GLOBAL: POPULATION AGEING, WAGE GROWTH AND INFLATION

There is broad agreement amongst researchers that population ageing has a detrimental impact on economic growth through a reduction in the working-age population. There is less agreement on the impact on inflation, which amongst other things is influenced by age-dependent spending and savings behaviour. Wage developments will play a key role. A shrinking labour force could create structural labour market bottlenecks in certain sectors, trigger a 'war for talent' and force companies to pay higher wages and raise their selling prices. This would spill over to the rest of the economy. It shows the importance of supply-side oriented policies aiming to raise potential GDP growth, thus avoiding that the central bank would be forced to address the inflation challenge through tighter monetary policy, which would lower realised growth.

There is broad agreement amongst researchers that population ageing has a detrimental impact on economic growth. Recent research shows that in the US, between 1980 and 2010, it has reduced the growth rate in GDP per capita by 0.3 percentage points per year[1]. It is to be expected that this trend will continue. An ECB paper quotes research by the European Commission, which concludes that in the Eurozone, "*population ageing is expected to have a dampening impact on potential growth*[2]." The Commission assumes that the decline in the working-age population (chart 1) "*will not be significantly counterbalanced by migration and a further rise in the labour force participation rate*", but it expects that total factor productivity will be the main driver of potential growth over the medium term[3]. There is less agreement on the impact of ageing on inflation, which depends amongst other things on what happens to spending versus production, considering the differences in spending and savings behaviour between various age groups[4]. Wage developments may also be an important factor: a shrinking labour force could create structural labour market bottlenecks, trigger a 'war for talent', increase employees' negotiating power, and force companies to pay higher wages and raise their selling prices. This is one out of many channels whereby population ageing can, through the labour market, influence inflation (exhibit 1).

For a detailed analysis of these drivers, we can first assume that the total working-age population remains constant. People who retire are replaced by young people that enter the labour market, by migration, by people who decide to work longer, by an increase in the participation rate. Under such a scenario, there could still be a negative impact on inflation because older people receive a higher wage so if an older cohort is replaced with a younger one, the average wage level would decline.

EURO AREA: PROPORTION OF POPULATION AGED 15-64 YEAR-OLD

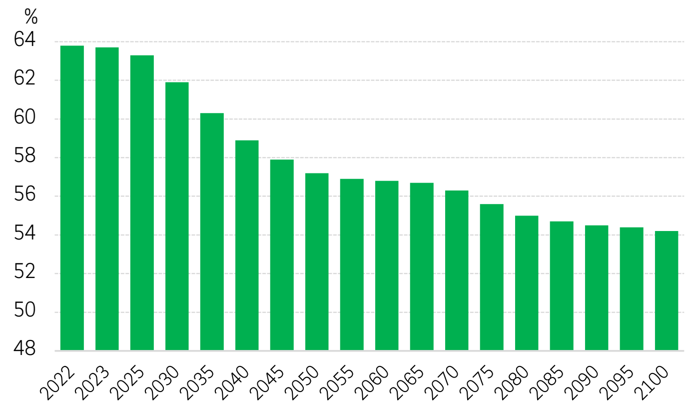

CHART 1 SOURCE: EUROPOP2023, EUROSTAT, BNP PARIBAS

This reduction in the cost base of companies could, through competitive pressure, cause a decline in selling prices. A potential increase in the productivity due to the changing age structure of the labour force, could also be disinflationary. On the other hand, wages increase faster for people early in their career, so this would limit the impact of the difference in wage levels[5]. Moreover, to the extent that older people work longer, the wage bill of companies would not decline.

1Source: Nicole Maestas, Kathleen J. Mullen, David Powell, *The Effect of Population Aging on Economic Growth, the Labor Force, and Productivity*, American Economic Journal: Macroeconomics, April 2023.
2Source: *The macroeconomic and fiscal impact of population ageing*, ECB Occasional Paper 296, June 2022.
3There is disagreement on the impact of an ageing workforce on productivity. The research mentioned in footnote 1 finds a negative effect in the US.
4 At the risk of oversimplifying, younger generations save in order to accumulate sufficient financial wealth by the time they retire whereas retired people have a low or even negative savings rate.
5Changes in the age structure of employment can therefore have substantial effects on wage growth. The main channel for such effects seems to be the different wage levels, given that the average hourly wage of an employee who is 60 or older is more than 50% higher than that of an employee under 30. The fact that wage growth tends to decrease with age works in the opposite direction. However, this effect tends to be more gradual and is therefore often less important – especially in times of large cyclical fluctuations in participation

The decline in the working-age population raises the risk that, through various channels, inflation would increase. This creates a necessity of supply-side oriented policies to mitigate this risk.

A more realistic assumption is that the working-age population declines, causing structural labour market bottlenecks in many if not most sectors. This would put upward pressure on wages as companies seek to poach staff from competitors or from other sectors where employees have similar skillsets. This way, upward wage pressure due to bottlenecks in one sector would spill over to other sectors, although the latter may not suffer from similar bottlenecks. A higher wage bill would force companies to increase their selling prices -if the competitive environment allows them to do so-, thereby creating another spillover channel to the rest of the economy. How about the possibility that in certain sectors, the opposite would occur, and that available labour would be in excess supply? Could this be a counterbalancing force in terms of inflation? This is very unlikely due to the downward rigidity of nominal wages. Moreover, the question seems rather theoretical: anecdotal evidence shows that already today, shortages are widespread.

To conclude, the decline in the working-age population can, through various channels, put upward pressure on inflation. The fact that different channels exist increases the risk that this theoretical possibility becomes reality, hence the necessity of supply-side oriented policies to mitigate this risk: improving the matching of skills -those required by companies versus those offered by job seekers-, increasing the participation rate, providing incentives for working longer, a policy towards skilled migration, boosting productivity. This would not only raise potential growth but it would also avoid that the central bank would be forced to address the inflation challenge through tighter monetary policy, which would lower realised growth.

William De Vijlder

AGE AND WAGE GROWTH

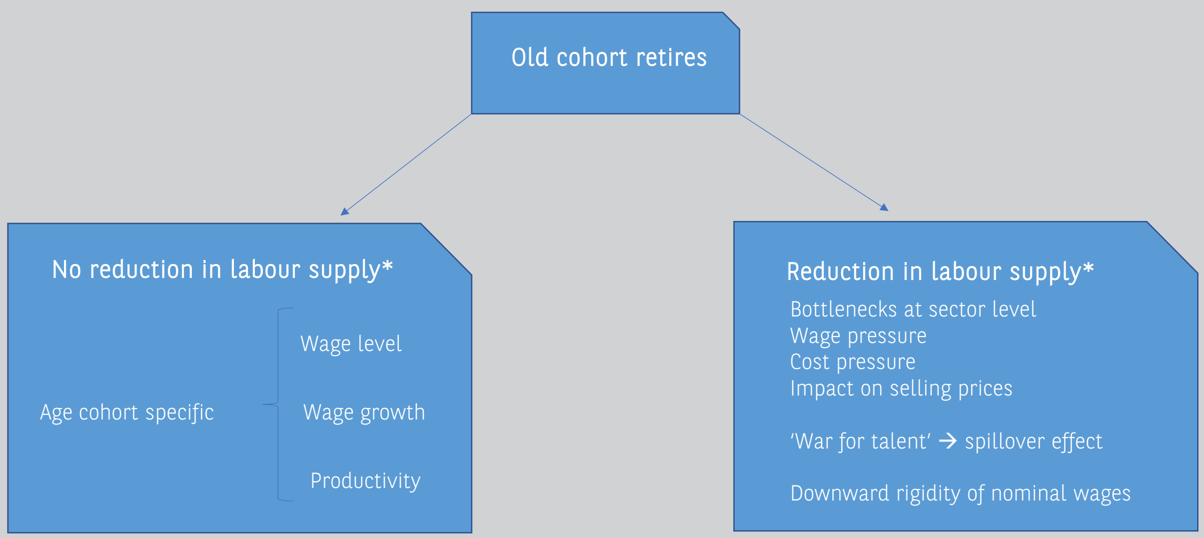

FIGURE 1

* Taking into account migration and change in labour force participation rate

SOURCE: BNP PARIBAS