact it is remarkably similar in concept to the original thinking in the wartime Beveridge Report.

Slide 13 DB pension schemes now a legacy issue...

Turning now to the corporate aspects of the ageing population phenomenon... the most obvious opportunity for Legal & General is in the Pension Risk Transfer or PRT markets.

I have never met a company CFO who wanted more longevity risk... indeed the widespread complaint is that a legacy Defined benefit Pension scheme is at best a distraction from running a company, and more often than not it is expensive blocker of corporate strategy or M&A. Occasionally, a legacy scheme in deficit – and virtually all are, as the graph on the right shows – can turn a problem into a full-blown crisis, as we are currently seeing in the UK with Tata Steel and Bhs.

This is not just a UK issue – while the UK has historically been the focus of L&G's activity in the bulk annuity markets, we have now also executed transactions in the US and Netherlands.

Slide 14 Managing risk with LDI

Pension de-risking underpins numerous sources of profit for Legal & General. The first step in the de-risking journey can be the switch of a schemes assets from equity to active fixed –income, and on into LDI strategies. Two thirds of the UK's largest pension schemes are on this journey.

LGIM's LDI and multi-asset solutions business had around £340bn of AUM at the year-end, and assets in this category increased by 15% during 2015, with external net flows of £28bn. This translates into a leading market share of

around 40%, and we expect further growth in the UK and also in the US and Asia.

Slide 15 LGR Nine sources of Profit

LGR – Legal & General Retirement – is the division which brings together our de-risking and decumulation solutions.

LGR's Operating profit in 2015 was £639m. We have nine profit streams in this business, including a UK capital-lite front book model which can include reinsurance of longevity risk through our panel of a dozen reinsurers, a back-book business and a separate US business model which utilises the balance sheet and administration capability of our L&G America business.

Slide 16 PRT

The next stages of risk transfer – longevity insurance, buy-ins and buy-outs, is also a market where we have been a leader for many years and continue to execute significant business through our LGR division today.

The demand is certainly there... in the US, UK and Netherlands... and globally, legacy DB pension liabilities amount to almost \$9 trillion. In addition, there is an active secondary market in annuity back-book transfers – you will have seen our recent £3bn deal for Aegon.

Slide 17 UK Pension Risk Transfer Opportunity

Looking more closely at the UK, we see that less than 10% of private sector DB liabilities have been transferred.... With a market delivering a total of around £12bn of dealflow annually in recent years.

Our own significant deals have included buy-outs, ordinary buy-ins and medically-underwritten buy-ins.

Executing transactions in these markets requires a combination of skills – in asset management, longevity and mortality, which means there are few natural competitors – we are now not only active in the UK, but also now in the US and Netherlands.

Slide 18 US pension Risk Transfer Opportunity

Looking at the US market now, we see many of the same characteristics. Large untapped opportunity – only 4% of annuity risk has transferred, the market is running at about \$12bn of dealflow annually, and competition is relatively thin.

In both cases, our PRT business has been re-modelled to work effectively and meet our internal hurdle rates of return under the Solvency 2 capital regime.

Under Solvency 2, our back book of business receives the benefit from the use of transitionals – Solvency 2 makes very little difference. The US market benefits from equivalence for new business.

Slide 19 Longevity reinsurance: our capital-lite strategy

The effective management of risk and capital was behind our adjustment to our “capital-lite” business model – this ensures also that the business is efficient under Solvency 2. We are able to use a growing, deep and liquid longevity reinsurance market as appropriate. For example, we’ve reinsured almost £12bn of longevity risk in the past five years, but chose not to do so on our recent £3bn transaction for the Aegon back book.

Slide 20 Back book to deliver material profits for many years

LGR is, moreover, a business where we have long-term visibility of emerging cash and profits – a back book which drives cash emergence for many years to come. This is one of the factors behind LGR’s success within L&G.

This is a complex subject – there is a degree of speculation about supposed trade-offs between profit upfront from Bulks, capital usage, subsequent cash

emergence and therefore underpin for a progressive dividend policy. I'm happy to take any questions on this, but I will say upfront that we manage this business – as we manage all our businesses, to secure a material level of cash for a multi-year period, with that cash being high-quality in the sense that it is visible and highly predictable – and therefore a strong underpin for dividend growth.

Slide 21 UK housing policy creating generational unfairness

The individuals who comprise our ageing populations naturally don't tend to become too familiar with the complexities of the PRT or bulk annuity markets – their concern is with the reliable provision of income in retirement.

However, they are very familiar with the impact of an ageing society on the housing market.

The UK has a chronic housing shortage. Whereas in the post-war period we were able to build 300,000 – even 400,000 new homes per year, today we are at around 150,000 – 100,000 short of the target.

Prices have risen accordingly as a result of this supply shortage, particularly in London and the South-East, and affordability relative to wages both for first-time buyers and renters is at an all-time low.

This is driving intergenerational unfairness as the age of first-time buyers rises – more young people live for longer with their parents, and more young people are dependent on their parents to fund deposits for mortgages. The “Bank of Mum and Dad” is a top ten UK mortgage lender – facilitating the purchase of £77bn worth of housing in 2015.

Part of the problem is that older people – empty nesters – tend to stay in family homes that are too big for them, whilst, as we have seen, raising money against those properties by means of lifetime mortgages. Survey data tells us that around a third of the over-60's want to rightsize, but can't because the choice of suitable property in the right locations is so limited. Most older

people want to remain within 5 miles of their current home, and to be near the “three F’s” – Family, Friends and Facilities.

However, only 1% of new housing in the UK is tailored for this older market – and the lack of choice causes shortages and blockages back down the chain of under-used family homes.

Slide 22 LGC – creating new assets for long term investors

Within L&G, LGC has two solutions for this problem. The first is to invest in housing in a broad sense: build-to-sell through our CALA Homes jv, build-to-rent through our £600m joint-venture with PGGM, the Dutch pension fund, additional housing as part of the urban regeneration projects we are undertaking in Leeds, Salford, Cardiff, Bracknell and many other locations, and from later this year modular construction through our L&G Homes business.

This last initiative will be a real disruptor to a market which has supply and production constraints – we will be able to produce 3000 homes per year from our new facility in Yorkshire.

We see this activity as economically and socially useful. The social utility of increasing supply to a market where older homeowners are shutting out younger purchases is self-explanatory.

The economics for Legal & General also makes good sense. With interest rates at historic lows – and \$10 trillion of global debt delivering negative returns – investing in real assets to earn better risk-adjusted returns is an obvious step for a long-term institutional investor such as ourselves.

Slide 23 Legal & General Capital: Direct Investing Growth Opportunity

Here you see the evidence of that: LGC last year delivered Operating Profit of £233m and Net Cash of £187m.

Below, you can see the total direct investments of £867m, with an operating profit of £69m and a Return on capital of 8.8% - not bad in a world of virtually zero rates.

Our structure lends itself particularly well to this approach. L&G Capital – LGC – invests regulatory surplus capital from our own balance sheet and creates new real assets... the debt component of these assets can be structured so as to match known illiquid liabilities in our annuity book, extracting an illiquidity premium... and as new asset classes are created, investment opportunities can be made available to third parties through our LGIM business.

There is a compelling synergy which runs across these real asset businesses – financially and operationally: LGIM's £18.3bn property and infrastructure business attracts investment from the UK, US Europe and Asia, and is a repository of expertise, while L&G is also the largest provider of intermediated mortgages in the UK – with over £40bn of mortgage business transacted last year.

Slide 24 UK Regeneration Case study £1b Media City

Here you see an example, Media City, which is a UK regeneration project where we are, amongst other things, the BBC's landlord. This provides equity assets for LGC, debt opportunities for LGR or the annuity book, and future development land for the LGIM property fund.

Slide 25 Clean Energy Case Study

...and here is another example, energy assets in the renewables space – here onshore wind – supporting the business objectives of LGIM, LGR and LGC.

Ageing populations play into our real assets business in another obvious way – investment in healthcare. An ageing population needs better healthcare, and a cash-constrained government cannot easily afford to invest in the necessary physical and digital assets.

In the US, health spending accounts for around 17% of GDP. In the UK, the combined public and private sectors account for only around 10%. Our National Health Service is creaking as it attempts to keep up with demographic change – longer lives, more long-term elderly conditions such as hypertension and dementia, and increasingly complex treatments.

NHS net expenditure in England has increased from £64 billion in 2003/04 to £113bn in 2014/15. It employs 150,000 doctors, up by 32,000 since 2004, and deals with 1 million patients every 36 hours.

Legal & General has already begun to invest in hospitals and care homes – we see this as a growth sector for good fundamental reasons, and there will be significant new opportunities.

For example, part of the devolution deal for Manchester involves the city taking responsibility for health and social care – with a £2bn budget shortfall. Part of the solution is likely to involve rationalisation of the property estate. To give another example, half the GP surgeries in the country have been assessed as unfit for purpose. Then again, as the government tries to bring more digital capacity to bear in the NHS, that also creates potential investment opportunities: we hear a lot about FinTech – MedTech is perhaps even more likely to become the next great growth area.

Slide 26 Five growth drivers + ambitions (from year-end)

So, ageing populations are very logically one of our five macro-drivers of growth. Demographic change on its own creates growth opportunities in pension saving, investment management, corporate longevity de-risking, housing and real assets.

Ageing populations also overlap or combine with other growth drivers: the demand for new real assets, which enhance yields for our balance sheet, and the constraints on government spending which will drive welfare reform and create new insurance opportunities.

This a powerful mix, and not just in the UK. US Pension Risk Transfer creates new opportunities... DC saving for retirement is a global phenomenon... just imagine what pensions auto-enrolment could look like in China.

Some of these opportunities will require constructive collaboration with governments – and it feels certain that governments will need to work closely with industry providers to meet the challenges of an ageing society. What is equally clear is that, while for example the excitement over Brexit and the Referendum will fade after June 23rd, our macro drivers of growth, including ageing populations, will be with us for the long-term.

Thank you very much – I'm now very happy to take questions.