Danske Bank

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Research euro area

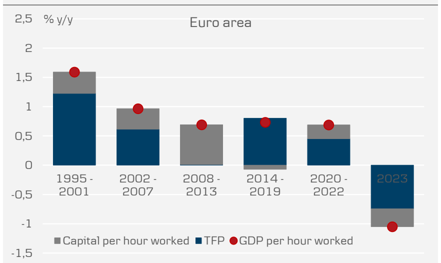
Euro area productivity will keep falling behind

- The chronic underperformance of euro area productivity growth compared to the United States over the past three decades is glaring, and it has vast implications on markets and the economy.
- Back in 1995, productivity levels in the US and the euro area were neck on neck. But since then, the US has pulled ahead significantly, boasting an average annual growth rate of 1.7% in labour productivity, while the euro area has fallen far behind, only managing a 0.9% average annual increase.
- **In this analysis, we argue that euro area productivity growth has been lower than US due to** weaker adoption of Information and Communication Technology (ICT), lower public investments, a less educated workforce, and regulatory constraints.
- **We expect weak euro area productivity relative to the US to continue** as Europe lags in new transversal technologies and regulatory hurdles persist. Public investments under RRF and progress on regulation, including a capital market union, support productivity, but large gains are far away.
- **Continued weak productivity implies a structurally lower EUR/USD and lower ECB policy rates.** At the current juncture, weak productivity growth might prolong the period of restrictive monetary policy.

Productivity is low in Europe due to weak ICT adoption

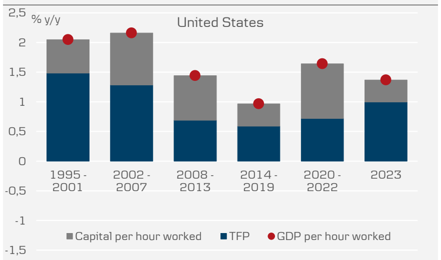
In examining the recent sluggish growth in productivity within the euro area compared to the US, several underlying factors come to the fore. **A significant contributor *appears* to be the region's inability to fully harness the productivity-enhancing potential of Information and Communication Technology (ICT).** IT and digitalization have historically been potent drivers of productivity, particularly in the service sector. Yet, since 1995, while the United States has witnessed a remarkable 900% surge in IT-related capital stock, the corresponding increase has been far more modest in the euro area, with Italy seeing only a 200% increase and Germany and France experiencing a 300% increase.

Euro area productivity decomposed



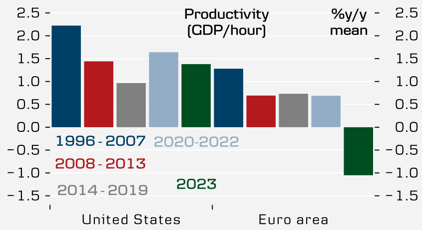
Source: EU Commission, ECB, Macrobond Financial

US productivity decomposed



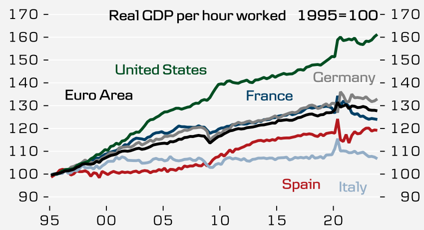
Source: EU Commission, BLS, BEA, Macrobond Financial

Euro area productivity fell 1.0% y/y in 2023 while US rose 1.5% y/y



Source: ECB, BEA, BLS, Macrobond Financial

US productivity has outperformed the euro area since 1995...



Source: ECB, BEA, BLS, Macrobond Financial

... following a large outperformance of euro area productivity after WW2

Source: Long-term productivity database, Macrobond Financial

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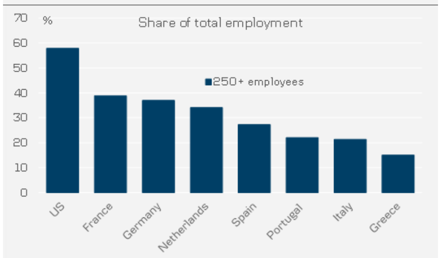
Regulatory constraints weakens euro area productivity

Tight product and capital market regulation in the EU constraint companies relative to the US and hinder productivity growth. The venture capital industry is *20 times bigger* in the US compared to the EU and the stock market capitalisation is only half of the US market in percent of GDP despite a similar savings rate. Since start-ups are more likely to *innovate* and force existing firms to adapt, this lack of "creative destruction" is associated with a *lower level of innovation* and thereby *productivity* in the EU. Less integration of academic research with start-ups in Europe compared to US is also a structural *weakness* for European productivity.

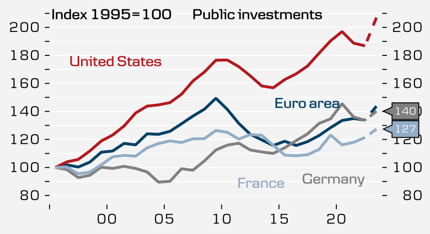
In the euro area, the share of employment in large firms fluctuates between 20% and 40% compared to 60% in the US. **Smaller firms, incentivized by regulations in Europe, exhibit *lower* ICT adoption and productivity.** France, for example, imposes regulatory constraints only on firms exceeding *50 employees*.

Firms are smaller in Europe which hinders ICT adoption



Source: OECD

Public investments have grown slowly in euro area compared to US



Source: OECD, Eurostat, European Commission

Lower public investments and educational levels also explain relatively weak European productivity

Another contributing factor to the lower productivity in the EU compared to the US since 1995 is the substantial discrepancy in public investments. While real US public investments have more than doubled since 1995, those in the euro area have only experienced a 40% increase. This disparity is particularly evident in public investments dedicated to research and development (R&D), which are notably lower in the euro area. Public investments can yield positive outcomes, if they *stimulate* private investments and contribute to enhanced productivity through investments in education, training, and research and development (R&D).

Finally, Europe's productivity woes also stem from a comparative lack of skilled labour. Reaping the gains of ICT *requires* an educated workforce and management of firms. In the United States, less than 10% of the adults between 25 and 64 years have not completed upper secondary education. In most of the Southern European economies this share is close to 40%.

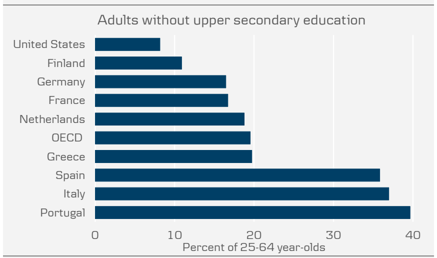
Euro area productivity likely to remain low

Europe's future competitiveness and productivity likely hinge on advancing transversal technologies like next-generation computing, applied AI, trust architecture, and the bio-revolution**. However, Europe lags behind on *eight of ten* transversal technologies, falling short in innovation, production, and adoption**. While Europe's leadership in clean tech and the adoption of next-generation materials offers promise, its dependence

What is productivity?

- Productivity is a measure of economic performance that compares output (goods and services) with the amounts of inputs (labour and capital) used to produce those goods and services.
- The most common macro productivity measure is labour productivity, measured as real GDP per hour worked or per person employed.
- The growth in labour productivity results from shifts in capital intensity (capital per hour worked) and the advancement of total factor productivity (TFP).
- Capital intensity tells how much capital is available per hour worked.
- Total factor productivity summarises how technological enhancements and efficiency improvements affect the productivity of inputs (labour and capital).

Europe lacks an educated workforce to reap ICT gains

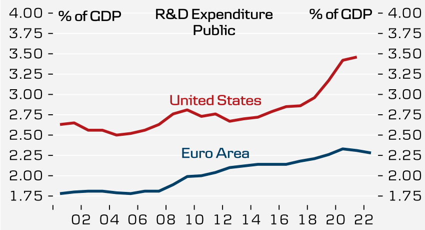


Source: OECD

on traditional industry poses a risk to the productivity outlook, especially with the recent rise in energy costs and expected further increases in EU carbon allowance prices.

Changing the regulatory hurdles that impair European productivity will take time, but progress is being made in the EU. Commission President Ursula von der Leyen says that Europe will do "whatever it takes" to be competitive. Therefore, former ECB President Mario Draghi is preparing a report on the future of European competitiveness, which will be published this autumn. The EU Commission also launched the initiative for a Capital Market Union (CMU) in 2015 to deepen financial markets and integrate banking across countries. Any changes following Draghi's competitiveness report, or a Capital Market Union are still years away tough. Hence, euro area productivity growth is not expected to increase significantly, despite **incremental *progress* on regulation having a slight positive impact on productivity in the coming years.**

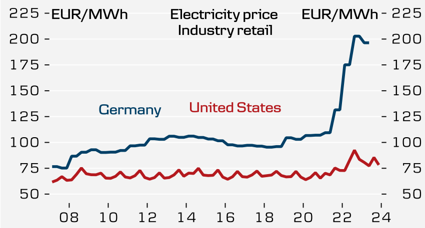
Public R&D expenditures in euro area are low compared to the US.



Source: Eurostat

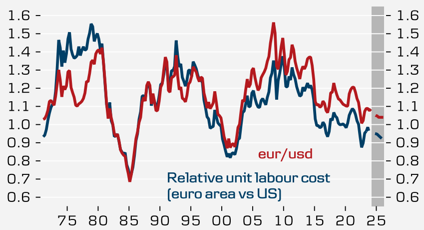
The Recovery and Resilience Facility (RRF) implemented during the pandemic is expected to boost Europe's productivity. A recent *mid-term evaluation* reveals that 33% of the EUR 672.5 billion has been disbursed, with the Commission estimating a doubling of public investments between 2019 and 2026, largely due to the RRF. The ECB estimates that the package could increase euro area potential GDP by up to 1.5% in 2026, which highlights the potential for future productivity growth through public investments.

High energy costs impair euro area competitiveness



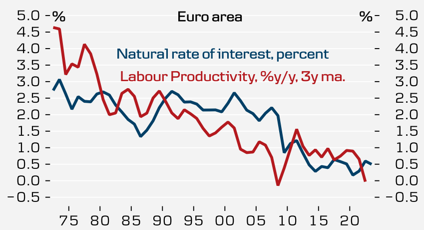
Source: Eurostat, EIA, Macrobond Financial

Relative unit labour costs to lower EUR/USD structurally



Source: OECD, Danske Bank, Macrobond Financial

Weak productivity lowers the natural rate of interest (r*)

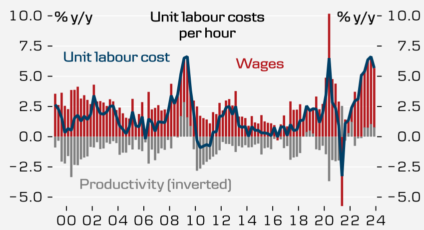


Source: Long-term productivity database, NY Fed

Weak productivity lowers long-term policy rates and risks prolonging the current period of restrictive monetary policy

Productivity is a key determinant of medium-term inflation and real interest rates, thereby bearing significant implications for monetary policy. Recent estimations indicate a one percentage point increase in trend productivity increases the natural rate of interest (r*) by *0.6 percentage points*. **Consequently, over the medium/long-term persistently low productivity growth will imply lower monetary policy rates**. Yet, given the current scenario marked by low, and even negative, productivity growth, there exists a risk wherein firms might be compelled to transfer a larger portion of the current elevated wage growth onto consumer prices. **Such a dynamic could impede the return of inflation to the 2% target, thereby prolonging the current period of restrictive monetary policy.**

Negative productivity growth increases unit labour costs



Source: Eurostat, Macrobond Financial

Low euro area productivity weakens EUR/USD structurally

With continued outperformance of US productivity relative to the euro area, relative unit labour costs are expected to lower EUR/USD from the current level of 1.08. Relatively higher productivity in the US lowers unit labour costs, meaning the same output is produced with lower input prices. Lower unit labour costs can make goods and services cheaper, thereby increasing foreign demand in the US. This mechanism is a key reason for our medium-term valuation of EUR/USD just above parity.

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