FUNDAMENTALS

Demographic drivers

Some countries are in pole position, while others are in danger of crashing out.

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The global labour force (the number of 15-70 year olds willing to work) is slowing down. Fewer babies have been born and previous generations are retiring. Some countries are offsetting this with policies such as increased immigration and delayed retirement. We look at these factors and which countries will be most affected by this fundamental demographic shift.

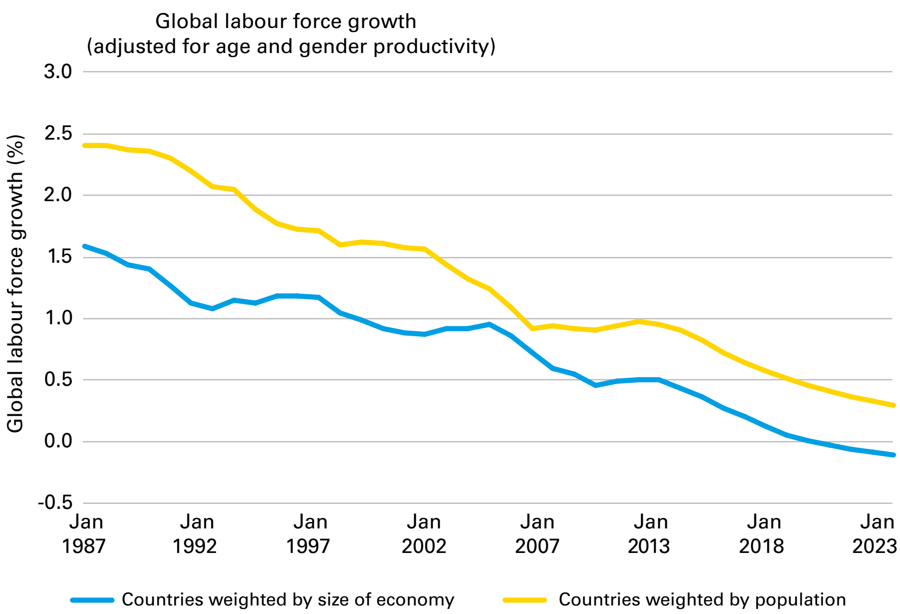
A GLOBAL TREND

Over the last forty years, the rate of growth of the global labour force has steadily declined. Over the next decade, the global labour force will grow by 1% less than in previous decades (the old 'normal'). When we weight countries by GDP, the labour force should actually stagnate within the next five years and turn negative within the next ten.

Our calculations take into account regional differences of retirement (the UK has been delaying retirement ages for example), earnings of men and women and the fact that experienced workers tend to earn more than their junior colleagues. This allows us to create and monitor a much more accurate estimate of the global labour force.

However, while these calculations show the 'what', they miss the 'why'. Looking at the key drivers of labour force growth (or lack of growth) can illuminate how and why they impact countries in different ways.

Figure 1: Global labour force growth (age and productivity adjusted)



Source: LGIM estimates

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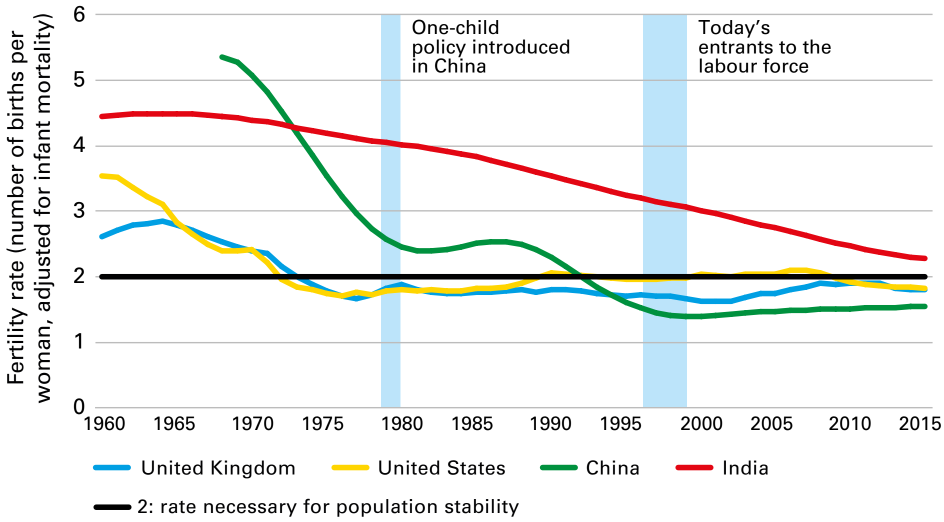
BIRTH RATES

The main driver of labour force growth is the number of new native entrants, i.e. the number of school/university leavers. This is basically the number of children born around 20 years ago (depending on the average number of years of education).

Adjusting for childhood mortality, India had a high fertility rate (average births per woman) 20 years ago of 3.2 children. China, however, reached its nadir at around 1.4 after a rollercoaster of a decline since 1968 when its rate was an eye-watering 5.4. The UK's fertility rate was 1.7 in 1997 which was relatively high for an advanced economy but well below its peak of 2.9 in 1964. Moreover, the UK and the US have both had for over 40 years fertility rates below the so-called 'replacement rate' of 2 births per woman.

This 'replacement rate' for population stability is because – assuming an equal split between baby girls and boys – a fertility rate of 2 is required for each woman to 'reproduce herself', i.e. produce one girl per woman. A fertility rate below this means the population will eventually shrink, above 2 and it will continue to grow. Fewer births means fewer school leavers, implying a shrinking labour force when previous generations retire. It is also interesting to note that China's one-child policy was introduced only after the initial collapse of its fertility rate and took a further 14 years before it sank below the replacement rate in 1993.

Figure 2: Birth rates have collapsed



Source: United Nations, LGIM estimates

IMMIGRATION

Imported labour (immigration) can keep the labour force growing even if the number of school leavers dries up. The US and the UK have experienced strong levels of immigration over the past decade. By contrast, Japan has shunned immigration and seen its labour force shrink further as a result. The rise of populism (Trump and Brexit) suggests immigration could be curtailed in the UK and US, turning their labour markets more Japanese. German immigration has surged since the recent refugee crisis but a softening is assumed ahead.

FEMALE PARTICIPATION

An increase in female participation can also boost the labour force. If we look at post-motherhood participation rates, only 33% of Indian women aged 50 are working compared to more than 80% in the UK, Germany and France. There is clearly capacity for more women to work in India and this is a shift which can be achieved in a relatively short amount of time. In Spain, where only 25% of women aged 50 worked in 1985, this was successfully raised to almost 75% today.

RETIREMENT AGES

Just as the labour force grows when a student graduates from school/university, it shrinks when an elderly worker retires. Trends in retirement are therefore important drivers of labour force growth.

As discussed in the previous demographics instalment, End of the baby boom[1], the UK has successfully boosted its labour force over the past decade by raising the female retirement age from 60 to 65 (the same as men). It intends to further raise the joint retirement age to 67 over the next decade. However, the official retirement age is only one factor determining when someone actually quits work. For example, 55% of Japanese men aged 65-69 work, despite the official retirement age being 62.

1 http://www.lgim.com/library/knowledge/thought-leadership-content/fundamentals/Fundamentals_Feb_2017.pdf

At the other extreme, only 7% of 65-69 year old men in France still work. But there have been significant increases in the share of 60-64 year olds working across Europe so there is scope for further delays in European retirement if political barriers can be overcome.

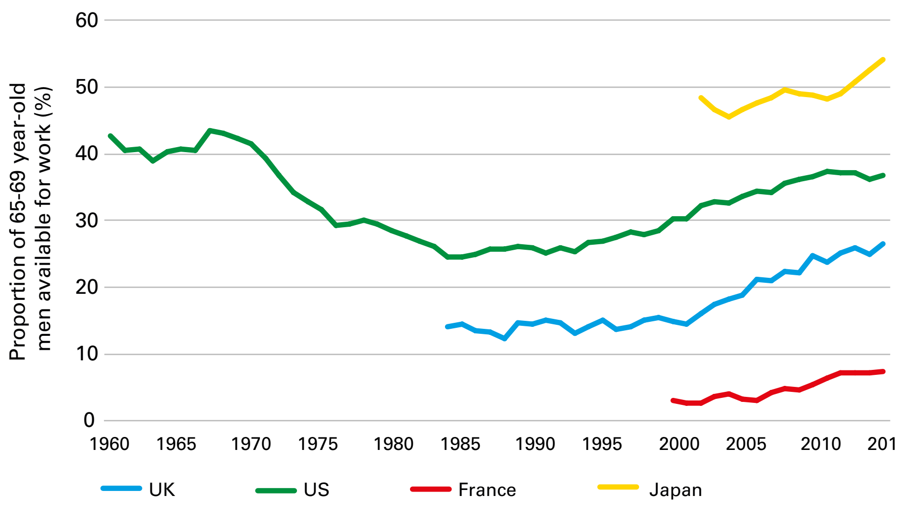
By contrast, there is less scope to boost elderly participation in the US. It's already quite high (37% participation rate for 65-69 year old men). This reflects its less generous state-pension system than most European countries as well as age discrimination laws which forbid employers from forcing workers to retire when they reach a certain age. This level also factors in the country's lower life expectancy rate so, with the low-hanging fruit gone, it is harder for the US to increase elderly participation further. In contrast to its peers, we assume the participation rate of elderly US workers remains flat.

REGIONAL DIFFERENCES

Now let's sum the impact of these drivers on the countries in our study. By combining projections of the number of people in different age/gender cohorts (e.g. males aged 60-64) with trends in participation rates for each cohort, we can estimate the labour force into the future. We also take into account productivity differences across age cohorts: young workers are inexperienced, the middle aged are in their prime while the elderly work fewer hours. We also take into account differences in working hours by gender.

We estimate such productivity-adjusted labour forces for 12 major economies, accounting for 70% of world GDP and over half of the world's population.

Figure 3: More older men are carrying on working



Source: OECD

We split the world into four groups: still strong, slowly stagnating, sharp shock and sustained slump.

The x-axis in Figure 4 shows the expected growth in the productivity-adjusted labour force over the next decade while the y-axis shows the change compared to the historical past. The top-right corner is therefore the sweet spot (strong growth and positive momentum) while the bottom-left is the worst (weak growth and negative momentum). We have also scaled each observation by the size of its economy.

STILL STRONG

India (1¾%) and Brazil (1%) should experience strong labour force growth over the next decade, reflecting their high birth rates. While this is still a significant slowdown on recent decades (down ½% and 1½% respectively), this group represents the main hope for global growth and could

Figure 4: What does the future look like?

be a good place to make long-term investments. However, such countries often lack high standards of governance and infrastructure: Brazil's political crises and corruption scandals a notable example. India's reform agenda under Prime Minister Modi is more encouraging.

SLOWLY STAGNATING

The UK and France should see their productivity-adjusted labour forces slowly stagnate over the next decade. This is around ½-¾% worse than historical average. These countries should therefore mildly disappoint versus long-term trends but could offer relatively safe investments if they continue to pursue pension reforms and pro-immigration policies.

SHARP SHOCK

The US and China face a bigger negative shock. Although their labour forces should also stagnate like the UK and France, this is a bigger reduction in growth compared to their more buoyant past. US labour force growth should decline by over 1% while China's should fall by over 1¾% relative to previous decades. Investors might be surprised by the sharp loss of momentum. Some investments that rely on a repeat of prior growth rates could come under severe pressure. The US could partly offset demographic decline with technological innovation but China will need to implement pro-market structural reforms.

SUSTAINED SLUMP

Russia (-1%), Italy (-½%), Germany (-½%) and Japan (-½%) should see sustained slumps in their labour force over the next decade. While there is uncertainty about German immigration and full-time female participation in Japan, both countries are running to stand still. Long-term investors looking for sustainable strong economic growth may think twice before investing in these countries.

FINAL THOUGHTS

In terms of the contribution to financial returns in US dollars, we estimate the global labour force will be stagnant over the next decade, down 1% compared with previous decades. But within this difficult aggregate outlook, there are areas of relative strength that long-term investors should focus on. Equally, some countries are set to underperform and face an uphill battle to generate decent economic growth.

Having broken down the key drivers of labour force growth into birth rates, immigration, female and elderly participation, you can see that policymakers have some ability to temper demographic decline. We will explore these policy options in the context of the UK in our next note.

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