



Taxes, social security, contributions and redistribution welfare state and public finances

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AT A GLANCE:

- ▶ **Challenges to welfare state financing:** The European welfare state faces growing financial pressures due to globalisation, climate change, demographic shifts, and digitalisation. Ensuring sustainable funding requires comprehensive tax reforms, increased cooperation, and innovative financing mechanisms.
- ▶ **Addressing tax competition and avoidance:** Harmful tax competition and profit-shifting erode public revenues. The EU must harmonise tax policies, enforce minimum corporate tax rates, and strengthen anti-tax avoidance measures such as the OECD's BEPS framework and the EU's Anti-Tax Avoidance Directive (ATAD).
- ▶ **Sustainable social security funding:** With ageing populations and shifting labour markets, traditional Bismarckian welfare states may need to diversify funding sources. A shift from social security contributions to alternative financing, such as general taxation, wealth taxes, or green levies, could enhance long-term sustainability.
- ▶ **Leveraging digitalisation for revenue and efficiency:** The rise of digital businesses and automation challenges traditional tax structures. Policymakers must modernise tax systems to capture value from digital transactions, improve enforcement using AI and data analytics, and formalise informal economic activities.
- ▶ **Climate and social equity considerations:** Eliminating fossil fuel subsidies and implementing fair energy pricing could generate substantial public revenues while advancing climate goals. Governments should reinvest these funds into green technologies and social protection measures, ensuring a just transition that supports vulnerable groups.

► 1. Summary

The welfare state remains a cornerstone of the European Union's (EU) commitment to social equity, economic stability, and public well-being. However, mounting financial pressures and emerging global megatrends—globalisation, climate change, demographic shifts, and digitalisation—have revealed vulnerabilities in existing welfare systems. Addressing these challenges requires innovative and sustainable reforms that align welfare systems with the EU's broader socio-economic goals.

KEY CHALLENGES AND OPPORTUNITIES

Increased global economic integration has intensified harmful tax competition, [eroded corporate tax bases](#), and encouraged profit-shifting by multinational corporations. Several stakeholders are involved: national governments (implementing more favourable tax regimes), companies (engaging in tax planning, tax avoidance, and even tax evasion), and workers (potentially driving a race to the bottom in social standards). These dynamics undermine governments' ability to fund essential public services. To address these issues, EU Member States must harmonise tax policies, establish minimum corporate tax rates, and strengthen anti-tax avoidance measures like the OECD's Base Erosion and Profit Shifting (BEPS) framework, the EU's Anti-Tax Avoidance Directive (ATAD) or the [OECD global agreement on minimum effective taxation \('Pillar Two'\)](#).¹ Enhanced enforcement and multilateral cooperation are critical to ensuring fair contributions from corporations and stabilising public revenues.

Fossil fuel subsidies, amounting to \$4.4 trillion globally, continue to hinder progress toward climate goals. Their removal and the implementation of comprehensive energy pricing reforms would generate significant fiscal revenues—\$220 billion annually per country and \$2.4 trillion globally—and align with the Paris Agreement's 2°C warming target. Energy pricing reforms can reduce CO₂ emissions by 31%, lower required carbon prices by 79%, and support equitable green transitions. Governments should reinvest these revenues in renewable energy, public transportation, and climate adaptation measures while protecting vulnerable households from potential regressive impacts.

Ageing populations and declining birth rates strain social security systems and labour markets. The growing retiree-to-worker ratio challenges the sustainability of pay-as-you-go pension models and increases demand for healthcare services. To address these challenges, policies must promote labour force participation (for instance by the use of flexible work arrangements), re-skilling, and immigration. Expanding family-friendly policies—such as parental leave, childcare support, and housing assistance—can mitigate the impacts of declining fertility rates. Diversifying funding sources through property, wealth, and green taxes is essential to ensure sustainable social protection systems.

The rise of [digital platforms](#) and automation has created revenue gaps, as traditional tax frameworks fail to capture the value generated by digital business models. Moreover, the question

¹ The Directive on the so-called Pillar 2 of the OECD global tax agreement entered into force on 1 January 2024 and will help ensure that all large companies operating in the EU pay an effective minimum tax rate of at least 15%.

arises which country may or can levy taxes. Digitalisation also disrupts labour markets, intensifying challenges to social protection systems. Policymakers must develop taxation frameworks for digital services, automation technologies, and financial transactions to ensure equitable contributions. Investments in modernising tax administrations using AI and data analytics can improve compliance and broaden the tax base. Digital infrastructure and skills development are critical to enhancing Europe's competitiveness in the global digital economy.

POLICY RECOMMENDATIONS

- Harmonise tax policies: Align corporate and digital tax frameworks across the EU to mitigate tax competition and “law shopping” leading to a race to the bottom and ensure equitable revenue generation.
- Safeguard fair competition among Member States: Given the cross-border nature of aggressive tax planning, tax avoidance, and tax evasion, the European Union must take action to ensure equitable treatment for European taxpayers.
- Unify a performance monitoring framework: this is essential for enabling tax authorities to identify the areas most impacted by tax avoidance and evasion, allowing them to allocate resources effectively and take appropriate action.²
- Eliminate fossil fuel subsidies: Redirect revenues from subsidy reforms to finance equitable climate adaptation and renewable energy investments.
- Promote inclusive labour markets: Implement policies that enhance workforce participation through immigration, re-skilling, and support for non-standard workers.
- Modernise tax systems: Leverage digital tools to detect tax evasion improve compliance, and formalise informal economic activities.
- Strengthen social protection systems: Expand coverage to include vulnerable groups while ensuring adequate and sustainable funding through innovative tax mechanisms.

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² For more information on that topic, see https://www.eca.europa.eu/ECAPublications/SR-2024-27/SR-2024-27_EN.pdf

▶ 2. Background

The welfare state serves as a cornerstone for ensuring social equity, economic stability, and public well-being across the European Union (EU). By providing essential social protection, it addresses inequality and supports vulnerable populations, fostering both social cohesion and inclusive growth. Central to the operation and effectiveness of welfare systems is the availability of sufficient public funding. However, these systems are under mounting financial strain, making it critical to assess how they can adapt and respond to emerging challenges, including the impact of various megatrends.

In recent years, the EU has found itself navigating a ‘polycrisis’—a convergence of interconnected crises such as economic instability, climate change, demographic transformations, and technological disruptions (European Commission, 2023; Nicolaidis and Azmanova, 2023). These crises have exposed the vulnerabilities of existing welfare systems, highlighting the urgency of developing social protection mechanisms that are not only resilient but also adaptable. The challenges posed by megatrends—particularly an ageing population, the acceleration of digitalisation, and the intensification of environmental challenges—further underscore the importance of sound and sustainable public finances (European Commission, 2024a).

The financial sustainability of welfare and social protection systems is pivotal to the EU’s ability to maintain social cohesion and economic stability while ensuring the well-being of its citizens. As these systems act as safeguards against external shocks, they have demonstrated their essential role in mitigating the adverse effects of crises. This has been particularly evident in recent years, where their capacity to absorb the impacts of economic, environmental, and societal disruptions has proven invaluable (SPI, 2025).

Looking forward, the EU must align its welfare systems with the twin transitions—the green and digital transformations—while simultaneously addressing demographic challenges and economic uncertainties. These transitions are reshaping labour markets, consumption patterns, and societal expectations, necessitating innovative approaches to welfare provision. In this context, social protection must be reframed not as a passive expenditure but as a strategic investment that strengthens the EU’s economic and social resilience (Hemerijck et al., 2025; Eick et al., 2023). By recognising welfare systems as a vital component of the EU’s economic architecture, policymakers can ensure that they remain robust and responsive in the face of complex and evolving challenges.

This policy brief aims to explore the intersection of taxes, social security, contributions, and redistribution within the broader framework of the welfare state and public finances in the EU. It examines how these elements can be leveraged to create a sustainable and equitable model of social protection, capable of addressing current and future challenges while fostering long-term economic and social stability.

▶ 3. Impact of megatrends on welfare states

3.1. GLOBALISATION

FISCAL IMPACT OF IMMIGRANTS

Numerous European studies examine the net fiscal position of migrants, discerning between EU and non-EU migrants. These studies reveal that non-EU migrants tend to have a less favourable fiscal position than EU migrants or native-born citizens (see Gnaedinger, Le Floch, and Stichnoth, 2024, and references therein).

However, these studies are purely accounting-based and take market incomes as given. Some research suggests a positive indirect effect, as low-skilled and high-skilled employment can be complementary. Because of the progressivity built into the tax-transfer system, the fiscal gains from higher earnings of high-skilled employees dominate the fiscal losses from lower earnings of low-skilled workers. However, the magnitude of this effect remains unclear. A study for the US indicates that it could outweigh negative direct effects (Colas and Sachs, 2024), but further research on this issue in the European context is needed. However, while the mechanism relies on immigrants and high-skilled workers being complements, low-skilled natives tend to face labour market competition from immigrants, although a positive scale effect may also be at work,

Migrants also indirectly contribute to the economy and public funds through innovation, and entrepreneurship. Many examples from successful tech CEOs (again mostly in the US) come to mind, and the benefits of their work on the market incomes of natives and other immigrants alike would again not be captured by the accounting measures of the net fiscal contribution. However, the redistributive effects of migration outlined above as well as increased diversity can also lead to reduced trust and support for collective action, potentially negatively impacting public finances and welfare state support.

Studies emphasize earnings and employment as key determinants of net fiscal contributions, particularly for non-EU migrants. Improving their earnings and employment should be prioritized by breaking down barriers that keep them underrepresented in the workforce. The current (and likely lasting) labour shortages and tight labour markets provide a window of opportunity for this.

Notably, better education translates less into economic success for non-EU migrants than for natives or EU migrants, possibly due to language barriers and difficulties with degree recognition. Policies addressing these issues are crucial. In addition to an easier recognition of foreign degrees (where, in many cases, a market test may be superior to administrative fiat anyway), implementing policies to retain international students could significantly enhance the economic integration of non-EU migrants.

It is important to remember that not all migration should be evaluated solely on economic terms. Humanitarian considerations are vital, even if they have associated costs. At the same time, the debate about the efficiency and divisiveness of this aid is legitimate. This discussion extends beyond welfare states, encompassing national and EU migration management, international politics, and Europe's historical responsibilities.

Finally, establishing efficient labour migration pathways could potentially alleviate concerns about the sometimes-blurred line between labour and refugee migration, thereby bolstering support for both.

GLOBALISATION AND INTERNATIONAL TAXATION

The rise in globalization has posed substantial challenges to international taxation. The ease of expanding economic activities has led countries to lower their tax rates to attract economic activity. The increase in tax competition has led to a marked decline in global corporate tax rates over the last decades (Devereux et al., 2008; Klemm and Griffith, 2004). Furthermore, multinational corporations have engaged in significant profit-shifting by exploiting differentials in tax systems to strategically relocate profits to low-tax jurisdictions, regardless of where the actual economic activity occurs. Zucman (2014) shows that the amounts of profits US corporations record in tax havens has increased tenfold since the 1980s. The rise in tax competition as well as the rise of profit-shifting has resulted in considerable revenue losses undermining governments' ability to fund public services. Moreover, profit-shifting has created a substantial disparity in the tax burdens borne by domestic and multinational companies.

While these challenges pose significant risks to public finances, they also present opportunities for enhanced global cooperation on tax policy. These developments have spurred the international community to undertake substantial efforts to tackle profit-shifting and harmful tax competition. These efforts have been led by the OECD and the G20 through the Base Erosion and Profit Shifting (BEPS) initiative. The European Union has been at the forefront of implementing these policy recommendations through adopting the Anti-Tax Avoidance Directive (ATAD) in 2016. The ATAD included a set of coordinated measures aimed at curbing tax avoidance practices within the European Union. Key provisions included Controlled Foreign Corporation (CFC) rules, interest limitations rules and exit taxation rules.³ Research indicates that these provisions have been effective in reducing profit-shifting (Clifford, 2019). More recently, in 2021, over 140 countries agreed to implement the Pillar Two Framework, introducing a 15% global minimum tax on profits. The global minimum tax will apply to corporations with annual revenues exceeding 750 million EUR and enable countries to collect a so-called "top-up" tax rate if the effective tax rate of a company is below 15% in a jurisdiction. Within the European Union the global minimum tax took effect as of January 2024.⁴

Despite these initiatives, substantial challenges remain, in particular posed by the new US administration. The new U.S. administration has expressed concerns over the implementation of a global minimum tax, threatening retaliatory actions against countries adopting such measures. Further, while the first Trump administration reduced federal corporate taxes from 35 percent to 21 percent, the new administration has announced further cuts in the corporate tax rate prior to taking office. These reductions will likely intensify global tax competition and undermine efforts to halt the race to the bottom in corporate tax rates.

3 Key provisions included the adoption of Controlled Foreign Corporation (CFC) rules, interest limitation rules or exit taxation rules. CFC rules allow countries of a parent company to levy a top-up tax on the profits of subsidiaries in low-tax jurisdictions. Interest limitation rules limit the deductibility of interest from the tax base. Exit taxation rules gave countries the right to levy a tax on companies when relocating their assets.

4 https://ec.europa.eu/commission/presscorner/detail/en/ip_23_6712

Thus, in the future governments in the European Union must strike a balance between curbing profit-shifting and maintaining competitiveness in an interconnected global economy. Measures to be taken include strengthening multilateral cooperation to the extent possible through continued engagements in forums such as the G20 or the OECD. Further, countries need to continue their efforts by ensuring compliance with adopted measures through robust enforcement and monitoring mechanisms.

3.2. CLIMATE CHANGE MITIGATION AND CLIMATE POLICY: GETTING ENERGY PRICES RIGHT—THE WELFARE EFFECTS OF FOSSIL FUEL SUBSIDIES AND EXTERNALITIES

In the EU Green Deal and European Climate Law, the EU has committed to lowering the reliance on fossil energy and to become climate-neutral by mid-century. Yet, many countries continue to heavily subsidise fossil fuels, both explicitly and implicitly. Explicit subsidies involve undercharging for supply costs, while implicit subsidies stem from underpricing the environmental costs associated with fossil fuel use. Together, these subsidies amount to an astonishing \$4.5 trillion per year, equivalent to 8.9% of global consumption per year (Kalmey & Rausch, 2025).

The largest share of these costs is attributed to health-related local air pollutants, which account for 61% of the total. Non-pollutant externalities, such as environmental degradation and climate change impacts, make up 34%, while explicit fossil fuel subsidies contribute the remaining 5%. These figures highlight the significant hidden costs borne by societies due to fossil fuel dependence (Kalmey & Rausch, 2025).

Eliminating fossil fuel subsidies and appropriately pricing the local externalities associated with their use could yield substantial benefits. On average, this shift could improve economic welfare by approximately 4.3% of consumption. Such reforms would not only enhance global economic efficiency but also promote environmental sustainability and public health, creating a more equitable and resilient global economy (Kalmey & Rausch, 2025).

The scope and pace of current climate mitigation measures is not sufficient to limit global warming to 2°C as envisaged by the Paris climate agreement (Climate Action Tracker, 2024). The fundamental problem posed by climate change is that it is a global public good: while the mitigation costs of reducing greenhouse gas (GHG) emissions are local, the benefits are global (or individual nations enjoy only a small fraction of the benefits of their actions). Overcoming the free-rider problem requires a restructuring of the underlying incentives.

A key question for public policy in the EU (and elsewhere) is thus to investigate the economic incentives for reducing fossil energy consumption at the local (i.e. country or regional) level when the global climate externality is ignored. Global economies heavily rely on fossil fuels, incurring significant costs from local externalities that are not internalized in market decisions. A series of influential IMF reports (Coady et al., 2019; Parry, Black and Vernon, 2021; Black et al., 2023) show that many countries still heavily subsidize fossil fuels, both explicitly (undercharging supply costs) and implicitly (undercharging environmental costs). Global fossil fuel subsidies in 2022 totaled \$7 trillion (7.1% of global GDP) in 2022, of which 18% account for explicit and 82% for implicit subsidies. On a policy level, reform efforts to phase out inefficient fossil fuel subsidies have been ongoing since the G20's 2019 and 2020 commitments, reaffirmed at the United Nations Climate Change Conferences in 2021 and 2022.

Against this backdrop, we examine the following key questions for climate change mitigation⁵: What are the incentives for countries and regions to eliminate existing fossil fuel subsidies and adopt prices for fossil energy which reflect supply and environmental cost? How large are the foregone welfare gains from the subsidized use of fossil fuels in today's economies? How far would the removal of fossil fuel subsidies take individual countries and the global community in achieving their climate targets (as called for in the Paris Climate Agreement)?

Welfare is measured by taking into account market-based consumption as well as non-market welfare effects. The latter comprise the monetized damages from using fossil energy (coal, oil, natural gas) in the production and consumption of goods and services. These costs represent a market failure, i.e. the negative externality from fossil energy imposes costs on others which are not reflected in market prices. The focus is on health effects from elevated mortality risks from local air pollutants ($PM_{2.5}$, SO_2 , NO_x) as well as non-pollutant externalities related to oil use in motor vehicles associated with congestion, accidents, and road damage. The current global costs of subsidies and local externalities of fossil fuel combustion are enormous, totaling \$4.6 trillion, with local pollutants accounting for the largest share (61%), followed by non-pollutant externalities (34%) and explicit fossil subsidies undercharging supply cost (5%) (Kalmey & Rausch, 2025).

SUBSTANTIAL BENEFITS FOR COUNTRIES FROM GETTING ENERGY PRICES RIGHT

The removal of explicit fossil fuel subsidies yields only small welfare gains for most countries (0.2% on average). Unilateral local Pigouvian energy pricing, which also removes explicit subsidies, would yield large benefits for most countries and regions including many European countries (on average 3.9%, with gains at the country level ranging from 5-23%). In contrast, major EU countries like Germany and France would only slightly gain from Pigouvian pricing (less than 0.2%) or even be worse off such as Italy. Pricing only externalities related to local air pollution would reap already, on average across countries, 75% of the welfare benefits (Kalmey & Rausch, 2025).

Fiscal revenues which could be generated by eliminating fossil fuels subsidies and taxing local externalities according to marginal damage would be substantial. On average, countries or regions would obtain revenues equal to 4.9% of consumption or billion \$220 per year, ranging from 1.9-17.8% of consumption at the country level. Major EU countries (Germany, France, Italy) can also expect substantial inflows for the public budget from local Pigouvian pricing ranging from 2.1 to 2.9% (billion \$26–59) while the rest of Europe may even collect amounts totaling 4.3% (billion \$192) (Kalmey & Rausch, 2025).

CO-BENEFITS FOR CLIMATE CHANGE MITIGATION

Removing explicit fossil fuel subsidies globally would only minorly contribute to achieving the Paris agreement, reducing CO emissions by only 2%. However, global emissions would be reduced by 31% if all regions implemented comprehensive energy pricing reforms that include the removal of subsidies and full pricing of local externalities. Importantly, this would considerably help countries to achieve their climate commitments made under the Paris Agreement in line with a 2°C warming target. On average across countries, the carbon price (i.e., shadow cost of carbon) to achieve Paris targets is reduced by 79%. Around one third of countries and regions would exceed their

5 The material presented here is largely based on Kalmey and Rausch (2025): "Efficiency, Distributional, and Fiscal Effects of Climate Policy: The Case of Fossil Fuel Subsidies and Externalities", WeLaR Report Deliverable 6.2.

Paris climate targets, which means that the carbon price required and thus the welfare costs of achieving the Paris climate target would fall to zero. Moreover, major EU countries like Germany, France and Italy would already achieve a substantial fraction (up to 50%) of their Paris target. On a global level, this would already fulfill the required reduction within the framework of a development compatible with Paris 2°C (Kalmey & Rausch, 2025).

3.3. DEMOGRAPHIC CHANGES

The ageing of the European population is a significant demographic trend influenced by various factors. This challenge is common across all European countries, though its prevalence varies in intensity from one country to another, and from region to region or depending on whether the area is urban or rural (European Commission, 2023a&b).

Medical advancements and improved living conditions have increased life expectancy, leading to a larger elderly population in Europe. At the same time, Europe's low birth rate, which is below the generational replacement level, is attributed to factors such as higher education and employment for women, high living costs, lifestyle choices, and the availability and accessibility of care facilities for children and dependents (OECD, 2021).

The consequences of demographic ageing are multifaceted and have substantial effects on the labour market and the financing of social security systems. In the labour market, an ageing population leads to a decreasing labour force, potentially resulting in worker shortages in certain sectors, lower productivity, and increased pressure on younger generations to support the economy. Moreover, older workers may be overrepresented among the long-term unemployed due to challenges in reintegrating into the labour market, such as outdated skills or age-related discrimination. Businesses may also face difficulties related to managing an ageing workforce, particularly regarding health management and continuing education (European Commission, 2023b; Eurofound, 2024).

Longer life expectancy increases healthcare needs and services for dependent individuals. Older adults often require complex medical care, adding pressure to healthcare systems. Chronic diseases, like diabetes and cardiovascular conditions, become more common with age, requiring medical resources and infrastructure. The demand for healthcare, childcare and dependent care facilities is growing, leading to higher financial costs and a need for more qualified personnel. In this context, it is essential to support parents by fostering a family-friendly environment, enhancing work-life balance, and promoting gender equality. Key measures include offering flexible parental leave (inclusive of paternal leave), providing affordable childcare options, and ensuring access to suitable housing (European Commission, 2023a; ILO, 2023; OECD, 2021).

Social security funding is encountering significant challenges due to an ageing population. In Europe, the pay-as-you-go model, which relies on current workers' contributions to finance retirees' benefits, is under strain as the retiree-to-worker ratio continues to grow. To maintain this model, governments are increasingly raising the retirement age and adjusting contribution rates. To sustainably meet the rising demand for adequate and accessible social protection for all, while alleviating the pressure on public finances, the labour market, workers, and employers, it is imperative to diversify financing sources. This includes promoting alternative forms of taxation (European Commission, 2023b).

In summary, the ageing population in Europe is a multifaceted issue with various causes and notable impacts. It necessitates adjustments in the labour market and social security and health system funding to maintain sustainability and fairness for all generations.

3.4. RISE OF DIGITALISATION: CHALLENGES AND OPPORTUNITIES FOR TAX REVENUE AND PUBLIC FINANCES IN EUROPE

EUROPE'S POSITION IN THE GLOBAL DIGITAL ECONOMY

Over the past two decades, Europe has relied heavily on digital services and technologies developed by global tech giants, particularly from the United States and China. Companies such as Google and Microsoft dominate the global digital services market, shaping innovation and infrastructure while positioning Europe primarily as a consumer rather than a leader in digital development. This dependence raises critical concerns about Europe's digital sovereignty, economic value creation, and long-term strategic autonomy (European Commission, 2024a).

Despite notable advancements in fintech, telecommunications, and green technology, European digital firms have struggled to match the scale and global reach of their counterparts in Silicon Valley or Shenzhen. Structural challenges, such as fragmented digital markets, regulatory complexities, and insufficient investment in R&D and start-ups, have hindered Europe's ability to foster globally competitive tech firms. Meanwhile, the EU's industrial model remains heavily reliant on imports of advanced technologies, digital services, and intellectual property, with over 80% of its digital ecosystem dependent on third countries. From 2013 to 2023, Europe's share of global ICT revenues declined from 22% to 18%, while the U.S. and China expanded their dominance.⁶

This lag is particularly concerning as **70% of new value creation in the global economy over the next decade is expected to be digitally driven**. Europe's limited ability to leverage economies of scale, network effects, and "winner-takes-most" dynamics further compounds the challenge. At the same time, geopolitical tensions and industrial policies in competing economies threaten the security of Europe's supply chains, especially in critical sectors such as semiconductors and raw materials essential for digital technologies. Additionally, Europe faces a significant data value loss, with an estimated 90% of its data transferred to third countries, posing risks to industrial know-how and innovation potential.

Recognising these challenges, the European Union has adopted the [Digital Decade initiative](#), which outlines a strategic roadmap to enhance Europe's digital capabilities and competitiveness by 2030. The initiative focuses on four key areas: digital skills, secure and sustainable digital infrastructure, digital transformation of businesses, and digitalisation of public services. The EU aims to bridge the gap by fostering innovation ecosystems, supporting start-ups, and increasing investment in critical technologies such as artificial intelligence, quantum computing, and 5G networks.

The Digital Decade seeks to address Europe's dependence on foreign digital services by promoting the development of indigenous solutions and reducing barriers to market entry for European firms. Efforts such as the [European Chips Act](#), which seeks to boost Europe's share of global

⁶ See the future of European competitiveness report: https://commission.europa.eu/document/download/ec1409c1-d4b4-4882-8bdd-3519f86bbb92_en?filename=The%20future%20of%20European%20competitiveness_%20In-depth%20analysis%20and%20recommendations_0.pdf

semiconductor production, and the [Digital Markets Act](#), designed to curb the monopolistic practices of large tech platforms, reflect a broader push to level the playing field.

Beyond economic competitiveness, digital transformation is key to Europe's resilience, sustainability, and social well-being. Emerging technologies, such as AI, IoT, and blockchain, can enhance industrial efficiency, promote the circular economy, and drive Europe's transition to net-zero emissions by 2050. Additionally, digitalisation is essential for improving public services, reducing costs, and ensuring accessibility in an ageing society. Strengthening digital skills is also crucial to mitigating the risks of automation displacement and securing quality jobs in an increasingly technology-driven economy.

For Europe to thrive in the digital era, it must prioritise investment in cutting-edge technologies, bridge gaps in infrastructure, and cultivate innovation-friendly policies. By fostering homegrown digital solutions and reinforcing strategic autonomy, the EU has the potential to transition from being a digital consumer to a global leader in shaping the future of the digital economy.

TAXATION OF DIGITAL SERVICES

The taxation of digital services has become a critical issue as existing international tax frameworks struggle to effectively capture the value generated by digital transactions. The global economy's digital transformation has led to the emergence of new business models—many of which operate without a significant physical presence in the markets they serve. This shift has exposed gaps in traditional taxation systems, which rely heavily on the principle of physical presence to allocate taxing rights. In response, significant efforts have been made at both [the European Union \(EU\)](#) and international levels to address these challenges.

The EU's Digital Services Tax (DST) proposal

The European Union has spearheaded initiatives to ensure that digital companies contribute their fair share of taxes within its jurisdiction. In 2018, the European Commission [proposed a Council Directive on the common system of a digital services tax \(DST\)](#), targeting revenues generated from specific digital services, such as online advertising, intermediation platforms, and the sale of user data (European Commission, 2018). The DST aimed to introduce a 3% tax on revenues of large digital firms operating in the EU, ensuring that profits derived from European consumers were appropriately taxed.

The proposal reflected growing frustration with the ability of tech giants, such as Google, Amazon, and Facebook, to shift profits to low-tax jurisdictions while generating significant revenues in the EU. However, the initiative faced resistance from some member states, with concerns about its potential impact on competitiveness and fears of triggering retaliatory measures, particularly from the United States, home to many of the targeted companies.

VAT reform: Tackling challenges in the digital age

In addition to corporate taxation, the EU has made strides in reforming Value Added Tax (VAT) rules to adapt to the realities of the digital age. The [final report](#) on VAT in the Digital Age (2022) highlights measures to simplify VAT compliance for cross-border digital transactions and ensure that taxes are collected where consumption occurs. Key recommendations include introducing

a single VAT registration system for EU-wide operations and enhancing digital reporting requirements to reduce fraud and improve transparency (European Commission, 2022).

On 5 November 2024, the Council agreed on the ‘VAT in the Digital Age’ package, aimed at tackling VAT fraud, supporting businesses, and promoting digitalisation. Key measures include:

- Enhancing the one-stop shop for online VAT registration
- Requiring online platforms to collect VAT on passenger transport and short-term rentals when individual providers are exempt
- Mandating digital reporting based on e-invoicing for cross-border businesses, fully digital by 2030

International efforts: The OECD’s pillar one and pillar two agreements

At the international level, the Organisation for Economic Co-operation and Development (OECD) has been leading efforts to harmonize taxation frameworks through its [Base Erosion and Profit Shifting \(BEPS\) initiative](#). Central to these efforts are the Pillar One and Pillar Two agreements, which aim to address tax challenges arising from the digital economy (OECD, 2023).

- Pillar One: This pillar seeks to allocate a portion of multinational companies’ residual profits to the jurisdictions where their customers or users are located, regardless of physical presence. It represents a shift toward a user-based allocation of taxing rights, ensuring that digital companies contribute to public finances in the markets where they generate value.
- Pillar Two: This pillar introduces a global minimum tax rate of 15% on large multinational corporations, curbing profit-shifting to low-tax jurisdictions. By establishing a floor on tax competition, it aims to stabilize international tax systems and prevent a “race to the bottom.”

Strengthening administrative cooperation in taxation

A key pillar of EU tax policy is administrative cooperation through the exchange of tax-related information among member states, ensuring effective revenue collection. However, the digital economy poses challenges, as certain income sources may be inaccessible to national tax authorities.

To address this, the EU is expanding administrative cooperation by amending the Directive on Administrative Cooperation (DAC) in line with global standards.

- DAC7 (adopted in March 2021) – From 2023, tax authorities automatically exchange information on income earned via digital platforms, helping to prevent tax evasion, enhance tax fairness, and create a level playing field.
- DAC8 (adopted in October 2023) – Introduces new reporting and automatic information exchange requirements for:
 - Revenues from crypto-asset transactions
 - Advance tax rulings for high-net-worth individuals

These updates aim to improve tax compliance, extend reporting obligations, and strengthen international cooperation, ensuring effective tax collection in an increasingly digital and globalised economy.

Although these agreements have garnered widespread political support, implementation remains incomplete, with several technical and administrative challenges yet to be resolved.

► 4. Policy option to enhance welfare states in the EU

GLOBALISATION AND TAX COMPETITION

To mitigate the fiscal challenges posed by globalisation, the EU must strengthen efforts to harmonise tax policies across member states. Establishing minimum corporate tax rates and aligning key tax bases will reduce harmful tax competition, ensuring that multinational corporations contribute their fair share of revenues. Building on the OECD's Base Erosion and Profit Shifting (BEPS) framework and the EU's Anti-Tax Avoidance Directive (ATAD), member states should continue closing loopholes and adopting coordinated measures to curb profit-shifting practices.

The introduction of the global minimum tax under the Pillar Two Framework offers an unprecedented opportunity to stabilise corporate tax systems. EU governments should focus on enforcing compliance with the 15% minimum tax, ensuring that multinational corporations are taxed equitably across jurisdictions. This will require robust monitoring mechanisms and enhanced transparency, particularly in reporting corporate profits and tax payments.

Further, digitalisation of tax systems can play a crucial role in addressing tax evasion and improving compliance. Investing in advanced technologies such as data analytics and AI⁷ will enable tax authorities to better detect and prevent fraud. By strengthening cooperation within the EU and with international partners, member states can create a level playing field while preserving competitiveness in the global economy.

GREEN TRANSITION AND CLIMATE CHANGE MITIGATION

To accelerate the green transition and address climate change, governments should prioritise the elimination of fossil fuel subsidies and the pricing of local environmental externalities. These reforms would generate substantial fiscal revenues—approximately \$220 billion annually per country and \$2.4 trillion globally—that can be reinvested in climate adaptation projects, renewable energy infrastructure, and equitable transition mechanisms. Policymakers should develop frameworks that align energy pricing with environmental costs, reducing the economic burden of achieving Paris Agreement targets by lowering required carbon prices by an average of 79%. This approach ensures a cost-effective path toward emissions reductions while incentivising cleaner energy production and consumption.

Energy pricing reforms should also include social safeguards to protect vulnerable households from regressive impacts. Revenue from these measures could fund targeted support pro-

⁷ See the recent InvestAI initiative: EU launches InvestAI initiative to mobilise €200 billion of investment in artificial intelligence https://ec.europa.eu/commission/presscorner/detail/en/ip_25_467

grammes, such as direct transfers, energy efficiency subsidies, or investments in public transportation, ensuring that the benefits of the green transition are distributed equitably. Governments should also enhance collaboration at the EU level to harmonise energy pricing policies, strengthening the collective capacity to meet climate goals and fostering resilience against cross-border environmental challenges.

DIGITALISATION AND AUTOMATION

The rapid digital transformation presents unique opportunities for revenue generation and policy innovation. Governments should introduce targeted taxation frameworks for digital platforms, financial transactions, and automation technologies. For instance, taxes on digital services and robots can ensure that these sectors, which benefit disproportionately from technological advancements, contribute adequately to public revenues.

To enhance fiscal sustainability, investments in digital infrastructure and tax administration modernisation are essential. By utilising AI and data analytics, governments can improve tax compliance and efficiency, reducing revenue losses from evasion and fraud. Moreover, digitalisation should be leveraged to formalise informal economic activities, particularly in sectors impacted by automation, further broadening the tax base.

DEMOGRAPHIC CHANGES

In response to demographic shifts, including ageing populations and declining fertility rates, governments must implement policies to sustain economic participation and social protection systems. One priority is to incentivise higher labour force participation through measures such as flexible working arrangements, re-skilling programmes, and support for working parents. Immigration policies should also be adjusted to address labour shortages, focusing on the recruitment and retention of skilled workers and the recognition of foreign qualifications.

To ensure sustainable funding for social protection systems, governments should expand the tax base beyond labour. Introducing or increasing property taxes, wealth taxes, and capital gains taxes can provide stable and progressive revenue streams while reducing reliance on traditional labour taxes. Green taxes, including carbon and resource extraction taxes, can further contribute to funding social protection systems while advancing environmental goals.

Finally, governments must ensure that social protection systems are inclusive, providing universal coverage and adequate benefits for all citizens, including non-standard workers and the self-employed. Investments in sustainable funding mechanisms, combining taxes and social contributions, will be critical to maintaining the long-term viability of these systems in the face of demographic pressures.

CROSS-CUTTING RECOMMENDATIONS

- Strengthen EU-wide cooperation on tax and environmental policies to address challenges from globalisation and ensure equitable contributions across sectors.
- Invest in equity-focused funding mechanisms to facilitate just transitions and climate adaptation, aligning environmental goals with social justice.

- Enhance policy frameworks for labour market participation, family-friendly policies, and re-skilling to promote sustainable demographics.
- Expand digital economy taxation to address revenue gaps and ensure fairness in the contribution of digital platforms and automation technologies.
- Unify a performance monitoring framework: this is essential for enabling tax authorities to identify the areas most impacted by tax avoidance and evasion, allowing them to allocate resources effectively and take appropriate action

The European welfare state stands at a crossroads, shaped by globalisation, climate change, demographic shifts, and digitalisation. These megatrends present both challenges and opportunities, requiring bold reforms to ensure social equity, economic stability, and sustainability.

A key debate is how to sustainably finance welfare systems amid these challenges. In Bismarckian welfare states, which rely heavily on social security contributions, shifting towards alternative financing—such as general taxation, wealth taxes, or green levies—could create a more resilient system. Given economic transformations, ensuring adequate and sustainable funding for social security requires a broader discussion on diversifying revenue sources.

Addressing these megatrends demands greater EU coordination—harmonised tax policies, shared climate targets, and collaborative labour market reforms. The EU’s ability to act collectively will strengthen its influence in global negotiations and ensure its welfare systems remain robust, adaptable, and fair. By embracing proactive reforms, the EU can transform its welfare model from a reactive safety net into a driver of long-term social justice, economic resilience, and sustainable growth.

► 5. Further reading

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