

Brief

Prepared by the General Secretariat of the Council, under the direction of the President of the COR

Rationale Since the revision of the long-term targets for hourly labour productivity used in the financial projections for the pension system in November 2021, new themes have emerged in the public debate and work has been published on the impact of the environmental transition, artificial intelligence and teleworking on productivity. These new elements are brought to the attention of the members of the COR in order to fuel their reflections with a view to a possible revision of the long-term targets for the 2024 annual report.

I. The pace of productivity growth has slowed steadily in France since the early 1960s, as in other European countries

- ***How has productivity evolved over the last century?*** After catching up in the aftermath of the Second World War, marked by very dynamic hourly labour productivity growth rates, the rate of productivity growth has fallen steadily in France since the early 1960s, as in other European countries. For about fifteen years, the rate of growth in hourly labour productivity has fallen to significantly low levels, and this slowdown has been observed in all the countries monitored by the COR, even though they are not all at the same stage of progress and do not all have the same institutional and regulatory frameworks (document no. 3).
- ***Is France's post-covid productivity trend unique?*** The health crisis has led to a further fall in hourly productivity, particularly in France, which is experiencing a singular post-covid productivity trend, with a more marked slowdown than in other developed countries (document no. 2). This French singularity could be explained by a correction of the pre-existing imbalance between a relatively high level of labour productivity and an employment rate below the average for advanced economies. The recent increase in employment, driven in particular by the rise in apprenticeships, has brought France's level of output per person of working age closer to that of other countries, but this convergence has been achieved at the cost of a temporary deterioration in productivity trends..

II. Artificial intelligence (AI) should be an engine for growth, but the extent of the expected effects depends on public policies in terms of education and competition.

- ***What impact will AI have on employment?*** Philippe Aghion, Céline Antonin and Simon Bunel (document no. 4) find that robotisation reduces overall employment in employment zones and that the lower the level of education, the greater the negative effect of exposure to robots. This suggests that inappropriate labour market and education policies could reduce the positive impact of AI and lead to deleterious effects on employment.
- ***What impact can we expect from artificial intelligence (AI) on productivity?*** Technological revolutions have positive effects on growth, provided that institutions and public policies on competition adapt. Using US data, Ph. Aghion and his co-authors observe that ICT and AI have encouraged a phenomenon of concentration: some large companies dominate the market, increasing their margins and hindering access and/or innovation by other companies, thus slowing down the expected gains in productivity

III. The climate transition is likely to have a negative impact on productivity, at least in the short term, but could have positive effects in the long term depending on the policies implemented.

- ***What impact do environmental regulations have on productivity in the short to medium term?*** According to the report established by J. Pisani-Ferry and S. Mahfouz (document no. 5), in the next 10 years, decarbonisation will call an additional investment (more than two points of GDP in 2030, compared to a scenario without climate action). Of course, this additional investment will have a positive effect on effective growth, via demand. But it should not increase the growth potential of the economy because it will be about saving fossil fuels rather than increasing production capacities. On the other hand, financing these investments is likely to entail an economic and social cost, as the transition will temporarily entail a slowdown in productivity of around a quarter of a percentage point per year, and will require reallocations in the labour market.
- ***What impact will the climate transition have on productivity in the longer term?*** According to the hypothesis issued by Michael Porter in the early 1990s, well-designed environmental regulations, by encouraging innovation, could allow profitability and productivity gains in the long term higher than the cost of these policies (document no. 5bis). The challenge for decision-makers is therefore to identify the policies likely to trigger and support the energy transition that could have a positive impact on the long-term productivity growth rate, while minimising the negative short-term impact on productivity (document no. 6).

IV. Rapid expansion of teleworking should boost productivity levels

- ***What productivity gains can be expected from the development of teleworking?*** Based on data from a Banque de France survey of French companies and detailed information on their balance sheets and profit and loss accounts, document no. 7 shows that companies that made greater use of teleworking in 2019 are on average more productive and have withstood the crisis better overall. They are also larger and relatively less capitalised, even though their fixed assets in IT equipment and intangible capital (brands, software, etc.) are higher than in other companies. Estimates suggest that a significant overall increase in the use of teleworking over the long term could improve productivity levels by around 10%. Once this step has been taken, productivity growth should no longer be affected.
- ***How much remote working is optimal in terms of productivity gains?*** The volume of telework has an impact on the extent of the effects. According to document no. 8, which analyses the results of an October 2020's OECD survey of business leaders and employees in 25 countries, the ideal volume of telework is estimated on average at 2-3 days per week, which is consistent with the idea that the advantages (less commuting, fewer distractions, etc.) and disadvantages (deterioration in communication, less knowledge sharing, etc.) balance out at an intermediate level of telework intensity.

V. As part of the European 2024 financial projections exercise for retirement pensions, the long-term productivity growth assumption for France has been lowered to 1.3%

- ***What long-term productivity target has been adopted for the 2024 European financial projections exercise for retirement pensions?*** The Economic Policy Committee has set up an Ageing Working Group (AWG) in charge of presenting every three years some long-term projections of all age-related public spending (including pensions). The 8th edition of the Ageing Report is scheduled for 2024. For France, the assumption for hourly productivity growth has been revised downwards compared with the previous projection exercise (2021), and now stands at an annual average of 1.3% (compared with 1.5% in the previous exercise).