Speech by Governor Gabriel Makhlouf to OECD

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Growing pains: how demographics, migration and technology will reshape Europe’s workforce

Lecture at the OECD

Good morning and thank you for the invitation to speak here today.[1] It is a pleasure to be back at the OECD and to talk about a topic that is rarely far from the top of the policy agenda, namely labour market developments. Whether it is in relation to long-run growth prospects or the drivers of inflation, labour market dynamics play a crucial role.

My speech will today will cover three inter-related topics.

First, I will reflect on the resilience of labour markets over the last five years, highlighting the key developments that have seen employment in the euro area grow steadily, despite a sequence of negative shocks.

Next, I will explore how looming demographic challenges, ageing populations, declining fertility and shrinking work forces, will drag on employment growth and therefore economic growth in the coming decades, with migration only offering a partial, albeit important, solution to the challenge.

As demographic headwinds bite, finding ways to boost labour force participation and productivity becomes even more important as a driver of economic growth. Despite this, policy reforms to structurally raise participation rates in Europe have been slow in coming. On top of this, recent productivity trends for the euro area are not good. In the final part of my speech I will discuss how new technologies, and artificial intelligence (AI) specifically, can be harnessed to boost productivity, and how this interacts with some of the labour market dynamics.

The Euro Area Labour Market 2019-2025: a quiet champion

In the face of unprecedented shocks in recent years, the Euro area labour market has held up exceptionally well. This performance is all the more remarkable when we recall the hysteresis that characterised previous downturns. And it's why I refer to it as the 'quiet champion'.

The labour market entered the pandemic in good shape. Monthly unemployment in the euro area reached a low of 7.2 percent in March 2020, reflecting steady, if unspectacular, growth since around 2015. Notably, around two-thirds of the expansion of the labour force in the years prior to the pandemic was immigration from outside of the euro area. Around this time, falling unemployment and rising job vacancies were also contributing to tighter labour market conditions, seen as a key driver of wage growth.[2]

The pandemic triggered an immediate labour market disruption. Labour demand ground to a halt as job openings collapsed (PDF 946.55KB). Unemployment peaked at 8.6 per cent in August 2020. However, the euro area's response differed markedly from other regions, particularly the United States which saw a much larger unemployment spike. The difference reflected the extensive use of job retention schemes across Euro area countries, which maintained employment relationships while reducing working hours. These policies helped to support incomes in the face of an exceptional shock, but also facilitated a smoother recovery once economic activity resumed.

By the third quarter of 2021, little more than 18 months after the start of the pandemic, the employment rate in the euro area was above pre-pandemic levels, at 69 per cent of the working age population. Post-pandemic labour market dynamics have, however, proved to be more than just a rebound. Employment has continued to grow despite further shocks such as the war in Ukraine and rising geopolitical tensions, with the euro area employment rate hitting 70.8 per cent in late 2024; unemployment hit an all-time low of 6.2 per cent in late 2024 and has remained around that level since.

Several factors contributed to this resurgence.

On the demand side, post-pandemic pent-up demand, especially in consumer facing services, boosted the demand for workers. The slow adjustment of real wages – falling by around 2 per cent between 2021 and 2023[3]– was another important factor. As wage adjustment to the inflation surge lagged, this acted as a 'shock absorber', making labour more attractive than capital and thereby supporting labour demand.[4] ECB analysis points to the combined role of high profit margins and falling real wages in providing financial space for firms to hoard labour during the recovery from the crisis, especially in manufacturing.[5]

On the supply side, the labour force in the euro area increased by over 8 million between 2021 and 2025, growing at an average annual rate of 1.2 per cent.[6] This is almost four times the rate of growth we saw prior to the pandemic. And, much like the earlier period, migration has been an important source of workforce growth. Eurostat data shows that almost half of the increase in the size of the labour force is from foreign workers, that is, non-euro area nationals. In addition, foreign workers have also seen a larger increase in their employment rate in recent years, relative to nationals. The combined effects on GDP are large: the ECB has estimated that 4 of the 5 percentage point cumulative increase in GDP between 2019 and 2024 is attributable to foreign workers.

This is a euro area picture. When we look at individual countries, the relative role played by migration and increasing employment and participation rates differs. For example, growth in Italy, with a relatively lower participation rate, has been helped more by higher participation rates of nationals. Whereas the likes of Germany, with a declining working age population, has relied more on an influx of foreign workers to offset the effects of the population ageing. Some countries, like Ireland and Spain have relied on both channels, with higher participation rates and inward migration boosting employment growth in both countries.

I emphasise the migration channel for two reasons. First, assumptions about migration patterns can have a big impact on population growth estimates, as I outline below. Second, in the euro area, migration happens across the skill distribution: there was an almost identical increase in the share of high-skilled migrant and national employment between 2015 and 2023. This suggests that migration also matters for productivity growth.[7] I return to this in the next section that looks at longer-term demographic trends.

Longer-term demographic trends – where cyclical meets the structural

Looking ahead, at a euro area level some labour market cooling is expected over the current forecast horizon, through to end-2027. The September ECB staff macroeconomic projections have annual employment growth averaging around 0.5 per cent over the next two years, a significant drop-off compared to the recent experience.[8]

Some of this reflects a cooling of labour demand. We are already seeing this in job vacancies, which have declined from their post-pandemic peaks, although at the country level we see cross-country differences in these trends. For example, job postings in Spain and Italy remain around 50 per cent above pre-pandemic levels; whereas in Germany and France, the figure is closer to 15-20 per cent, reflecting more labour market cooling in these countries.

The employment growth slowdown also reflects demographic factors that were initially rather slow moving, but are now beginning to bite. I have previously talked about this as the 'quick-quick' phase of demographic change: a period when the population structure in many countries will go through a rapid transition phase, culminating in a far larger retired and elderly population, essentially an inversion of the population pyramid (PDF 1.35MB) that has characterised many developed countries for decades. Between 2024 and 2027, the euro area working age population is projected to fall by 0.7 per cent (or 1.5 million workers between the ages of 15 and 64). Some countries see large declines, for example Latvia (-4.8 per cent), Lithuania (-3.4 per cent), Greece (-2.6 per cent), Portugal (-2.1 per cent), Germany (-1.5 per cent) and Austria (-1.3 per cent). Even among those countries treading water – such as Belgium, France, Spain, the Netherlands, Finland and Cyprus, all start to see their working age populations decline from 2027 onwards. The longer-term impact is stark: the 'old-age dependency ratio' in the euro area, that is, the population aged 65 and over as a proportion of the population aged 15-64, is set to increase sharply from 33.7 in 2022 to 51.2 in 2050.

These trends will exert varying, and sometimes contradictory, effects on inflation. An older population with lower consumption and higher savings could place downward pressure on aggregate demand, limiting price growth in certain sectors. This aligns with the “secular stagnation” hypothesis, which has argued that ageing societies are more prone to disinflationary forces. At the same time, a shrinking working-age population will tighten labour markets in the absence of increases in labour force participation rates. This puts upward pressure on wages that feed into services inflation. Moreover, as older cohorts consume more health care and age-related services; relative price increases in those areas may become more entrenched. The balance of these effects is hard to predict, but one potential outcome is higher structural inflation in labour-intensive, non-tradable sectors (i.e. services), even as weak aggregate demand keeps headline inflation subdued. This creates an environment in which inflation dynamics are increasingly segmented, complicating the job of central banks that aim to stabilise prices economy-wide.

Returning to demographic trends, the workforce in Ireland is also ageing, although the trend somewhat lags what we see in other European countries. There are two main reasons for this. First, relatively higher fertility rates during the early-2000s will continue to support growth in the working age population in the near-term.[9] However, rapidly falling fertility rates since then, Ireland’s fertility rate was 1.5 in 2023, down from almost 2 in 2003, and converging on the EU average of 1.4, means that from the mid-2030s onwards, Ireland has one of the fastest ageing populations in Europe, rapidly closing current gaps in the dependency ratio, when compared to other countries. Central Bank of Ireland analysis (PDF 1.19MB) projects the long-term growth rate of the economy to slow by 2050 to below half its historic average growth rate observed over the last half century.

The second mitigating factor is migration. A recent report by Ireland's Department of Finance (PDF 2.71MB) shows how inward migration has been central to Ireland's growth story. Over the period 1995-2020, all European countries saw an increase in the share of international migrants in their population, but Ireland's trajectory stands out: from just over one-in-twenty international migrants in the population in 1995, by 2020 this was one-in-five, similar to figures for Austria, Germany and Sweden. As the report notes, while it can have large impacts, net migration is hard to predict, and, in the case of Ireland at least, it has been historically under-predicted. However, even baseline assumptions (PDF 2.71MB) of net migration returning to pre-pandemic levels of around 40,000 per year sees Ireland's labour force growth stay in positive territory through to 2047. In a low migration scenario – just under half this level – the labour force starts to contract much earlier, from 2041 onwards.

The point here is not so much to get bogged down in population or migration projection scenarios – which, as I said, are highly uncertain – but rather to highlight the extent to which migration can help mitigate the demographic and growth drag from ageing populations and falling fertility rates. This could allow time for governments to develop and implement other policies, mainly around labour force participation and productivity, as I discuss in the final section of my speech.

Some final thoughts on migration.

The preceding discussion focuses on the direct impact of migration, that is, on numbers in work. However, as OECD research, among others, has shown, migration supports growth beyond direct effects. This includes the potential for positive net fiscal impacts, i.e. taxes and contributions that migrants pay compared to the benefits and public services they receive – fostering trade linkages and contributing to job creation and entrepreneurship.

And while migration can offset some of drag on economic growth from unhelpful demographic dynamics – as well as helping to smooth out cyclical labour market fluctuations, we cannot ignore the growing political and social resistance to immigration in many countries.

For me it emphasises the importance of robust evidence and building a narrative that is based on facts. Research has shown that perceptions about migration can be wide of the mark, be it about the number and characteristics of migrants, or their economic contribution to society. It is important that decision makers continue to have a solid evidence base on the impact of migration on our economies, including how it interacts with demographic trends. OECD research and analysis provides a valuable evidence base to support effective decision-making.

Shrinking not sinking[10]

Migration can mitigate some of the effects of the coming demographic changes, but it cannot push back the tide. In this section, I now want to look at other how increasing labour force participation and productivity growth can help.

As I have said previously, with shrinking populations, increasing labour force participation is a necessary part of the solution. For the working age population, it is important that reforms to tax and benefit systems remove disposable income cliff-edges and tax wedges that can impinge on incentives to work. In this regard, ongoing OECD research on how tax and benefit systems affect incentives to work provide an important public policy role.

We also need to look beyond the traditional definition of working age population as 15-60/64 years of age and boost participation in the post-60/65 population. In a world of longer lifespans and health spans, sustaining living standards will need people to work beyond what is currently considered 'typical' retirement age. A recent OECD report on making the labour market work for older workers puts it well:

"To sustain living standards and address structural labour shortages, many countries will need people to work beyond 60 or 65. This requires labour market policies and employer practices that support the hiring, retention and most importantly the employability of mid-to-late career workers. Employers, employees, governments and social partners all have a role in promoting lifelong learning, improving job quality and promoting healthy workplaces to ensure the employability, well-being and economic contribution of older workers in an evolving world of work."

The impact of increased labour force participation in the post-60/65 population is potentially large. Take the old-age dependency ratio as an example. Defining the working age population as 15-69 instead of typical 15-64, and taking Eurostat's current population projections, the euro area dependency ratio in 2050 is 36.6 instead of 51.2; in Ireland it 'falls' from 43.2 to 29.1.[11] To put these changes in context, allowing for a 'high migration' scenario in population projections results in a relatively small decrease in the euro area 2050 dependency ratio, to just 48.9; for Ireland, it falls to 40.8.[12]

Shifting our perceptions of the working age population can alleviate some unpleasant demographic arithmetic. However, given relatively lower participation rates in general for older workers, these effects likely represent the upper-end of potential upside scenarios to raising participation rates. Having said that, labour force participation rates have increased for the 65-69 age group in recent years, from 13 to 18 per cent in the euro area between 2019 and 2025, and from 23 to 30 per cent in Ireland over the same period. For comparison, the participation rate of 65-69 year olds in the US in 2024 was 33.4 per cent.

Thus far, my remarks have focused on the role of the size of the working age population in growth. I will finish with a brief discussion on the other fundamental growth driver, namely productivity.

In previous speeches I have highlighted the drivers of weak productivity growth in Europe, and policies to try and improve it. On the policy front, implementing the proposals in the Draghi and Letta reports – mainly around completing the Savings and Investment Union and removing barriers that restrict trade in goods and services in the EU single market – must be a priority. You will not be surprised to hear that this was a topic of conversation at last week's meeting of EU Finance Ministers and Central Bank Governors.

But here I want to talk specifically around developments in AI. We are still in the early take-up phase of a technology that is itself rapidly evolving. But it is already clear that AI adoption rates are faster compared to historical episodes of new technology roll-outs, such as the advent of the personal computer. What we have seen so far in terms of the use of AI, including in my own organisation, suggests that it has the potential to disrupt existing employment patterns, both as a substitute for existing labour through the automation of certain tasks and as a complement to existing skills.[13] Together, this will create new opportunities for workforce growth and productivity gains. We need to prepare now for the changes that are coming. This means, among other things, more flexible labour markets that allow for worker mobility within and between firms, as well as across sectors and occupations. It also means providing training opportunities for workers – both younger and older – to drive upskilling and support transitions to new roles that may not even exist yet.

In many ways, this is revisiting the 'flexicurity' debate in Europe. Speaking at the OECD, many of you will be familiar with the concept, but flexicurity is essentially about balancing flexibility for employers and security for workers so that firms and workers can adjust efficiently to economic changes and new technologies, while also maintaining social inclusion and competitiveness.[14]

In the early-2000s, flexicurity became synonymous with labour market structural reforms.[15] As you will have seen from our September decision, the ECB's Governing Council considers it important for governments to adopt growth-enhancing structural reforms that can strengthen the euro area economy in the current environment.

In the context of AI, and given the role of start-ups in driving innovation historically (PDF 411.04KB), we must reduce both bureaucratic and financial hurdles to starting, and scaling-up, a recurring theme in both the Draghi and Letta reports. Reforms that align and streamline hiring procedures across the euro area will help to minimise risks to firms of adopting new technology, as well as encouraging greater cross-country worker mobility, which will be particularly important for high-demand digital or AI skills. Related to this, mutual recognition of skills and aligning this to the national university and vocational training programmes at the country level will help to balance supply and demand for skills at a European level. Better coordination around the passporting of worker benefits, be it pensions, training credits or even health insurance – would also encourage mobility across firms, sectors and countries. As AI shifts the demand for skills, active labour market programmes that focus on reskilling, not just younger, but also mid-career workers, linking back to my earlier discussion – will be important.

Conclusion

Despite a series of negative shocks in recent years, employment in the euro area has steadily grown, driven by strong post-pandemic demand and increased labour force participation, bolstered by inward migration. Looking ahead, demographic shifts will slow employment growth. Migration offers a partial solution, but the dividend from raising labour force participation rates is arguably greater. And, we need to be thinking about participation in the context of new generations living longer and healthier lives.

Raising productivity growth will be fundamental for sustaining living standards. The roll-out and rapid adoption of AI has led to much hype about its productivity promise, but the eventual impact remains highly uncertain. Nonetheless, flexible labour markets and proactive reskilling of workers across the age distribution will be essential to maximise the productivity enhancing potential of these new technologies.

To sum up, what the data is telling us is that our societies are facing a series of important choices if we want to sustain or improve our future living standards (or, perhaps more accurately, for some of us at least, the living standards of our children and grandchildren).

We could of course just accept that living standards will worsen but I see little evidence that poorer living standards are likely to be tolerated by the majority of our citizens. I suppose we could also see an increase in fertility rates but I am not sure this would solve the challenge on its own and, on the evidence, that would require a significant reversal in recent trends.

Our choices are likely to involve improvements in our productivity, an increase in labour market participation and inward migration. In my view a combination of these, they are not mutually exclusive - offer us the most effective route to building the best opportunities for our grandchildren.

I do not suggest that this will be straightforward. To help us to choose well, we will need researchers and organisations such as the OECD to set out the facts in an accessible way and enable informed choices to be made by policymakers, and which can be understood by our citizens.

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[1] Thank you to Rea Lydon, Daragh Clancy, Rob Kelly and Conor O'Shea for their help in preparing these remarks.

[2] See, for example, the discussion on wage growth dynamics and labour market tightness in the December 2019 Eurosystem macro projections. In 2014, there were more than ten unemployed persons for each job vacancy; by 2019, this had fallen to around four unemployed persons for each job vacancy. Despite an initial collapse in job vacancies (PDF 946.55KB) at the onset of the pandemic, the post-pandemic rebound would see this ratio almost halve again.

[3] Monitoring wage dynamics after the inflation surge was important for monetary policy makers concerned about 'second round effects' that could drive inflation persistently about target. See for example, my November 2021 remarks "Inflation dynamics in a pandemic: maintaining vigilance and optionality", where I highlight this risk. The development of more forward-looking and real-time wage trackers – such as the ECB Negotiated Wage Tracker and the Indeed Wage Tracker, developed by the Central Bank of Ireland and the jobs site Indeed – have provided crucial information on wage dynamics.

[4] On real wage dynamics during the inflation surge, see President Christine Lagarde's 2025 speech at the Kansas Fed Symposium in Jackson Hole, Wyoming.

[5] One of the flip sides of labour hoarding is lower productivity growth, measured as output per worker. Understanding the reasons for weak productivity during the post-pandemic recovery was a key issue for the Governing Council in recent years. For more on this, see Chapters 2 and 3 of the ECB/Eurosystem 2025 Strategy Review Occasional Paper "A strategic view on the economic and inflation environment in the euro area" (PDF 3.02MB).

[6] For context, this is only marginally lower than the average annual growth rate of the US labour force between 2022 and 2024. With euro area unemployment rates changing little over this period, increases in the labour force map almost directly to increases in employment.

[7] Beyond productivity effects, the concentration of migrant workers in certain sectors is also notable. For example, healthcare in Ireland is a case-in-point. Government statistics (2023) show that almost one quarter of nurses and midwives were from outside Ireland, while more than 7 in 10 new doctors registered in 2022 were trained abroad.

[8] The slowdown in employment growth is not unique to Europe. For example, the IMF WEO (April 2025) has employment growth in the United States at 0.5 per cent in 2026, in part due to a large slowdown in inward migration. This is down from a 2021-23 average of almost 3 per cent.

[9] The fertility rate measures the number of live births per woman. See Eurostat (2025) for more on fertility statistics and trends.

[10] This catchy title is from the Economist magazine's September 13th, 2025 edition.

[11] I use Eurostat's EUROPOP23 calculations from March, 2023.

[12] The ‘high migration’ scenario assumes 33 per cent more immigration than in the baseline from non-EU countries in each year covering the projection horizon. For the euro area, the baseline assumption is for approximately net 1 million non-EU migrants each year from 2026 onwards, down from almost 4 million in 2022, a figure significantly boosted by Ukrainian’s fleeing the war with Russia. For comparison, net immigration into the EU from 2015-19 averaged 1.4 million per year.

[13] For more on this, see, amongst others, Anthropic (2025), Kazinnik and Brynjolfsson (2025), Babina and Fedyk (2025), Hampole et al. (2025) and Agrawal, Gans and Goldfarb (2025).

[14] For OECD publications on the topic, see, for example “Flexicurity and the Economic Crisis 2008-2009: Evidence from Denmark” (Eriksson, 2012) (PDF 1.66MB). The 2021 OECD Economic Survey for Denmark also notes how “Denmark’s well-functioning “flexicurity” facilitates reemployment of workers displaced by the energy transition.”

[15] See, for example, the 2007 Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on “Towards Common Principles of Flexicurity”.