OECD Economic Surveys: Türkiye 2025

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Foreword

This Economic Survey was prepared by Gabriel Machlica, Sébastien Turban and Gizem Gergin under the supervision of Pierre Beynet. Research assistance was provided by Gülen Devren Şahin and Eun Jung Kim, editorial assistance by Elodie Lormel and Meral Gedik and communication assistance by Laura Fortin and François Iglesias.

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Information about this and previous Surveys and more information about how Surveys are prepared is available at https://www.oecd.org/en/topics/economic-surveys.html.

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Basic Statistics of Türkiye, 2023

(Numbers in parentheses refer to the OECD average)

LAND, PEOPLE AND ELECTORAL CYCLE					
Population (million)	85.3		Population density per km²	110.9	(39.2)
Under 15 (%)	21.8	(16.9)	Life expectancy at birth (years, 2022)	77.3	(80.6)
Over 65 (%)	10.0	(18.2)	Men (2022)	74.7	(78.0)
International migrant stock (% of population, 2020)	7.2	(13.9)	Women (2022)	80.0	(83.2)
Latest 5-year average growth (%)	0.9	(0.4)	Latest general election	May-2023	
ECONOMY					
Gross domestic product (GDP)			Value added shares (%)		
In current prices (billion USD)	1 118.3		Agriculture, forestry and fishing	6.9	(2.7)
In current prices (billion TRY)	26 545.7		Industry including construction	32.0	(27.1)
Latest 5-year average real growth (%)	4.9	(1.7)	Services	61.0	(70.2)
Per capita (thousand USD PPP)[1]	42.3	(59.0)			
GENERAL GOVERNMENT (Per cent of GDP)					
Expenditure	35.7	(42.4)	Gross financial debt[2] (2021, OECD: 2023)	43.5	(113.0)
Revenue	30.9	(37.8)	Net financial debt (2021, OECD: 2023)	25.9	(66.7)
EXTERNAL ACCOUNTS					
Exchange rate (TRY per USD)	23.11		Main exports (% of total merchandise exports)		
PPP exchange rate (USA = 1)	7.35		Machinery and electronics	15.9	
In per cent of GDP			Transportation	14.1	
Exports of goods and services	31.9	(31.2)	Textiles and Clothing	12.9	
Imports of goods and services	34.4	(31.1)	Main imports (% of total merchandise imports)		
Current account balance	-3.4	(-0.3)	Fuels	19.1	
Net international investment position	-28.0		Machinery and electronics	19.0	
			Metals	12.2	
LABOUR MARKET, SKILLS AND INNOVATION					
Employment rate (aged 15 and over, %)	48.3	(58.0)	Unemployment rate, Labour Force Survey (aged 15 and over, %)	9.4	(4.8)
Men	65.7	(65.5)	Youth (aged 15-24, %)	17.5	(10.6)
Women	31.3	(50.8)	Long-term unemployed (1 year and over, %)	2.0	(1.0)
Participation rate (aged 15 and over, %)	53.3	(60.9)	Tertiary educational attainment (aged 25-64, %)	25.9	(41.0)
Average hours worked per year (2021, OECD: 2023)	1 732	(1 742)	Gross domestic expenditure on R&D (% of GDP, 2021)	1.4	(2.9)
ENVIRONMENT					
Total primary energy supply per capita (toe)	1.9	(3.7)	CO2 emissions from fuel combustion per capita (tonnes)	4.6	(7.6)
Renewables (%)	17.4	(12.5)	Water abstractions per capita (1 000 m³, 2020)	0.8	
Exposure to air pollution (more than 10 g/m³ of PM 2.5, % of population, 2020)	99.8	(56.5)	Municipal waste per capita (tonnes, 2022)	0.4	(0.5)
SOCIETY					
Income inequality (Gini coefficient, 2022, OECD: latest available)	0.427	(0.316)	Education outcomes (PISA 2022 score)		
Relative poverty rate (%, 2022)	13.2	(11.7)	Reading	456	(476)
Median disposable household income (thousand USD PPP, 2022, OECD: 2021)	13.0	(30.0)	Mathematics	453	(472)
Public and private spending (% of GDP)			Science	476	(485)
Health care	4.2	(9.2)	Share of women in parliament (%)	19.8	(32.8)
Pensions (2019)	7.6	(9.5)	Net official development assistance (% of GNI, 2022)	0.8	(0.4)
Education (total spending, 2020)	4.7	(5.1)			

Note: The year is indicated in parenthesis if it deviates from the year in the main title of this table. Where the OECD aggregate is not provided in the source database, a simple OECD average of latest available data is calculated where data exist for at least 80% of member countries.

1. OECD aggregate refers to weighted average.

2. Gross financial debt refers to general government gross financial liabilities. Net financial debt is the total financial liabilities minus the total financial assets.

Source: Calculations based on data extracted from databases of the following organisations: OECD, International Energy Agency, International Labour Organisation, International Monetary Fund, United Nations, World Bank and Turkstat.

Executive Summary

Key messages

Türkiye has been one of the fastest-growing economies in the OECD over the past decade, leading to a significant improvement of labour market and social outcomes. Although improving, the income gap with OECD countries remains large and women's participation in the workforce is still low. Moreover, Türkiye's traditional growth drivers are set to lose steam. The contribution of working-age population growth is expected to steadily decline, while investment levels are already high and have recently shifted towards less productive assets.

In this context this Survey contains four main messages:

- The prudent macroeconomic policy stance is helping to restore sustainable growth and should be maintained. Over the long term, improving public finances will require more efficient consumption taxes, a broader income tax base, and strengthened social assistance.
- Women's labour force participation remains significantly lower than in other OECD countries. Removing barriers to employment requires expanding affordable early childhood education and care, promoting a more balanced use of parental leave, and addressing the distinct impacts that regulations and policies can have on women and men.
- Greenhouse gas emissions are relatively low but are growing fast. Efficiently reducing emissions to achieve the 2053 net zero target will require higher effective pricing of greenhouse gas emissions and transitioning away from coal for energy supply. Climate change adaptation policies should also expand, in particular to address the increased risk of wildfires due to rising temperatures.
- Potential growth per worker in Türkiye has been slowing down and remains relatively low. To support growth after the demographic dividend has phased out, the country needs to improve productivity in particular in services sectors, by upskilling the labour force, enhancing innovation, and easing business regulations.

Ensuring sustainable growth

The fast economic growth over the last decade will be harder to sustain as Türkiye will no longer be able to rely on its traditional drivers through factor accumulation. Moreover, the country will face long-term challenges such as digitalisation and climate change. A credible and stable macroeconomic stance coupled with structural reforms will be key to achieve the next step in Türkiye's economic convergence.

Türkiye has been one of the fastest-growing economies in the OECD over the past decade, with an average annual growth rate of 4.9%. The living standards of the Turkish population have increased approximately fourfold. Labour market and social outcomes have improved significantly. The labour force participation rate for the population aged between 15 and 64 has increased from around 50% in 2005 to 60% in 2023, and the poverty rate has been halved. Türkiye has made progress in relatively decoupling its strong economic growth from air emissions, energy use, waste generation and water consumption.

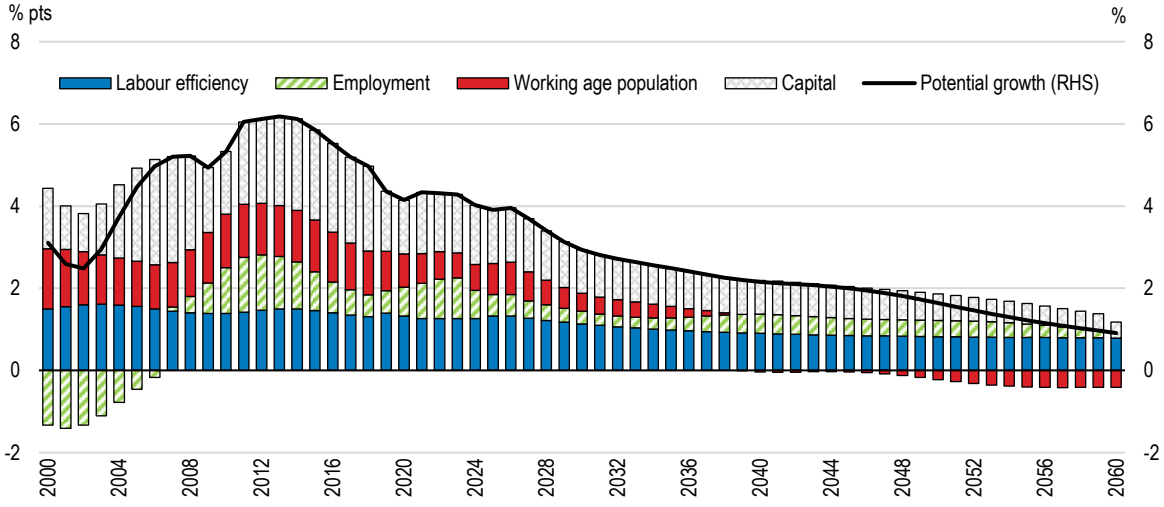
However, significant structural weaknesses persist and the income gap with OECD countries remains large. Income inequalities are wide. The labour market outcomes of working-age women, migrants, and the elderly are weak. Türkiye's workforce skills lag those of other OECD countries, exacerbated by the emigration of high-skilled individuals. This contributes to its limited productivity and competitiveness in high-skill manufacturing and services industries. Environmental issues are preponderant as greenhouse gas emissions are still rising, albeit from low levels, and poor air quality has a large impact on the population's health, for example.

Those structural weaknesses will hinder Türkiye's capacity to address future long-term challenges. With population ageing, growth potential through additional labour is diminishing steadily (Figure 1). Simultaneously, shifts in labour market demand driven by technological progress and digitalisation are accelerating, and require more flexible labour and product markets in addition to adaptive skills policies. Türkiye will also face new constraints due to the significant rise in temperatures over the next decades.

Successfully pursuing economic convergence will require structural reforms. Maintaining a credible and stable macroeconomic policy is essential to foster investment and growth. Easing barriers to labour mobility and business dynamism would enable Türkiye to exploit its strong potential fully. The results would be widely shared among the population by expanding economic opportunities for all. A ramping up of the green transition would make this growth sustainable with large health co-benefits.

Figure 1. The potential growth will slow as capital and labour accumulation weakens

Contributions to potential output growth



Source: OECD calculations based on OECD Economic Outlook No. 116 long-term database.

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Macroeconomic stabilisation efforts need to be maintained

Economic activity is expected to moderate after years of strong growth driven by domestic demand which created large imbalances and challenges to long-term sustainability. The new restrictive setting of monetary and fiscal policies has helped to stabilise financial markets, boosted confidence, and reduced uncertainty. To fully leverage the improving international sentiment, authorities should maintain prudent macroeconomic policies until inflation is firmly on track to meet targets.

The economy grew by 5.3% in 2022 and 5.1% in 2023, driven by expansionary fiscal and monetary policies. These boosted consumer spending growth to record levels. However, these policies also led to significant imbalances, including rising inflation, a widening current account deficit, negative net international reserves, and a large depreciation of the Turkish lira.

Following the May 2023 elections, the policy mix has started to normalise. The new government has taken necessary steps to stabilise the macroeconomic framework and pull Türkiye's economy back on to a sustainable path. The Central Bank has gradually raised interest rates by a cumulative 41.5 percentage points, reaching 50% in March 2024, and the government is planning a fiscal consolidation for the coming years.

Economic activity is expected to moderate over the next two years (Table 1). Tighter financial conditions, and restrictive monetary and fiscal policies, are likely to curb household consumption. Investment and government spending are also expected to weaken, particularly as post-earthquake reconstruction efforts wind down. However, exports are projected to gradually improve, supported by a better external environment.

Maintaining tight monetary policy and fiscal discipline will be essential until inflation is firmly under control. Strengthening fiscal discipline will require structural reforms to improve spending efficiency, expand tax revenues, and promote inclusive growth.

Table 1. Macroeconomic projections

Annual % change unless specified	2023	2024	Projections*	
			2025	2026
Gross domestic product (GDP)	5.1	3.2	3.1	3.9
Consumer price index	53.9	58.5	31.4	17.3
Core consumer price index	58.5	59.8	31.2	17.3
Unemployment rate (% of the labour force)	9.4	8.7	8.8	8.3
General government fiscal balance (% of GDP)	-4.8	-4.7*	-3.0	-2.6

Note: * Projections for 2025 and 2026 are an update of EO116 based on the Interim Economic Outlook of March 2025.
Source: OECD (2025), OECD Economic Outlook: Statistics and Projections (database).

The efficiency of public finances should be strengthened. Comprehensive and transparent expenditure reviews integrated into the budget process can improve spending efficiency and increase fiscal space. Although public revenues rely comparatively more on less-distortive consumption taxes, the consumption and income tax bases could be broadened, and the structure of value-added tax rates could be simplified.

Public finances could become more redistributive. The tax and benefit system barely reduces inequalities in market incomes. Non-pension social benefits are very low, and revenues heavily rely on flat social security contributions instead of a progressive income tax. To reduce income inequality, it will be crucial to expand both the coverage of income taxation and the social safety net.

Boosting female labour market participation would support growth

Female labour force participation improved, but still remains significantly lower than in other OECD countries, with women also facing higher unemployment rates than men (Figure 2). The underutilisation of women's talents limits Türkiye's economic potential. Closing the gap between men and women could increase long-term GDP per capita growth. Doing so requires a combination of tax policies, expanding pre-school education facilities and promoting more equitable family policies.

A disproportionate share of unpaid care and domestic responsibilities is a major barrier to women's labour market participation. Motherhood particularly affects women's workforce engagement in Türkiye, where 96% of mothers act as primary caregivers while only 2% of fathers do. Improving access to early childhood education and care (ECEC) is an essential part of this challenge.

Expanding public investment in ECEC could increase capacity and affordability. In recent years, most ECEC facilities in Türkiye have operated near full capacity. Public funding for ECEC, at 0.3% of GDP, is significantly below the OECD average of 0.8%. Employer-provided childcare remains rare. Additionally, the lack of transportation and meal services in public ECEC programs adds extra costs for families, making childcare less affordable. Expanding the supply of high quality ECEC should be a priority as it remains inaccessible for many low-income households, who would benefit the most.

Promoting more equitable family policies could support greater workforce participation for both parents. Türkiye does not currently offer non-transferable parental leave reserved for fathers. Rigid employment structures such as strict full-time requirements, fixed hours, and limited opportunities for remote or part-time work, fail to accommodate the needs of women who require adaptable working conditions due to caregiving roles. In addition, some labour regulations can be eased as they can unintentionally act as a barrier to female labour participation. For example, granting severance pay to women resigning upon marriage increases the long-term cost for employers.

Türkiye's tax policies do not favour the labour force participation of parents by imposing a high tax wedge. Türkiye does not provide child-related fiscal benefits in contrast to most OECD countries. Providing targeted tax credits or cash benefits for parents would promote labour force participation especially among women of low income.

Figure 2. Labour market outcomes of women lag behind other OECD countries

Source: OECD (2024), OECD Labour force statistics indicators (database).

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Tackling climate change challenges requires a more decisive choice of policies

Greenhouse gas emissions are relatively low, but current policies are insufficient to reach the 2053 net zero target. Achieving the country's goal will require implementing carbon pricing as planned and a transition away from coal. Rising temperatures due to climate change are weakening the decarbonisation capacity of Türkiye's forests, particularly by increasing the risk of wildfires.

Türkiye's emissions trajectory is not in line with the country's 2053 net zero target and requires continuing improving the policy framework. Although emissions per capita are low, they are increasing fast, and are expected to peak only by 2038 (Figure 3). This is partly explained by economic growth, but also by the relatively slow decarbonisation of energy supply. A detailed, long-term sectoral breakdown of emissions reduction plans and targets is needed and should be accompanied by a comprehensive Climate Law. In that context, the draft Climate Law introduced in Parliament in February is a step in the right direction.

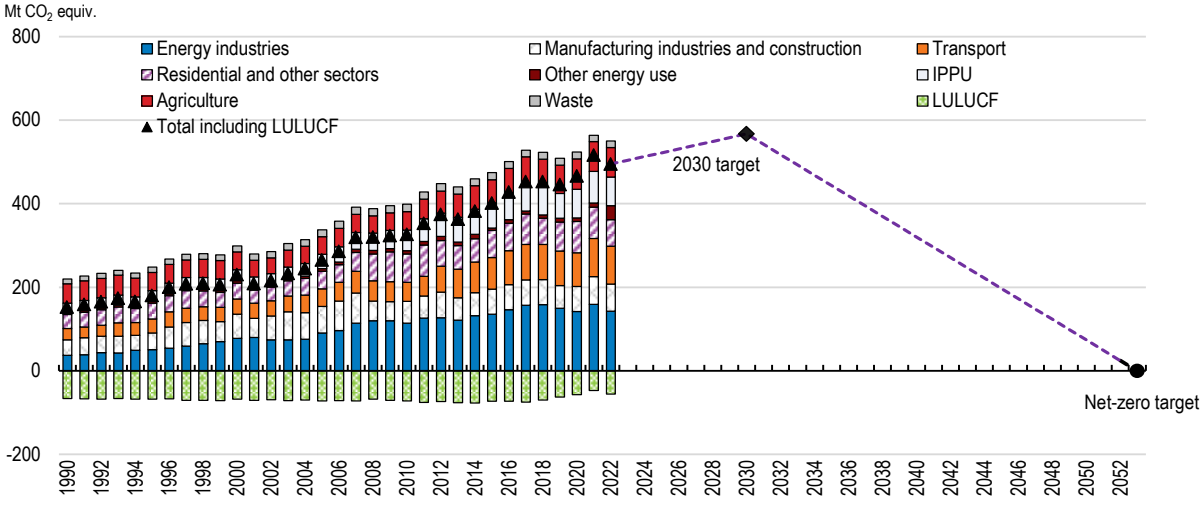
Reducing emissions will require carbon pricing. Türkiye is pricing carbon only indirectly for example through fuel taxes, and at low levels. It needs to follow up on the implementation of an Emissions Trading System and transition away from its fossil fuel subsidies. Revenues are expected to be sufficient to support the required investments for the transition, help groups requiring targeted policies, and reduce other distortive taxes.

Coal-fired power needs to be phased out, and Türkiye needs to expand and green its electricity generation. Coal fuels 30% of total energy supply and more than a third of electricity. A majority is imported. In addition, more than a fifth of electricity is generated by natural gas. Shifting from coal to renewables would lower costs, reduce energy dependency, and tackle air pollution. However, support will be needed for workers and regions which are highly dependent on the industry.

Better forest management would enhance the capacity of forests to reduce emissions and address wildfire risks. Türkiye's forests have degraded and are absorbing a smaller share of emissions. Recent wildfires have contributed to the trend, and climate change will amplify the risks. Subsidies and regulatory support for preserving forests and for wildfire prevention are needed. Broadening insurance coverage would make the exposed population less vulnerable to wildfire risks.

Figure 3. GHG emissions are likely to continue increasing in the next ten years

Greenhouse gas emissions by sector and targets



Note: Sectoral shares based on the OECD database over 1990-2021. Breakdown and total for 2022 are estimated based on Türkiye's Informative Inventory Report (IIR) 2024. The historical data and target estimate on the total emissions are based on the IMF database.
Source: OECD (2024), Air & GHG emissions database; Ministry of Environment, Urbanization, and Climate Change (2024), 2053 Long Term Climate Strategy; and IMF (2024), Climate Change Indicators Dashboard.

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Completing the transition to a competitive and innovative economy

The Turkish economy remains specialised in medium-technology sectors, and needs to boost competitiveness in high-skilled manufacturing and services (Figure 4). Upward integration in global value chains will require technological progress, workforce upskilling, and reducing barriers to business dynamism to enable companies to gain a competitive edge in international markets. Türkiye will need to improve adoption of innovations among firms by encouraging better research-business collaborations.

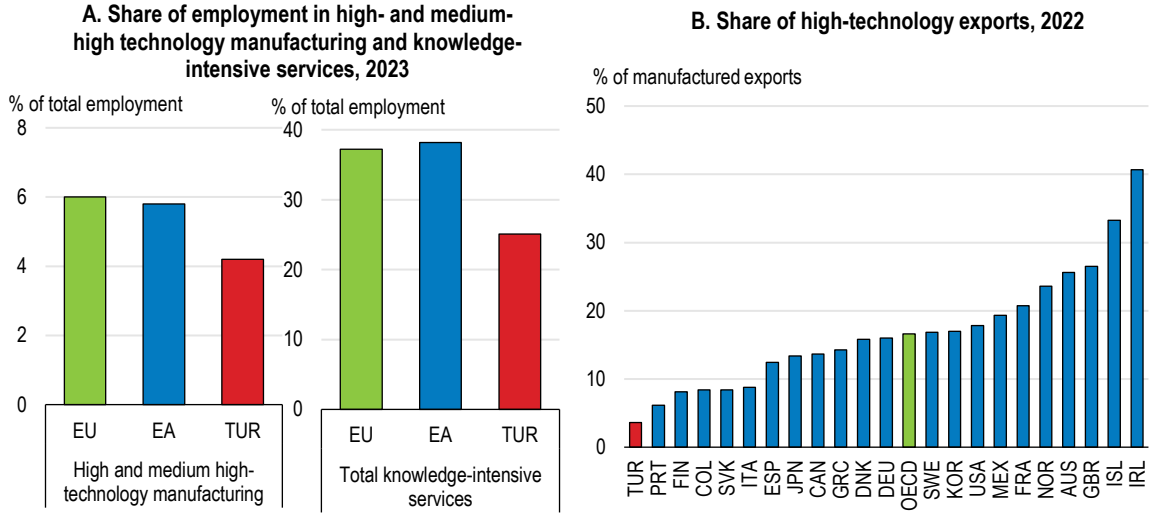
Despite recent progress, the performance of the innovation system still lags that of the country's OECD peers. One third of Turkish companies reported introducing an innovation in 2018-2020, compared to around half on average in the OECD. Similarly, Türkiye's performance in other intellectual property indicators, such as trademarks and design applications, is lower than the EU average.

Türkiye needs to boost homegrown innovation. Public support to R&D is at the OECD average but needs to become more targeted and efficient, in particular through unified programme evaluations. More needs to be done to promote links between research activities and broader technology adoption, as today there is limited diffusion of new technology among Turkish companies. Financial support to research-business collaboration and performance contracts in higher education institutions would also help improve diffusion.

The labour force requires upskilling. While participation in tertiary education has increased significantly, Türkiye lags other countries in its human resources. Providing more information and incentives for universities should tackle mismatches between graduates and labour demand. Reducing barriers to participation in high-quality lifelong learning would improve the employability of older adults. Pursuing recent initiatives to attract talented citizens back home would also boost skilled labour supply.

Significant barriers to business dynamism could be lifted. Hurdles remain to firm creation. The administrative burden on existing firms is heavy. The conduct of professional services activities is among the most regulated in the OECD, and hampers productivity along the value chains. Easing existing restrictions and regulations in services, including limits to foreign participation, would boost business dynamism, and services exports and FDI. The recent improvements in simplifying the insolvency regime should also be continued to facilitate business renewal.

Figure 4. The economy concentrates on production with relatively lower value added



Note: In Panel B, unweighted average of 38 countries for the OECD aggregate.
Source: Eurostat; and World Bank World Development Indicators.

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MAIN FINDINGS	KEY RECOMMENDATIONS
Maintaining a stable macroeconomic framework and improving the quality of public finances	
Annual consumer price inflation remains stubbornly high, reached around 42% in January, and although inflation expectations have decreased in recent months, they remain well above the inflation target of 5%.	Monetary policy should remain tight until inflation is sustainably on a downward path towards the target.
The government debt-to-GDP ratio is relatively low and the deficit is expected to decrease to 2.6% in 2026. However, a premature relaxation of current macroeconomic policies could lead to renewed instability.	Reduce the deficit in accordance with the government's Medium-Term Program 2025-2027 to support macroeconomic stabilisation.
The VAT system is particularly complex due to the prevalence of special rates. Türkiye's VAT revenue is low relative to potential.	Once inflation is under control, reduce the scope of reduced VAT rates.
The benefit system is among the least redistributive in the OECD, because it is narrow.	Broaden social protection, including via additional social assistance benefits and higher basic pensions.
Strengthening the labour force participation of women	
Female labour force participation is the lowest in the OECD, mostly due to a disproportionate share of unpaid care and domestic work.	Continue increasing public spending on early childhood education while monitoring efficiency. Introduce paid parental leave that is shareable and encourage its more equitable sharing among parents by including non-transferable periods.
Türkiye does not provide adequate cash benefits for families with children, leading to one of the highest tax wedges for families in the OECD.	Increase direct cash benefits for children, targeted towards low-income families.
Supporting climate change mitigation and adaptation	
Carbon is only taxed indirectly, mostly via fuel taxes. A fifth of emissions are effectively priced above EUR 30 per ton. Fossil fuel subsidies remain significant, in particular for coal.	Implement an ETS as announced and provide support for green investment and social transfers to compensate groups vulnerable to the green transformation. Transition away from fossil fuel subsidies, replacing them with targeted social support, as necessary.
Two-thirds of energy consumption is based on energy imports, mostly from fossil fuels. Electricity is mostly powered by coal and natural gas.	Develop and swiftly implement a plan to transition away from coal.
The pace of solar and wind installations has slowed down. Wind and solar investment are incentivised by feed-in tariffs (FiTs). Price signals are better incorporated in feed-in premiums (FiPs) or contracts for differences (CfDs) relative to FiTs.	Focus on auction-based support schemes to support the deployment of renewable energy, and replace FiTs by market-based instruments like FiPs or CfDs.
Disaster-related insurance coverage in Türkiye is low and focused on earthquake risks. The government has announced plans to extend compulsory insurance to other natural disasters.	Implement disaster-insurance coverage beyond earthquakes as planned, and increase the coverage threshold, while ensuring that premiums remain contained.
Lifting productivity and competitiveness	
Despite relatively generous government support, there is only limited adoption of new technology among Turkish companies. Only one-third of Turkish companies reported introducing an innovation in 2018-2020, compared to around half of the companies in the average OECD country.	Expand further the programmes that promote research-business collaboration, and allow researchers to temporarily join the private sector and vice-versa.
The sharp increase in university graduates has resulted in a high likelihood of mismatch, especially among recent graduates. Türkiye has the largest skills gap for workers with tertiary education among OECD countries.	Further enhance incentives for tertiary education institutions, including funding to offer courses more aligned with labour market needs.
Services are less knowledge intensive, and domestic services are used less in exports than in OECD countries. Productivity gaps in manufacturing firms appear in firms with services affiliates in more restricted sectors.	Reduce barriers to the conduct of activity in professional services by easing the regulation of fees, restrictions on advertising and marketing, limits on firms' legal forms, and occupational licensing.
Restrictions on services trade and FDI reduce competition and hamper the development of services exports.	Loosen foreign participation restrictions in services sectors where they have hampered beneficial competition.
The Customs Union with the EU does not cover non-processed agricultural products, trade in services, and public procurement.	Support expanding the Customs Union to agriculture, services, and public procurement.
The insolvency regime appears particularly inefficient for services firms where exiting firms tend to have higher productivity than remaining ones.	Provide a simplified insolvency system for SMEs.
Transparency International's perception of corruption index worsened in 2023. Türkiye's now ranks 115th among 180 countries surveyed.	Establish a permanent and independent anti-corruption body.


100

1 Staying the course on macroeconomic stabilisation

The economy grew excessively fast in 2022 and 2023, driven by very expansionary fiscal and monetary policies. This led to significant imbalances including historically high levels of inflation. Following May 2023 elections, the policy mix has started to normalise. Restrictive monetary and fiscal policies have helped to stabilise financial markets, boosted confidence, and reduced uncertainty. To fully leverage the improving international sentiment, Türkiye should maintain prudent macroeconomic policies until inflation is firmly on track to meet targets. Long term fiscal sustainability and the credibility of the government's fiscal strategy will require structural reforms to improve spending efficiency, expand tax revenues, and promote inclusive growth.

1.1. Macroeconomic policies are normalising

1.1.1. Economic activity is moderating

Türkiye has been the fastest-growing economy in the OECD over the last two years (Figure 1.1, Panel A). The economy expanded by 5.3% in 2022 and 5.1% in 2023. Strong support from expansionary fiscal and monetary policies boosted consumer spending to historic highs. However, these policies led to unsustainable developments, creating significant internal and external imbalances, as evidenced by rising inflation, a widening current account deficit, a negative level of net international reserves excluding swaps (the difference between official gross reserve assets and net short-term currency drains), and a decline in the value of the Turkish lira. Following the May 2023 elections, the government started a process of normalising macroeconomic policies to pull Türkiye's economy back onto a sustainable path. Fiscal and monetary policies have rightly become restrictive, which has contributed to the economy's slowdown in 2024. Year-on-year GDP growth dropped from 6.5% in the first quarter to 2.4% in the fourth quarter of 2024. On the other hand, the more conventional policy approach has improved investor sentiment and has eased the risks around the outlook, as imbalances have been reduced. The current account deficit has been decreasing, the exchange rate has stabilised, and net international reserves excluding swaps turned positive for the first time since early 2020. In addition, foreign-currency swaps with local banks have been fully unwound.

Before the macroeconomic normalisation, domestic demand had been the main driver of economic growth in 2022 and 2023 (Figure 1.1, Panel B). Real household consumption in this period grew at an unprecedented pace, by around 15% annually, the highest growth rates in Türkiye's history. Sales of automobiles and durable goods exceeded historical averages in 2023, as high inflation led some households to frontload their purchases. Consumer spending in 2022 and 2023 was also supported by positive labour market developments. The number of people employed reached an all-time high in 2024 while the unemployment rate fell below 9% in the second half of the year, marking the lowest rates in a decade. While the number of workers in the manufacturing sector remained stable, the services sectors benefited from improving labour market conditions (particularly in the construction sector, tourism, and the information and telecommunication sectors), also partly reflecting structural adjustments in the economy.

Wages increased alongside those significant employment gains, with average annual growth of 88% and 114% in 2022 and 2023 respectively, well above the inflation rate in these years (72% and 54%). This wage growth was bolstered by substantial salary increases for public sector employees and significant hikes in the minimum wage. The minimum wage – earned by around half of workers in non-agricultural sectors – has been raised five times between 2022 and the end of 2024, reaching a level 459% higher in gross terms than in 2021 (against almost 400% for consumer prices). Overall, real labour compensation per employee has increased by 43% between the last quarter of 2019 and the last quarter of 2023 while the real minimum wage grew by 42% between May 2019 and May 2024 (OECD, 2024[1]).

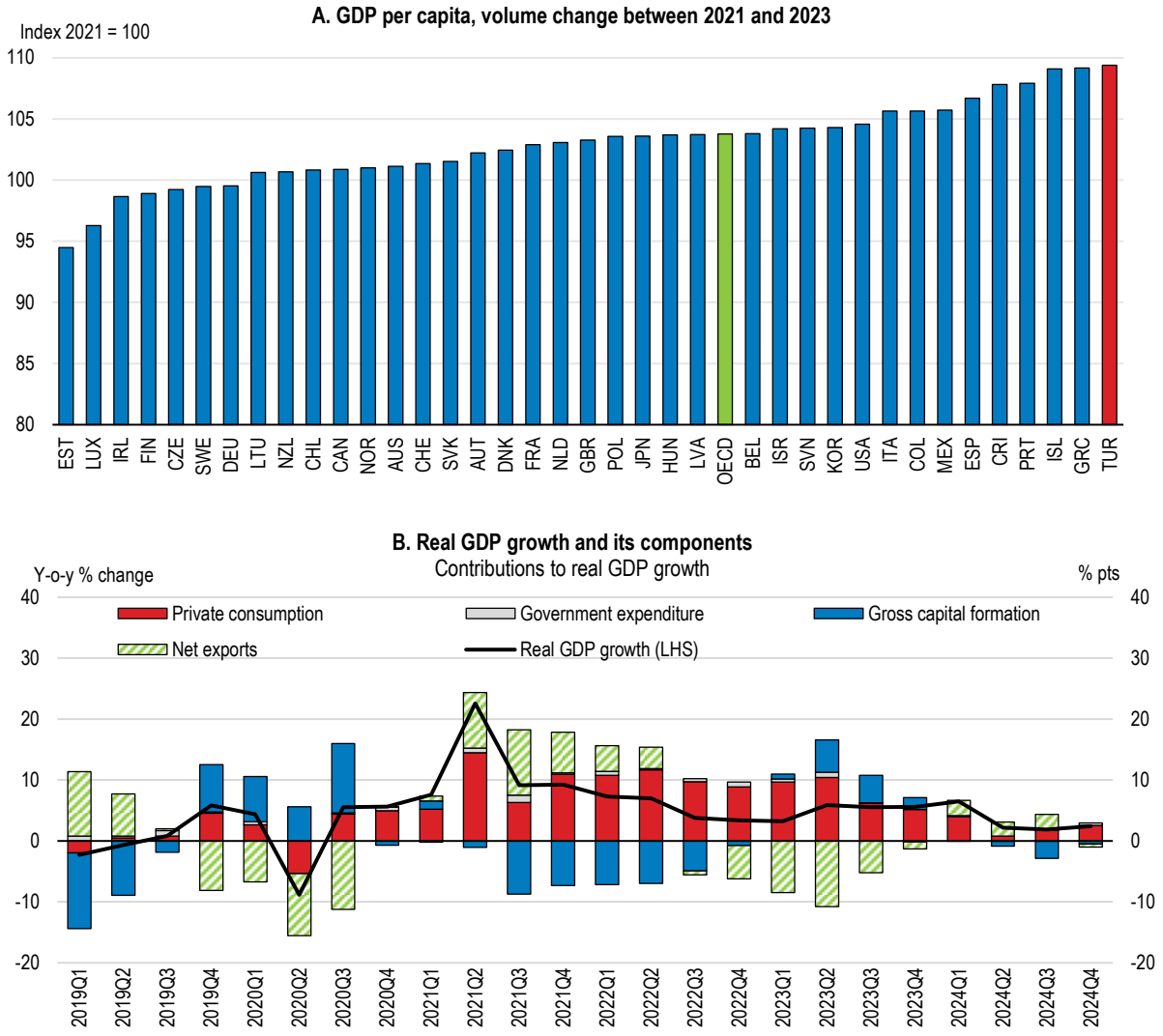
Besides the favourable labour market developments, supportive monetary and fiscal policy boosted household spending. In 2023, the disposable income of households was supported by significant increases in pensions and social transfers to compensate for high inflation and the consequences of the February earthquakes (see below). In addition, loose monetary policy boosted loan growth, which in nominal terms in 2022 and 2023 was one of the highest in history (see below). Elevated inflation expectations led to higher demand for loans, resulting in additional hikes in money supply (CBRT, 2024[2]).

Investment grew considerably in 2023, making a significant contribution to economic growth. Beyond the increase in investments in machinery and equipment, one reason for the higher investment activity was the reconstruction following the earthquake that struck Türkiye at the beginning of 2023 (Box 1.1). A large share of post-earthquake fiscal spending was allocated to investments, primarily to rebuild the housing stock. Additionally, machinery and equipment investments were strong in 2023.

The effects of macroeconomic stabilisation policies implemented in the middle of 2023 began to take hold in 2024 as the effects of monetary tightening started to be more pronounced and household consumption slowed considerably (Figure 1.1, Panel B). Credit growth slowed (see below) and an analysis by the Central Bank examining credit card spending showed that consumption began to decelerate in the second quarter of 2024, particularly in "optional discretionary items" such as jewellery, car rentals, and electronic goods. These categories were expected

to be more significantly and rapidly affected by monetary tightening (CBRT, 2024[2]). On the investment side, the effects of the reconstruction process began to fade and financing conditions also tightened due to Central Bank interest rate hikes, reducing investment activity in the first half of 2024 although construction investments continued to show strong growth.

Figure 1.1. After years of strong growth, economic momentum slows



Note: In Panel A, data are based on GDP in USD, constant PPPs (rebased, reference year 2020).
Source: OECD National Accounts Database; and OECD Economic Outlook: Statistics and Projections (database).

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Combined with the effects of the post-pandemic disruptions in global supply chains, strong domestic demand, fuelled by supportive fiscal and monetary policies, along with currency depreciation and high energy prices, drove year-on-year inflation beyond 80% in the second half of 2022 (Figure 1.3). In particular, the effective nominal exchange rate fell by more than 50% between June 2021 and June 2022 and evidence from the pre-pandemic period suggests that the pass through of exchange rate to inflation is significant with a large pass through to import prices after a year (Akgündüz et al., 2019[3]). Although inflation began to ease due to base effects, consumption tax hikes to finance earthquake-related expenses in the second half of 2023 (see below) contributed to keep inflation around 50%. Rising prices are disproportionately affecting households with lower incomes: for example, households in the first income decile allocate about two thirds of their budget to food and housing—double the share typically spent by households in the upper decile (World Bank, 2021[4]). Furthermore, robust demand and elevated inflation contributed to a rise in external imbalances, and the public deficit increased substantially.

Monetary policy and other macroprudential policies appropriately became more restrictive and began to curb domestic demand in 2024, helping to slow inflation and lower inflation expectations. Inflation expectations remain significantly above the Central Bank's medium-term target of 5%, and core inflation has stayed persistently high, driven by rising prices in services. Indeed, services inflation, particularly in rents, education, health, and catering services has been relatively sticky. The empirical evidence in Türkiye indicates that persistence in services inflation is more than twice as high as goods inflation due to prevalent backward-looking pricing behaviour across services sectors (CBRT, 2024[2]).

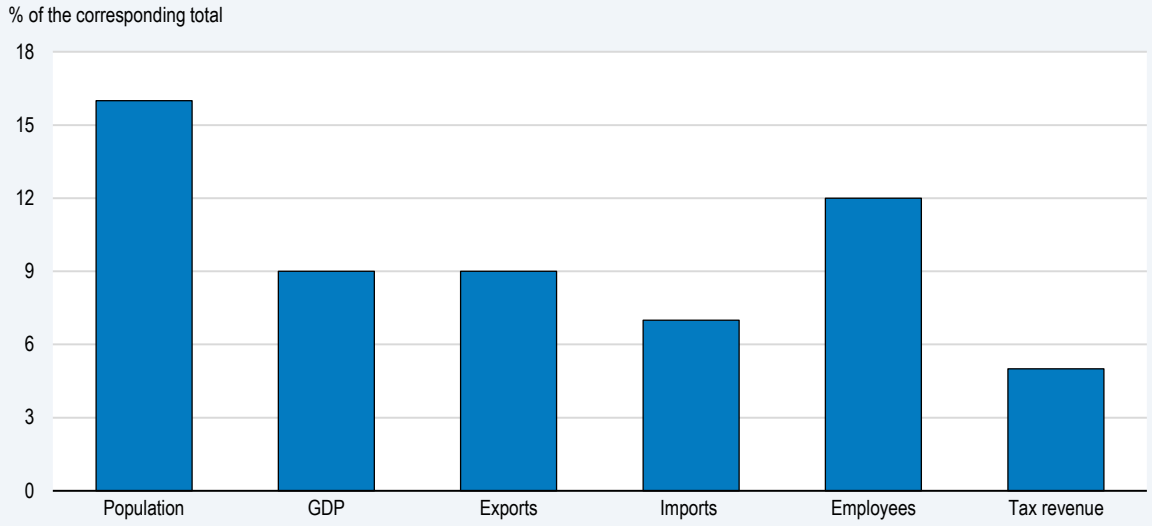
Box 1.1. The 2023 earthquakes in Türkiye and its effects on the economy

On 6 February 2023, two large earthquakes hit 11 provinces in central and southern Türkiye. They affected an area of 110 000 km^2 and 14 million people or 16% of the national population (Figure 1.2). These earthquakes and their aftershocks resulted in widespread damage and fatalities. It is one of the deadliest natural disasters in Türkiye. The death toll exceeded 50 thousand people and around 3.3 million were displaced. The earthquake wreaked damage on over half a million buildings as well as communication and energy structures and led to significant financial losses.

- The government estimated that the **total financial burden** of the earthquakes for the country is around 9% of GDP (SBB, 2023[5]). The most prominent component (55%) is the damage to housing units, the second largest source of damage (12%) is the destruction of public infrastructure and damage to public service buildings. The earthquakes have also had significant damages on manufacturing industry, energy, and other private sector activities (11%). Further damages involve losses to the insurance sector, revenue losses of trade, and macroeconomic impacts.
- The disaster had also **short-term effects on economic activity** through the disruption of business continuity, loss of labour and capital leading to production losses, disruption of supply chains, and a decline in total demand, with retail and wholesale trade being interrupted. The impact on 2023 growth was likely below 1% of GDP as the affected region only contributes a small share of GDP, and as part of the slowdown was compensated by increases in investment due to the reconstruction activity (SBB, 2023[5]; IMF, 2024[6]).
- The **fiscal burden** of the earthquake amounts to approximately 8.3 percentage points of GDP over a 5-year period. The amount of earthquake-related public spending was marked at 960 billion TL (around 3.6% of GDP) in 2023. Earthquake-related expenditures were realised at 1.9% in 2024, and the earthquake-related budget allocations in the Medium-Term Program (2025-27) were marked at 0.9% in 2025, 0.7% in 2026 and 0.6% in 2027.

Figure 1.2. The affected region represents around one-tenth of Türkiye's GDP

Share of the national population and economy of the region affected by two large earthquakes in February 2023



Note: The share of employees is based on the formal sector.
Source: Paterson, A., et al. (2023), "The Territorial Impact of the Earthquakes in Türkiye: Policy Note", OECD Regional Development Papers, No. 50.

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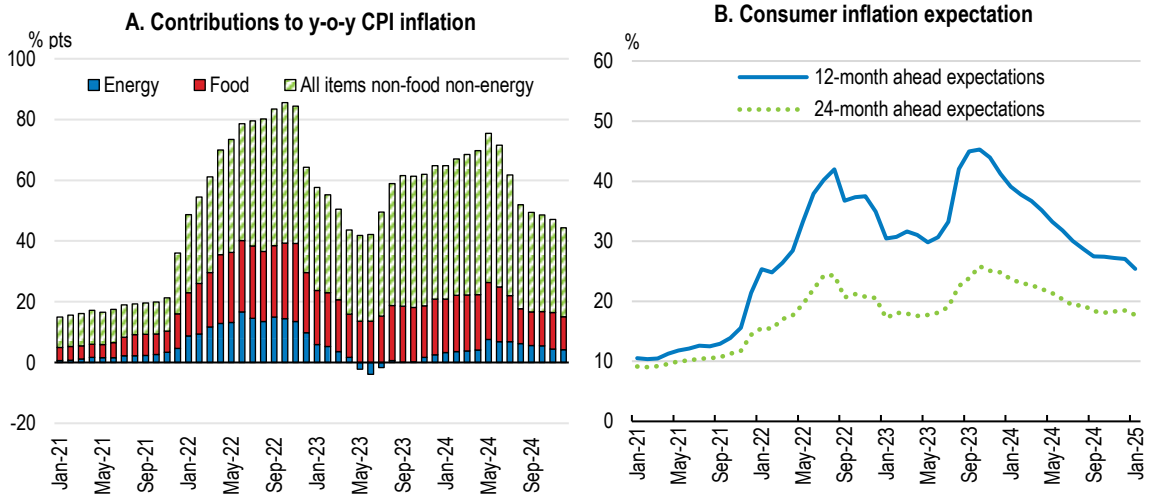
Figure 1.3. Inflation remains high



Note: In Panel B, data are based on the CBRT Survey of Market Participants that polls real and financial sector representatives and professionals.
Source: OECD (2025), OECD Consumer Price Index; and CBRT.

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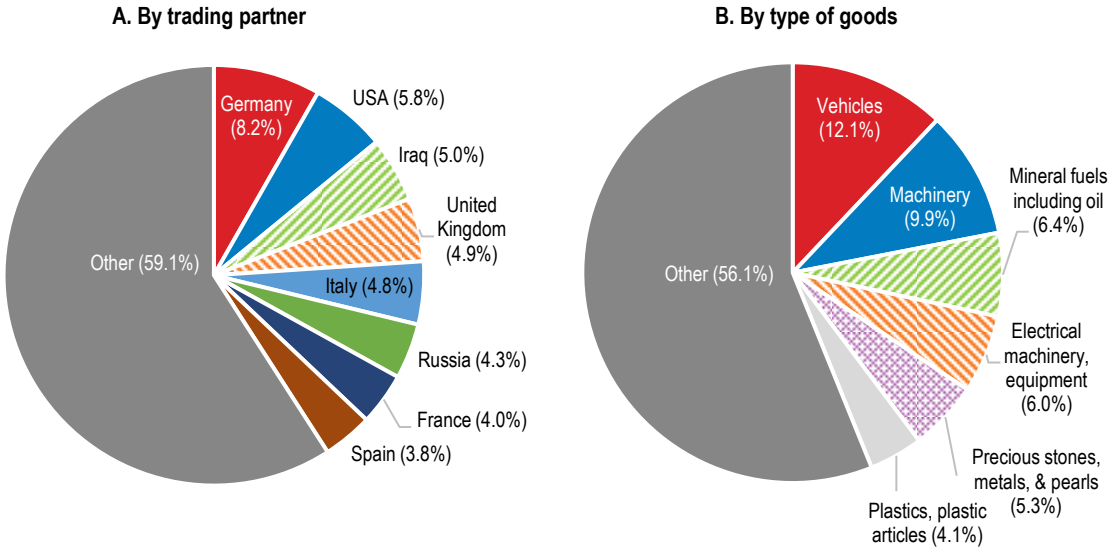
Export growth turned negative in 2023 and remained weak in the first half of 2024. Demand growth from Türkiye's main trading partners slowed significantly. In addition, the relative stabilisation of the Turkish lira led to an appreciation of the real exchange rate, and may have put downward pressure on competitiveness in some labour-intensive sectors. Additionally, the earthquake affected export activities in the southern regions, which accounted

for nearly one-tenth of the country's export capacity (Box 1.1). Geopolitical factors also played a role in export performance, as tensions in the Middle East contributed to weaken total exports growth in the first half of 2024.

The EU remains Türkiye's largest export destination (Figure 1.4). In 2023, 41% of Türkiye's exported goods were destined for the EU. In terms of products, manufacturing and machinery dominate Türkiye's exports of goods. Türkiye's manufacturing sector has shown notable progress, reflecting a positive shift toward higher value-added production and exports. Despite efforts over the past decade, the share of high-technology goods in manufacturing exports remains low (see Chapter 4), rising only from 3.1% in 2022 to 3.8% in 2023 against more than 16% on average in the OECD. Meanwhile, low-technology exports still make up about one-third of overall manufacturing exports.

Figure 1.4. Share of exports on goods, by type and trading partner, 2023



Source: OECD calculations based on UN Comtrade.

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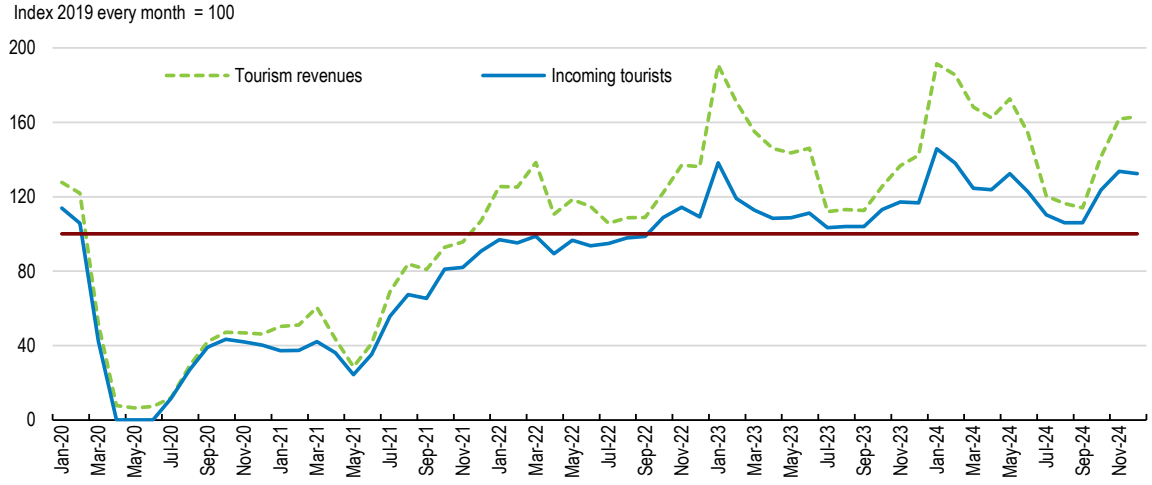
By contrast, services exports improved in 2023, driven by strong tourism revenues, which increased by 12.1%. Over 57 million tourists visited Türkiye in 2023 and 62 million in 2024, surpassing the pre-COVID level from 2019 by around 10% and 20% respectively (Figure 1.5). An expanding number of tourists are visiting Türkiye for medical reasons, including treatments and procedures related to dental care, cardiac operations, or cosmetic surgeries. The share of health tourism revenue in total tourism income rose from about 1% in 2002 to 5.4% in 2023 and 5.0% in 2024 (Government of Türkiye, 2024[7]; TurkStat, 2024[8]).

Economic activity is expected to moderate in the next two years after years of strong growth primarily driven by domestic demand, but which generated imbalances posing challenges to long term sustainability. The drivers of growth will be more balanced, in line with government efforts, and the positive output gap from 2022-2024 is set to turn negative. Tighter financial conditions, along with restrictive monetary and fiscal policies aimed at rebalancing the economy in a sustainable way, will limit household consumption, while investment and government spending are also expected to weaken, especially as the effects of post-earthquake reconstruction subside. Exports are anticipated to gradually strengthen due to an improving external environment. Unemployment is expected to to remain slightly below 9%. Efforts to contain inflation will have some impact, but inflation is still projected to decline modestly throughout the forecast period to reach 17% in 2026.

Figure 1.5. International tourism has rebounded to above the pre-pandemic level in 2023



Note: Data from January 2020 are based on the corresponding monthly data in 2019.
Source: TurkStat, "Visitor's tourism income, number of person and average expenditure per capita by months".

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Table 1.1. Macroeconomic indicators and projections

Annual percentage change, volume (2009 prices)

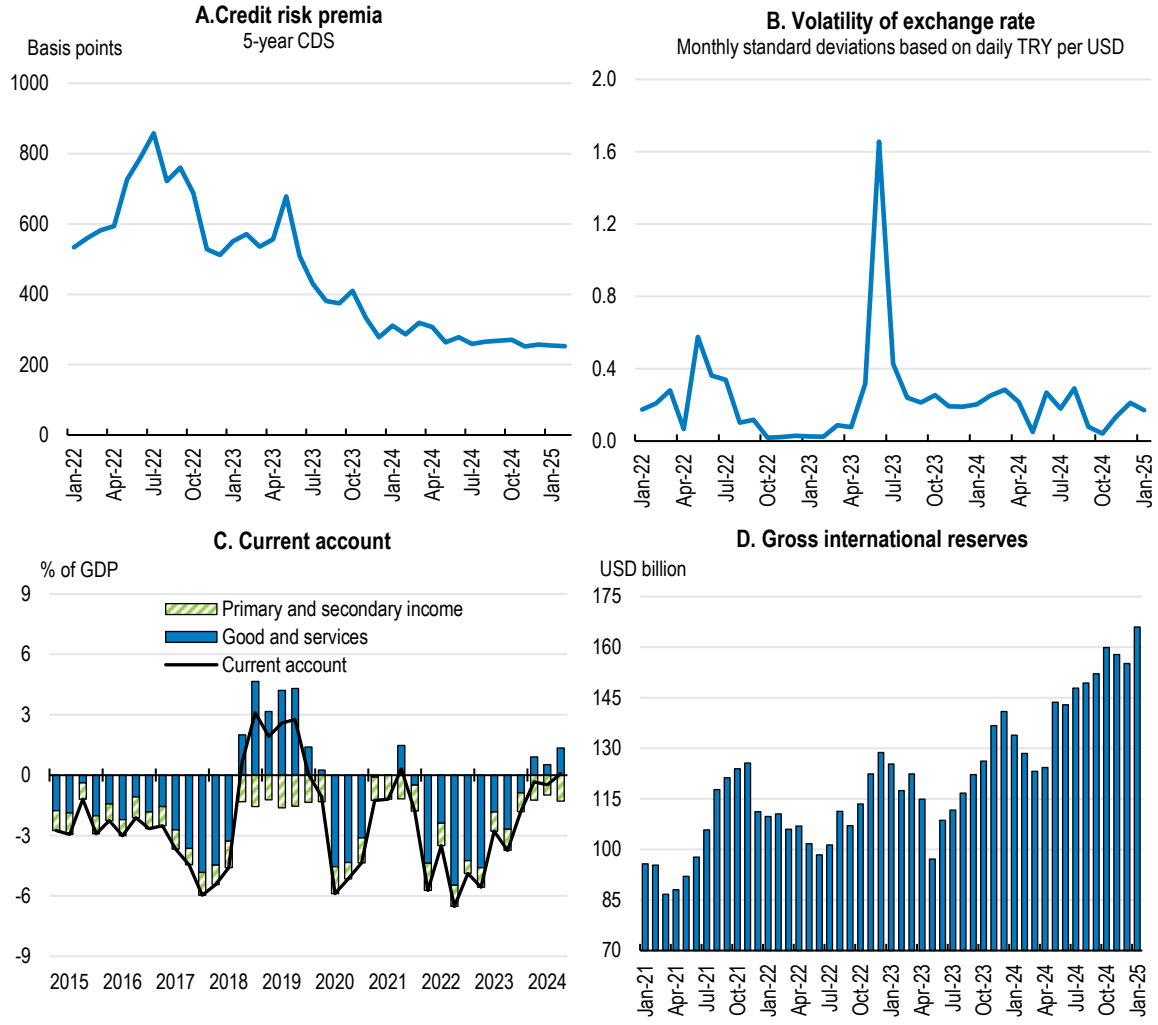
	2021	2022	2023		Projections*	
	Current prices (TRY billion)			2024	2025	2026
Gross domestic product (GDP)[1]	**7,256.1**	**5.3**	**5.1**	**3.2**	**3.1**	**3.9**
Private consumption	4,008.7	18.5	13.5	3.8	2.3	3.1
Government consumption	939.3	4.3	2.5	0.8	1.4	2.2
Gross fixed capital formation	2,044.2	1.3	8.4	3.9	3.2	5.2
Stockbuilding[2]	234.5	-6.1	0.6	--0.7	0.2	0.0
Total domestic demand	7,226.8	4.8	10.6	1.4	0.8	3.8
Exports of goods and services	2,593.6	9.9	-2.8	0.9	0.9	3.9
Imports of goods and services	2,564.2	8.6	11.8	-4.1	-0.0	3.3
Net exports[2]	29.38	0.5	-6.1	1.7	0.3	0.2
Other indicators (growth rates, unless specified)						
GDP deflator		96.5	68.3	58.4	30.5	19.1
Potential GDP, volume		4.4	4.4	4.1	4.1	4.1
Output gap (% of potential output)		0.3	0.9	0.0	-1.0	-1.2
Consumer price index		72.3	53.9	58.5	31.4	17.3
Core inflation index[3]		57.3	58.5	59.8	31.2	17.3
Unemployment rate (% of labour force)		10.5	9.4	8.7	8.8	8.3
Current account balance (% of GDP)		-5.1	-3.4	-0.6*	-0.4	-0.5
General government financial balance (% of GDP)		-2.1	-4.8	-4.7*	-3.0	-2.6

1. Based on working-day adjusted series.
2. Contribution to changes in GDP. Stockbuilding includes statistical discrepancy.
3. Consumer price index excluding energy, food, non-alcoholic beverages, alcohol, tobacco and gold.
* Projections for 2025 and 2026 are an update of EO116 based on the Interim Economic Outlook of March 2025.
Source: OECD (2025), OECD Economic Outlook: Statistics and Projections (database).

1.1.2. Downside risks persist

The recent shift in the economic policy framework has improved investor sentiment. The perceived creditworthiness of Türkiye has improved as evidenced by the fall in the value of Türkiye's CDS (Figure 1.6, Panel A). The country has gained confidence from international credit rating agencies, which upgraded their ratings in 2024. Due to the improvement in the country's risk premium, banks' external borrowing costs have decreased and access to international capital has become easier (CBRT, 2024[9]). The short-term volatility of the Turkish lira has also fallen (Figure 1.6, Panel B), and the currency has remained more stable compared to the 2022-2023 period.

Figure 1.6. The external position has improved



Note: In Panel A, data are presented as monthly data. The higher CDS value, the higher probability of a credit default.
Source: OECD (2025), Balance of Payments (database); CBRT; and LSEG.

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Türkiye's large external financing needs have diminished. The current account deficit has been decreasing from a relatively high level (Figure 1.6, Panel C) due to weaker domestic demand in 2024, falling energy prices, and lower demand for gold, in parallel of a pickup in exports. Gross international reserves have been rising (Figure 1.6, Panel D), and net international reserves, excluding swaps, turned positive for the first time since early 2020. The current account deficit is expected to decline further, reflecting a slowdown in domestic activity but also an improvement in foreign demand. However, potential risks remain. In particular, external debt maturing within a year amounted to USD 226.6 billion in 2023, roughly 20.1% of GDP. Further fluctuations in the exchange rate could thus make debt service payments more costly and unpredictable, impacting the economic decisions of both the private and public sectors.

The risks to the outlook remain skewed to the downside. One downside risk could lie in an earlier-than-expected relaxation of the macroeconomic policy stance, which could result in higher inflation and lira depreciation. Moreover, if inflation expectations persist at elevated levels, additional monetary and fiscal tightening may be required, which would dampen domestic demand and slow economic growth.

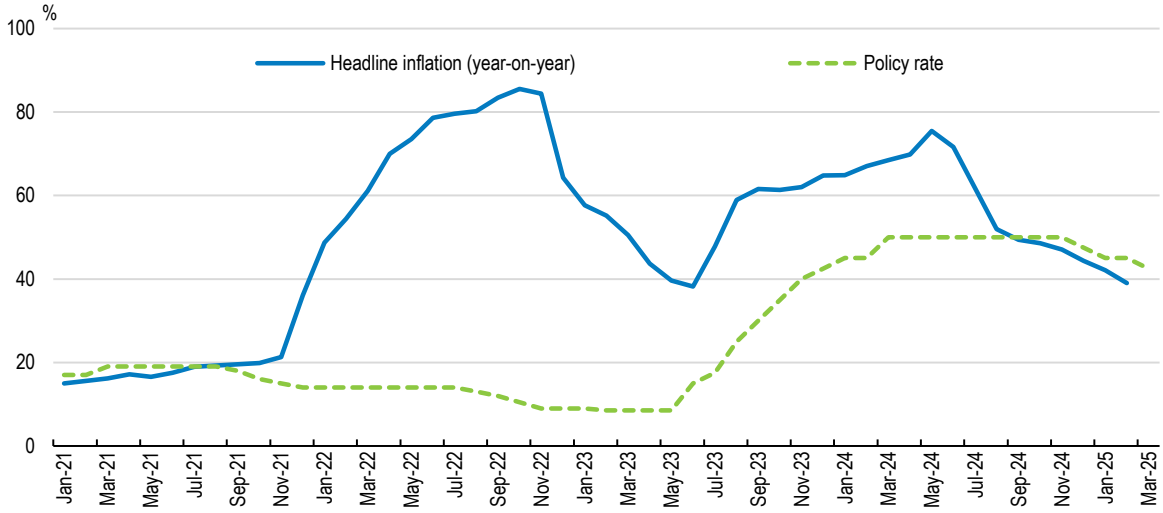
Table 1.2. Tail risks that could lead to major changes in the outlook

Vulnerability	Possible outcomes
Dramatic escalation of the Middle East conflict, with the potential to spread to other countries.	Conflict escalation could increase food and energy prices, cause prolonged supply chain disruptions, and significantly reduce demand from major trading partners. This would negatively impact exports, potentially leading to job losses. Increased uncertainty could also restrain business investment and consumer spending.
Earthquakes affecting more populated areas.	An earthquake in a densely populated area could have a severe impact on both the local population and the economy.
Prolonged and severe droughts disrupting agricultural production and water availability.	Prolonged droughts could lead to sharp declines in crop yields, rising food prices, and increased import dependency, straining the trade balance. Furthermore, water scarcity could impact key industries like energy, particularly hydroelectric power, and manufacturing, increasing operational costs. These dynamics could exacerbate inflation and reduce GDP growth.

1.1.3. Monetary policy has become restrictive

Following the May 2023 elections, a dramatic shift in the macroeconomic policy mix was initiated, led by the Central Bank's tightening of monetary policy (Figure 1.7). Since then, the Central Bank of Türkiye (CBRT) has gradually raised the policy rate (the one-week repo auction rate) by a cumulative 41.5 percentage points, reaching 50% in March 2024. Given falling inflation expectations (Figure 1.3) and increasing interest rates, the real forward rates turned from negative to positive and increased significantly beyond potential GDP growth. At the same time, the CBRT has widened the interest rate corridor to 300 basis points below and above the policy rate, allowing flexibility to adjust rates as needed before policy meetings. To curb credit growth, the CBRT has lowered monthly growth limits for loans in 2024, to 1.5% for foreign currency loans, and 2% for Turkish lira loans. In January 2025, the monthly growth limit for foreign currency loans was further reduced to 1% and to 0.5% in March. The monthly growth limit for Turkish lira commercial loans has been differentiated at 2.5% for SMEs and 1.5% for other commercial loans. Reserve requirement ratios were also raised for Turkish lira and FX deposits. In December 2024, the Central Bank cut the policy rate by 2.5 percentage points while maintaining a tight monetary stance given the decline in inflation and inflation expectations while the interest rate corridor was narrowed to 150 basis points. In January and March 2025, the policy rate was cut further by 2.5 percentage points each time as expected, and lowered to 42.5%.

Figure 1.7. Monetary policy has become restrictive



Source: CBRT; and BIS.

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The tightening of monetary policy has been a welcome departure from the period between 2021 and 2023, where monetary policy was excessively accommodative. During that period, the CBRT had reduced its policy rate by 10.5 percentage points despite accelerating inflation, strong economic activity and a widening current account deficit. The real long-term interest rate based on the private consumption deflator was -63% in 2022 and -44% in 2023. To curb the ensuing dollarisation, the authorities introduced a foreign exchange-protected deposit scheme (KKM-FX protected deposit) and tax incentives to participate in this scheme. In addition to KKM, exporters were required to exchange 40% of their foreign currency revenues into liras – the share was initially set at 25% in January 2022 and raised in April 2022, and has recently been lowered to 30% in June 2024. Despite these measures, the foreign exchange reserves declined in the period of 2022-23. As the lira lost around 70% of its value vis-à-vis the US dollar between the beginning of 2021 until mid-2023, the KKM-FX protected deposits resulted in high costs. The fiscal costs related to the compensation of the KKM-FX holders reached almost 1% of GDP in the period of 2022 and 2023.

In addition to the higher interest rates, the CBRT has also recently simplified regulatory and macroprudential measures, eliminating some policies implemented before mid-2023. Interest rate caps on loans, reserve requirements based on the Turkish Lira (TL) share of total deposits, and the requirements for government bond holdings have been removed. As part of the simplification process, the CBRT has begun phasing out the KKM FX-protected scheme, including through the exclusion of KKM accounts from the TL deposit share target. Additionally, as of mid-2024, KKM returns became subject to taxation, and the minimum interest rate was progressively lowered. As a result, the share of KKM FX-protected deposit in total deposits has started to decrease from around 25% in mid-2023 to 5% in January 2025 (Aydın and Sümer, 2024[10]). The CBRT has announced that simplification steps will continue in 2025.

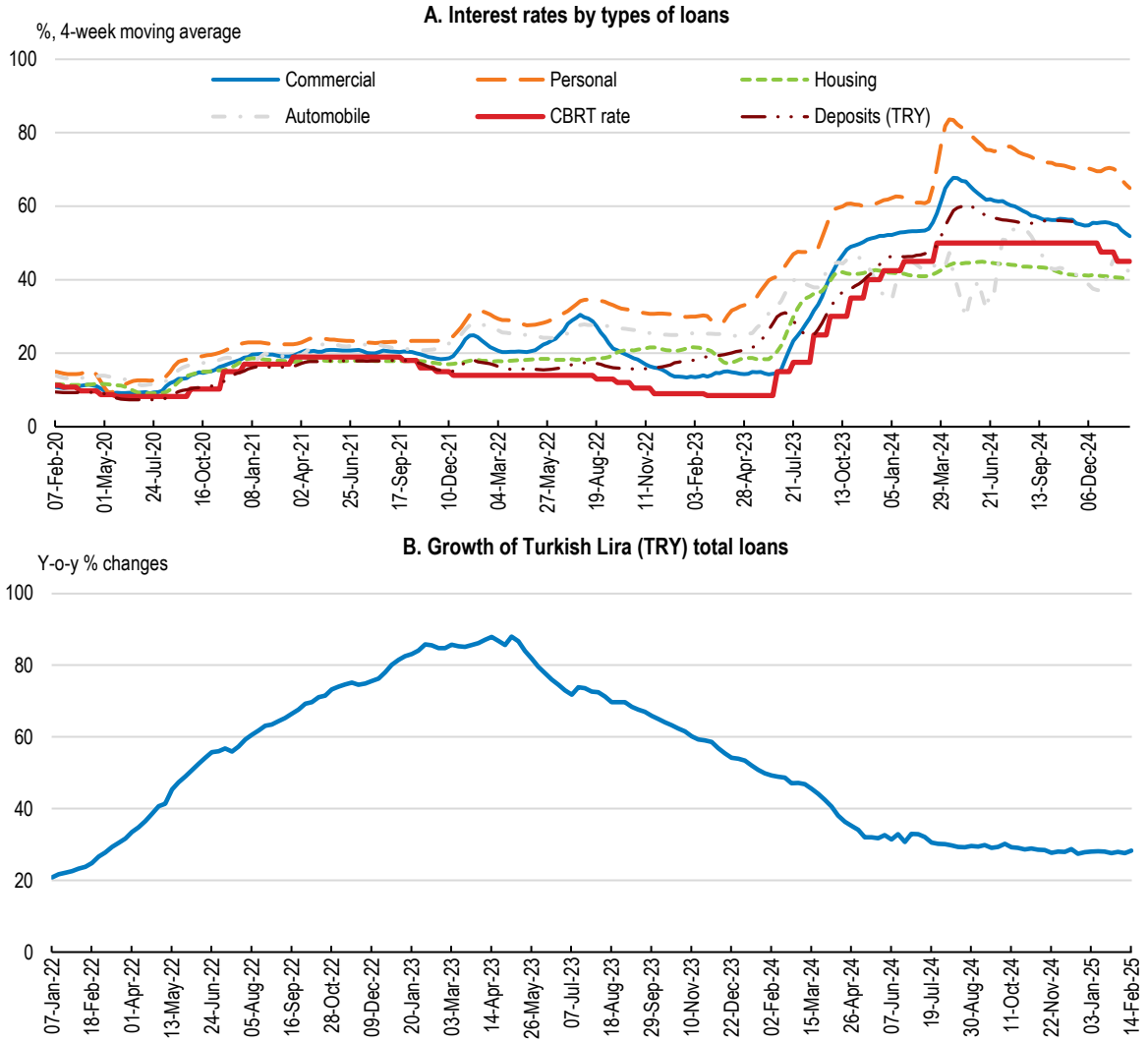
Confidence in the independence of the Central Bank has increased due to credible improvements in financial and monetary policies, which have positively influenced investor sentiment (see above). However, building on those successes, there is room to further strengthen confidence in the independence of the CBRT. According to the Central Bank Independence Index, which evaluates *de jure* central bank independence for 155 countries, the rules governing the appointment of the governor and central bank board members lag behind those of other OECD countries (CBI, 2024[11]). To address this, the appointment of the governor could be carried out by separate bodies rather than by the executive branch. Additionally, the terms of office for the governor and board members could be extended beyond the electoral cycle, and their reappointment could be limited.

The CBRT's communication with the public has improved. The Central Bank has repeatedly emphasised its commitment to maintaining a tight monetary policy until there is a marked improvement in the inflation outlook. The CBRT provided clear guidance on the levels of monthly inflation and expectations that must be achieved before

policy easing can begin. The CBRT is expecting that given tight monetary and fiscal policy, inflation will fall below 10% and close to the 5% target in 2027.

As a result of these measures, financial conditions have tightened. Deposit and lending rates are now more closely aligned with the policy rate (Figure 1.8, Panel A), and lira-denominated commercial loan growth has slowed (Figure 1.8, Panel B). Demand for housing and vehicle loans has weakened, and the use of credit card cash advances has also declined (CBRT, 2024[9]). Additionally, portfolio inflows from abroad and swap transactions with non-residents have increased rapidly. Inflation expectations have started to decrease.

Figure 1.8. Increased lending rates eased the demand for loans



Note: OECD calculations based on weekly data. The latest data point refers to 14 February 2025 in both Panel A and B. In Panel A, commercial loans exclude overdraft accounts and credit cards.
Source: CBRT; Banking Regulation and Supervision of Agency, www.bddk.org.tr; and OECD calculations.

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1.1.4. Financial stability risks should be monitored closely

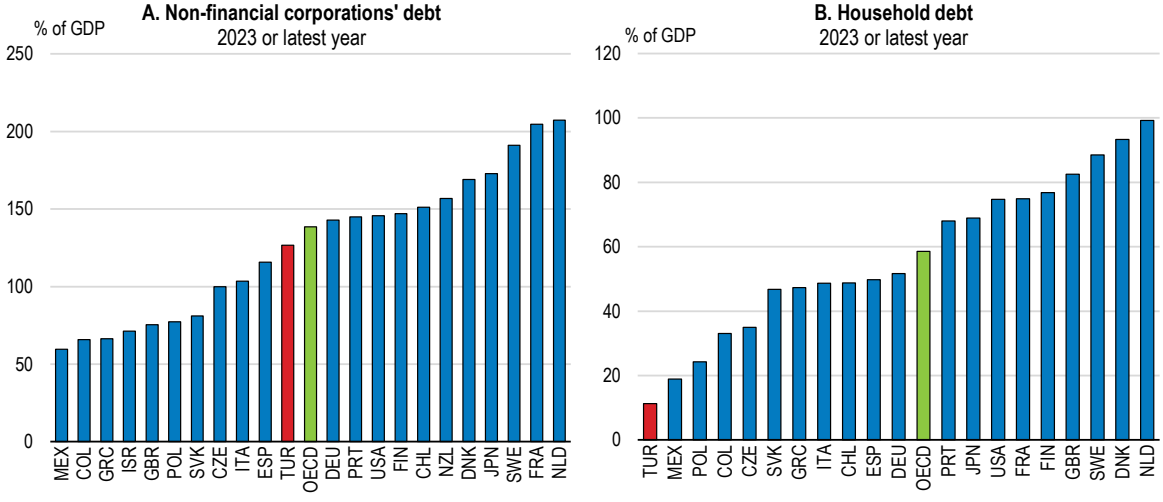
However, while current monetary and macroprudential measures are appropriate, this period of monetary tightening may highlight areas of risk in the corporate and household sectors, which will require careful monitoring by the authorities. On the corporate side, while corporate indebtedness is close to the OECD average (Figure 1.9), profit margins have been declining since early 2023 (while remaining above historical averages) and the share of

companies able to cover at least a quarter of their total debts with annual profits has also been on a downward trend. The capacity to cover debt in foreign currency with export revenues has been improving overall (CBRT, 2024[9]). However, empirical evidence analysing the Turkish corporate sector suggest that micro firms are relatively more affected by changes in interest rates than larger firms, standing out as the most vulnerable portion of the corporate sector (World Bank, 2024[12]). Therefore, the fiscal policy measures undertaken to support vulnerable businesses will play an important role in the upcoming period to maintain economic stability (see below).

On the household side, while the debt ratio remains well below that of other OECD countries (Figure 1.9), some segments are more at risks. Retail loans, particularly those via credit cards, have been rising quickly (CBRT, 2024[9]). The ease of use of credit cards and the relatively low level of credit card interest rates in a high inflation environment from 2022 to mid-2023 contributed to a historically high level of credit card debt. During inflationary periods, credit cards have provided easily accessible financing with instalment options for durable and semi-durable goods and services. High limits granted to individuals led to spending behaviour and consumption demand that was inconsistent with their incomes (CBRT, 2024[9]). The ratio of unpaid debt to total card balance has increased and reached 13.7% in the first half of 2024. In response, authorities increased interest rates on credit card purchases and cash advances, aligning them with other types of retail loans.

Overall, the banking sector's liquidity position appears relatively strong, with short- and long-term liquidity indicators above both legal minimums and historical averages (CBRT, 2024[9]). A strong preference for TL deposits, combined with slower TL loan growth, has reduced the loan-to-deposit ratio, positively impacting the sector's liquidity outlook. The banking sector's share of non-performing loans (NPL) has remained stable at a level below historical averages, as a decline in the commercial NPL ratio has offset a slight increase in the retail NPL ratio, which rose marginally following the tightening of financial conditions. Banks' medium- and long-term external debt rollover ratios have increased, with the external debt rollover ratio well above 110% (CBRT, 2024[13]; CBRT, 2024[9]). Still, banks' asset quality could be affected by worsening economic conditions. Therefore, as was mentioned in the previous OECD Economic Survey of Türkiye, publishing banking sector stress tests could help strengthen domestic and international confidence (OECD, 2023[14]).

Figure 1.9. Household and corporate debt is not particularly high



Note: According to the system of national accounts (SNA), debt is obtained as the sum of the following liability categories: special drawing rights (AF12), currency and deposits (AF2), debt securities (AF3), loans (AF4), insurance, pension, and standardised guarantees (AF6), and other accounts payable (AF8). Data refers to 2021 for Israel, to 2022 for Mexico and New Zealand. Unweighted average for the OECD aggregates with 37 countries in Panel A and 38 countries in Panel B. In Panel B, the household sector includes non-profit institutions serving households (NPISH). The data is not consolidated and thus include within-sector debt exposure.
Source: OECD (2024), OECD Financial indicators dashboard; OECD National Accounts database; and OECD Financial Accounts database.

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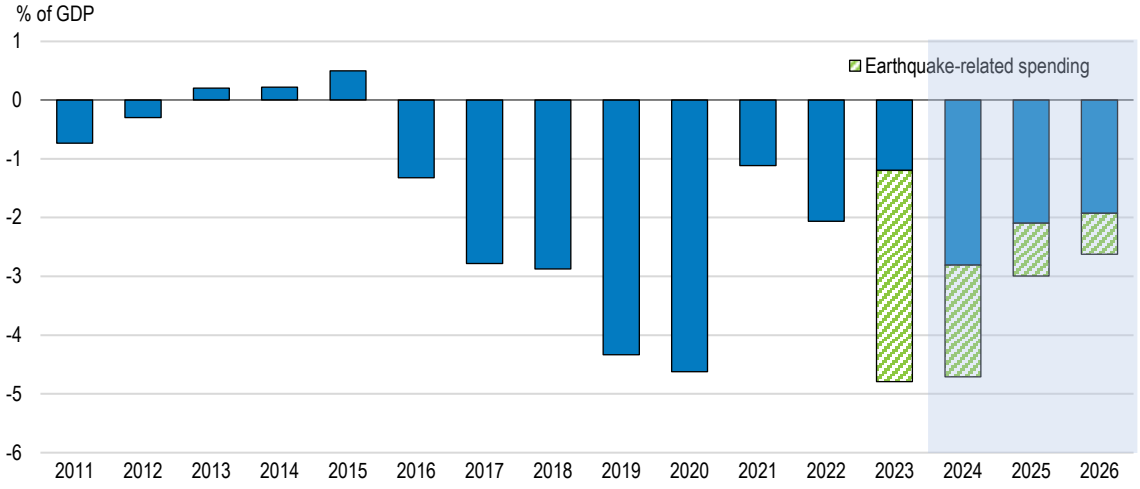
The current orientation of monetary policy with a tight policy stance taking into account the trajectory of inflation expectations is appropriate. It should be maintained until inflation is sustainably on a downward path to target. While measures such as caps on credit growth were appropriate to curb demand in order to slow inflation, they also weaken the transmission mechanism of monetary policy. Therefore, when inflation is on a clear downward path, the ongoing macroprudential framework simplification should continue. Notably, the credit growth caps could be gradually removed and the requirements for exporters to exchange part of their revenues to TL could be gradually dismantled.

1.1.5. Fiscal policy is set to tighten

The government is expected to significantly lower the deficit, which has increased substantially in recent years mainly due to earthquake-related spending (Figure 1.10). The consolidation strategy involves a combination of revenue and expenditure measures (Box 1.2). Larger deficit cuts will come from the expenditure side through reduced capital and transfer spending as earthquake-related investments will largely decrease in 2025. On the revenue side, improvements are expected from measures such as the introduction of a minimum corporate tax and the removal of various tax exemptions, increases in withholding tax rates on deposits, funds, FX-protected deposits and some securities, and higher tax collection performance while combating informality.

Figure 1.10. The fiscal position was weak over the past decade

Government net lending



Note: The shaded area refers to projected data. OECD calculations on earthquake-related spending over 2023-26 based on the reports, "Inflation Report 2024-IV" and "Medium Term Program (2025-2027)".
Source: OECD (2024), OECD Economic Outlook 116 database; CBRT, Inflation Report 2024 - IV (November 8, 2024); and Presidency of Strategy and Budget and the Ministry of Treasury and Finance, Medium Term Program (2025-2027).

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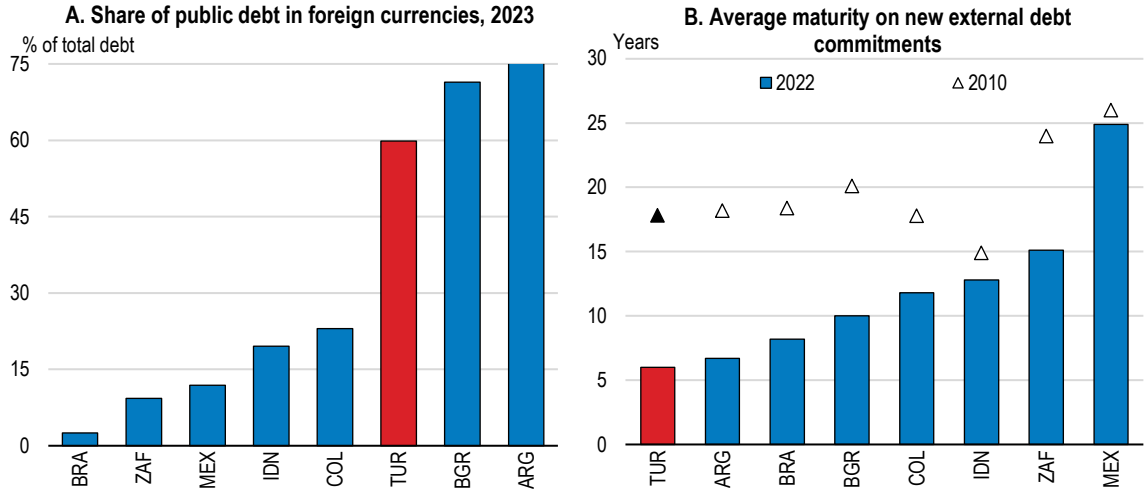
The planned reduction in the deficit is appropriate for strengthening market confidence, for building fiscal buffers to address potential future crises, and for stabilising the macroeconomy. With multipliers estimated at around 0.4–0.5, the consolidation will have an impact on economic growth, which is expected to fall from 3.5% in 2024 to 2.6% 2025 (see above).

Achieving planned targets will be challenging in a high-inflation environment, as inflation-sensitive wages and pensions account for a significant share of expenditures. The success of the fiscal plan will ultimately depend on aligning fiscal policy decisions with the direction of monetary and structural policies. Effective coordination between these policies is crucial to achieving a sustainable reduction in the deficit that is both economically sound and politically viable.

It is also important that the minimum wage setting (as well as public sector wage indexation) does not run counter the macro-economic stance. Türkiye has a country-wide minimum wage set by the Minimum Wage Determination Commission, an independent tripartite body encompassing representatives from the government, employer, and employee organisations. In case employer and employee representatives disagree, the institutional set-up of this Commission implies that the government sets the minimum wage. Independent expert commissions, as used to determine wage increases in several OECD countries, are well placed to consider and make the necessary links between minimum wages and policy areas.

Türkiye's government debt-to-GDP ratio is relatively low compared to other OECD countries and maintain the country at a low risk of sovereign stress in the short term, but its structure makes it vulnerable to shocks. Türkiye's higher interest rates make domestic borrowing more expensive, and debt servicing costs have risen (TMTF, 2024[15]). Additionally, as of the end of 2024, 56.1% of the debt is denominated in foreign currencies, which could further strain the debt trajectory if the Turkish lira depreciates, although this share has recently been on a downward trend (Figure 1.11, Panel A). Finally, the average maturity has shortened recently form around five years to 4 years (TMTF, 2024[15]). It was already lower than the world median (more than 7 years) (World Bank, 2024[16]) and the average maturity on new external debt commitments is among the lowest across large middle-income countries (Figure 1.11, Panel B). This speeds up the passthrough of higher interest rates and exposes Türkiye to new variations in funding costs and rollover risk.

Figure 1.11. Government debt is low, but its structure makes it prone to risks



Note: In Panel A, data are based on long-term debt (maturity more than one year) converted in USD at end-2023. See BIS for more details.
Source: BIS (2024), Debt Securities Statistics (database); and World Bank (2024), External Debt Statistics database.

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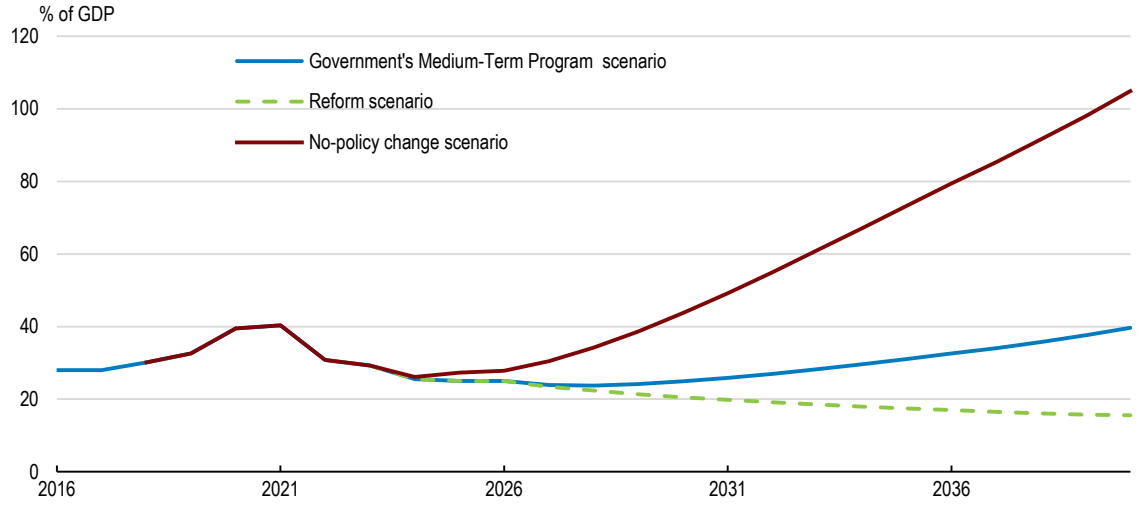
Moreover, contingent liabilities pose additional risks to fiscal policy, highlighting the need to strengthen the framework for supervising and monitoring public-private partnerships (PPPs). Currently, the government provides guarantees, including repayment guarantees and minimum revenue, which are included in the budget of related institutions. While Türkiye discloses information on contingent liabilities according to the International Public Accounting Standards, information on the size, structure, and risk composition of the overall PPP portfolio could continue to be improved (IMF, 2024[6]; European Commission, 2023[17]; European Commission, 2023[18]). As recommended in the previous OECD Economic Survey, closely monitoring contingent liabilities and improving fiscal transparency further would help mitigate these vulnerabilities. Türkiye should publish a regular Fiscal Policy Report to fully disclose risks related to public financial liabilities (OECD, 2023[14]).

The importance of future fiscal policy, risks, and the potential of structural reforms can be illustrated by three scenarios for the long-term trajectory of the public debt ratio (Figure 1.12):

- No Policy Change Scenario - The above-mentioned risks highlight the importance of government consolidation efforts. If the government fails to meet its planned target, and the deficit remains at its 2024 level, the debt will rise significantly. In this scenario the deficit will remain at 4.7% of GDP, and in the medium-term additional ageing-related spending will increase the debt even further.
- The MTP scenario - Meeting the government's targets outlined in the Medium-Term Program (MTP) will help keep the public debt stable in the short term. The deficit will be reduced to 2.6% by 2026 also thanks to the consolidation package (Box 1.2), which will help to keep the debt stable in the short term. However, in the medium term, public debt is projected to increase further due to ageing-related spending, which is expected to grow by around 2 percentage points between 2030 and 2040 (Guillemette and Turner, 2018[19]).
- The Reform scenario - Meaningful and sustained reduction in the debt-to-GDP ratio would require a more comprehensive approach. This would include stronger fiscal reforms to make the deficit reduction sustainable, coupled with structural reforms to boost economic growth 5 (Box 1.3). The reform scenario would not only improve living standards, but would put debt on a downwards trajectory which is more resilient to potential future shocks.

Figure 1.12. Achieving fiscal consolidation targets will help to reduce public debt

General government debt, Maastricht definition



Note: The no-policy change scenario assumes a deficit at the level of 2024 of 4.9%, with macroeconomic indicators based on the forthcoming OECD Economic Outlook 116 database and the OECD long term database. The Government's Medium-Term Program scenario assumes that the deficit will fall to 2.6% in 2026 in line with the Medium-Term Program. The reform scenario assumes higher growth based on the OECD Economics Department Long-term Model and lower deficit, deriving notably from reforms proposed in this Survey (see Box 1.3).

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Box 1.2. Consolidation package

Achieving the government's fiscal target requires substantial consolidation contributing to a reduction of the deficit of nearly 3 percentage points of GDP between 2023 and 2026. In this regard, the government already implemented and proposed a number of measures both on the expenditure and revenue side:

On the revenue side, the contribution comes from the increase in tax rates.

Türkiye has introduced two major tax packages, one in 2023 and the other in 2024. Major changes involved:

- The VAT rates were increased. The intermediate rate was raised from 8% to 10% and the standard rate was raised from 18% to 20%. The SCT rate on gasoline and diesel were raised significantly to 5 TL per litre.
- The corporate tax rate applicable to financial institutions was increased from 25% to 30%.
- A minimum corporate tax of 10% is set on corporate income for all domestic companies.

On the expenditure side, savings will be achieved not only through cuts, but also through the effective and efficient use of existing resources. Major changes involve:

- Restrictions on new public spending, including new hires, rents and purchases or leasing of vehicles.
- Efficiency in Public Investments: Public investment appropriations will be reduced by 15% and no new projects will be accepted into the public investment program.
- A 10% cut will be applied to allowances for goods and services, except in areas related to earthquake relief and other essential needs.
- Increasing the efficiency of expenditures on the Public Fleet by standardising the number and the use of vehicles, and encouraging the inter-institutional use of public vehicles.
- Reducing expenditures on urban lighting through the use of LED.

Box 1.3. Quantifying the impact of selected policy recommendations

Table 1.3 presents estimates of the fiscal impacts of key reforms recommended in this Survey. Additional expenditures arise from boosting green investment, and increasing expenditure on childcare services while expenditure reviews provide efficiency gains. Additional revenues are obtained via more efficient VAT collection and the taxation of carbon. The quantification is merely indicative and does not account for behavioural responses.

In addition, tax revenues would increase by 0.3% of GDP by 2030 due to dynamic effects of reforms on GDP growth (Figure 1.13).

Table 1.3. Illustrative fiscal impact of recommended reforms

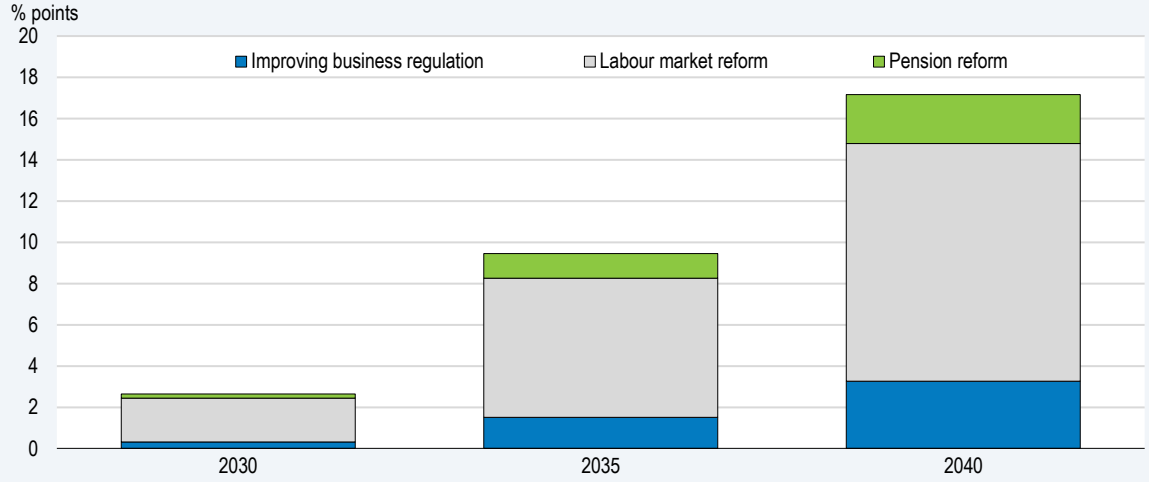
Fiscal savings (+) and costs (-), % current year GDP

	2030
Expenditure measures	**-1.9**
Bolstering childcare services[1]	-0.5
Social benefits reform[2]	0
Improving business regulations[3]	0
Boosting green investment[4]	-2.0
Improving efficiency through expenditure reviews[5]	0.6
Revenue measures	**3.0**
Reducing the VAT gap[6]	1.0
Increase environmental taxes[7]	2.0
Revenue gain from the recommended reform package via higher GDP[8]	**0.3**
Overall Budget impact	**1.4**

1. Bolstering childcare services: increasing spending in pre-school education to the level of OECD average (see Chapter 2).
2. Linking of retirement age to life expectancy and reducing the replacement rate, while increasing other social benefits (see below and Chapter 2).
3. Improving business regulation: reducing by half the gap in the product market regulation index between Türkiye and the OECD average (see Chapter 4).
4. Boosting green investment: Investment in new low-carbon electrical capacity, based on the OECD energy transition scenario (see Chapter 3 and Guillemette and Château (2023[20])).
5. Improving efficiency through expenditure reviews (see below): Annual savings at 0.13% of GDP comparable to the saving targets set in expenditure reviews in New Zealand (Treasury of New Zealand, 2023[21]). The saving programme should take place throughout 5 years.
6. Reducing tax inefficiencies: Reducing the VAT gap to the OECD average (see below).
7. Environmental taxation: increasing the revenues from carbon pricing instruments by 2% of GDP (See Chapter 3 and D'Arcangelo et al. (2022[22])).
8. Higher revenues due to higher GDP growth relative to baseline (see Figure 1.13).
Source: OECD calculations.

Figure 1.13. Structural reforms can help increase standards of living and make growth sustainable

Cumulative difference from baseline GDP per capita (no policy change) scenario, by policy area



Note:1) Improving business regulation: improvement of the PMR indicator to the OECD average by 2040; 2) Labour market reforms: reducing the gap vis-à-vis the OECD in labour market participation by half by 2037; 3) Pension reform: Increasing the average effective retirement ages by two thirds of life expectancy.
Source: OECD simulations based on OECD Economics Department Long-term Model.

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Reforms mentioned in the Survey have significant potential to boost Türkiye's economy. Simulations based on the OECD long-term growth model (Guillemette and Turner, 2018[19]) suggest that an ambitious reform package that would strengthen Türkiye's regulatory framework, reduce the gap in labour market participation between men and women, and increase the effective retirement age, could boost GDP per capita by more than 10% by 2040 (Figure 1.13). This reform package would help Türkiye's economy in its convergence process towards other OECD countries.

1.2. The tax and benefit system can become more efficient and inclusive

Achieving the stated fiscal targets in the short term is an important prerequisite to stabilise the economy and further strengthen international market confidence while bringing the debt trajectory on a sustainable path. However, OECD evidence indicates that the structure of Türkiye's expenditure and tax revenues could be improved to be more conducive to long-term growth and reducing inequalities (Fournier and Johansson, 2016[23]) (Figure 1.14). Making public finances more efficient and inclusive would make current fiscal consolidation more economically and politically sustainable while providing additional fiscal space.

There is room to improve the efficiency of public finances. The structure of public spending, features a relatively large role of public subsidies (see Chapter 3) and a lower share of expenditure on education (see Chapter 2) for example, which is typically associated with worse growth outcomes (Fournier and Johansson, 2016[23]). More generally, government effectiveness appears to have declined in recent years: for example, Türkiye fell from the 66th percentile to the 44th percentile in the World Bank's Government Effectiveness Indicator between 2012 and 2022. To improve long-term welfare and ensure political sustainability, it is crucial that government expenditures achieve their objectives at the lowest possible cost and that revenues and spending effectively promote economic growth. Expenditure efficiency can be enhanced through comprehensive and transparent expenditure reviews integrated into the budget process. Similarly, the efficiency of the tax system can be improved. While Türkiye relies relatively more on consumption taxation than other countries, which is typically considered to be less distortive for economic activity (Akgun, Cournède and Fournier, 2017[24]), tax revenues could be levied more efficiently by broadening the tax base and simplifying the rate structure by reducing the scope and the number of special VAT rates.

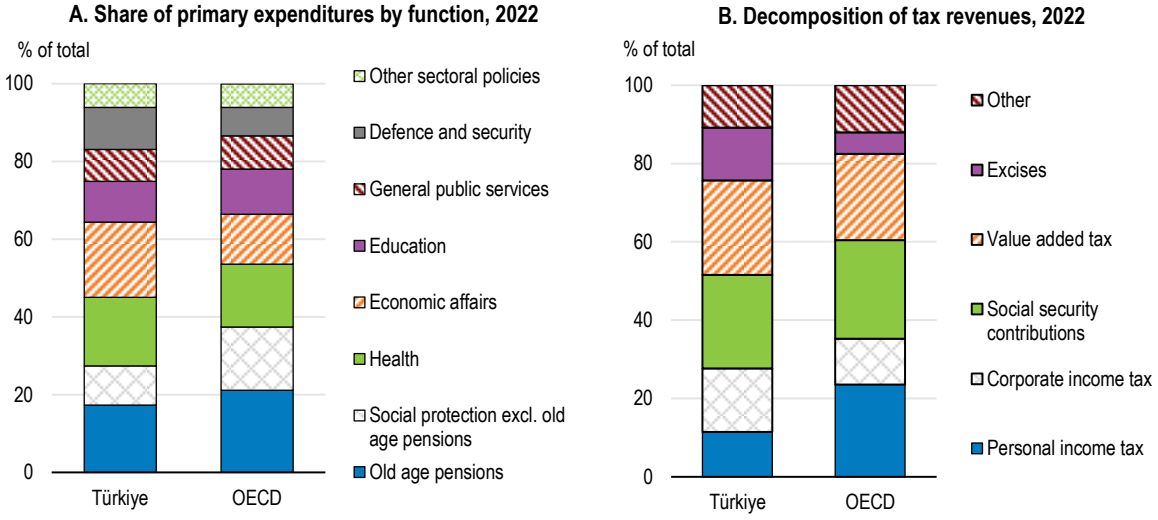
Enhancing the inclusiveness of public finances can address redistributive concerns while ensuring that the chosen fiscal path remains politically sustainable. The tax and benefit system in Türkiye is hardly redistributive despite high inequalities in market income. For example, the Gini coefficient on market incomes is the second highest in the OECD and the coefficient on disposable income is the third highest. This is reflected in a structure of public finances which is not conducive to inclusive growth, with a relatively low share of social benefits and a high reliance on flat social security contributions in the taxation of labour income. To address these disparities, expanding the coverage of income taxation and of the social safety net — two essential tools for reducing income inequality—is crucial.

1.2.1. Improving fiscal efficiency

Increasing the efficiency of spending

Improving the efficiency of public services and spending can create fiscal space to finance public priorities. A recent analysis by the World Bank suggests that Türkiye's performance in education and health services is significantly below what other countries achieve with similar resources while the quality of infrastructure investment has also deteriorated (World Bank, 2023[25]). Improving spending efficiency would also ensure the political acceptability of taxation and public indebtedness. Today, beyond the low performance on government effectiveness indicators, the Turkish population is among the least satisfied with public services (OECD, 2023[26]).

Figure 1.14. Public finances rely on consumption taxation and subsidies



Note: In Panel A, data for Türkiye come from the Ministry of Treasury and Finance. Unweighted average of 29 countries with available data for the OECD aggregate. "Other sectoral policies" include environmental protection, housing and community amenities, and recreation, culture and religion. In Panel B, the Value added tax also includes other general taxes on consumption. Unweighted average of 35 countries with available data for the OECD aggregate.
Source: OECD (2024), OECD Annual Government Expenditure by Function (COFOG); OECD Global Revenue Statistics; and Ministry of Treasury and Finance.

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Türkiye should continue the recent implementation of a formal process of spending reviews**.** Spending reviews can be an effective mechanism for identifying opportunities for efficiency improvements, cost savings, and resource reallocation (Doherty and Sayegh, 2022[27]). Türkiye has officially started an expenditure review process in 2024. While the Turkish Court of Accounts provides audit reports and information on expenditures in public administrations, but the Ministry of Treasury and Finance should systematically review expenditures to eliminate inefficient ones. The OECD has provided detailed guidelines on the best practices for spending reviews based on country experiences (Tryggvadottir, 2022[28]).

The reviews must ensure broad coverage. In Slovakia and the Netherlands, targeted reviews are conducted, with the focus shifting annually to different areas potentially leading to substantial savings. For example, Slovakia achieved savings of approximately 8% from the total expenditure reviewed (Doherty and Sayegh, 2022[27]). Spending reviews completed just in the year 2020 in that country identified potential savings amounting to 1.2% of GDP in public employment and wages, defence, and IT spending (OECD, 2022[29]). Expenditure reviews in Türkiye could include expenditures via state-owned enterprises, in particular those that have been transferred to the Türkiye Wealth Fund (see Chapter 4).

The reviews should be integrated into the budget process. This integration enhances the relevance and impact of spending reviews on fiscal decision-making. In this regard, setting clear strategic objectives at the start of the process is important to ensure that the spending reviews are aligned with medium-term fiscal objectives and deliver tangible results. For example, New Zealand integrates saving targets into its spending reviews before the budgeting process begins. Ministries then conduct spending reviews to identify opportunities for achieving these savings targets, ensuring that expenditures are focused on areas of the highest priority and efficiency (European Commission, 2024[30]).

The review process should be transparent and inclusive. Terms of references, interim and final reports including implementation report data, should be made available online for all completed spending reviews. The amount of reallocation or savings made based on the findings of the Spending Reviews should also be publicly disclosed (Tryggvadottir, 2022[28]). Currently, the audit reports from the Turkish Court of Accounts provide substantial information to the Parliament on expenditures annually but the reports are not systematically debated (European Commission, 2024[30]).

Making the tax system more efficient

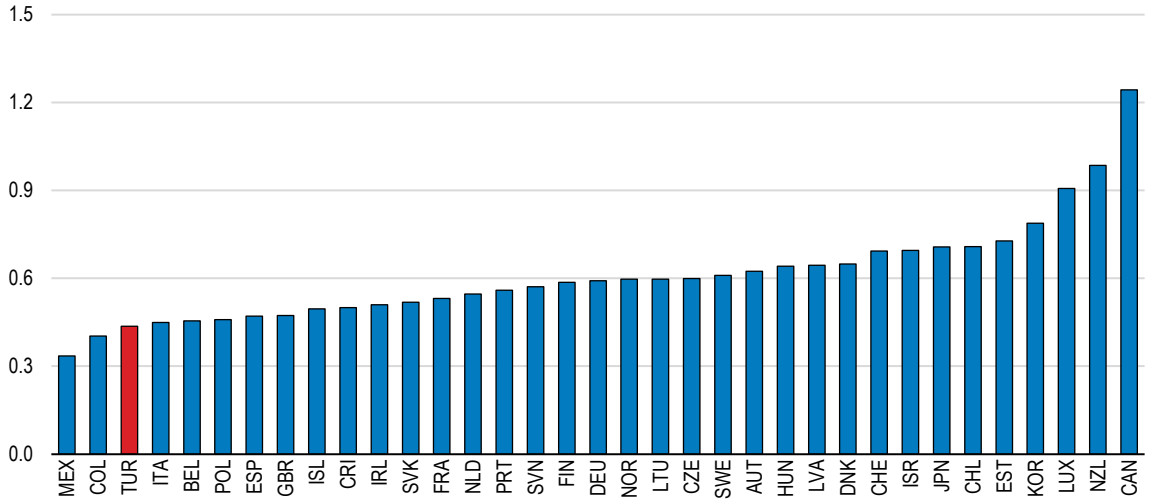
The efficiency of the tax system could be improved to promote growth and to increase tax collection. Statutory rates for the personal income tax, social security contributions, and VAT are broadly in line with OECD averages. However, tax bases are relatively narrow and crippled by important exemptions. For example, the number of registered income taxpayers is low (although some non-registered persons are taxed by way of withholding) and the narrow base is the major factor behind low income tax revenues: while the exemption threshold is relatively low compared to the average wage, and income tax rates are in line with OECD averages, less than 30% of the population is registered as an active personal income taxpayer compared to 60% in OECD countries on average (OECD, 2024[31]). As was outlined in the previous OECD Economic Survey of Türkiye, informal and semi-formal work practices are widespread in Türkiye and contribute to the reduction in the tax base for corporate and personal income taxes, and require reforms to the labour market to promote formal job creation going beyond direct fiscal policy measures (OECD, 2023[14]). Reducing informality would also contribute to higher revenues from consumption taxation, in particular via the value-added tax. The authorities have recognised, and emphasised, the importance of reducing informality and tax evasion to broaden the income and VAT tax bases. In particular, inspections have been intensified and broadened while leveraging the use of digital technologies and big data to improve targeting.

The design of consumption taxation in Türkiye is complex. Slightly less than 60% of consumption tax revenues (i.e. all taxes on production, sale, transfer, leasing and delivery of goods and rendering of services) comes from a general value-added tax (VAT). Around one third of consumption tax revenues comes from excise taxes – the highest share in the OECD – due to Türkiye's Special Consumption Tax (SCT) on four product groups: petroleum products, motor vehicles, tobacco products and alcoholic beverages, and luxury products including durable goods. The VAT system is particularly complex due in particular to the prevalence of special rates. The standard VAT rate is 20%, but there are also two reduced rates for redistributive purposes and industrial support. A 10% rate applies, among others, to some food products, healthcare services, pharmaceuticals and medical products, food catering, and cultural services, while a 1% rate applies to food products, among others. Recent data indicate that about 67% of the tax base is subject to the standard rate, around 18% to the intermediate rate, and around 15% to the 1% rate. This complexity leads to a significant compliance burden for businesses: at over 95 hours annually, the time required to comply with VAT regulations in Türkiye is the seventh highest in the OECD, where the average is 54 hours (PwC, 2019[32]).

Simplifying consumption taxes – in particular VAT – could increase revenue and reduce economic distortions. Due to tax exemptions and special rates, Türkiye's VAT revenue is low relative to its potential. The VAT revenue ratio compares actual VAT revenues with what would theoretically be raised if VAT was uniformly applied at the standard rate to the entire potential tax base and all revenue was collected. In 2022, it was the third lowest in the OECD (Figure 1.15). This ratio dropped from 44% in 2013 to 34% in 2019, compared to 55% in the OECD during the same period (OECD, 2022[33]). This low number reflects a combination of revenues forgone because of the deviations from the standard rate, and non-compliance.

Figure 1.15. Value added tax revenues are far below potential

VAT revenue ratio, 2022



Note: The ratio measures the extent to which a VAT regime collects the VAT on the natural base of the tax, i.e. on final consumption expenditure. It is computed as total government revenues from VAT divided by the product of the VAT standard rate and final consumption expenditure.
Source: OECD (2024), OECD Tax Statistics, OECD Revenue Statistics; and OECD National Accounts Database.

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The effectiveness of these reduced rates should be reconsidered. They are an inefficient way to meet redistributive or sectoral-support goals and tend to benefit wealthier households (Brys et al., 2016[34]; OECD, 2010[35]). A more equitable and efficient approach would be to use direct lump-sum payments to households based on socio-economic characteristics rather than using VAT for redistributive purposes (OECD, 2022[33]). Such targeting could leverage Türkiye's well-performing integrated social assistance system (see below, and (Adam et al., 2011[36])). Reduced rates introduced to address social, cultural and other non-distributional goals are also hard to justify on efficiency grounds: the social welfare gains of implementing such a system are unclear in practice given the potential for mislabelling and the additional administrative costs of having multiple rates (Crawford, Keen and Smith, 2008[37]).

Non-compliance and fraud are also significant issues. In 2019, VAT revenues covered only 56% of expected tax liabilities, whereas the equivalent number for the EU was estimated at 89% (World Bank, 2023[25]; European Commission, 2023[38]). This "VAT compliance gap" has also worsened in recent years and is now over 10 percentage points higher than a decade ago (World Bank, 2023[25]).

Harmonising VAT rates could reduce non-compliance by preventing misclassifications. Expanding the VAT base by taxing more goods and services at the standard rate, while potentially lowering the standard rate, could reduce economic distortions by lowering overall tax levels and removing incentives for behavioural optimisation and avoidance. Further simplification could be achieved by revising the set of exemptions. Türkiye allows more exempted transactions than a typical OECD country. The standard advice in VAT design is to have a short list of exemptions, limited to basic health, education and perhaps financial services (OECD, 2022[33]).

Beyond the VAT, changes in excise taxes – namely, the SCT – also seem warranted. Excise taxes on energy products are lower than EU minimum rates and none apply to coal, coke, or electricity (European Commission, 2023[17]). Like the VAT, the use of SCT for redistributive purposes, e.g. via the progressive structure of the excise on motor vehicles and the taxation of "luxury goods", could be handled more efficiently by an improved income tax and benefits system (see below). The SCT on tobacco products could also be increased progressively. Despite a relatively high share of taxes, cigarettes prices are relatively low in Türkiye relative to other OECD countries, and in particular they have become more affordable in recent years. This is in part because the SCT on tobacco (and other products) is typically updated twice a year according to domestic PPI inflation. As a consequence, the increase in the tax-inclusive price has tended not to compensate the increase in household income (TEPAV, 2020[39]; TEPAV, 2020[40]). In parallel, smoking prevalence in Türkiye is the highest in the OECD (OECD, 2023[41]). Furthermore, tobacco is the fourth cause of deaths in the country, and the country has one of the highest death rates from smoking in the OECD. Tobacco contributed to a quarter of total losses of disability adjusted life years from diseases in 2021 (IHME, 2021[42]). Research indicates that increasing tobacco prices is the single most effective and cost-effective measure for reducing tobacco use (WHO, 2021[43]). Increasing tobacco prices would benefit from the strong position of Türkiye when it comes to non-pecuniary anti-tobacco measures. In particular, Türkiye was the first country to implement all of the measures recommended by the WHO in its MPOWER guidelines for tobacco control.

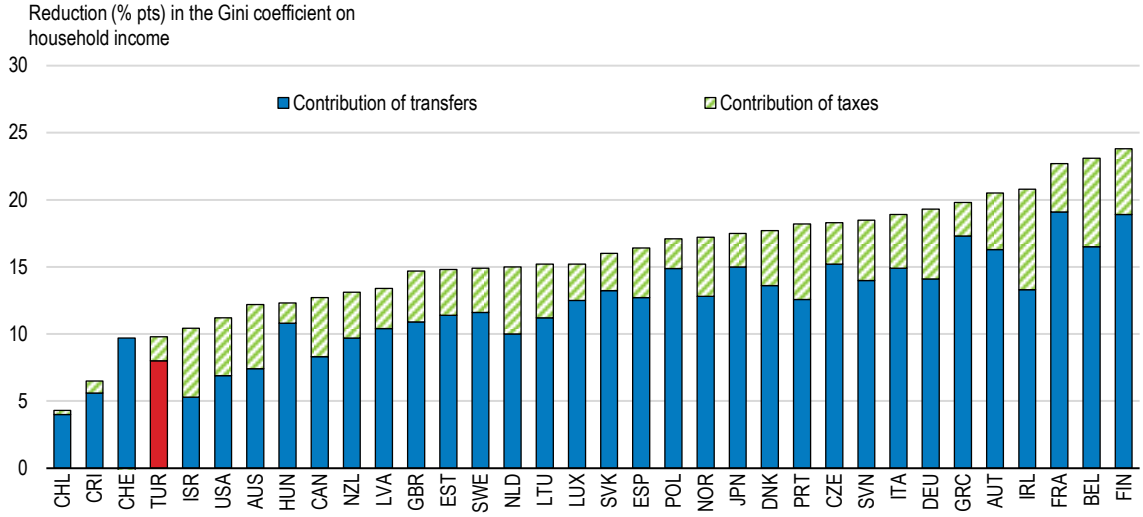
1.2.2. Making fiscal policy more inclusive

The tax and benefit system is among the least redistributive in the OECD, because it is narrow. In the median OECD countries, three quarters of the redistribution is done through transfers and the rest mostly through personal income taxation (Figure 1.16 and Causa and Hermansen (2017[44])). Türkiye's share and level of public expenditures going to social protection is relatively low, in particular when excluding pensions. In 2019, the last year for which comparable data on social expenditures are available, expenditures on pensions (including survivors') were 7.5% of GDP against 7.7% on average in the OECD. By contrast, Türkiye has the lowest old-age dependency ratio in the OECD (measured as the number of individuals aged 65 or older per 100 persons of working age) at half the OECD average. As shown in Figure 1.12 these expenditures will increase significantly as the population ages, since Türkiye has only recently started its demographic transition. Pensions expenditures represented 60% of social expenditures in 2019 against 40% in the OECD. Indeed, expenditure on other social protection is particularly low. In the same year, spending on incapacity-related, family, unemployment, and housing benefits, and other social policy areas including benefits to low-income households and other social services amounted to 1.4% of GDP against 5.6% in the median OECD country. This was the lowest level in the OECD (OECD, 2023[45]; OECD, 2024[46]). In parallel, the level of personal income taxation (excluding, therefore, social security contributions) is also low. In 2022, Türkiye raised 2.4% of GDP from the income tax of individuals against 8.2% in the OECD, although levels in 2022 (and 2023) are exceptionally low because of the delayed passthrough of inflation into income tax revenues: in 2019, revenues for the taxation of income household amounted to 3.8% of GDP against 8.0% in the OECD. The low level of income taxation in parallel with the small size of the social protection system explains the weak redistributive power of public finances in Türkiye compared to other countries despite high inequalities in market income, i.e. before redistribution.

Türkiye's pension system is relatively generous, contributing to a high level of social contributions. The system consists mostly of a statutory, defined-benefit contributory public system including a minimum pension. Such pension systems can be broadly compared across countries on three dimensions: the contribution rate, the pension level, and the retirement age. While Türkiye's contribution rates are slightly higher than those in OECD countries on average, its parameters for replacement rates and retirement ages are notably generous ((OECD, 2023[45]) and Figure 1.17). Consequently, Türkiye has a relatively high tax wedge (in particular for families with children due to the absence of child benefits in addition to relatively high SSCs, see Chapter 2), and its pension expenditures are similar to those of other OECD countries with significantly less favourable demographics. The defined-benefit system could be rebalanced by reducing contribution and replacement rates, and increasing the retirement age.

Figure 1.16. Public finances do not redistribute much

Income redistribution by the tax and benefit system, 2023 or latest available year



Note: The contribution of transfers is computed as the difference between the Gini coefficient on market incomes and the coefficient on gross incomes. The contribution of taxes is computed as the difference between the Gini coefficient on gross incomes and the coefficient on disposable incomes.
Source: OECD (2025), OECD Income Distribution Database.

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Further increases in retirement ages could be considered as retirement ages for women and men are rather low in international comparison. In 2022, the statutory retirement age for men was 52 years, against 64.4 in the average OECD country. For women, it was 49 years against an OECD average of 63.6 years – close to the average for men since only nine countries feature a difference between women and men. As a consequence, the effective age of labour market exit was the fourth lowest in the OECD in 2023 for both men and women at 61.5 and 60.2 years respectively. In addition, the employment rate for 55-64 year olds in 2023, at 36%, was the lowest in the OECD and 30 points below the OECD average. Importantly, retirement ages are scheduled to increase over the next 25 years. Male workers entering the labour force in 2022 will be able to retire after a full career at age 65. However, this will remain among the lowest in the OECD and below the OECD average of 66.3. In addition, the age requirement was withdrawn in 2023 for workers who entered the labour force before it was put in place, increasing significantly the number of pensioners in the foreseeable future (see above). Türkiye is also still among the few countries which do not provide a bonus for late retirement (and which do not provide early retirement options, including after the phase in of the age reform). Finally, like for the retirement age, the nominal accrual rate has been decreased to 2% per year in a recent reform, but the effective accrual rate remains the third highest in the OECD after Colombia and Austria. While further increases in the retirement age are warranted, they should be carefully linked to life expectancy. In particular, despite low effective and normal retirement ages today, Türkiye's lower life expectancy implies that the life expectancy at the (effective) labour market exit age for men is in line with the OECD (but one year above the OECD average for women) (OECD, 2023[45]).

Despite high replacement rates, Türkiye's pension system is relatively unequal and does not adequately protect the elderly from poverty, although it provides better protection against poverty for pensioners relative to employed persons. The net replacement rate for high earners is the highest in the OECD, and the second highest when considering the average earner, which also results in some of the highest levels of net pension wealth. This is due to high gross replacement rates which do not vary with income, and the absence of any taxation on pension income, which also creates horizontal inequalities between workers and pensioners: Türkiye has the third largest gap in the OECD between the taxation of pensioners and workers at average earnings. Furthermore, the ceiling for pensionable earnings, at 4.24 times average earnings, is particularly high. A lower parameter typically makes other OECD pension systems more redistributive. As a consequence of this structure, despite a relatively high income of the elderly population on average compared to other OECD countries, large inequalities imply that income poverty

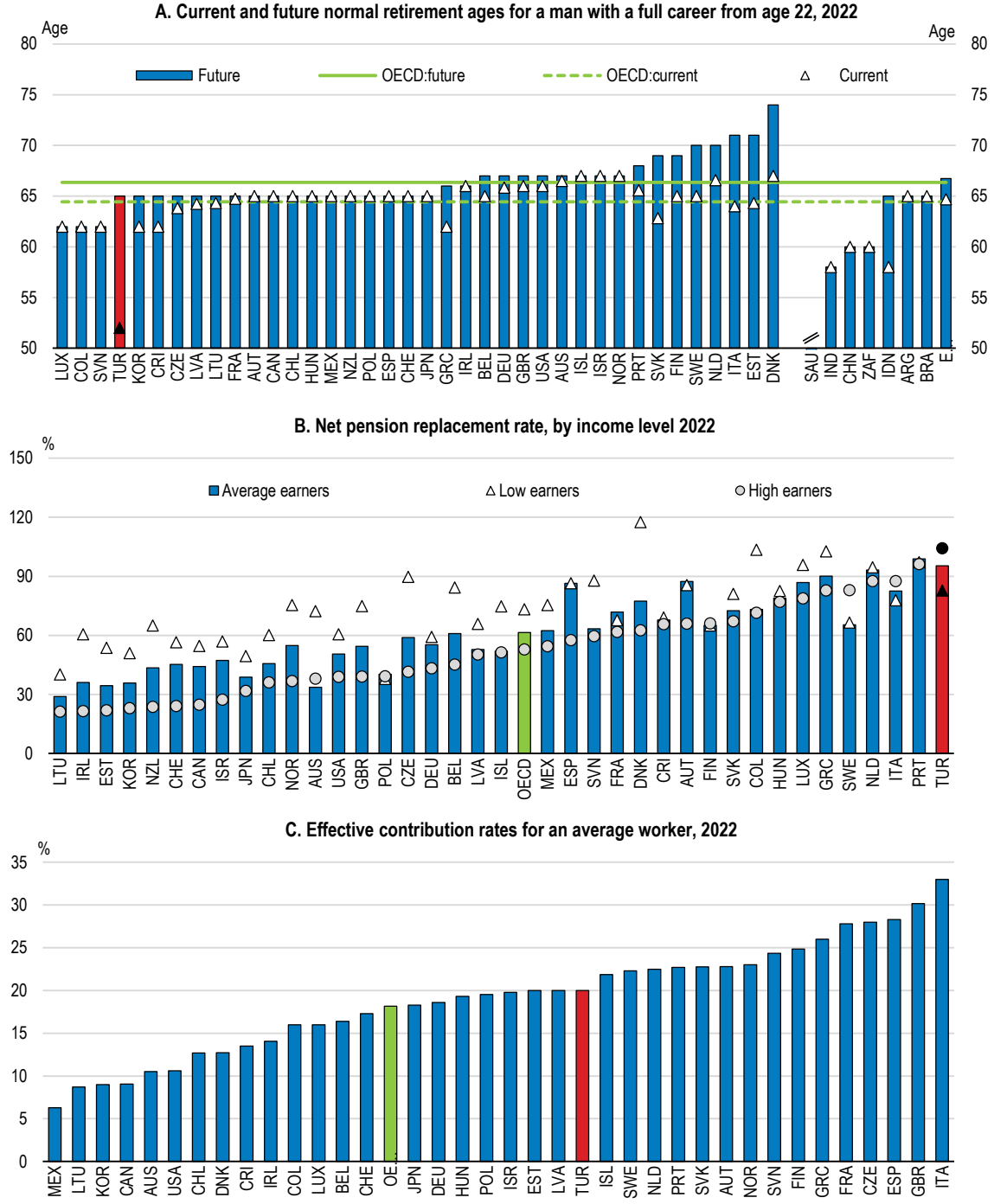
rates at old age are in line with the OECD average and the depth of poverty (measured by the distance to the poverty threshold of the average income of poor households, where in turn poverty is defined as disposable income below 50% of the median household) is the highest in the OECD. This poverty depth is also linked to the low minimum income for the elderly poor which is not eligible for pensions (European Commission, 2024[47]).

Other social benefits are relatively well targeted, but their scope is too narrow to effectively address inequalities and poverty. As discussed above, non-pension social benefits are relatively low. Social assistance expenditure falls below the average for any of the World Bank-defined country income groups. Those benefits are typically targeted, more than in other countries. Türkiye can also rely on a well-developed e-government system, the Integrated Social Assistance Service Information System (ISAS), which integrates administrative data from various government ministries and agencies, and processes applications and payments for a large share of social protection programs. However, there are still gaps in coverage when eligibility criteria go beyond income. More importantly, the low level of benefits implies that they cover a smaller share of consumption for the poorest compared to other countries, and do not contribute to a significant reduction in inequalities (World Bank, 2023[25]). Türkiye has made recent progress in this area with the launch of the "Family Support Program" in 2022 which provides benefits based on households' income and number of children. The program has recently been extended but is still scheduled to expire at the end of 2024. The program could be made permanent**.**

Broadening the income tax base would make the tax system more redistributive. In most countries, progressive income taxation is the main tax instrument for redistribution through public finances. As discussed above, revenues from labour income taxation in Türkiye are low mostly because of the high level of informality. In parallel, because social contributions are high, the tax wedge is actually relatively high, encouraging informality and thus reducing employment rates and the labour income tax base. Beyond broader policy measures to target informality such as easing labour regulations and the severance pay system, reducing the high level of social security contributions would thus contribute to broaden the labour income tax base. One possibility would be to lower pension contributions, as discussed above, for low-income workers. This would support formal employment at low cost since such reductions are likely to boost government revenues given the large elasticity of employment to its cost at those levels in countries with relatively high minimum wages like Türkiye (L'Horty, Martin and Mayer, 2019[48]). More generally, streamlining and simplifying the system of incentives, support measures and discounts on contributions which are in place today to reduce the burden for employers stemming from SSCs would provide room to reduce the tax wedge while safeguarding the financing of social security systems (OECD, 2023[14]).

Türkiye operates a dual income tax system which taxes capital income significantly less than labour income, potentially contributing to inequalities (Hourani et al., 2023[49]). As in a majority of OECD countries, capital income is often taxed separately from labour income in Türkiye. For example, interest income, dividend income, and capital gains are subject to flat taxes which can vary e.g. depending on maturity. As a consequence, the effective taxation of dividends is 25 points lower than wage income for high earners, and the gap is almost 40 percentage points for long-term capital gains. After integrating the taxation of profits under corporate taxation, the effective taxation of dividends is still 15 points lower than the effective taxation of wages. Those gaps are higher than most OECD countries and can encourage income shifting while reducing horizontal and vertical equity, given the concentration of capital income at the top of the distribution.

Figure 1.17. The normal retirement age is low, the replacement rates are high and unequal, and pension contribution rates are high



Note: In Panel A, Normal Retirement Age (NRA): "current" and NRA: "future" refer to retiring in 2022 and entering the labour market in 2022, respectively. For better visibility, the scale of this chart excludes the lowest observed values of 47 for both current and future ages in Saudi Arabia. Credits for educational periods are not included. In Panel B, the net replacement rate is defined as the individual net pension entitlement divided by net pre-retirement earnings, taking account of personal income taxes and social security contributions paid by workers and pensioners. "Low earners" are defined as workers with half of average worker earnings and "high earners" as workers with twice the average worker earnings. In Panel C, contributions include mandatory and quasi-mandatory pension schemes. See Table 8.1 in the source document for more details on country-specific notes

Source: OECD (2023), Pensions at a Glance 2023: OECD and G20 Indicators.

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Table 1.4. Recommendations

MAIN FINDINGS	RECOMMENDATIONS (Key recommendations in bold)
Maintaining a stable macroeconomic framework	
Annual consumer price inflation remains stubbornly high, reached around 42% in January, and although inflation expectations have decreased in recent months, they remain well above the inflation target of 5%.	**Monetary policy should remain tight until inflation is sustainably on a downward path towards the target.**
Introduced measures such as caps on credit growth have helped to ease inflation pressures, but they also weaken the transmission mechanism of monetary policy.	As inflation progresses to a sustainable path, gradually dismantle the credit growth caps and requirements for exporters to exchange part of their revenues to Turkish Lira.
The CBRT has started simplifying the macroprudential policy framework and announced that further steps will be taken in 2025.	
Confidence in the independence of the Central Bank has increased due to significant improvements in financial and monetary policies, which have positively influenced investor sentiment.	Continue improving confidence in the independence of the Central Bank.
Türkiye's government debt-to-GDP ratio is relatively low compared to other OECD countries and the deficit is expected to decrease to 2.6% in 2026.	**Reduce the deficit in accordance with the government's Medium-Term Program 2025-2027 to support macroeconomic stabilisation.**
However, a premature relaxation of current macroeconomic stabilisation policies with higher deficits and looser monetary policy could lead to higher risk premia and renewed instability.	
Concerns on risks linked to contingent liabilities have been reduced thanks to the stabilisation of the exchange rate and the phaseout of FX-protected accounts. Other contingent liabilities related to PPPs are included in the budget of related institutions. However, information on the size, structure, and risk composition of the overall PPP portfolio could continue to be improved.	Continue to improve the monitoring of contingent liabilities.
Improving the quality of public finances	
Türkiye has just recently started implement spending reviews. The efficiency of certain spending is low based on international studies.	Systematise the process of comprehensive and public spending reviews and integrate the results in the budget process.
The VAT system is particularly complex due to and the prevalence of special rates. Türkiye's VAT revenue is low relative to its potential. Achieving redistribution goals can be more effective by using direct lump-sum payments to households based on socio-economic characteristics rather than VAT for redistributive purposes.	**Once inflation is under control, reduce the scope of reduced VAT rates and use the revenues to support lower-income households with more targeted, direct support.**
Despite a clear decline in informality, the income tax base still has potential to expand when compared to other OECD countries.	Pursue policies aimed at tackling informality to strengthen the redistributive role of taxes. This could be done through easing labour market regulations and targeted reductions in pension contributions.
Türkiye's pension system is relatively generous in terms of pension replacement rates and retirement ages, contributing to a high level of social contributions. It is also regressive.	Rebalance the pension system by linking the retirement age to life expectancy, providing bonuses for late retirement, and reducing the accrual rate and the contribution rates.
The benefit system is among the least redistributive in the OECD, because it is narrow.	**Broaden social protection, including via additional social assistance benefits and higher basic pensions.**

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2 Removing the barriers to female labour market participation

Aging in Türkiye highlights the need to better utilise existing human resources, particularly women, whose labour force participation is notably lower than in other OECD countries. Promoting equal opportunities for women and men not only enhances economic efficiency but also delivers significant economic benefits. In Türkiye, women spend disproportionately more time than men on unpaid care and housework and are less likely than women in other OECD countries to rejoin the labour market after childbirth. Expanding access to early childhood education and care is crucial, as limited availability prevents many mothers from re-entering the labour market. Additionally, labour market policies such as improved tax regulations and comprehensive parental leave that is aligned with early childhood education and care policies could play a pivotal role in ensuring that women's earnings and employment outcomes do not diverge from men after the birth of a child.

2.1. Lifting labour force participation will be essential for future growth

Türkiye's economy has been benefiting from a young and dynamic population over the past decades relative to other OECD countries. Yet, this "demographic dividend" is set to gradually decline, slowing future potential growth, even if Türkiye has put in place several policies, such as the creation of the Department of Family and Population Policies to address demographic issues as well as the Council of Population Policies to monitor demographic changes and develop related policies, which could slow down the expected decline. Future demographic challenges underline the need to better leverage existing human resources, in particular women, whose labour force participation is particularly low compared to other OECD countries. Equal opportunities for women and men would also strengthen economic efficiency through better allocation of talent and bring major economic benefits (see below).

The previous *OECD Economic Survey of Türkiye* focused on general barriers that prevent higher labour market participation. Based on OECD indicators, employment legislation is relatively rigid with strict labour market rules for regular workers driven by the costly severance pay system (OECD, 2023[1]). Combined with one of the OECD's highest minimum-to-median wage ratios, this results in comparatively high costs of formal job creation. In addition, strict employment rules for fixed-term and temporary work agency contracts lead to the widespread use of informal and semi-formal work practices. High labour tax wedges also discourage formal job creation as employee and employer social security contributions and net average tax rates are higher than in other OECD countries. More flexible labour markets should be part of a comprehensive reform programme that shifts job loss protection to a broader-based unemployment insurance scheme, supported by well-designed activation policies.

Table 2.1. Past OECD recommendations and actions taken for the higher labour market participation

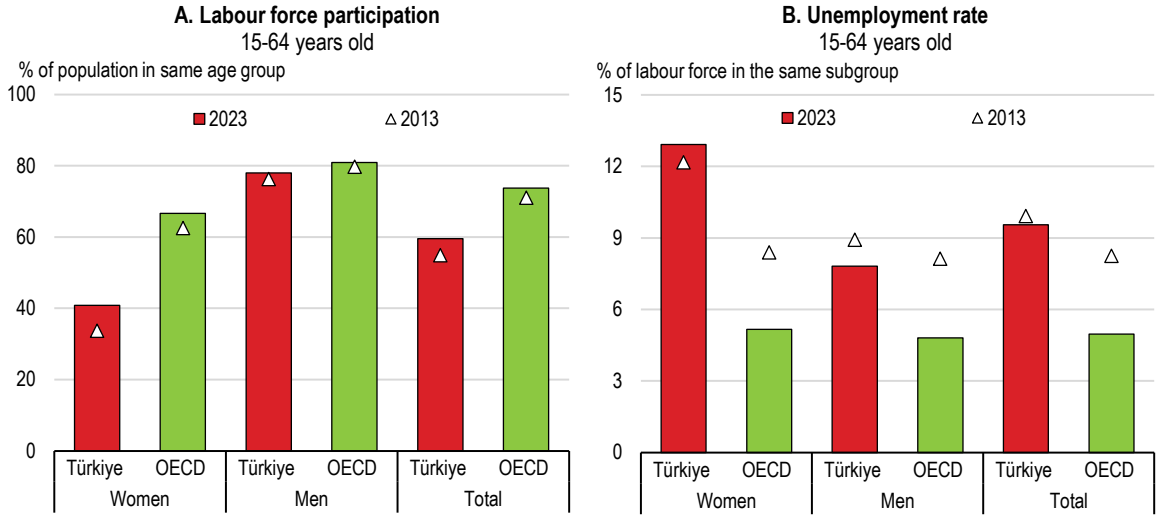
Recommendations in previous Surveys	Actions taken since previous Survey (Feb 2023)
Make permanent work more flexible and increase the scope for fixed-term and temporary work contracts, while ensuring social protection of workers and access to reemployment services.	None, but authorities announced in their latest Medium-Term Program amendments to be made in the Labour Law in the first quarter of 2025 to improve the flexibility of the labour market, in particular regarding remote, part-time, temporary, and platform work.
Shift social protection from the severance pay system to a broader-based unemployment insurance. Introduce portable severance accounts.	None, but studies are carried out to evaluate the broadening of the unemployment insurance system and the interaction with the severance pay system.
Ensure that statutory minimum wages are affordable for firms, for example by setting a minimum wage floor at the national level and promoting collective bargaining at the enterprise level.	None
Enhance up-to-date information on labour market outcomes for graduates from vocational education tracks, for example by extending the Career Counselling System.	A new employment-focused program for vocational high school was implemented in February 2024 by The Ministry of National Education (MoE). MoE has decided to implement four new school programs, namely "regional", "specialty", "intra-sector" and "integrated into the sector", in order to facilitate the employment of vocational high school students receiving education in every region of Türkiye. The KALFA Program has been implemented and the Program aims to "Provide Sustainable Qualified Human Resources" for the defense industry. Young people who are included in the KALFA Program, designed with an education-based development strategy, are provided with employment opportunities in the defense industry after the program.

This chapter will discuss challenges specific to women's labour market participation. The first section describes progress made in female participation, but also the long-standing factors that hinder more rapid improvements. The second section discusses early childhood education and care (ECEC), as the availability of ECEC places is a major factor affecting women's re-entry in the labour market after childbirth. The third section assesses labour market policies that can be more supportive of women's employment. Finally, the last section concludes on using the practices and procedures of the budget cycle in a systematic way to promote equality between women and men, which can provide the government with insights into how tax and spending decisions affect equality between women and men.

2.2. Weak female participation hurts growth while having deep roots

Türkiye's women's labour force participation remains weak despite progress over the last decade. In the last 10 years, female participation in the workforce was supported by a number of measures such as awareness campaigns and labour law reforms. The labour force participation of women aged 15 to 64 years increased from 33.8% in 2013 to 40.9% in 2023. Nevertheless, women's participation levels remain significantly below those in other OECD countries where the same participation rate increased from 62.5 to 66.7% (Figure 2.1). In addition, when women participate in the labour force, they face higher unemployment rates than men, which further discourages participation.

Figure 2.1. Labour market outcomes of women lag behind other OECD countries



Source: OECD (2024), OECD Labour force statistics indicators (database).

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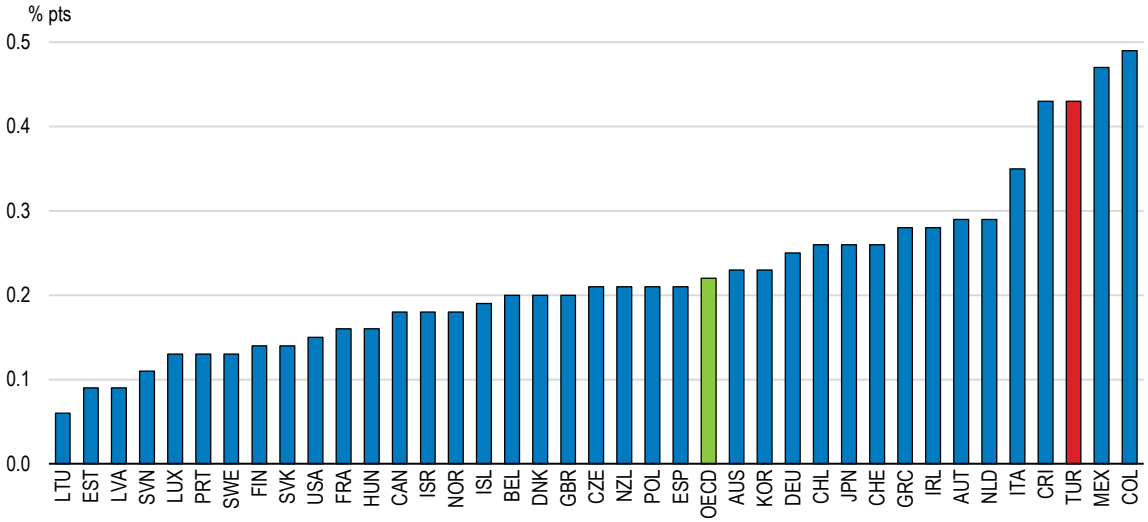
While women in Türkiye earn less than men, the wage gap is smaller than in other OECD countries (Gonne and Trincao, [Upcoming][2]). This is likely due to a selection bias: many low-skilled women either stay out of the workforce or work informally, while those who do participate tend to be better educated and highly skilled. Most of the earnings gap in Türkiye is due to employment gaps, not wage disparities. In contrast, OECD countries like Lithuania, Sweden, Estonia, and Finland see wage gaps as the main driver of earnings gaps, since their employment and participation gaps are smaller (Ciminelli, Schwellnus and Stadler, 2021[3]). Therefore, policy efforts should in a first stage focus on removing structural barriers that prevent women from joining the formal labour market.

Increasing female labour force participation could bring significant economic benefits for Türkiye (Cuberes and Teignier, 2016[4]; IMF, 2024[5])**.** The underutilisation of women's talents limits the country's economic potential. An OECD study estimates that closing gaps between women and men in participation and working hours by 2060 could boost long-term GDP per capita growth by over 0.4 percentage points, increasing GDP by nearly 17% – one of the largest potential gains among OECD countries (see Fluchtmann, Keese and Adema (2024[6]) and Figure 2.2). Building a more inclusive labour market that fully utilises women's skills can also enhance productivity (Hsieh et al., 2019[7]).

The weak participation of women in the labour market has long-standing causes. Women in Türkiye spend an average of four more hours per day than men on unpaid care and housework, significantly higher than the OECD average of two hours (Gonne and Trincao, [Upcoming][2]). This disproportionate involvement is a primary reason for women's low labour force participation. A recent TurkStat survey found that 30% of inactive women cite housework as their primary reason for not participating in the labour market, whereas no men gave this reason (TurkStat, 2023[8]). Childcare responsibilities highlight this disparity further: 96% of mothers are primary caregivers compared to only 2% of fathers, making childcare the most unequally divided household task (TurkStat, 2022[9]). In contrast, in the EU, 30% of men share childcare responsibilities equally or take on a larger role than their partners (Eurofound, 2017[10]).

Figure 2.2. Closing gaps between women and men in labour market participation would boost per capita GDP

Estimated difference relative to the baseline in the projected average annual rate of growth in GDP per capita over the period 2023-2060



Note: The simulation assumes that gaps in labour market participation and hours worked close by 2060. The figure shows the average yearly difference in potential per capita output growth by the end of the projection period, relative to the baseline projection from the OECD Economics Department Long-Term Model. Unweighted average of 38 countries for the OECD aggregate.
Source: Fluchtmann, Keese and Adema (2024), "Gender equality and economic growth: Past progress and future potential", OECD Social, Employment and Migration Working Papers, No. 304.pers, No. 304.

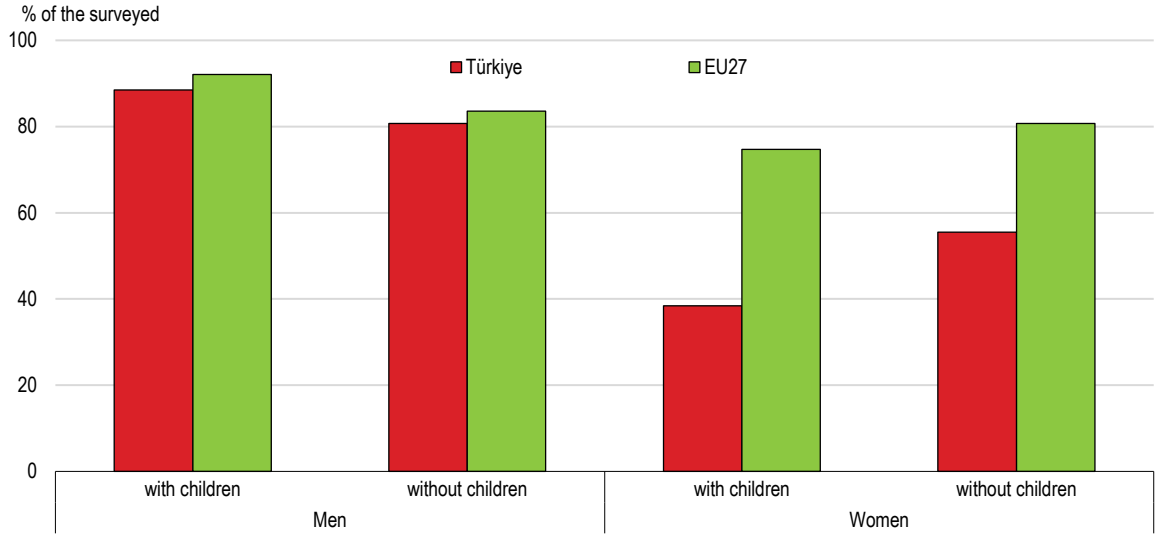
StatLink https://stat.link/ijkyqo

Deeply rooted societal attitudes hinder efforts to improve female labour force participation and promote equality between women and men in Türkiye. Cultural norms continue to reinforce traditional roles, especially regarding women's work-home balance. 64% of the population considers being a housewife as fulfilling as paid work – consistent with the OECD average. However, other beliefs are less in line with the OECD average (OECD, 2017[11]). For example, 52% of the population believes men deserve more job opportunities than women (OECD average: 18%), and 48% thinks men are better business executives (OECD average: 18%). These perceptions not only reflect traditional norms but also create barriers that limit women's workforce participation. Additionally, 53% of the population believes children suffer when mothers work, compared to 33% in OECD countries overall.

Women are likely to reduce engagement in the workforce after childbirth. Motherhood significantly affects women's workforce participation in Türkiye. Only 27% of mothers with children under age 3 were employed in 2023, compared to 58% of women without children (Turkstat, 2024[12]). Conversely, fathers are more likely to participate in the labour force than men without children (Figure 2.3). The child penalty – defined as the average reduction in women's employment over the 10 years following the birth of their first child – is around 29% in Türkiye. While slightly lower than the OECD average, it tends to persist over time. In urban areas like Istanbul, the child penalty is even higher, reaching 61%, reflecting regional differences in job flexibility (Kleven, Landais and Leite-Mariante, 2023[13]). Motherhood also drives women toward more flexible, often precarious jobs, such as informal work, partly due to relatively low prevalence of supportive policies including childcare services (Akkan, Buğra and Knijn, 2023[14]) (Dedeoğlu and Şahankaya Adar, 2022[15]). These impacts are most pronounced immediately after childbirth but often extend into the long term (Berniell et al., 2021[16]). As discussed below, policies like improved childcare services, tax incentives, and comprehensive parental leave aligned with ECEC policies can help mitigate these challenges and support mothers' workforce participation.

Figure 2.3. Employment rates of mothers with children are low

Employment rate of people aged 25-49 with and without children, 2023



Source: Eurostat (2024), EU Labour Force Survey.

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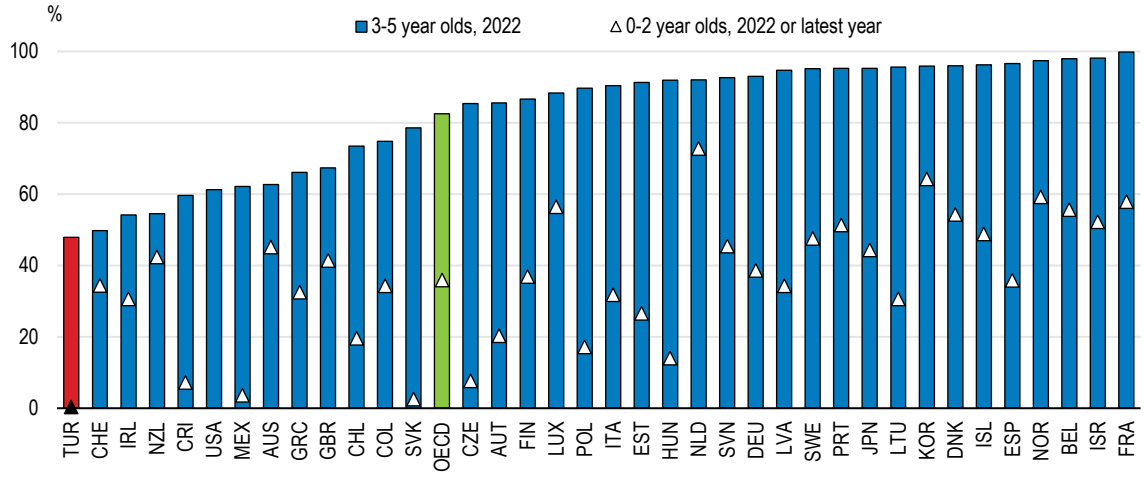
2.3. Türkiye should continue its efforts to increase access to affordable high-quality childcare

Improving access to early childhood education and care is key for supporting mothers and ensuring their participation in the labour market. Research shows that affordable childcare significantly improves maternal employment outcomes (Olivetti and Petrongolo, 2017[17]; Halim, Perova and Reynolds, 2022[18]). When implemented effectively, expanded ECEC access can lead to multiple benefits by facilitating women's labour force participation and improving broader equality outcomes; enhancing well-being and early development of Turkish children; and creating decent job and business opportunities in the paid care sector, particularly for women.

Türkiye has made notable strides in improving ECEC services, with enrolment rates rising significantly in recent years. Between 2005 and 2022, the share of children aged 3-5 enrolled in ECEC or primary education has increased sharply from 28% to 48% (OECD, 2024[19]). Enrolment for 5-year-olds showed the most progress and has become almost universal like in other OECD countries: in particular, Türkiye had by far the largest increase, over the last 10 years, in enrolment rates of young children one year before the typical primary entry age (OECD, 2024[19]). Despite these improvements, Türkiye's ECEC enrolment rates still lag significantly behind other OECD countries where the enrolment rate of 3-5 years old is 35 percentage points higher (Figure 2.4). This highlights significant gaps in early childcare services, particularly for the youngest age group, where such services are virtually non-existent.

Figure 2.4. ECEC enrolment rates are low

Enrolment rates in early childhood education and care services and primary education programmes



Note: The OECD average includes all OECD member countries with data available for both age groups (data for Canada and the USA are missing for 0-2 year olds and data for Canada are missing for 3-5 year olds). Data for 0-2-year-olds generally include children enrolled in early childhood education services (ISCED 2011 level 0) and other registered ECEC services (outside the scope of ISCED 0, because they are not in adherence with all ISCED-2011 criteria). Data for 3-5-year-olds include early childhood education services (ISCED 2011 level 0) and other registered ECEC services, as well as primary education (ISCED 2011 level 1).
Source: OECD (2024), Education at a Glance 2024: OECD Indicators (data for 3-5 year olds); and OECD Family Database, Chart PF3.2.A (data for 0-2 year olds).

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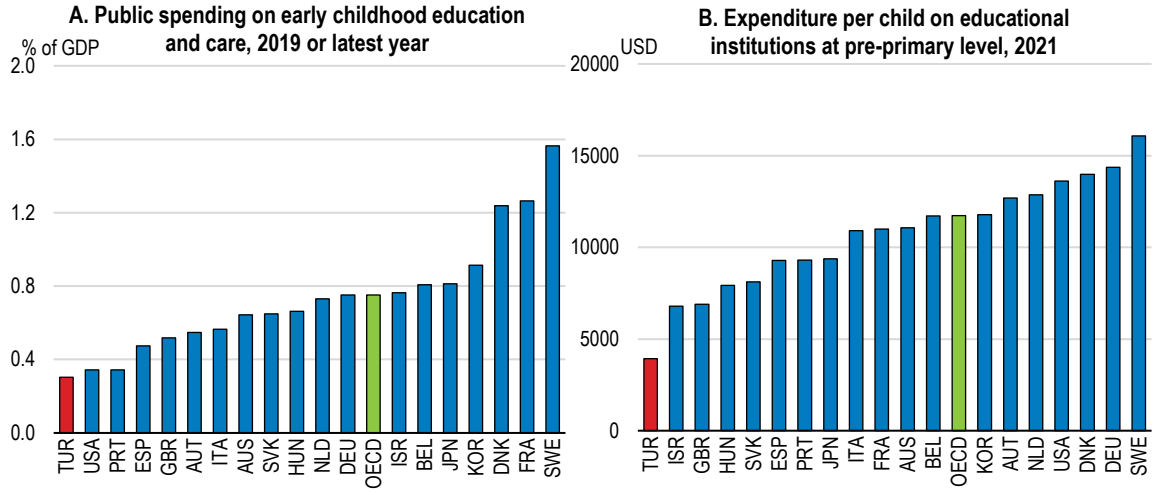
2.3.1. Improving the labour market access of women through lower supply-side barriers

In Türkiye, approximately 80% of ECEC services are publicly provided, with capacity heavily skewed towards children in pre-primary school age. ECEC is not mandatory in Türkiye, but it is highly encouraged for 5-year-olds. ECEC prioritises enrolment of 5-year-olds, as regulation mandates that younger children who are four or three years old can only be offered places after accommodating all the older children who express demand. Most of the ECEC facilities for five-year-olds operate at or close to full capacity and sometimes not all the 5-year-olds have been able to be enrolled in the past (European Commission/EACEA/Eurydice, 2019[20]). This means places are rarely offered to younger children. To address the demand for children aged 3–5, some publicly-owned childcare centres are available but have limited capacity. Private centres also offer childcare, but their limited number and high costs make them difficult to access for many families. Unlike many OECD countries, Türkiye does not have a legal entitlement guaranteeing every child an access to ECEC services. This lack of a "place guarantee" exacerbates the supply-demand imbalance. As a consequence, the quality of ECEC services tends to also be lower than the OECD average even in the highest levels of ECEC: in 2018, there were 18 children by teaching staff in pre-primary education (ISCED 02) compared to 14 in the OECD on average, while the ratio has not improved between 2013 and 2022 as opposed to most OECD countries (OECD, 2020[21]; OECD, 2024[19]). Addressing this issue would require significant investments to expand infrastructure, increase public and private capacity, and ensure equitable access for all families in need of childcare services (European Commission/EACEA/Eurydice, 2019[20])

Broadening access to childcare for children under 3 years old could have a significant impact on women's labour market participation. This age group shows the strongest link between childcare availability and mothers' ability to engage in paid work, more than the ECEC enrolment rates of 3-5 years-old (OECD, 2018[22]). In Türkiye, however, childcare options for children under 3 are limited. Crèches and day-care centres are almost entirely dependent on private providers, which fail to meet growing demand. This has left many families without access to these essential services in the past (European Commission/EACEA/Eurydice, 2019[20]). By contrast, countries like Denmark,

Luxembourg, Portugal, and Germany have implemented robust ECEC systems that ensure high enrolment rates for children under 3. In Denmark, for example, every child is guaranteed a place in a day-care facility from the age of 26 weeks until school age. If public provision is unavailable, parents receive financial support for private childcare. Germany introduced a legal right to childcare for children under 3 in 2013, significantly increasing capacity and enrolment rates (OECD, 2018[22]).

Figure 2.5. Public spending on early childhood education and care is low



Note: In panel A, some countries local governments play a key role in financing and providing childcare services. Such spending is comprehensively recorded in Nordic countries, but in some other (often federal) countries it may not be fully captured by the OECD social expenditure data. In panel B, expenditure per child is based on headcounts rather than full-time equivalent students and is converted in current PPPs. Unweighted average for the OECD aggregates with available data (35 countries for Panel A and 27 countries for Panel B).
Source: OECD Family Database Indicator PF3.1; and OECD (2024), Education at a Glance 2024: OECD Indicators.

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Türkiye has room to increase public funding for ECEC to expand capacity and supply. Türkiye allocates just 0.3% of its GDP to ECEC, compared to the OECD average of 0.8% (Figure 2.5). Increasing public investment in ECEC would not only help meet rising demand but also provide substantial economic and social returns (Heckman et al., 2010[23]). An OECD study estimated that achieving best-practice levels in pre-primary attendance could boost per capita income in Türkiye by almost 6% (Égert, Botev and Turner, 2019[24]). Upfront fiscal costs could be offset by long-term benefits, such as increased tax revenues from higher earnings and reduced spending on social programmes or healthcare. Early childhood education programmes can yield high social returns, with some studies finding returns up to 44 times the initial investment (Hendren and Sprung-Keyser, 2020[25]). Expanding ECEC capacity also has immediate benefits, such as creating jobs in the education sector.

Strengthening the legal and regulatory framework for various childcare providers – including private businesses, employers, local governments, and home-based care – could significantly enhance Türkiye's childcare delivery capacity**.** Municipalities already play a supportive role in addressing gaps in national programmes by offering early education services tailored to local needs.

Employer-provided childcare in Türkiye remains rare. Turkish labour law mandates that workplaces with at least 150 female employees provide childcare facilities and those with 100 or more female employees offer breastfeeding rooms. However, these legal requirements apply only to a small fraction of workplaces, as a large share of employment in Türkiye is in micro and small enterprises with fewer than 50 employees (Turkstat, 2023[26]). More generally, as this can provide large employers with strong financial incentives not to hire women, the authorities could consider reviewing this mandate.

Türkiye should create incentives for smaller businesses to offer childcare options. Examples from other countries can provide guidance. In Chile, small firms can pool resources to establish shared childcare centres near workplaces, making this a cost-effective solution. In Japan, starting in 2025, employers will be required to support work-life balance and childcare needs regardless of company size, including through measures such as teleworking or

reduced working hours. Another way forward can be to pursue the introduction of childcare centres in organised industrial zones. Many countries, including Australia, Austria, France, Germany, Greece, Hungary, Italy, and Switzerland, have improved their ECEC systems by increasing subsidies for local governments and private providers, including employer-sponsored childcare (Alajääskö and Fluchtmann, 2023[25]).

Regulation requirements for childcare service providers could be eased. In Türkiye, private childcare providers benefit from tax breaks, but inadequate accreditation standards and licensing costs can create barriers for establishing new facilities (World Bank, 2015[28]; Batyra, 2017[29]). Accreditation requirements primarily focus on building and infrastructure specifications, which can pose challenges in densely populated urban areas. International best practices, instead, emphasise standards based on child development outcomes, staff qualifications, and service quality rather than physical infrastructure (OECD, 2015[30]; Slot, 2018[31]).

Türkiye could address the lack of childcare availability, particularly for children under 3, by introducing a formal, regulated home-based ECEC model. A well-regulated home-based system could help expand childcare access while maintaining quality and reliability and expand the formal employment base (European Commission/EACEA/Eurydice, 2019[20]). In this system, childminders care for a small group of children (typically 4–5) in their homes, providing families with flexible care options. For example, Korea features licensed childcare centres in a home setting for a small number of children in houses or apartment units, and those centres contributed significantly to the enrolment rate of very young children (Ahn and Shin, 2013[32]). Currently, such system is at the pilot stage in Türkiye. Home-based ECEC is especially beneficial for children under 3 and is widely used in countries like France, where more children are cared for by childminders than in crèches. Other countries, such as Belgium, Denmark, Germany, and the United Kingdom, also rely on home-based care, though centre-based care still dominates. Implementing a home-based childcare system in Türkiye would require (i) Developing clear regulatory frameworks to ensure quality and safety standards, (ii) establishing training and certification programmes for childminders, and (iii) monitoring services to guarantee reliable care. In that context, Türkiye is currently implementing a joint small project with the European Union in Ankara, Istanbul, and Izmir providing grants to 3 500 mothers of young children on the condition that they employ a certified caregiver, with the goal to both support mothers' employment and the professionalisation of childcare.

2.3.2. Demand-side barriers also hinder women's labour market participation

In addition to limited supply, families in Türkiye face demand-side barriers when seeking suitable childcare options. While childcare costs are relatively low compared to the average wage (Gromada and Richardson, 2021[33]; UNICEF, 2024[34]), high out-of-pocket costs can remain a significant challenge for some families and prevent them from accessing ECEC services. Studies indicate that preschool care and education expenses are often beyond the financial reach of low-income households (Dedeoğlu and Şahankaya Adar, 2022[15]; Pınarcıoğlu and Soyseçkin, 2018[35]). This disparity was evident in enrolment rates in Türkiye in the past: among children aged 3–5 from the poorest income decile households, only 16.4% attend preschool in 2012, and a mere 0.4% used daycare services. In contrast, children from households in the wealthiest income decile have much higher participation rates – 28.4% for preschool and 31.6% for daycare services (World Bank, 2015[28]). Today, disadvantaged children, who stand to benefit the most from ECEC, are more likely to miss out on early educational experiences, potentially impacting their future opportunities (Alajääskö and Fluchtmann, 2023[27]). To address this inequality, some countries have introduced targeted measures. For instance, Lithuania mandates preschool education for children from families at social risk, ensuring access to critical early education services (Alajääskö and Fluchtmann, 2023[27]). In Türkiye, 3% of the capacity of certified day care centres is reserved for disadvantaged children who can then benefit from care services free of charge, which has benefited around 3 000 children per year since 2017.

High ECEC costs in Türkiye are further exacerbated by the absence of supportive financial mechanisms, such as tax incentives or subsidies for families. Currently, financial assistance to help families afford private childcare services is sparse, although employer-provided nursery and daycare centres are exempt from income taxation. Ensuring adequate financial support, such as fee discounts or subsidies, is essential to reducing barriers and enabling more families to access childcare. Across OECD countries, various financial support programmes aim to lower the cost of childcare, including childcare allowances, tax concessions, fee rebates, and increased entitlement to other benefits. For example, Estonia caps childcare fees at 20% of the monthly minimum wage, Germany exempts low-income and vulnerable households from ECEC fees. Norway limits childcare fees to a fraction of gross household income and

offers 20 hours of free childcare weekly for lower-income parents. In Quebec, Canada, capping childcare fees has significantly increased maternal labour force participation (Alajääskö and Fluchtmann, 2023[27]). These strategies ensure more equitable access to ECEC and promote broader participation, especially among low-income families. Similarly, countries like Sweden and Germany provide generous subsidies and family benefits to reduce the financial burden on parents, making childcare more accessible across all income levels. Adopting such measures in Türkiye could significantly enhance affordability and access to ECEC services.

Operational challenges and hidden additional costs in public childcare services can reduce demand and accessibility for parents. Public kindergartens and nurseries often face logistical limitations, such as not being open during the summer and relying on a double-shift, half-day system, which does not meet the needs of parents working full-time jobs. Additionally, the lack of transportation and meal services in public ECEC programmes adds extra costs for families, making childcare less affordable and harder to access. Quality concerns also emerge when children of different ages are grouped together in the same classroom due to capacity constraints, which can discourage families from enrolling their children. Although private centres generally offer more flexibility and better services to mitigate these issues, they are often more expensive, posing a significant challenge for low-income mothers who might otherwise seek these services. All these factors create practical barriers that complicate access to affordable and quality childcare.

Beyond costs and operational challenges, social norms regarding caretaking of young children could be reducing the response of labour supply to better childcare access. Indeed, recent evidence suggest that cultural norms have a significant impact on gaps between women and men in labour market outcomes in some OECD countries (Olivetti, Pan and Petrongolo, 2024[36]). As discussed above, cultural norms in Türkiye continue to reinforce traditional roles of women and men, including for childcare. In recent years, many OECD governments have tried to change stereotypes through public awareness campaigns, which could help counter social norms (OECD, 2017[11]; Gonne and Trincao, [Upcoming][2]). Several policies including mentorship, capacity-building programmes, and active recruitment of women for leadership positions can help alter these expectations through creating role models (André et al., 2023[37]). Recent evidence suggests that indeed, those policies can contribute to reduce gaps between women and men as norms are transmitted not only by parents, but also via peer effects, teachers, and hierarchical superiors for example (Olivetti, Pan and Petrongolo, 2024[36]). Finally, designing family and labour market policies carefully, as discussed below, can help alter social norms. For example, they can incentivise the take-up of parental leave by fathers. They can also take into account, via budgeting practices sensitive to equality between men and women for instance, the indirect impact of nominally-neutral policy measures because of their interaction with social norms, e.g. in the context of household taxation.

2.4. Family and labour market policies that could help promote female participation

2.4.1. Parental leave policies could foster a more equitable sharing of leave between parents

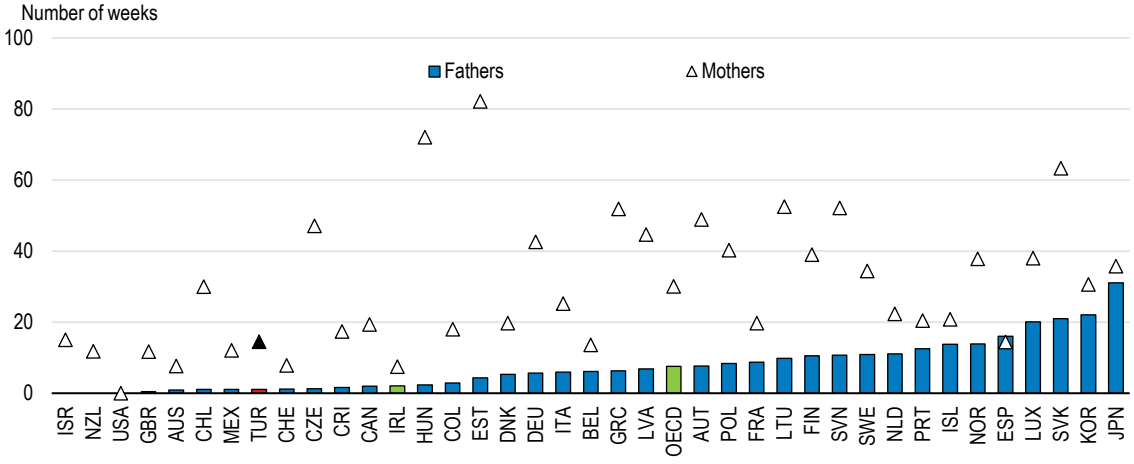
Incentivising a more equitable sharing of parental leave between parents would help to balance the share of unpaid work and home care, enhancing women's engagement in the workforce. Maternity leave is more generous in Türkiye than the median OECD country, as mothers are entitled to 16 weeks of paid maternity leave with a full replacement rate (Figure 2.6). However, the absence of paid parental leave implies that total paid leave available to mothers is relatively low compared to other OECD countries even in full-rate equivalent terms. Additionally, mothers can take up to 6 months of unpaid parental leave following maternity leave, along with the option to work half-time for 60 days (for the first child) up to 180 days (for the third and subsequent children), with a half-time working allowance covering the non-worked hours. The difference between women and men in available parental leave is wider than in the OECD. Fathers receive only 5 days of paid paternity leave (and no paid parental and home care leave), also at full replacement rate, which is less than most OECD countries. Civil servants are eligible for up to two years of unpaid parental leave, available to either parent, on top of paid maternity and paternity leave entitlements.

Inequalities between women and men in the take-up of parental leave can lead to women spending disproportionately more time than men on unpaid care and housework, which negatively impacts their employability and wages. Recent evidence suggests a correlation between fathers' leave taking and higher involvement in care and other unpaid work later on, which might be beneficial for mothers' labour market outcomes during and beyond the leave period (Fluchtmann, Keese and Adema, 2024[6]). Policies that encourage fathers' uptake of paternity and parental leave could weaken the persistent bias between women and men regarding paid and unpaid work eventually and improve family well-being by strengthening father-child relationships (OECD, 2023[38]). For example, evidence from Norway suggests that coworkers and brothers are significantly more likely to take paternity leave if their peers are (exogenously) induced to take leave (Dahl, Løken and Mogstad, 2014[39]).

In recent years, policy reforms in many OECD countries have aimed to encourage fathers to take up parental leave through earmarked months or bonus systems, while Türkiye does not currently offer non-transferable parental leave that is exclusively reserved for fathers. Evidence indicates that introducing such measures can, in addition to supporting women's work, significantly boost their leave uptake and increase their involvement in childcare (OECD, 2023[38]). For instance, in Iceland, men accounted for only 3% of all parental leave taken before mother and father quotas were introduced in the early 2000s. Today, men take approximately 45% of all parental leave. The number of OECD countries offering some parental leave reserved for fathers rose from seven in 1995 to 34 in 2020 (OECD, 2022[40]; André et al., 2023[37]).

Figure 2.6. The durations of paid leaves are short and unequal

Paid leave duration, in full-rate equivalent, 2023



Note: Paid leaves include maternity or paternity leaves, and parental and home care leaves. Entitlements are reported in full-rate equivalent, i.e., paid at 100% of previous earnings. Unweighted average of 38 countries for the OECD aggregate.
Source: OECD Family Database, https://www.oecd.org/en/data/datasets/oecd-family-database.html.

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2.4.2. Changes in other family and labour market policies could enhance female labour participation

The lack of flexible employment contracts in Türkiye significantly hinders women's ability to participate in the workforce. Rigid employment structures – such as strict full-time requirements, fixed hours, and limited opportunities for remote or part-time work – fail to accommodate the needs of women who require adaptable working conditions due to caregiving roles. These inflexible arrangements often force women to either leave the workforce entirely or turn to informal, less secure jobs that provide flexibility but lack stability, social security, and career advancement opportunities. The previous OECD Economic Survey of Türkiye recommended expanding the use of fixed-term and temporary work agency contracts, which are currently confined to seasonal and agricultural sectors. Extending these contracts to other industries, such as business services, could facilitate women's transition

into formal employment (OECD, 2023[1]). Although reforms in 2016 introduced flexible work models like part-time work, part-time employment remains underutilised in Türkiye, accounting for only 9.5% of the workforce compared to the EU average of 16.5%. Increasing the availability of part-time roles and easing regulatory restrictions could help more women participate in and remain in formal employment. Türkiye has also supported female entrepreneurship: for example, it provides discounted social security premium payments for female workers in trades and crafts activities performed outside a workplace, or capacity support programs and corporate income tax exemption for Women-led Cooperatives. As a result, women entrepreneurship in Türkiye is in line with OECD average, although the gap between men and women is relatively larger given the high rate of entrepreneurship in the country (OECD/European Commission, 2023[41]).

Certain labour laws in Türkiye unintentionally discourage women from joining the workforce. For instance, Turkish labour law grants severance pay to women who resign within one year from the date of marriage, potentially increasing not only the long-term cost for employers, but also women's incentives to resign and quit the labour force. While the law prohibits discrimination between women and men in the labour market, this regulation – specific to female employees – can indirectly contribute to employment disparities. Such regulations, while well-intentioned, highlight the need to balance protective measures with policies that actively promote women's workforce participation.

Türkiye's tax and benefits policies do not favour the labour force participation of households with children. Türkiye does not provide significant fiscal benefits to such households' members through advantageous tax treatments or cash benefits, relative to OECD countries. For example, expenditure on family and children benefits in 2022 represented 550 purchasing power standards (PPS, an artificial currency unit which theoretically buys the same amount of goods and services in each country) per population aged 18 or younger against between PPS 1500 and PPS 12500 in EU countries. As a consequence, the average tax wedge on households with children is among the highest in the OECD (Figure 2.7). For example, the tax wedge for a single person at 67% of the average wage is at the OECD average for childless households, but twice the OECD average for a household with two children. Importantly, those households tend to be headed by women: in 2023, three quarters of single parents with resident children were women. Providing targeted tax credits or cash benefits for children, such as deductions or credits for childcare expenses, would promote greater labour force participation especially among women. Indeed, evidence also suggests that the elasticity of women's labour supply is particularly high among women earning low incomes and in countries where female labour participation is lower (OECD, 2024[42]). Since childcare costs are, today, entirely out-of-pocket, the financial benefit of entering the labour force, particularly for low-income families, is often outweighed by the costs associated with the induced childcare and transportation expenses, and the loss of unpaid domestic labour. Direct benefits, in particular child benefits, targeted toward lower income households, can increase the marginal tax wedge as the level of benefits is phased out with income. However, the average tax wedge is the more relevant measure to consider when aiming to improve participation in the labour market, and a marginal tax rate increasing with income would also enhance the progressivity of the tax system (see Chapter 1) (Paturot, Mellbye and Brys, 2013[43]).

2.5. Promote equality between women and men into budgetary and decision-making processes

Appropriate budgetary practices and procedures can provide governments with insights into how tax and spending decisions affect equality between women and men. By analysing how resource allocation impacts men and women differently, governments can make informed decisions that reduce disparities and prevent policies from unintentionally disadvantaging women's economic participation or reinforcing societal perceptions that discourage women from working. Such budgeting practices are increasingly applied in OECD countries. To date, 23 OECD member countries have integrated budgeting tools into their budgetary frameworks to promote equality between women and men in a systematic way, with four more countries planning or actively considering its implementation in the near future (OECD, 2023[44]).

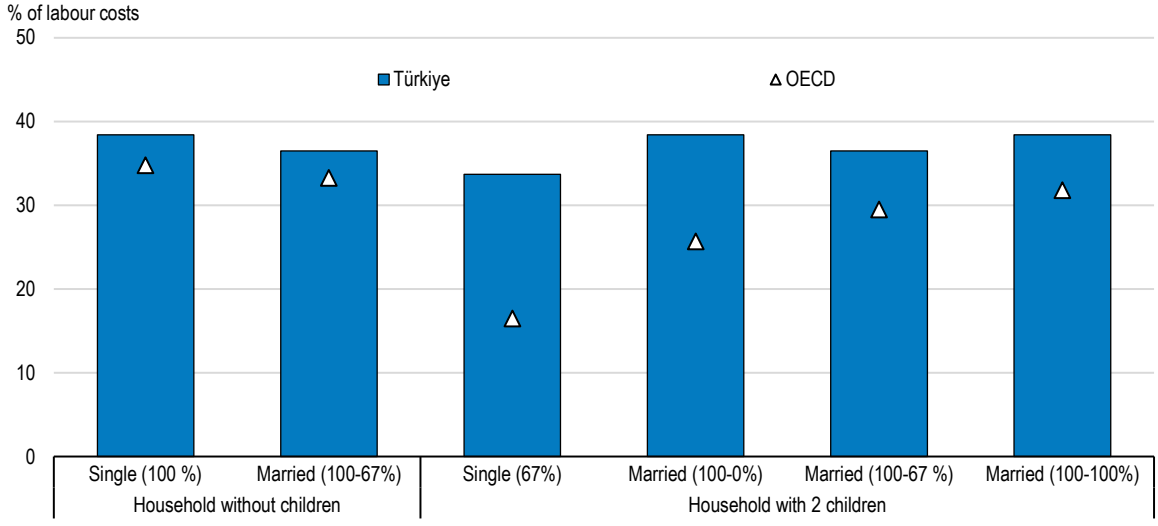
Türkiye has been applying budgeting practices sensitive to equality between women and men since 2019 and has progressively incorporated this approach into key fiscal reforms. The 2003 *Public Financial Management and Control Law* laid the foundation for fiscal policies sensitive to equality women and men. In 2011, a formal commitment to budgeting practices that consider these sensitivities was established. This commitment has since been reflected in

strategic planning documents, such as development plans. By 2019, those budgeting practices became more visible through performance indicators in Türkiye's 11th Development Plan (Curristine et al., 2021[45]; OECD, 2023[44]). Additionally, public investment projects are now required to address their differential impact on women and men and contribute to women's empowerment (Strategy and Budget Office, 2024[46]).

Such budgeting practices in Türkiye can be improved to better serve equality outcomes. Current efforts focus largely on integrating new dimensions into performance budgeting but lack critical tools such as ex-ante and ex-post impact assessments, and distributional analyses of budget measures according to their differential consequences on women and men. Approximately 40% of OECD countries that implement budget practices promoting equality between women and men use at least one of these tools to evaluate the impact of fiscal policies on equality between women and men (OECD, 2023[44]). Adopting such practices in Türkiye would provide a more comprehensive understanding of the impacts of fiscal decisions on equality between women and men, ensuring that resource allocation effectively reduces inequalities. Additionally, while Türkiye's legal framework allows for such budgeting practices, it does not mandate it. In contrast, 65% of OECD countries have institutionalised those budgeting practices through legal mandates, with some countries even embedding it in their constitutions (OECD, 2023[44]). Establishing legal requirements would strengthen integration of those practices across all sectors and ensure consistent application. Moreover, budget allocations sensitive to equality between women and men in Türkiye are currently limited to certain agencies, such as the Ministry of Family and Social Services. Supporting the expansion of this approach across all line ministries would promote policy coherence and adopt a more comprehensive strategy for enhancing women's workforce participation and advancing equality between women and men. The launch of the Planning and Budgeting Strategy and Action Plan for Equality Between Women and Men for 2024-2028 is thus promising. The plan provides actions to be taken for the systematic integration of an equality perspective into national and local policymaking and budgeting processes. It sets four main objectives: developing statistics and analyses responsive to equality between women and men, mainstreaming this responsiveness in planning and budgeting processes, building institutional capacity to conduct budgeting practices as discussed above, and strengthening monitoring and auditing mechanisms.

Figure 2.7. The absence of child benefits discourages labour force participation of households with children

Average tax wedge, by household type and wage level, 2023



Note: Data are based on personal income tax plus employee and employer contributions (SSCs) less cash benefits to which each household type are entitled. Married (100-60%) corresponds to the two-earner couple at the combined wage level of 100% and 60% of average wage. Married (100-0%) corresponds to the one-earner couple at the wage level of 100% of average wage.
Source: OECD (2024), Taxing Wages 2024: Tax and Gender through the Lens of the Second Earner.

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Additional considerations in transport infrastructure investment can significantly influence inequalities in economic outcomes between women and men. An International Transport Workers' Federation survey revealed that 80% of women feel unsafe on public transportation in both developed and developing countries (OECD, 2023[38]). Safety concerns can discourage women from pursuing economic opportunities that require commuting in Türkiye (Beyazit et al., 2023[47]; Özgür Keysan, Kaygan and Kaygan, 2022[48]). Challenges such as long travel times, poorly-lit streets, and unreliable public transport schedules usually disproportionately affect women. They often face greater difficulties using public transportation due to concerns over safety and accessibility, which restricts their ability to travel to work, access social services, or engage in education and training opportunities. Incorporating sensitivities to inequality between women and men into transport infrastructure investment can enhance the safety, accessibility, and reliability of public transport, ultimately boosting women's labour force participation, and good practices could be pursued in Türkiye. For instance, Chile has implemented responsive transportation policies by adapting routes, designing safer night services, and incorporating universal accessibility features for pregnant women and mothers with children. Canada and Iceland have introduced programmes to improve public transport safety, frequency, and accessibility, enabling women, particularly from low-income backgrounds, to participate more actively in the workforce (OECD, 2021[49]).

Table 2.2. Recommendations

Main findings	Recommendations
Female labour force participation is the lowest in the OECD, mostly due to a disproportionate share of unpaid care and domestic work.	**Continue increasing public spending on early childhood education while monitoring efficiency.** **Introduce paid parental leave that is shareable and encourage its more equitable sharing among parents by including non-transferable periods.**
Currently, women who resign upon marriage are entitled to severance pay, potentially increasing the long-term cost for employers, but also women's incentives to resign and quit the labour force.	Introduce more inclusive regulations in survivor benefits, working conditions and head of household legislations. Abolish severance payments upon marriage.
Rigid employment conditions affect women disproportionately when coupled with other structural barriers and drive them out of the workforce or to informal or precarious employment. Fixed-term and temporary work agency contracts are confined to seasonal and agricultural sectors	Expand the availability of flexible working arrangements, such as fixed-term contracts, to other industries, such as business services.
Türkiye does not provide adequate cash benefits for families with children, leading to one of the highest tax wedges for families in the OECD.	**Increase direct cash benefits for children, targeted towards low-income families.**
While the budgeting process includes instruments sensitive to equality between women and men, it lacks critical tools such as impact assessments and distributional analyses of budget measures. More generally, Türkiye does not mandate that budgeting be sensitive to inequalities between women and men through legislation.	Establish legal requirements for the inclusion of budgeting procedures sensitive to inequalities between women and men, and improve tools and methods to understand how budget measures impact those inequalities and could promote equality goals.

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3 Steps towards green transformation in Türkiye

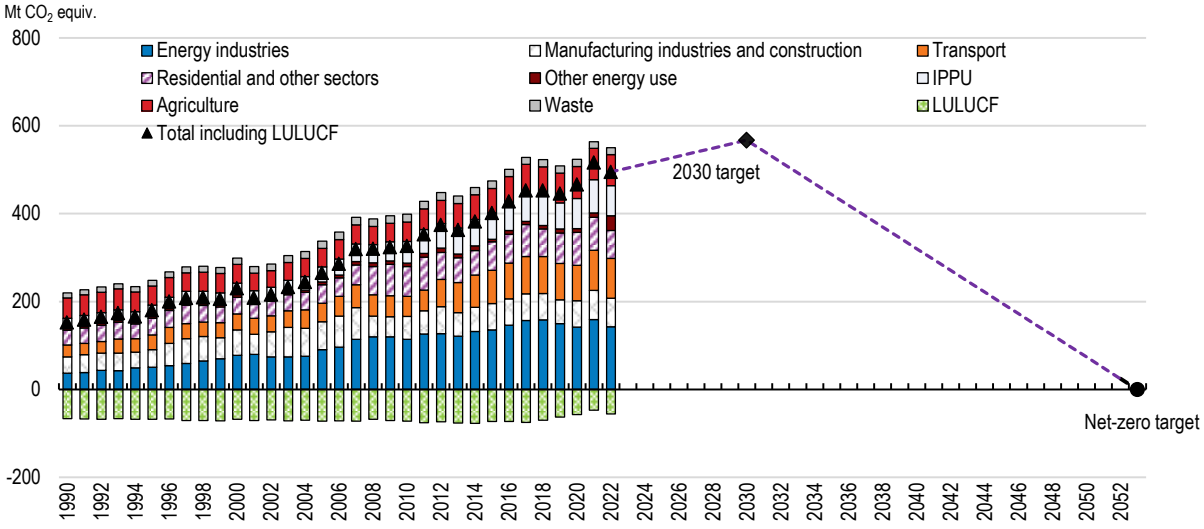
Türkiye faces sizeable climate mitigation challenges. Although emissions per capita are relatively low and have been decelerating recently owing to enhanced mitigation efforts, they are still growing faster than in other OECD countries because of economic convergence and a carbon-intensive energy supply. The country has set a net-zero emissions target for 2053, with emissions expected to peak in 2038. To reach this target, Türkiye needs to take ambitious actions. In particular, Türkiye aims to put in place a carbon price, which should be a key instrument to reduce emissions and whose revenues could be used to support the environmental transition. Türkiye has also developed long term strategies to reduce emissions in key sectors like transport, buildings, and industry. A particular challenge will be to transition away from coal towards low-carbon energy, including by investing further in renewables. This would also provide significant side benefits, such as reducing air pollution and strengthening energy security. Finally, by strengthening the management of its forests, Türkiye can increase its greenhouse gas absorption capacity and better protect its ecosystems against growing wildfire risks.

3.1. Achieving Türkiye's ambitious climate change objectives requires a detailed strategy

Türkiye has recently made significant progress in addressing climate change mitigation and adaptation. A directorate of Climate Change was established in 2021 as part of the Ministry of Environment, Urbanisation, and Climate Change. The country ratified the Paris Agreement in 2021 and published a revised Nationally Determined Contribution (NDC) in 2023. The NDC proposes to reduce greenhouse gas (GHG) emissions by 41% in 2030 relative to a "business as usual scenario" and confirms the country's long-term net zero objective for 2053 (Figure 3.1). In 2024, the country published two Strategy and Action Plans (SAPs) for emissions mitigation and climate change adaptation through 2030. A 2053 Long Term Climate Strategy was published in November, which integrated the previous action plans for mitigation and adaptation in a comprehensive strategy across sectors, and listed several intermediate and sectoral targets for 2030, 2035, and 2053. Emissions have decoupled from growth: CO2 emissions have grown less than GDP since 1990 because the carbon intensity of energy has fallen by 18% and the energy intensity of GDP has fallen by 28%. Emissions per capita in Türkiye are 37% below the OECD average. However, the rapid growth in GDP per capita is putting upward pressure on emissions. The carbon intensity of energy use has declined, but less than in other OECD countries (Figure 3.2).

Figure 3.1. GHG emissions are likely to continue increasing in the next ten years

Greenhouse gas emissions by sector and targets



Note: The sectoral shares on GHG emissions are based on the OECD database over 1990-2021. The breakdown and total for 2022 are estimated by using sectoral shares and the growth rate of total GHG emissions from Türkiye's Informative Inventory Report (IIR) 2024. The historical data and target estimate on the total emissions are based on the IMF database.
Source: OECD (2024), Air & GHG emissions database; Ministry of Environment, Urbanization, and Climate Change (2024), 2053 Long Term Climate Strategy; and IMF (2024), Climate Change Indicators Dashboard.

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Achieving the net zero target in 2053 under current policies could be challenging. In particular, GHG emissions would rise by 30% by 2030. The country has committed to reach an emissions peak in 2038 "at the latest" (Climate Action Tracker, 2023[1]). Ensuring an earlier peak in emissions in the short term would help make emissions mitigation more feasible in the long term to achieve the final target. By contrast, emissions have increased relatively more than other countries in recent years after adjusting for economic trends: as a consequence, the Yale Environmental Performance Index ranked Türkiye 117th for its emissions trajectory over the last ten years and 155th when extrapolating those trends to 2050 (Block et al., 2024[2]). Türkiye's reliance on coal, in particular, is not declining. In 2023, electricity generated through imported coal was at an all-time high. Türkiye is also increasingly vulnerable to climate change risks. Temperatures have increased by more than 2°C during the last 100 years and the country is warming faster than other OECD countries (Figure 3.3). Compared to other OECD countries, the country is particularly exposed to forest wildfires, which have contributed significantly to the increase in emissions in 2021 (Maes et al., 2022[3]).

Türkiye has made important progress in strengthening its institutional framework for climate change mitigation and adaptation in order to achieve its green transformation goals. The Climate Change Mitigation Strategy and Action Plan (2024-2030) has been developed as an implementation tool for the NDC and includes detailed sectoral actions and strategies with the goal to achieve the NDC targets, although those are not connected directly to sectoral emissions targets. A comprehensive Climate Law to implement Türkiye's goals was announced in 2023 and is expected to be approved by Parliament in 2025 after its introduction on February 20th 2025. Such legislation exists in a majority of European countries and provides not only an opportunity to inscribe medium- and long-term emissions targets in law, but also a framework for a regular update in climate plans, for performance monitoring and for stakeholder participation, and finally can help establish independent expert advisory councils to support policymaking and monitoring (Evans et al., 2023[4]; D'Arcangelo et al., 2022[5]). Without this type of legislation, there are no legal requirements to incorporate climate objectives into policy processes, making it more complicated to integrate climate considerations into infrastructure investments and cost-benefit analyses. Türkiye recently adopted green budgeting in line with a majority of OECD countries, but the practice remains at an early stage. In particular, the country has not implemented green budget tagging, and accountability and transparency is weakened by the lack of reporting on implementation and the absence of an oversight institution (OECD, 2024[6]).

To improve the institutional framework governing its mitigation strategy, Türkiye can rely on the past experiences of other OECD countries which have implemented a comprehensive policy mix to achieve well defined and detailed intermediate targets with the help of independent bodies (Box 3.1). It will also benefit from the stakeholders' coordination made possible by its well-implanted Climate Change and Adaptation Coordination Board (CCACB), which gathers public and private institutions as well as observers from other organisations, academia and NGOs, to determine, monitor, and evaluate the strategies and actions related to climate change.

Achieving a successful green transformation would help Türkiye address the main environment-related issues identified in previous *OECD Economic Surveys* (Box 3.1). Previous Surveys emphasised concerns regarding the future trajectory of GHG emissions given expected population growth and economic convergence, and the lack of detailed sectoral objectives consistent with targets. The absence of carbon pricing in parallel of existing fossil fuel subsidies, in particular, does not provide enough incentives to reduce emissions. In addition, the significant reliance on coal not only prevents significant emissions reduction, but also contributes to the degraded air quality in the country, identified in previous Surveys and the latest Environmental Performance Review of Türkiye (OECD, 2019[7]). Reducing the health impact of air pollutants will also require a modal shift in private transportation away from private car use, and better information via air quality indicators over all key sources of pollution in the entire territory. Finally, previous surveys have also underlined how Türkiye's economic growth has increased pressures on natural resources and the environment. In particular, rapid urbanisation has led to urban sprawl encroaching on natural areas. Continuing careful management and policy coordination between ministries, in particular via the CCACB, would safeguard the ecological services provided by Türkiye's natural asset base including the high biodiversity in the country and its contribution to carbon mitigation and climate change adaptation.

This chapter discusses three important steps for Türkiye to ensure a successful green transformation in line with those main challenges. While a comprehensive policy mix is required for effective decarbonisation strategies – carbon pricing, incentives for the adoption of low-carbon technologies, standards and regulations, support for the groups vulnerable to the transition process, etc. – this Chapter will focus on three particular elements:

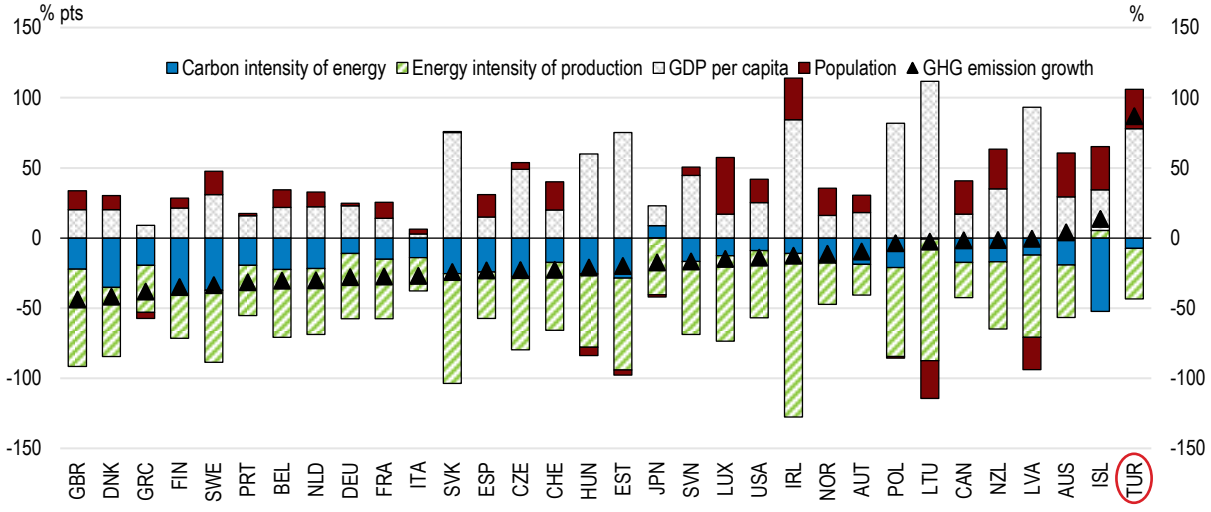
- Firstly, the country needs to price carbon effectively to provide the right incentives to economic agents but also address Türkiye's exposure to the EU's Green Deal and Carbon Border Adjustment Mechanism (CBAM).
- Secondly, it needs to expand and decarbonise electricity production in order to transition away from imported fossil fuels and thus reduce the high contribution of energy production to GHG emissions. This would not only help achieve Türkiye's climate change mitigation objectives while improving energy security, but also provide substantial health benefits considering the significant impact of the currently high level of air pollution on premature deaths.
- Finally, Türkiye needs to improve the management of its forests which are already affected by increasing temperatures and a changing climate.

It should be noted that the decarbonisation of energy production will support the greening of other sectors such as transportation, buildings, and industry, which are also critical to reaching the climate objective, but that will not be

discussed specifically in this Chapter. Türkiye has recently developed a detailed strategy and several action plans for those sectors (see Box 3.2).

Figure 3.2. Emissions have decoupled from growth but the carbon intensity of energy supply is high

Kaya decomposition of the change in GHG emissions between 2000 and 2022



Note: The black triangle is the growth in total GHG emissions excluding LULUCF between 2000 and 2022. Coloured bars represent the sum of annual contributions to the change by source, approximated by the log-difference. The Kaya equation is a simple decomposition of the level of GHG emissions into emissions per unit of total primary energy supply ("carbon intensity"), energy use per unit of real GDP ("energy intensity"), real GDP per capita (in USD 2015 PPP), and population.

Source: OECD (2024), OECD Environment Statistics (database); Demography and Population Statistics (database); National Accounts Database; IEA (2024), IEA World Balances (Energy).

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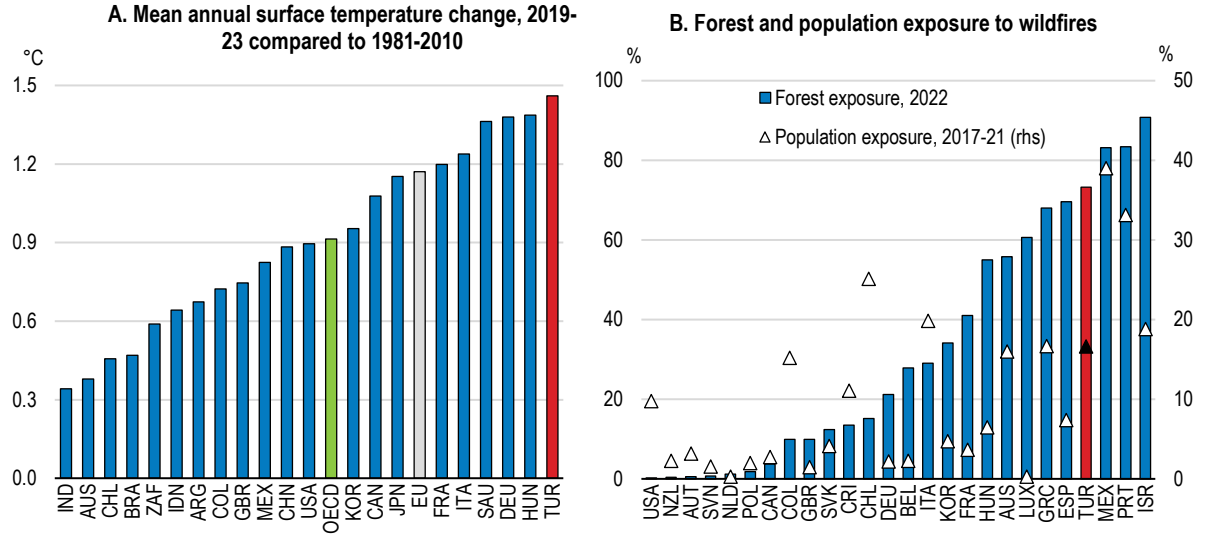
Figure 3.3. Türkiye is warming faster than other countries, increasing exposure to wildfire risks



Note: In Panel B, forest exposure refers to the share of tree-covered areas exposed to very high or extreme wildfire danger for more than three consecutive days. OECD countries with a level of 0% have been excluded from the figure. Population exposure refers to the share of the population exposed to at least one fire over 2017-21.

Source: OECD (2024), OECD Environment Statistics (database); and OECD (2022), "OECD Regions and Cities at a Glance 2022".

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Table 3.1. Past OECD recommendations and actions taken for the green transition

Recommendations in previous Surveys	Actions taken since previous Survey (Feb 2023)
Make emission pricing more consistent across sectors, including by gradually scrapping various subsidies to coal and by raising the carbon price.	Institutional documents including the most recent Medium-Term Program discuss the implementation of an ETS in the proximate future.
Replace coal subsidies for poorer households by means-tested income support programmes without linking aid to fossil fuel consumption.	In November, Türkiye announced that starting on January 1st, 2025, subsidies to electricity consumers beyond 5 000 kWh per year, and industrial users beyond 15 000 kWh per year, would be removed.
Implement the recommendations of the 2019 OECD Environmental Performance Review of Türkiye. In particular, adopt a new National Climate Change Action Plan as planned by the authorities.	Two medium-term strategy and action plans for mitigation and adaptation have been published in 2024 for the period 2024-2030. In November, Türkiye published a "2053 Long Term Climate Strategy" document.
Design a strategy to increase the share of renewable resources in primary energy production, drawing notably on the solar potential.	The 2023 NDC provides numerical targets for the deployment of renewables in 2030 and the 2022 National Energy Plan sets up targets for 2035. At the end of 2024, Türkiye announced intentions to increase renewable energy installed capacity. In particular, the country set a target to quadruple wind and solar installed capacity target by 2035.

Box 3.1. Developing the institutional framework for carbon mitigation strategies in OECD countries

A regularly-updated, detailed sectoral strategy of GHG emissions reductions can provide certainty and ensure the credibility of long term targets

For example, France's National Low-Carbon Strategy (SNBC) outlines short- and medium-term carbon budgets and strategies to achieve sectoral targets in the long run, and carbon neutrality by 2050. In particular, it focuses on decarbonising energy through the expansion and the greening of electricity, reducing energy consumption, reducing non-energy emissions, and enhancing carbon sinks. The 2015 Law on the Energy Transition for Green Growth requires that climate budgets are set for five-year periods via the SNBC.

An effective combination of governance and policy choices can support decarbonisation

For example, Denmark has been at the forefront of emissions reductions by articulating strong institutional choices with proactive policies. This includes a comprehensive policy mix with a carbon tax, regulatory measures such as a ban on new fossil fuel cars, public investment, and targeted policies to attract private investments such as R&D support or streamlined planning processes. On the institutional front, it provided intermediate ambitious, detailed, and quantifiable targets for example in its Climate Law, and promoted stakeholder involvement e.g. via business-government partnerships and an advisory citizen assembly.

Independent advisory bodies can help design, strengthen and coordinate climate policies

An independent economic advisory body on climate change can provide technical advice and help coordinate different policy interventions across public and governmental institutions. For example, the United Kingdom established the Committee on Climate Change to provide independent analyses and to advise the Government on setting legally-binding carbon budgets, to monitor governmental action, and to provide policy advice. In Denmark, the Environmental Economic Council provides analyses and advice to policymakers, and the Danish Council on Climate Change, a council of experts, provides annual recommendations to the Ministry of Climate, both to achieve long-term mitigation targets. In addition, the latter Council provides an annual climate report including ten-year projections and an analysis of the adequacy of current policies.

Source: (D'Arcangelo et al., 2022[5]; OECD, 2024[8])

Box 3.2. Türkiye's Long Term Climate Strategy

Türkiye's Long-Term Climate Strategy (LTS) provides a comprehensive overview of targets and projected policy interventions for long-term greenhouse gas emissions mitigation in the main economic sectors, in parallel of strategies related to innovation, just transition, and climate finance.

In the energy sector, the strategy focusses on long-term improvement in energy efficiency and diversification of supply with ramped up renewable and nuclear energy targets in particular. In industry, emissions reductions ranging from 75% to 100% are planned for the hard-to-abate industrial sectors by 2053. In buildings, gradual regulatory changes are proposed to bring emissions near zero along with efficiency savings. In transportation, the plan foresees the gradual expansion of electrification and modal shifts and presents 2035 targets for the number of electric vehicles and charging stations, and long-term targets for the electrification and the more intense use of railways. In the waste and agriculture sectors, actions to reduce methane emissions are proposed by enhancing the circular economy and sustainable agriculture principles. In land use, land use change and forestry (LULUCF), the main focus is to improve forest management through research and development and regulatory changes.

Table 3.2. Main LTS targets by sector

Energy	Reduce energy intensity by 35% by 2035 compared to 2022.
	Quadruple the solar and wind capacity by 2035, from 31 GW to 120 GW.
	Increase nuclear energy capacity to 7.2 GW by 2035.
	Increase electrolyser capacity to 70 GW by 2053.
	Increase the share of renewable energy in primary energy from 17% to 50% by 2053.
	Increase battery capacity to 2.1 GW in 2030 and 7.5 GW in 2035
Industry	80% reduction in HFC consumption by 2045.
	93% emission reduction in the cement sector by 2053.
	99% emission reduction in the iron and steel sector by 2053.
	75% emission reduction in the aluminum sector by 2053.
	100% emission reduction in the fertilizer sector by 2053.
Buildings	New large buildings will need to meet Nearly Zero Energy Building standards starting from 2025.
	30% energy savings in public buildings by 2030.
	New buildings will require an Energy Performance Certificate Class A starting in 2033.
	New buildings will be constructed as Net Zero Operational Carbon Buildings from 2043.
	The emissions from the buildings sector will be reduced to near zero by 2053.
Transportation	Increase electric vehicles to 4.2 million by 2035.
	Install 347 000 charging sockets by 2035.
	Electrification of railways will be completed by 2053.
	Construct 7 000 km of High-Speed Train and Fast Train lines by 2053.
	Raise the share of railways in logistics from 5% to 22% by 2053.
Waste	The recovery rate of municipal waste will be increased to 70% by 2053.
	Sending waste to landfills without segregation will be eliminated by 2053.
	The reuse rate of treated wastewater will be increased to 20% by 2053.
Agriculture	Consolidation of all fragmented lands will be completed by 2053.
	At least 10% of agricultural land will be used for organic farming by 2053.
	Irrigation efficiency rate will be increased to 65% by 2053.
	Emissions from livestock will be reduced by optimizing feed rations and feed variety.
LULUCF	Double project funding for R&D and innovation by 2030 compared to 2020 levels
	The proportion of woody green areas in settlements will be increased.
	Develop mechanisms in line with the EU Carbon Removal Certification regulations.
	Circular economy components will be implemented in forests.

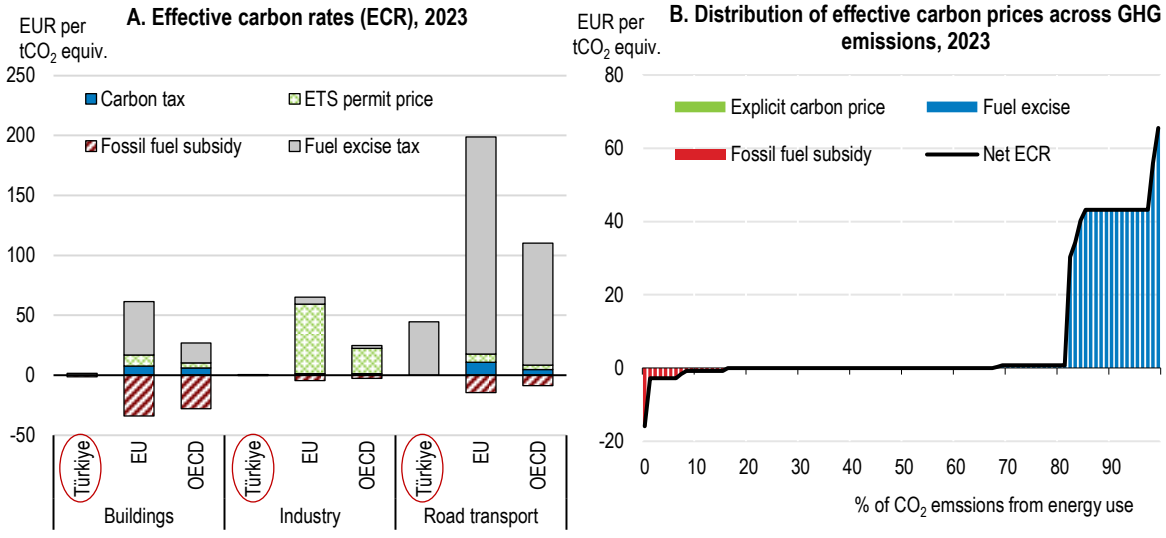
Source: Turkish authorities and Türkiye: 2053 Long Term Climate Strategy, https://unfccc.int/sites/default/files/resource/Turkiye_Long_Term_Climate_Strategy.pdf

3.2. Pricing carbon to signal the need for a green transformation

Türkiye needs to increase its carbon pricing as part of a broader strategy to reduce emissions. Pricing emissions is the most effective way to reduce emissions, especially in the short run, and can raise significant revenues which can be recycled (OECD, 2023[9]; Hahn et al., 2024[10]). Still, effective decarbonisation requires a broad policy mix, combining carbon pricing with standards and regulations and complementary policies such as innovation support, infrastructure investment, and compensatory measures for groups vulnerable to the green transformation.

The expected increase in revenues from carbon pricing tends to be more important in middle- and low-income countries than in high-income countries, as they tend to be more carbon-intensive and with low or no direct carbon taxation, going beyond the level of expenditure needed for the transition (Black et al., 2024[11]). Today, Türkiye only prices carbon indirectly, mostly through fuel excise taxes in road transport. Effective carbon rates are thus relatively low compared to other OECD countries, particularly in industry and buildings (Figure 3.4, Panel A). More than two-thirds of energy use is not taxed (Figure 3.4, Panel B). Fewer than a fifth of emissions are priced above EUR 30 per ton and almost none above EUR 60 per ton. In addition, the gap with the EU – Türkiye's main trading partner – is likely to widen as the region implements a second Emissions Trading System (ETS) in 2027 covering road transport and buildings emissions.

Figure 3.4. Only few greenhouse gas emissions are priced



Note: In Panel B, OECD calculations based on data on effective carbon rates by sector, fuel, and instrument (OECD, 2024), and the emissions base refers to all GHG excluding land use change and forestry. The ECRs are available at the level of the sector, fuel, and instrument (e.g. excise tax, carbon tax, ETS). Covered emissions are sorted by increasing level of the ECR that applies to them. Therefore, for a given point on the y-axis, the value on the x-axis corresponds to the share of total emissions priced at or below this value.
Source: OECD (2024), OECD Net effective carbon rates (database); and OECD (2024), Pricing Greenhouse Gas Emissions 2024: Gearing Up to Bring Emissions Down, OECD Series on Carbon Pricing and Energy Taxation.

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Türkiye should accelerate the implementation of a national ETS. The country has conducted several studies regarding the pricing of carbon including an analysis of the most adequate carbon pricing mechanism and a mandatory emissions' monitoring, reporting, and verification program (World Bank, 2022[12]). Following up on these analyses, the government decided to adopt an ETS and planned to finalise the legal framework for it in its Medium-Term Program (MTP 2025-2027). The details of the ETS, such as the scope, the emissions cap, and the schedule, have not been specified yet but will be included as part of the enactment of the Climate Law in 2025 along with details regarding the Carbon Market Board overseeing the system. The implementation of a pricing mechanism is urgent because the EU will introduce a carbon border adjustment mechanism (CBAM) in 2026, which according to some estimates could cost Türkiye EUR 2.5 billion per year. However, a carbon price of EUR 20 per ton in 2027 gradually increasing to EUR 50 per ton in 2032 would reduce the costs for Türkiye by two thirds and allow the country to collect part of the revenue initially raised by the EU (Long et al., 2023[13]).

The government continues to directly support fossil fuels via tax expenditures and direct transfers. For example, in 2021, the Revenue Administration estimated revenues foregone from excise tax exemptions for fossil fuel use to 0.9% of GDP (World Bank, 2022[12]). Türkiye also provides substantial direct support for coal and other fossil fuels. This includes capital transfers to the state-owned Turkish Hard Coal Enterprise (TTK) to compensate the company for its high production costs which were more than three times its selling price in 2018. In addition, Turkish Coal Enterprises (TKI) has been supplying coal in-kind to poor households using lignite for heating purposes (OECD, 2023[14]; World Bank, 2023[15]). While Türkiye has made efforts to expand its natural gas infrastructure to reduce the dependence of households on coal, the country should phase out fossil fuel subsidies or replace them with targeted support measures if needed.

Beyond this direct support, government guarantees supporting fossil fuels are also sizeable. An electricity capacity mechanism, whereby power plants receive monthly capacity payments based on a regulated formula, applies to coal and natural gas (it also applied to hydropower until last year). It has become partially competitive since 2022 where a mixed payment methodology with half of the capacity payments distributed at market clearing prices was implemented (Korucan and Yardimci, 2023[16]). The goal of the mechanism is to ensure sufficient installed and reserve generation capacity. It could be improved. For example, it does not feature emissions performance standards or age limits for participating domestic plants while a 50% efficiency criteria applies to power plants using imported fuels. Eligible firms are allowed to participate in the energy market, while in other countries these mechanisms are typically put in place to bolster strategic reserves (Papandreou, 2023[17]; IEA, 2021[18]). A temporary, competitive mechanism with emissions standards and oriented towards building strategic reserves, along with boosting green electrification and improved grid interconnections, would provide better incentives more efficiently while improving energy security (European Commission, 2016[19]).

Direct and indirect support, and the lack of carbon taxes, imply that fossil fuels are severely underpriced even before accounting for externalities. Taking into account the social costs of fossil fuels, the IMF estimated that implicit and explicit subsidies to fossil fuels amounted to 15% of GDP in 2022. In particular, the country provides the largest benefit to coal and natural gas among G20 countries (Black et al., 2023[20]). More targeted support could be beneficial. For example, in 2015 Indonesia reduced the share of fossil fuel subsidies in government expenditures by 60% and replaced them with increases in spending on social protection and infrastructure, which supported growth and employment. It also reduced the budget's vulnerability to risk coming from variations in commodity and currency prices (OECD, 2024[21]). In addition to providing more targeted support in line with climate ambitions, Türkiye could review tax expenditures based on their impact on the environment: today, 10 countries have included such tax expenditures in the scope of their green budgeting (OECD, 2024[6]).

Pricing carbon efficiently could increase government revenues significantly. Increasing the effective carbon rate to a floor of EUR 60-75 per ton by deploying an ETS and transitioning away from fossil fuel subsidies could reduce emissions by more than 15% and raise 2% of GDP in extra revenues annually (Parry, Minnett and Zhunussova, 2023[22]; D'Arcangelo et al., 2022[23]). In parallel, the net zero pathway (NZP) developed by the World Bank and consistent with Türkiye's 2053 net zero target estimates that the additional public investment needs for the green transition would amount to 0.9% of GDP per year. In its Twelfth Development Plan, and reiterated in the 2053 Long Term Climate Strategy, the government estimated additional annual public investment needs of 0.7% of GDP, a similar order of magnitude.

Carbon revenues could be recycled to support growth, facilitate green investment, and accompany groups requiring special policies during the green transition. Increasing the price of carbon without compensatory policies would increase inequalities and hamper growth: a recent estimate by the IMF suggests that a price of EUR 75 per ton would reduce consumption in Türkiye by 3.4% for the lowest income decile and by 2.5% for the top decile (Parry, Minnett and Zhunussova, 2023[22]). However, recycling a quarter of the revenues towards a targeted income transfer to the bottom 40% of household and using the rest to reduce labour taxation would have a positive impact on growth and be redistributive (Guillemette and Château, 2023[24]; Chateau, Jaumotte and Schwerhoff, 2022[25]). These estimates do not take into account the environmental and social benefits of higher carbon prices. To address the impact on domestic competitiveness, in particular for energy-intensive and trade-exposed industries, Türkiye could in turn implement its own CBAM (which ensures that domestic purchasers have no carbon-price-related reason to prefer domestic products over imports or vice versa), provide emissions-unrelated rebates to exposed industries, or temporarily provide free allowances depending on an arbitrage between effectiveness and administrative complexity (OECD, 2022[26]; OECD, 2021[27]; Parry, Minnett and Zhunussova, 2023[22]).

3.3. Greening and expanding electricity generation to reduce emissions and bolster energy security

3.3.1. Decarbonising energy production requires expanding electricity supply and greening its sources

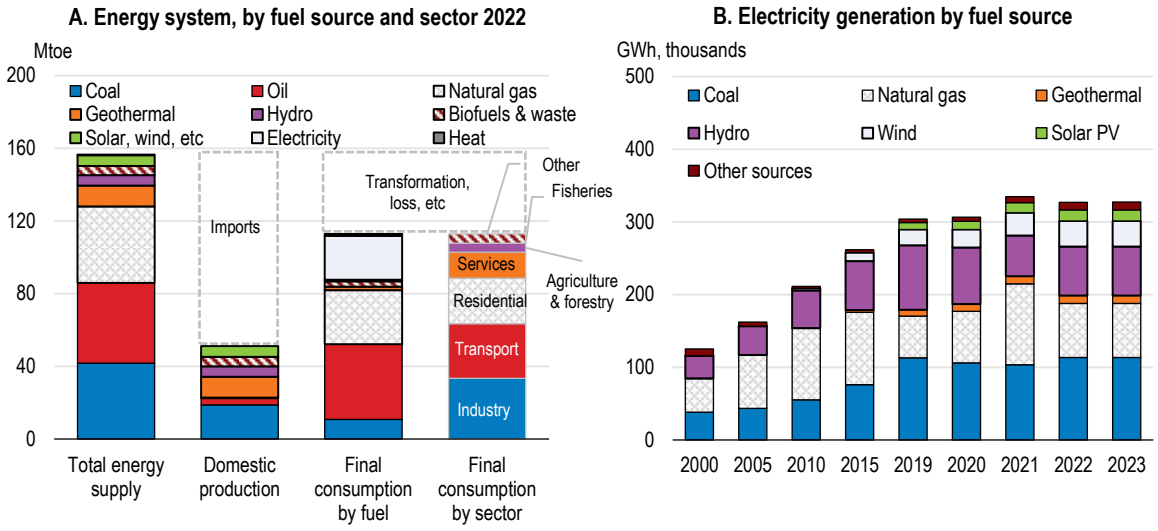
Energy consumption is relatively carbon intensive in Türkiye. While the share of renewables in primary energy and electricity supply is at the median of OECD countries owing in part to significant hydropower resources, the share of renewable energy in final energy consumption is among the lowest in the OECD (IEA, 2024[28]). The energy sector is responsible for almost a third of the country's emissions, 10 percentage points higher than in the median OECD country. Coal, oil, and natural gas each contribute almost 30% to total energy supply (Figure 3.5, Panel A). As a consequence, most of final consumption is provided by fossil fuels, or by electricity generated with fossil fuels.

To reduce GHG emissions from energy supply, electricity generation will need to be expanded, and its sources will need to be greened. Electricity in Türkiye covers one fifth of final energy consumption today, slightly less than in advanced economies on average. It remains fuelled mostly by coal and natural gas, which contributed to 35% and 23% of electricity generation respectively in 2022 (Figure 3.5, Panel B). The carbon intensity of electricity generation has not declined as fast as other countries (IEA, 2021[18]; Ember, 2024[29]). This is particularly concerning given that the decarbonisation of economic sectors to achieve emissions targets will depend on their electrification. In particular, in addition to energy efficiency measures and carbon capture, it will require (i) the electrification of cars, trucks, and an expanded electrified railway system; (ii) renovations to insulate buildings and the move towards electrified heat pumps, and (iii) manufacturing processes (e.g. for steel production) fuelled by electricity or hydrogen typically generated via electrolysis (World Bank, 2022[12]; IEA, 2023[30]). Türkiye's detailed strategy and action plans in each of those economic sectors confirm the importance of electrification in successfully achieving the green transformation in the country (see Box 3.2).

Decarbonising energy supply by deploying green electricity will help achieve emissions targets. The World Bank has recently provided a detailed "Resilient and Net Zero Pathway" (RNZP) showing how Türkiye could achieve its 2053 target, and meet a doubling of peak power demand, by transitioning away from coal power plants, accelerating investments in solar and wind energy while ensuring energy security through additional battery and pumped storage, pushing forward on energy efficiency, and relying on gas generation with carbon capture and storage (World Bank, 2022[12]).

Such a strategy would also significantly improve energy security. Total domestic energy production only covers 31% of total energy supply today. Oil and natural gas are almost integrally imported and represent around three fifths of final energy consumption. Half of the coal supply is also imported, mostly from Russia and Colombia (Figure 3.5, Gumus (2024[31])). In parallel, the integration of renewable energy sources such as wind and solar power could raise concerns regarding energy security due to their intermittent nature. To address these challenges, net zero scenarios including the one developed by the World Bank puts emphasis on the importance of investment grid diversification and interconnection, flexible backup generation, demand response programs and smart grids, and investment in energy storage. Such concerns have been largely recognised in Türkiye's, long term strategy: in particular, the LTS includes a projected increase in electrolyser and battery capacity to 2 and 2.1 GW respectively by 2030 and plans for additional pumped-storage hydropower plants, and a reduction in energy intensity by 35% in 2035 (Box 3.2).

Figure 3.5. The supply of energy, including electricity, is mostly carbonised



Note: In Panel A, services include commercial and public services.
Source: IEA World Energy Statistics and Balances (database), www.iea.org/countries/turkiye/energy-mix.

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3.3.2. Transitioning away from coal

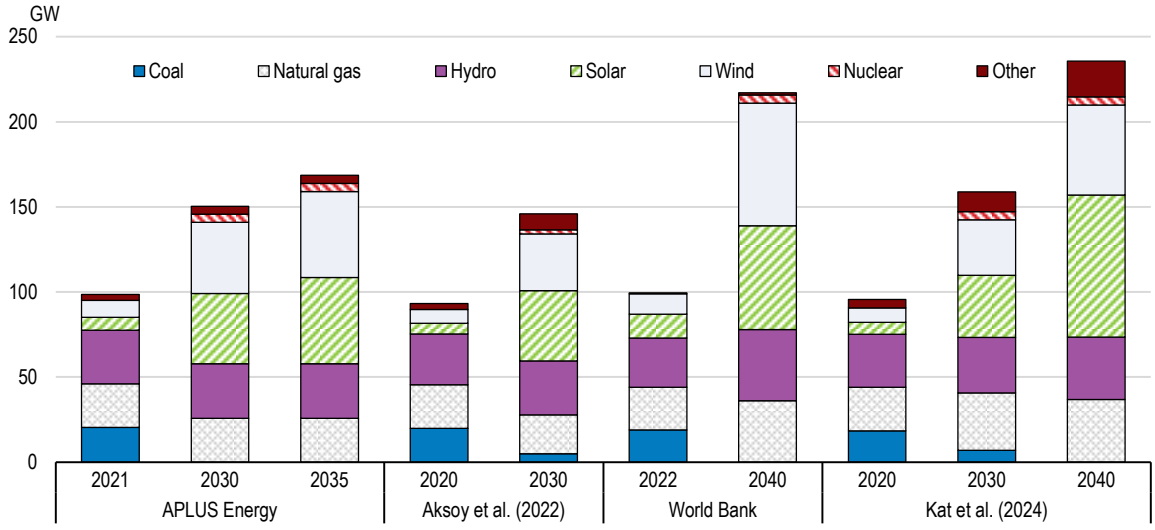
Türkiye needs to transition away from coal-fired power to decarbonise energy generation and enhance energy security. To achieve the net zero target, no new coal plant should be built, the most inefficient coal plants should be closed by 2030, and the remaining plants closed or retrofitted by 2040 (World Bank, 2022[12]; IEA, 2021[32]). However, the Turkish government has not proposed plans to reduce coal capacity and instead aims to expand coal mining activity to provide baseload capacity and thus improve energy security. While Türkiye projects to reduce the share of coal in energy supply, the 2022 National Energy Plan (NEP) forecasts an increase of absolute domestic coal-fired power plants capacity by 1.7 gigawatts (GW) by 2030, and a general increase in capacity until at least 2035. Other OECD countries relying significantly on coal, such as Germany, Slovenia, or Poland, have deployed national plans to phase out coal. By contrast, coal-fired power generation has more than doubled in the last decade in Türkiye. A detailed plan to transition away from coal, consistent with the country's emissions target, would provide greater certainty on the future trajectory of energy supply and spur investment in power generation from other sources.

Various net zero pathways (NZP) developed for Türkiye suggest that a transition away from coal is necessary and feasible. Following up the announcement of the net zero target, four reports have developed decarbonisation pathways which include future trajectories for power capacities by energy sources. Despite differences in assumptions relative to macroeconomic and energy demand projections, all scenarios agree on the future of electricity generation. Coal would be phased out (Figure 3.6). Solar and wind capacities would be quadrupled by 2030 compared to ten years prior – an annual rate of growth of 15-20%, and reach a total of around 140GW in 2040 against 25GW in 2023. While this pace is ambitious since global renewable capacity has increased by 10% a year in the last 10 years, it has been steadily accelerating. In particular, global renewable capacity increased by 60% in 2023, by 40% in the United States, and by 30% in Europe, South Africa, and Brazil (IEA, 2024[33]). The current hydropower capacity would be maintained for storage and baseload capacity. In order to provide the necessary baseload capacity, natural gas capacity would stabilise or grow slightly to support energy security and peak-demand support, but would typically be combined eventually with carbon capture in an NZP. A nuclear capacity of 4.8GW is generally assumed, as announced by the government (the government announced in November 2024 a new target of installed capacity of nuclear energy 4.8GW for 2030 and 7.2GW for 2035) (Alparslan, 2022[34]; World Bank, 2022[12]; APLUS Energy, 2021[35]; Aksoy et al., 2022[36]; Şahin et al., 2021[37]; Kat et al., 2024[38]).

Transitioning away from coal with renewables would provide energy at lower cost and reduce energy dependency. Building new coal plants is already more expensive than solar and wind, and this gap will widen as renewables get cheaper and carbon prices rise (IEA, 2024[39]; Alparslan, 2021[40]; Aksoy et al., 2022[36]). Furthermore, the average cost of electricity generated from renewables was expected to fall below the operating cost of coal in 2023 in Türkiye, and has already done so in the EU and the United States (Gray, 2020[41]). In addition, the efficiency of domestic coal is 50% lower than that of imported coal. Maintaining the current level and structure of coal import capacity, in turn, is problematic for energy security. The share of imported coal in the production of electricity has kept increasing in the last four years. Russia and Colombia have represented more than four-fifths of Türkiye's coal imports since 2017; and the share of coal imports in coal-generated electricity has been gradually increasing over the last 20 years, from none to almost two-thirds between 2000 and 2023 (Gumus, 2024[31]; EIU, 2024[42]). While the share of domestic coal in electricity generation is around 14% currently, other greener sources of energy could as efficiently stabilise energy supply. The capacity factor (the actual energy output relative to the theoretical maximum) of domestic coal has fallen below some wind farms recently (Gumus, 2024[43]).

Figure 3.6. Future power capacities are consistent across projected net zero pathways

Projected power capacity in net zero pathways, by source



Note: Numbers from the World Bank are not directly accessible but replicate Figure S.4 of the Country Climate and Development Report. "Other" includes 15GW of biomass in Kat et al. (2024)'s projections in 2040.
Source: (Alparslan, 2022[34]; World Bank, 2022[12]; APLUS Energy, 2021[35]; Aksoy et al., 2022[36]; Şahin et al., 2021[37]; Kat et al., 2024[38])

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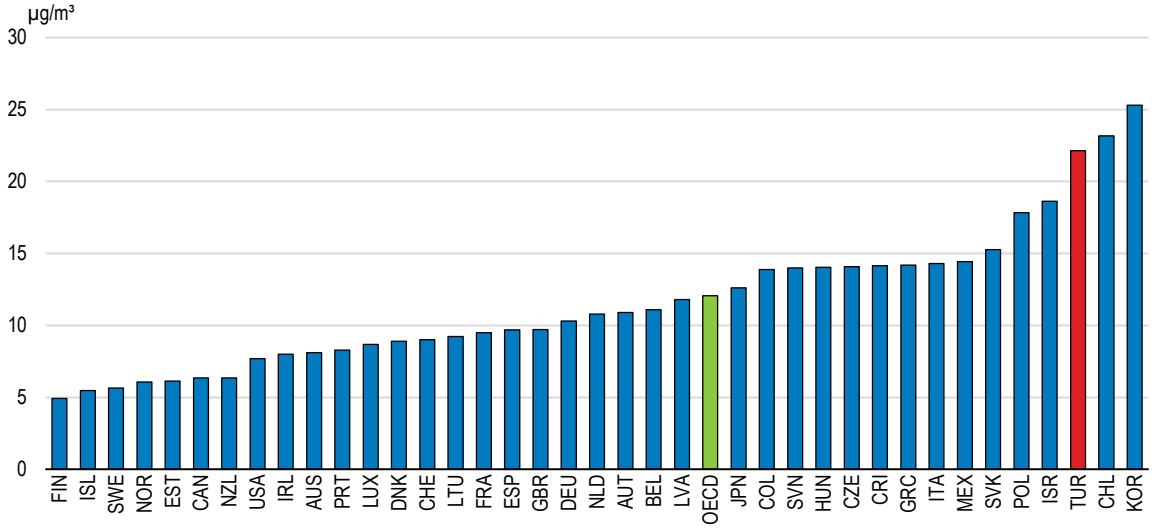
Transitioning away from coal would have significant welfare benefits by reducing not only GHG emissions, but also air pollution. Türkiye has one of the highest levels of exposure to fine particulates (PM2.5) in the OECD, leading to the highest mortality rates from air pollution in 2019 (Figure 3.7). In that year, 13.8% of premature deaths were attributed to exposure to PM2.5 against 5.5% in the OECD on average. The overall welfare cost of particulate exposure generated by coal-fired power plants has been estimated to be between 2% and 5% of GDP per year (OECD, 2024[44]; Health and Environment Alliance, 2021[45]; Black et al., 2023[20]; OECD, 2024[46]).

Türkiye has started to tackle the issue. Power plants are subject to the industrial air pollution control regulation, which sets relatively tight limit values for some air pollutants. In addition, Türkiye introduced the Regulation on the Management of Industrial Emissions in January 2025, which introduces a Green Transformation Certificate to assess the environmental performance of facilities in some industrial sectors, classifying facilities from A to F based on their compliance with the best available techniques. The Ministry of Environment, Urbanisation, and Climate Change also provides grants to municipalities to replace coal with natural gas for residential heating in order to reduce the health effects of air pollution. However, no limit exists on PM2.5 concentrations. Introducing or tightening thresholds, along with regulatory enforcement and inspections conducted following the OECD Best Practice Principles for Regulatory Policy such as evidence-based and targeted inspections (OECD, 2014[47]), could bring coal plant retirements forward or incentivise retrofits.

Figure 3.7. The population is exposed to a high level of air pollution

Mean Population exposure to fine particulates PM2.5, 2020



Source: OECD (2024), OECD Environment Statistics (database).

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The successful transition away from coal will require a combination of carbon pricing, standards and regulations, and financial incentives. As an example of successful and rapid phaseout, coal has now effectively no role in electricity generation in the United Kingdom even though its contribution had been stable between 2000 and 2010 and still represented 30% of total generation in 2010 (OECD, 2022[26]; MacDonald, Lee and Candlin, 2023[48]). The United Kingdom successfully phased out coal in particular by setting a carbon price floor and limiting emissions intensity beyond the potential reach of coal plants.

Such measures can be accompanied by investments in conversions or retrofits. Early closures of power plants could be compensated through direct payments or auctions. The World Bank has estimated the direct, stranded costs of early retirements at USD 4 billion (World Bank, 2022[12]). Germany implemented both strategies, respectively for lignite and hard coal. Türkiye could also benefit from cooperation with domestic and multilateral development banks (Kachi, Bendahou and Outlaw, 2024[49]). In Chile, the Inter-American Development Bank provided a concessional loan to finance the retirement of two coal power units early and replace them by a wind farm (IDB Invest, 2021[50]). The Asian Development Bank, of which Türkiye is a member, has set up a pilot programme including a debt restructuring instrument to incentivise the early decommission of coal power plants. Coal plants can also be retrofitted. Converting coal plants to gas plants can be attractive for those with pre-existing gas infrastructure nearby. Coal power plants below 300 megawatts (MW) capacity that lack gas infrastructure and are outside earthquake zones could also be replaced by small modular nuclear reactors (SMRs) (World Nuclear Association, 2024[51]). The government emphasises SMRs as a major part of the strategy to decarbonise energy production in its most recent mitigation SAP. Nuclear energy provides more stable decarbonised electricity compared to renewable sources, and the smaller scale of SMRs reduces the risks of delays and overruns compared to standard nuclear plants. However, as for other nuclear plants, there are other environmental concerns related to the storage of waste, and potential negative long-term implications on life and health in case of serious accidents, which require careful monitoring and the cost of additional investments to be taken into account. In addition, the technology of SMRs is relatively new: the first SMR was connected in 2019 and only Russia, China, and India have already connected some SMRs to the grid. Finally, the capture of coal emissions can make sense for new coal plants to avoid large depreciation costs. It could be made more competitive with a high carbon price: the average cost of capture is around USD 50-100 per ton today with an additional cost of transport and storage of USD 20 (IEA, 2021[52]).

3.3.3. Support measures will have to accompany regions and workers dependent on coal

Complementary measures will be required to accompany the people and regions vulnerable to changes in the structure of jobs in general, and to the transition away from coal in particular. At the national level, the net employment effects from higher carbon prices could be fairly limited (Chateau, Bibas and Lanzi, 2018[53]), as jobs created in greener businesses, including in construction and services, are projected to offset job losses in mining and carbon-intensive industries. In Türkiye, estimates suggest that there are around 50 thousand workers in the coal industry and an additional 150 thousand workers in the subsectors covered by the EU CBAM. This is less than 1% of total employment (World Bank, 2022[12]; Özenç and Aşık, 2024[54]). Many workers in these sectors already have skills transferable to green jobs, which should help them find other job opportunities (IEA, 2022[55]). In Türkiye, compared to other manufacturing jobs, wages are relatively higher in the coal sector, informality and the share of routine jobs are lower, and education levels are similar despite a higher rate of vocational training (Özenç and Aşık, 2024[54]).

In Türkiye and other coal-intensive countries, coal jobs are concentrated in specific regions and affect specific workers, which can be impacted disproportionately (OECD, 2023[56]). In the United Kingdom, hourly wages for displaced coal workers are estimated to have fallen by 40% on impact and remained 20% lower fifteen years later (Rud et al., 2024[57]). In the United States, counties exposed to the decline of coal activity since 1980 have experienced long-run reduction in earnings, employment, and population (Hanson, 2023[58]). More generally, past transitions in other countries have shown that these regions can suffer long-term effects if the transition is not anticipated (Caldecott, Sartor and Spencer, 2017[59]).

Learning from other countries' past transitions will be important for Türkiye in order to prevent long-term scarring of regions and workers. In the country, coal and lignite mining represents more than 0.4% of employment in two regions: Zonguldak-Karabük-Bartın (4.2%) and Manisa-Afyonkarahisar-Kütahya-Uşak (1.1%). Past experiences in other countries suggest that adequate support can be provided through a combination of labour market policies, place-based investments, and measures to remove obstacles to geographical mobility (OECD, 2023[60]). For example, the coal transition was relatively successful in the region of Limburg in the Netherlands, which benefited from the relocation of some government services and support for innovation and knowledge sharing which boosted growth in the 2000s after suffering from the highest unemployment rate in the country in the 1970s. The transition away from coal could be partly funded by savings from reduced coal subsidies: The World Bank estimated that two thirds of the transition costs in Türkiye could be covered by the induced reduction of coal subsidies (World Bank, 2022[12]).

Supporting the transition away from coal will require an assessment of the redistribution of skills induced by the transition, and a combination of place-based and labour market policies. The public employment service can assess the skills needed for green jobs through "skills assessment and anticipation exercises", which could be based on labour force surveys such as the recent analysis made by the SHURA Energy Transition Center (OECD, 2023[61]; Özenç and Aşık, 2024[54]). Once groups vulnerable to the green transformation have been identified, the government can put in place a combination of place-based policies and reinforce labour market policies (Causa et al., 2024[62]; D'Arcangelo et al., 2022[5]; OECD, 2024[63]). Place-based policies include early-stage reskilling and up-skilling, public investment programmes, and improvements in social conditions through higher quality healthcare and transport policies in the region. They can take the form of wider regional industry development plans. For example, the Just Transition Development Plan in Greece deploys private, public and PPP financing for investments in Western Macedonia not only to shift power production from lignite plants toward natural gas and renewables, but also to establish a pharmaceutical industry and develop wine tourism (OECD, 2023[64]).

Encouraging geographical mobility could help smooth transitions. As an example of such a policy, the EU's Just Transition Fund (JTF) makes provisions for support for both digital and physical infrastructure investments that improve connectivity (IEA, 2022[65]). Similar policies could be implemented in Türkiye. Central government financial support for place-based policies can be conditioned on the establishment of long-term, regional plans for the transitions: for example, the JTF provides support to the territories most affected by the green transition and requires that countries prepare long-term plans for eligible regions (OECD, 2021[66]). Active labour market policies, targeted unemployment benefits and social assistance, and looser labour market regulations, will then facilitate the reallocation of workers to green employment (Causa et al., 2024[62]). Furthermore, more stringent employment protection legislation is associated with a higher share of brown workers that cannot transition to green jobs, potentially because it creates barriers to exit of low productivity polluting firms (Tyros, Andrews and de Serres,

2023[67]). As a consequence, following up on the recommendations of the special chapter of the 2023 OECD Economic Survey of Türkiye in that regard will be essential. In particular, Türkiye can increase the number of persons receiving counselling services by supporting job placement services by the public employment service İŞKUR, engage private job placement and counselling providers, deploy digital tools to improve match efficiency, expand the scope and generosity of unemployment insurance and assistance, and loosen employment protection legislation (OECD, 2023[68]).

3.3.4. Türkiye can speed up the deployment of renewables

The transition away from coal will only be successful if wind and solar capacity expands fast. Türkiye has made significant progress in the deployment of renewables in recent years. The share of renewables in electricity generation has increased from 26% in 2010 to 46% in 2024. During this period, the country built up a wind and solar installed capacity of 12.5 and 19.9GW respectively (Gümüş, 2025[69]). The authorities have provided two quantitative intermediate future targets: the 2023 NDC aims to reach capacities of 18GW and 33GW by 2030 for wind and solar respectively, and the NEP aims at 29.6GW and 52.9GW by 2035. These objectives have been raised in November 2024 to 43.1GW and 76.9GW. Even before recent announcements, the solar objective was consistent with NZPs, while the objectives for wind power are still below but significantly closer to requirements (Figure 3.6). However, the pace of installation has recently slowed down: for example, only 0.4GW of wind capacity was installed in 2023, the lowest number since 2012 (Gumus, 2024[31]). There is room for solar and wind expansion. Today, Türkiye appears to only use a relatively small share of its solar and wind potential, and the current geographical distribution of capacity is not optimally aligned with potential (IEA, 2021[18]; OECD, 2023[68]; Yildirim, 2023[70]).

To accelerate wind and solar power deployment, Türkiye can improve its current financial incentives. Today, the country uses three main instruments: (i) The Renewable Energy Support Mechanism (YEKDEM), a Feed-in Tariff (FiT); (ii) competitive auctions conducted via the Renewable Energy Resource Areas (YEKA) for a FiT in specific "renewable energy zones"; and (iii) net metering regulation for small-scale solar systems. Those incentives are largely welcome, but their design could be improved.

FiTs can be costly, slow to adapt to changes in technology, and hard to calibrate. FiTs are a simple mechanism to provide support and reduce uncertainties, but prices and volumes allocated via FiTs are typically settled by an administrative process which can be slow to adjust to declines in costs due to technological progress. In addition, they blur the price signal as they are not directly linked to the market price. As a consequence, most OECD countries have now shifted away from FiTs towards mechanisms that incorporate the price signal and based on competitive biddings like feed-in premiums (FiPs) and contracts for differences (CfDs). With these instruments, the producer is guaranteed a given price – and obtains the upside if the wholesale price rises above this guaranteed level in the case of FiPs. CfDs can be fiscally attractive compared to FiPs (and would prevent unexpected windfalls to renewable generators) since they allow the government to recoup revenues if the market price is above the reference tariff level. CfDs could be paired with long-term Purchasing Power Agreements whereby private power consumers and producers agree on long-term energy supply, which also reduces the burden on public finances (Busch et al., 2023[71]; Ason and Poz, 2024[72]).

Even though an eventual shift from FiTs towards FiPs or CfDs would be more efficient, the recent shift to a reliance on auctions with YEKA is welcome and could be pursued in the short term. The programme has shown some limitations. Solar capacity allocations since 2017 are only one-third of what would be needed to achieve targets. Recent growth has been mostly driven by small-scale solar due to the loosening of the net metering regulation (Alparslan and Yildirim, 2023[73]). Large-scale plants would provide significantly higher returns thanks to a lower average cost of energy (Hahn et al., 2024[10]). Wind capacity expansion has also been slow, partly due to insufficient transmission capacity and potentially because of restrictive participation requirements like local content rules (IEA, 2021[18]). By 2023 only 1.3GW of capacity was operational out of the tendered 6GW since 2017 (Gumus, 2024[31]).

Finally, remaining administrative and regulatory constraints could be loosened. Experience from other OECD countries shows that establishing a single body responsible for issuing all required licenses or establishing a spatial committee to coordinate the broader electricity network is key to promote investment in renewables. For rooftop solar energy, approval must be obtained from different organisations in Türkiye. As a consequence, it takes 27 weeks from an application for a residential rooftop solar system with one week for the actual installation (Alparslan and Yildirim, 2023[73]). Encouragingly, authorities have identified the permit process as an essential barrier to

renewables deployment and has planned to significantly reduce the pre-license process from 48 months to 18 months along with shortening other procedures (e.g. environmental impact assessments).

3.4. Better managing Türkiye's forests

Forests are essential for emissions mitigation but their role is threatened, in particular by increasing wildfire risks. The annual GHG sequestration from land use, land-use change and forestry (LULUCF) has declined significantly. In absolute terms, it grew from 66.5 Mt CO2-eq in 1990 to reach a peak of 77 Mt CO2-eq in 2014, but eventually decreased to 47 CO2-eq in 2021. The share of non-LULUCF emissions sunk declined steadily from 30% in 1990 to 8% in 2021. This was partly driven by the historically large wildfires in 2021 which burnt a surface four times higher than in any year since 1990, and released 20 million tons of CO2. There has been an increasing trend in burnt areas in recent years. Fires have been responsible for 14% of tree cover loss in Türkiye between 2001 and 2023. More generally, the intensity of forest use increased by 50% between 2019-22 and 2010-18, and is now above the median OECD country (OECD, 2019[7]). Annual tree cover loss has doubled since 2016 (GFW, 2024[74]). While permanent deforestation (excluding wildfires) remains rare, it has tripled since 2016. Land take and recultivation have been higher than most countries in the European Economic Area in the last decade. An ambitious forest strategy will thus be essential both to reduce carbon emissions and adapt to climate change.

3.4.1. Improving the mitigation capacity of forests

Restoring and enhancing the level of emissions sunk by the LULUCF sector will be key to achieve Türkiye's emissions target. In the World Bank's RNZP with significant reductions in emissions in other sectors, the reductions induced by forests and harvested wood products would need to increase by 60% to achieve net zero emissions in 2053. To achieve those goals, Türkiye can rely on a strong institutional governance of its forests. They are largely owned and managed by the government through the General Directorate of Forestry (OGM). Special afforestation requires OGM authorisation and oversight.. All forest areas benefit from a long-term management plan in line with the Sustainable Development Goals, against 83% in Europe and Northern America for example.

Türkiye can pursue the improvement in its accounting of natural capital, especially forests. Previous increases in forest cover have been linked to changing definitions of forests and afforestation. For example, data provided to the FAO included land re-registration, while private forests were underestimated (Serengil and Papageorgiou, 2022[75]). In 2017, the World Bank estimated that 40% of what authorities classified as forests were actually "other wooded land" according to UN definitions, while private forests were 10 times larger than reported (World Bank, 2017[76]). Efforts are under way to improve forest accounting, but more could be done. To improve accuracy, Türkiye's Twelfth Development Plan aims to align forestry statistics with international standards. Although the Twelfth Development Plan also sets a gradual, increasing target to raise the forest coverage from 29.8% in 2022 to 30.3% in 2028, the country could set clear, quantitative objectives for net afforestation and assess forests' vulnerability aligned with its climate adaptation strategy.

Türkiye could focus on restoring degraded forests and reforestation with fast growing species, while limiting deforestation. Over 40% of the forest area is considered degraded. Restoring these forests is cost-effective and can significantly increase carbon absorption (Grafton et al., 2021[77]). The World Bank's RNZP study suggests that preventing net deforestation, reforesting 15 thousand hectares by 2053, and restoring a third of the degraded forests could offset 120 million tons of GHG emissions and compensate unabated emissions in other sectors. The Twelfth Development Plan's objective for industrial afforestation is in line with this scenario, but the proposed increase in forest area is significantly lower. To address this issue and improve forest management and institutional capacity, the OGM has launched the 'Climate Resilient Forests Project' in 2024, focusing on policy development, fire-resistant species, climate-resilient forests, and enhancing wildfire response capacity.

To achieve those objectives, Türkiye should employ a policy package combining regulatory policies and economic incentives. Türkiye has room to extend the range of protected areas: the share of protected land area is currently relatively low and the country has not set a horizon to achieve the Kunming-Montreal target of 30% (OECD, 2023[78]; European Commission, 2024[79]). However, the careful selection of protected areas will be essential. Evidence of past protected areas policies suggest that they have had a minor impact on forest cover on average because the

selected areas are often under minimal pressure from economic development, but that better targeting and strict enforcement yield positive results (Reynaert, Souza-Rodrigues and van Benthem, 2024[80]). Türkiye could also adopt policy tools like taxes, subsidies, and tradable permits (Chhun et al., 2024[81]). Subsidies can take the form of tax credits, tax reductions (e.g. property tax exemptions), or payments for ecological services (PES). For example, Costa Rica has a long-running PES programme to stop deforestation, which provides direct payments to landowners when adopting sustainable forest management techniques (OECD, 2023[82]; UNFCCC, 2020[83]; OECD, 2020[84]). Eventually, forests could be covered by an ETS provided that mechanisms are in place in particular to manage the risks of carbon release (Mendelsohn, Sedjo and Sohngen, 2012[85]; Parry, Minnett and Zhunussova, 2023[22]; Sedjo and Marland, 2003[86]; OECD, 2024[87]). However, as discussed above, the sectoral coverage of the ETS planned by Türkiye has still not been specified.

3.4.2. Reducing wildfire risks

Climate change poses a growing risk of wildfires, which threaten forests and their sequestration power, and generate economic costs. Among OECD countries, Türkiye is particularly exposed: in particular, the share of tree-covered area exposed to very high or extreme fire danger is among the highest across the 52 countries in the International Program for Action on Climate (IPAC) and the share of the population exposed is above the IPAC median (Maes et al., 2022[3]).

The length of the fire weather season has increased by 40% since 1979 and is expected to increase by 30% in a scenario of an increase in 2°C in global temperatures (Jones et al., 2022[88]). Exposure to wildfire risk is high: three quarters of the country's forests are exposed to very high or extreme fire danger, and 17% of the population were exposed to at least one fire between 2017 and 2021 (Figure 3.3). Wildfires have social costs that go beyond direct lives lost and damages to infrastructure and ecosystems. In particular, they present significant long-term health risks: today, wildfire-induced air pollution is associated with 340 000 premature deaths annually in the world (OECD, 2023[89]). In the United States, with a shorter wildfire season, a more limited increase in relative risk, and less population exposure, a recent estimation suggested that the mortality burden from the increase in fine particulates due to climate-induced wildfires would generate annual damages of more than 0.6% of GDP by 2050 (Qiu et al., 2024[90]).

Better management in reforestation and forest restoration can help reduce wildfire risks, along with improved land use, and stronger institutional capacity. The 2021 wildfires in Türkiye highlighted the need for better wildfire prevention and response. The OECD has provided an exhaustive cross-country comparative analysis of recent policy measures implemented by other countries facing similar risks which can support Türkiye's strategy against wildfires (OECD, 2023[89]).

- Implementing modern forest management techniques, for example through prescribed fires and the creation of buffer zones and fuel breaks. Türkiye has already experimented with some of those policies. The Constitution mandates that forests lost to wildfires should immediately be reforested, and the country has started planting fire resistant species in those rehabilitations. It has also built roads to isolate settlements and agricultural lands from forests (San-Miguel-Ayanz et al., 2022[91]).
- Reinforcing land-use planning and building incentives, for example by regulating development in wildfire-prone areas. For instance, Portugal and France ban the construction of new buildings in zones with high wildfire risks. Building codes and standards can also mandate fireproof building designs. Financial incentives through insurance premia or the tax system can encourage wildfire mitigation: for example, the Colorado Wildfire Mitigation Deduction allows owners to claim tax credits for mitigation investments (Sutherland et al., forthcoming[92]).
- Ramping up institutional capacity to manage wildfires with more funding. Türkiye's forest fire management budget is relatively low, although capacity has recently increased since the wildfires of 2021 including investments for helicopters and drones (WWF, 2019[93]). Türkiye already provides important services, e.g. through early warning systems and information sharing across government agencies (World Bank, 2022[94]). It also benefits from international coordination through the European Forest Fire Information System and the EU Civil Protection Mechanism which pools response capacities with the EU and 10 other countries.

The institutional framework could still be improved by promoting a whole-of-government approach to wildfire management, for example by creating a single coordinating body like the Agency for the Integrated Management of Rural Fires in Portugal.

Low insurance coverage makes the population vulnerable to increasing wildfire risks. Insurance can help not only reduce the socio-economic impacts of climate-related events, but also provide incentives for mitigation actions through premia or regulations and contribute to sharing the monetary burden between the public and the private sector. Such mitigation actions can include, for example, risk prevention measures at the property level such as fire-proof roofs and windows or renovations with non-flammable building materials. For example, in the United States, some insurance providers already give a discount on premiums to homeowners undertaking wildfire prevention measures – such discounts are mandated in California via the "Safer from Wildfires" programme. Today, the take-up of insurance in Türkiye is relatively low. For example, in 2022 the penetration of non-life insurance was the lowest in the OECD at 1.1% of GDP. The premiums per person amounted to USD 108, the second lowest in the OECD and 20 times below the OECD average (OECD, 2023[95]). The majority of disaster-related insurance covers earthquakes through Türkiye's Catastrophe Insurance Pool (TCIP, or DASK in Turkish). As a consequence, only around 14% of Türkiye's climate-related total economic losses were insured between 1980 and 2019, and 8% of all natural catastrophe economic losses between 1990 and 2019, lower than most OECD countries (World Bank, 2022[12]; OECD, 2021[96]).

Expanding the existing earthquake insurance system (TCIP) to cover other natural disasters would help. Disaster insurance aims to achieve multiple objectives: achieving broad coverage at an affordable price while being able to cover large losses in a reasonable amount of time. Experiences from European and OECD countries suggest that this could be achieved by mandating insurance against multiple risks as part of standardised products, while providing public reinsurance for catastrophic losses (OECD, 2005[97]; Kuik et al., 2017[98]). In France, private insurers must include insurance against natural catastrophes in property insurance policies. Coverage is funded from a fixed share of all premiums and insurers in turn benefit from government-backed reinsurance through the "Catnat" system. TCIP provides a good starting point to establish a broader system of insurance beyond earthquakes. It is set as a compulsory earthquake insurance scheme for dwellings in municipal areas. It has a simplified premium structure with 15 rating categories based on hazard zone area and the type of dwelling (OECD, 2021[96]). The government provides limited reinsurance on top of TCIP's coverage and households can subscribe to private insurance above the TCIP threshold. For this reason, it is particularly welcome that the government is planning to expand the scope of TCIP to include most natural disasters, and include rural areas, which are currently excluded from coverage. The regulation regarding this Compulsory Disaster Insurance, which was outlined in the Medium-Term Program, is expected to be implemented in 2025.

Raising public awareness of disaster risk and providing more information would also help insurance take-up, incentivise adaptation investment, and ensure than insurance premiums reflect the actual risk. Türkiye already provides detailed geographical information on wildfire risks. Some countries in the OECD have started implementing programmes to add information on disaster risk at the time of a rental of purchase transactions, as is usually done for energy performance. This could be part of a certificate programme: for example, Germany's Hochwasserpass includes a flood risk assessment and recommendations for additional precautionary measures. In the United States, the Boulder County's Wildfire Partners program provides certificates after a free home assessment, which can be used to subscribe to insurance. Additional regulations could then complement the broader insurance system: In California, the "Safer from Wildfires" programme legally mandates insurance providers to reward wildfire prevention efforts undertaken by insured individuals by reflecting these in risk scores and giving corresponding discounts on insurance premiums (OECD, 2023[89]).

Table 3.3. Recommendations

MAIN FINDINGS	RECOMMENDATIONS (Key recommendations in bold)
Improving the institutional framework for emissions reductions	
Greenhouse gas emissions are still growing and the government expects them to peak by 2038. The government has not presented a sectoral breakdown of a plan to achieve its 2053 net zero target. The Climate Law announced in 2023 has been introduced in Parliament on February 20th 2025 but has yet to be approved. Türkiye has adopted green budgeting, but the process is still at an early stage.	Develop long-term projections and scenario analyses for demand and supply across all energy sources on a sector-by-sector basis. Swiftly implement the Climate Law once approved. Expand green budgeting methods by developing green tagging and reviewing tax expenditures.
Implementing an effective carbon price	
Carbon is only taxed indirectly, mostly via fuel taxes. Fewer than a fifth of emissions are effectively priced above EUR 30 per ton. Fossil fuel subsidies remain significant, in particular for coal. An ETS is scheduled to be set in 2025.	**Implement an ETS as announced and provide support for green investment and social transfers to compensate groups vulnerable to the green transformation.** **Transition away from fossil fuel subsidies, replacing them with targeted social support, as necessary.**
Transitioning away from the use of coal in energy production	
Two-thirds of energy consumption is based on energy imports, mostly from fossil fuels. Electricity is mostly powered by coal and natural gas. Türkiye plans to expand coal capacity in absolute terms despite higher costs and high dependence on a narrow set of partners for imports. Air pollution-related mortality is the highest in the OECD.	**Develop and swiftly implement a plan to transition away from coal.** Set a tight emissions intensity limit for new power plants. Introduce an enforceable (e.g. via fines) threshold for fine particulate emissions and consider tightening thresholds for other air pollutants.
Accompanying workers and places vulnerable to the green transition	
Some regions and workers are vulnerable to the transition away from coal and brown energy. Rigid labour market regulations, an expensive severance pay system, and low unemployment insurance coverage hamper labour reallocation. The green transition in general, and the transition away from coal in particular, may exacerbate skills mismatches, shortages, and the need for reconversions.	Develop a skills assessment and anticipation exercise for the green transition. Facilitate the reallocation of workers to green employment through active labour market policies. Condition financial support for place-based policies on the establishment of long-term regional plans. Increase the number of persons receiving job counselling services. Shift social protection from the severance pay system to a broader-based unemployment insurance.
Supporting the deployment of renewable energy	
The pace of solar and wind installations has slowed down. Wind and solar investment are incentivised by feed-in tariffs (FiTs), including YEKA which allocates capacity via auctions. Increase in solar capacity has mostly been driven by small scale infrastructure. Price signals are better incorporated in feed-in premiums (FiPs) or contracts for differences (CfDs) relative to FiTs.	**Focus on auction-based support schemes to support the deployment of renewable energy, and replace FiTs by market-based instruments like FiPs or CfDs.** Increase the size of allocations under the YEKA feed-in tariff and support large-scale solar and faster wind deployment. Establish a single body to issue installation licenses.
Improving the management of forests	
Forests have degraded in recent years, and are used more intensely and have sunk less emissions than in the past. Recent statistics on forests are not necessarily aligned with international definitions. The share of land and maritime protected areas is relatively small.	Continue aligning the definition of forests with international standards. Increase further the objective of forest coverage and provide a clear schedule for achieving it. Extend protected areas with careful enforcement and targeting towards selected areas under heavy pressure from economic development. Consider implementing a payment for ecosystem services, a feebate on forest emissions, or introducing forests in the ETS.
Reducing exposure and vulnerability to wildfires	
Forest wildfires have become more likely because of climate change and a large share of forests and of the population are exposed. Land take has been relatively high in the last decade. Disaster-related insurance coverage in Türkiye is low and focused on earthquake risks. The government has announced plans to extend compulsory insurance to other natural disasters.	Implement active management of vegetation accumulation including prescribed fires. Restrict construction in high-risk areas through regulation or financial incentives. **Implement disaster-insurance coverage beyond earthquakes as planned, and increase the coverage threshold, while ensuring that premiums remain contained.**

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4 Completing the transition to a competitive and innovative economy

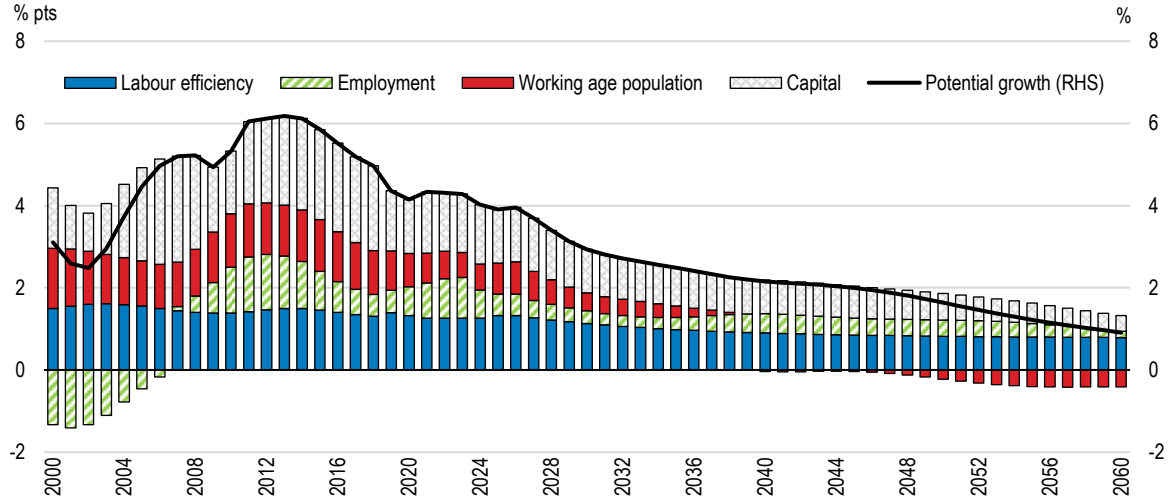
Türkiye's traditional growth drivers, based on factor accumulation, will be limited since investment levels are already high and the demographic dividend is set to fade. Future growth will depend on higher productivity growth, but productivity has slowed in recent years and remains below the OECD average, undermining international competitiveness. The economy remains specialised in medium-tech sectors and lacks competitiveness in high-skilled manufacturing and services. A successful continuation of economic convergence will require improving the performance of the innovation system by boosting the diffusion of new technologies, for example through better research-business collaborations. In addition, the distribution of workers' skills could be improved. Reducing barriers to high-quality lifelong learning would support the employability of older adults, while skills mismatches could be tackled by providing incentives for universities to better align their programmes to labour market needs, and by reducing the emigration of skilled workers. Finally, easing the significant barriers that remain to business dynamism, in particular through large interventions of the state in business activities, would boost productivity, FDI, and competitiveness.

4.1. Productivity will have to improve to continue the convergence process

The next stage of economic convergence will require boosting productivity, enhancing competitiveness, and bolstering services exports. Improving Türkiye's growth prospects will require boosting total factor productivity growth, as the ability to grow through more capital and labour is shrinking. In general, growth can rely on increasing labour and capital inputs, or improving the efficiency in using these inputs. Over the last decades, Türkiye has benefited from a young population and relatively high capital accumulation (Figure 4.1) .There is still potential to increase women's employment (see Chapter 2). However, growth in the working age population is expected to decline steadily over the next 25 years (see Chapter 1). Consequently, margins to increase GDP through additional labour input will gradually narrow. The potential for further capital accumulation is also limited. The investment rate in Türkiye is already high relative to OECD countries: in 2022, fixed capital formation relative to GDP was 30% higher than the averages in Europe and the OECD. As a consequence, sustaining dynamic economic growth in the future will largely depend on improving productivity growth.

Figure 4.1. The potential growth will slow as capital and labour accumulation weakens

Contributions to potential output growth



Source: OECD calculations based on OECD Economic Outlook No. 116 long-term database.

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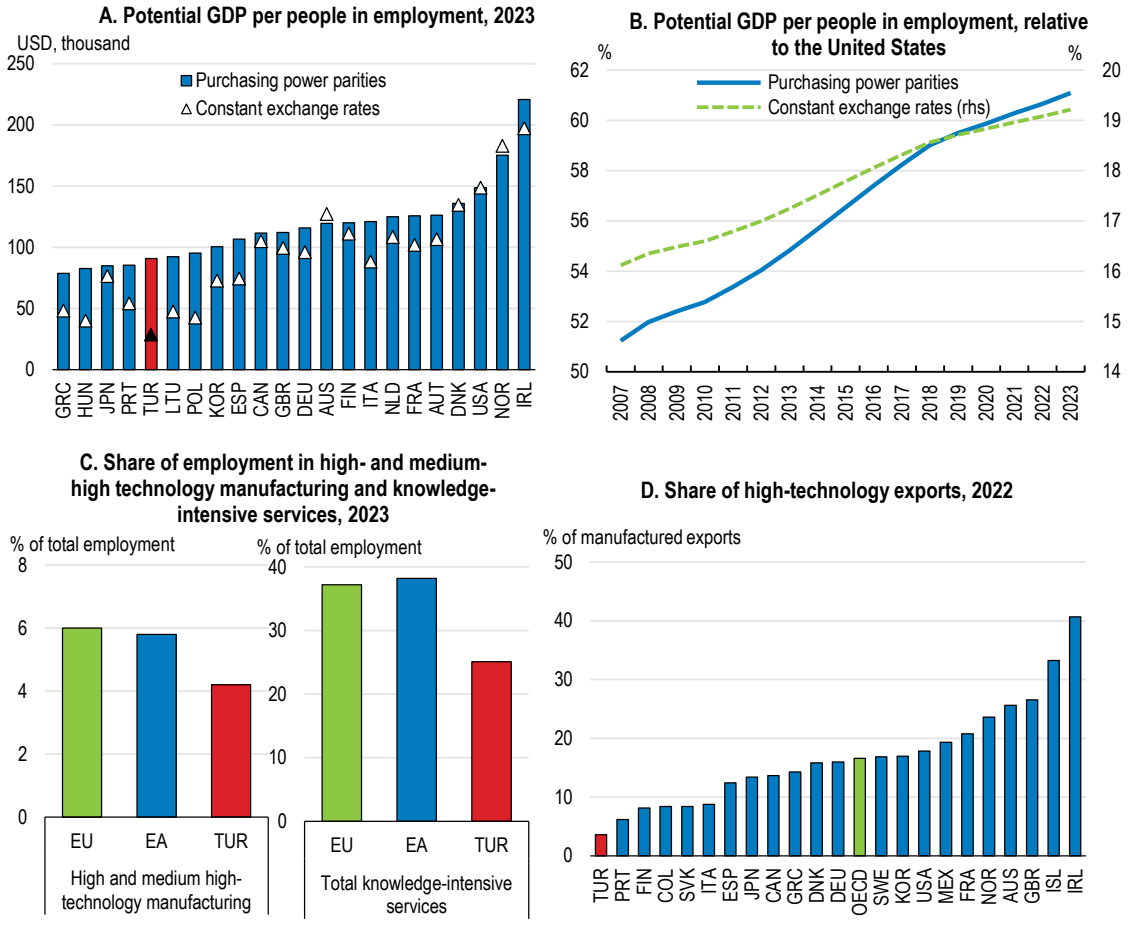
GDP per employed person has increased faster in Türkiye than in other OECD countries in the past two decades, and in 2022 it was around the median of OECD countries when measured at purchasing power parity. However, the convergence process has recently slowed down and improvement in recent years has partly reflected imbalanced growth as discussed in Chapter 1. Indeed, when productivity is measured in terms of potential GDP per employed person, the convergence process has slowed down in recent years and productivity levels remain lower today than in other OECD countries (Figure 4.2, panel A and B). Low productivity within each sector has been the main factor behind the aggregate productivity gap vis-a-vis other OECD countries. The educational attainment of the workforce is still particularly low compared to other OECD countries. Investment has been flowing into less productive areas such as housing, while the share of investment in intellectual property products (around 10% of domestic fixed capital formation) has been half that of Europe (around 20%) over the last decade. Over the past 20 years, total factor productivity growth has been slow and has contributed less to growth than in similar countries (Dincer, Eichengreen and Tekin-Koru, 2022[1]; Rab et al., 2019[2]; Yilmaz, Yasar and De Rosa, 2017[3]; OECD, 2023[4]; Acemoğlu and Üçer, 2020[5]; Sevinç et al., 2022[6]). Related to that, the economy remains specialised in relatively lower tech sectors. For example, the share of workers employed in skill-intensive manufacturing and services jobs remains one-third lower than in Europe (Figure 4.2, Panel C and Rab et al. (2019[2])).

Further development will require improving productivity, particularly in services sectors. Higher productivity will help shift Türkiye's competitive edge from industries relying on low-cost labour to higher value-added production. This will allow to continue increasing wages durably and thus improving living standards. Today, Türkiye's lack of competitiveness in these high-skilled manufacturing and services industries is reflected in the relatively low level of its exports' technology intensity (Figure 4.2, Panel D). The share of high-technology exports in manufactured exports is particularly low, around 3.5% over the last 12 years against more than 20% in upper middle-income countries. However, progress has been made recently: the share of medium-high technology exports has increased from 32.2% in 2015 to 37.5% in 2024 and in recent decades Türkiye has gradually upgraded into advanced manufacturing (World Bank, 2022[7]). In services, transport and tourism represent around 80% of exports against less than half on average in OECD countries. Further upward integration into global value chains (GVCs) will require technological progress, workforce upskilling, and structural reforms to respond to global demand (OECD, 2023[4]).

Figure 4.2. Productivity is still low and the economy concentrates on production with relatively lower value added



Note: In Panel A and B, data are converted in USD at 2021 purchasing power parities and 2021 exchange rates. In Panel D, unweighted average of 38 countries for the OECD aggregate.
Source: OECD (2024), OECD Economic Outlook 116 database; Eurostat; and World Bank World Development Indicators.

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This chapter discusses how Türkiye can boost total factor productivity growth and ensure a continued rise in living standards while improving competitiveness to boost manufacturing and services exports. Increasing productivity growth will require a three-pronged strategy: (i) encouraging innovation and promoting the adoption of new technologies, (ii) enhancing the skills of current and incoming workers, and (iii) reducing barriers to business dynamism, notably through trade openness.

4.2. Encouraging innovation and promoting the adoption of new technologies

Technological advancement and innovation can help unlock potential productivity gains and enable companies to gain a competitive edge in the international market (OECD, 2024[8]). However, the performance of the innovation system in Türkiye significantly lags behind that of its European peers (European Commission, 2024[9]). Although public and private investment in R&D activities in Türkiye has increased significantly over the last decade, it remains at almost half of the OECD average (Figure 4.3). This is reflected in relatively weak innovation outcomes. Only one-third of Turkish companies reported introducing an innovation in 2018-2020, compared to around half of the companies in the average OECD country (OECD, 2024[10]). Business-based R&D in Türkiye, resulting in patent applications with international significance, is relatively weak. Moreover, innovative outcomes are weak relative to spending, suggesting inefficient use of resources. Indeed, the number of patent applications relative to business-based R&D spending is among the lowest across OECD countries (see Figure 4.3, Panel C). Similarly, Türkiye's performance in other intellectual property indicators, such as trademarks and design applications, is considerably lower than the EU average (European Commission, 2024[9]). In some areas, though, the country is showing promising development, such as design applications and trademark registrations. This reflects growing awareness of the importance of intellectual property protection. Despite relatively lower patent applications compared to R&D spending, Türkiye is making progress in strategic sectors, including defence and high technology, where notable international patents have emerged. As a result, Türkiye performs relatively well compared to other middle-income countries and was one of only four other middle-income economies among the top 40 Global Innovators in 2024 according to the World Intellectual Property Organization's office (WIPO, 2024[11]).

Innovation and the diffusion of new technologies depend on both firms' capabilities and incentives. To promote innovation among Turkish companies, the authorities need to make (i) government support more targeted and efficient and (ii) promote wider adoption of new technology among Turkish companies by promoting collaboration between research institutions and companies.

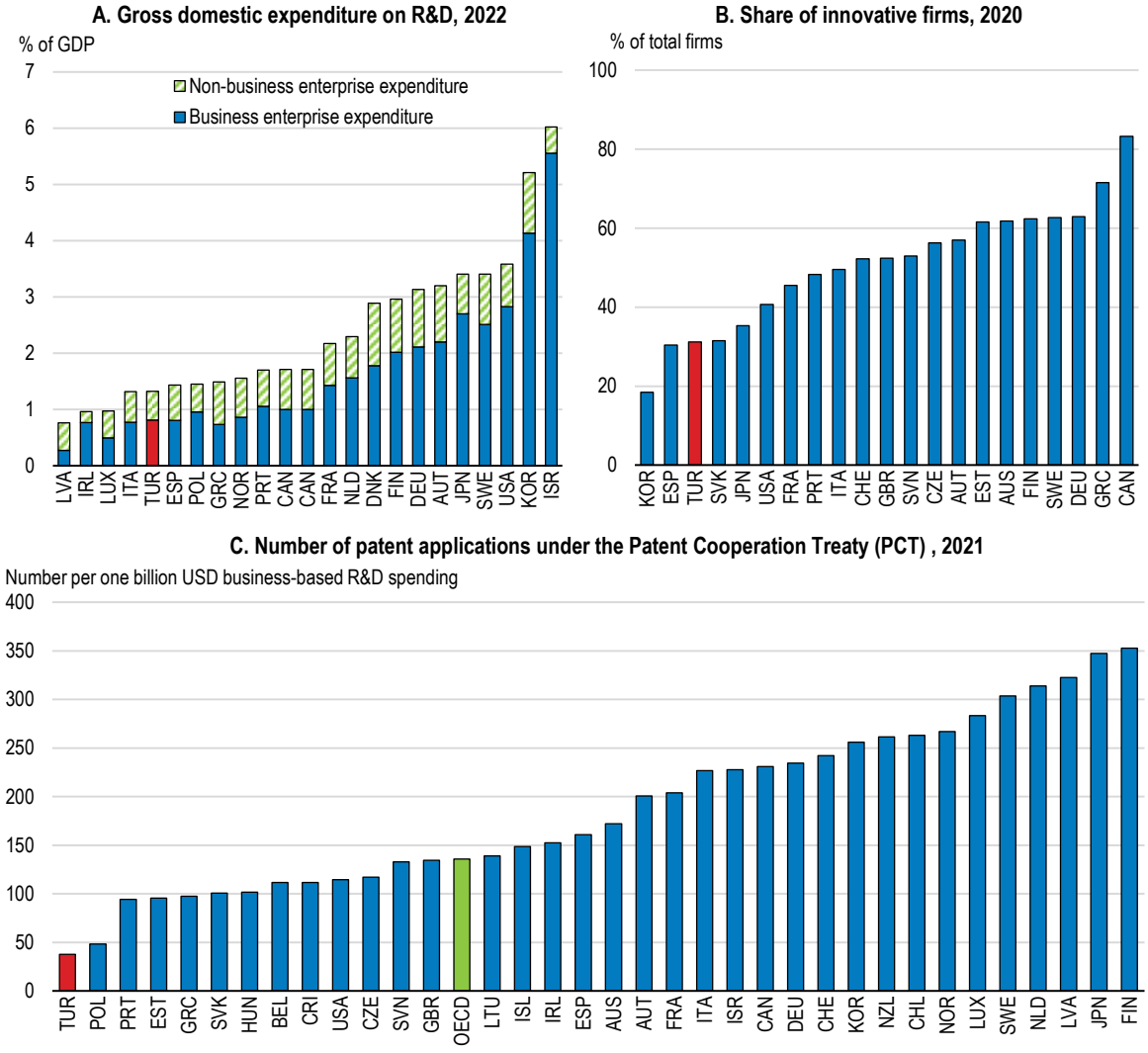
4.2.1. Government support for R&D should become more targeted and efficient

The government has already recognised these challenges and has significantly increased its efforts to improve the innovation system in Türkiye, supported by numerous government initiatives and investments in this area. Indeed, overall government support for R&D has increased from 0.03% of GDP in 2006 to almost 0.23% in 2021, around the OECD average. This support consists of direct funds, tax incentives (see Box 4.1), and assistance through public procurement.

Direct funding of R&D is at the OECD average, and the government has rightly made a steadfast commitment to enhancing its research capabilities. In addition, there are a number of institutions providing grants through universities and other public and private organisations, supporting researchers with scholarships and awards. In recent years, new measures have been introduced to expand mission- and project-based grants. For example, the electric car "TOGG" received substantial investments through the project-based investment incentive program, including allocated land free of charge for the investment project.

Expanding research grants is a step in the right direction, but more needs to be done in terms of evaluating these programmes. Türkiye has recently built up a broad system of impact assessment for support programmes, and most programmes aimed at fostering technology-based entrepreneurship and innovation are evaluated for economic impact. Since 2021, the Scientific Technological Research Institution of Türkiye (TÜBİTAK), a national institution within the Ministry of Industry and Technology, has been implementing a Commercialisation Monitoring Process for supported projects through its Technology and Innovation Support Programs Directorate (TEYDEB). In addition, the Directorate General for State Aids of the Presidency of Strategy and Budget also monitors and evaluates the effective implementation of government support programmes conducted by the Ministry of Industry and Technology's Impact Assessment Department and TÜBİTAK. Assessments and evaluations can be further expanded. One approach could be to adopt a system based on the experience of the Research Excellence Framework (REF) in the United Kingdom, which helps identify good practices and challenge areas, and assesses both the quality of scientific contributions and their social impact. Under this framework, institutions are required to submit "R&I impact case studies" demonstrating the impact of their R&I activities on wider society (OECD, 2023[12]; OECD, 2019[13]).

Figure 4.3. R&D expenditure and innovation are weak in Türkiye



Note: In Panel B, OECD calculations based on the 2023 OECD survey of national Innovation Statistics and Eurostat Community Innovation Survey (CIS-2020).

Source: OECD (2024), Main Science and Technology Indicators (MSTI database), July; and OECD 2023 Innovation Indicators Dataset, based on the 2023 OECD survey of national Innovation Statistics and Eurostat Community Innovation Survey (CIS-2020).

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In addition to direct funding, Türkiye is also using tax incentives to promote R&D (Figure 4.4). In general, R&D tax incentives and direct funding are equally effective in raising business R&D investment, and small, credit-constrained R&D performers tend to show a greater responsiveness to R&D tax support (OECD, 2023[14]). However, they are more effective at boosting investment towards incremental development than more transformational, higher spillover-potential knowledge (OECD, 2024[15]). Empirical evidence in Türkiye confirms that R&D tax incentives in the country increase business sector R&D intensity, but their effectiveness is limited, and government funding partially substitutes business investment in R&D which would have happened nonetheless (Tas and Erkan, 2024[16]). These findings suggest that there is room for better targeting R&D support to firms with higher innovation capabilities and growth potential. Evidence from OECD countries shows that R&D tax credits primarily favour incumbent firms rather than start-ups. Cash refunds, which could benefit start-ups, should be considered to strengthen the effectiveness of R&D tax credit incentives in Türkiye. Indeed, a new policy design analysis suggests that firms' responsiveness to tax support is nearly twice as large when refund provisions are available, and three times as large when tax incentives are redeemable against payroll taxes and thus disconnected from the profit

situation of firms (OECD, 2023[14]). As payroll taxes are also typically payable at a more frequent basis, such incentives allow for quicker and more regular tax relief payments than corporate tax offsets. For these reasons, payroll tax offsets may have a bigger effect on business R&D expenditure than other corporate tax offsets. The effect of tax incentives on experimental development is found to be more than three times as large as the effect on basic and applied research (OECD, 2023[14]).

Box 4.1. Türkiye's innovation support system

The Twelfth Development Plan of Türkiye outlines the country's strategic vision for research, development, and innovation, emphasising the importance of the green and digital transformation to enhance global competitiveness and achieve sustainable development goals. The plan highlights critical technologies, including Artificial Intelligence, Internet of Things, Big Data, Quantum Technologies, Cybersecurity, Advanced Materials, Robotics, Micro/Nano/Opto-electronics and Chips, Biotechnology, Hydrogen Technologies, Genome Editing, and Next-Generation Nuclear Reactors. These technologies are identified as enablers for achieving sustainable development goals, addressing global challenges such as climate change and the energy transition, and supporting Türkiye's long-term economic and social development.

Direct funding

Selected grant schemes:

- The Scientific and Technological Research Council of Türkiye (TÜBİTAK) is a major funding source of R&D and innovation support programmes in the country. The number of R&D project applications went from 260 in 2001 to 3035 in 2023. Beyond its role as a funding agency, TÜBİTAK plays a pivotal role in strengthening Türkiye's national R&D and innovation ecosystem through its research centres and institutes, which focus on conducting research and developing technologies in strategic areas. Operating across a broad spectrum of activities, including university-industry collaboration, fostering the entrepreneurship ecosystem, supporting high-technology platforms, and advancing artificial intelligence projects, TÜBİTAK aims to enhance Türkiye's global competitiveness and contribute to achieving sustainable development goals.
- Türkiye participates in international funding programmes, such as the EU's Horizon Europe Research and Innovation Funding Program.
- The Turkish National e-Science e-Infrastructure (TRUBA) in Türkiye provides high-performance computing and data storage to research institutions and researchers.

The Ministry of Treasury and Finance (MoTF) has implemented two programs to foster innovation and support high-growth, technology-driven ventures that face financial access challenges. First, it has established Fund of Funds, including the Turkish Growth and Innovation Fund (TGIF) and the Development and Investment Bank of Türkiye Fund of Funds. Second, it includes direct resource transfer to venture capital funds, through the Tech-InvestTR Venture Capital Support Program in cooperation with TÜBİTAK. These initiatives drive investment in venture capital funds targeting SMEs and startups in strategic, innovation-focused sectors, aligning with national development plans.

Tax incentives

Income based tax incentives for R&D and innovation:

- Technology development zones regime: CIT exemptions in Technological zones (for profits derived from the software activities or products developed as a result of the R&D activities).
- 5/B regime**:** Corporate income tax exemption for 50% of income from inventions and software development attributable to R&D performed in Türkiye.
- Income tax exemption - Income exemptions (100%) on salaries of R&D, design, and support personnel on 'supported programs' declared by the Ministry or activities in techno parks.

Expenditure-based R&D tax incentives:

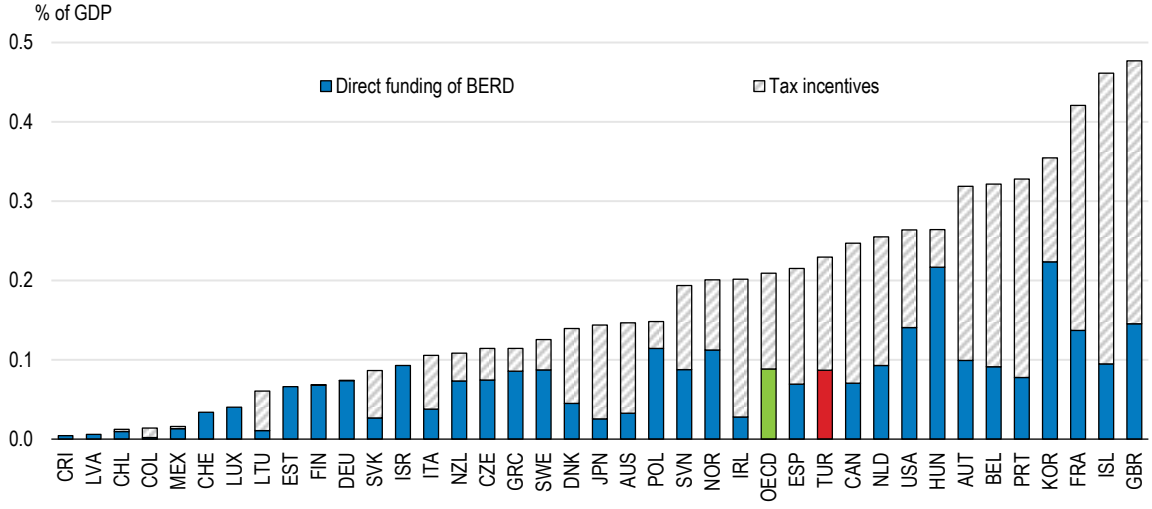
- R&D tax allowance: Incremental R&D expenditures above the previous year level of R&D spending can be deducted at a rate of 50% from the CIT base.
- Social security premium support (50%) - Half of the employer portion of social security premiums for R&D, design, and support personnel (with a ceiling) will be funded by the MoF.
- Accelerated depreciation of R&D capital assets.
- VAT exemption on machines and equipment acquired for R&D and design activities.

Türkiye should also evaluate the effectiveness of its so-called "patent box" (Regime 5/B). The patent box allows companies to apply a lower rate of corporation tax to profits earned from patented inventions. While this scheme supports local firms and SMEs, contributing to enhanced innovation and research, there are concerns that patents are likely to accrue mainly to multinational firms. Patent boxes may push firms to focus on innovations that lead to outcomes susceptible to protection by IP rights, thereby distorting the focus towards more applied research on products closer to market introduction (Akcigit, Hanley and Serrano-Velarde, 2013[17]; Appelt et al., 2016[18]). Moreover, patent boxes could distort firms' incentives to protect its intellectual property, encouraging firms to apply for patent protection when they might not have done so in the absence of the measure.

Innovation could be supported by easing access to new sources of capital. Currently, equity financing is low in international comparison and venture capital expenditures are among the lowest in Europe relative to GDP (European Commission, 2024[9]). Empirical research confirms that ensuring easier access to equity capital is essential for innovation, especially for young firms. Access to equity capital is also associated with higher MFP growth for firms below the productivity frontier (Corrado et al., 2021[19]; Andrews, Adalet McGowan and Millot, 2017[20]). OECD research confirms that the productivity of Turkish companies would benefit from increasing the availability of venture capital (Sorbe et al., 2019[21]). Some remaining distortions implied by corporate taxation disincentivising investment financed by equity could be eased. For example, Türkiye has reduced the debt-bias in the corporate tax system by introducing in 2015 an allowance for corporate equity via a notional interest deduction on half of newly-issued equity. As discussed in the 2021 OECD Economic Survey of Türkiye, this allowance could be raised and extended to retained earnings (OECD, 2021[22]). More generally, continuing efforts which lower risk premia, such as the recent amelioration in the predictability of the macroeconomic policy framework (see Chapter 1) and improvement in the economic institutions, will help to stimulate the demand for equity capital, thereby reducing the reliance on debt to finance capacity-enhancing investments.

Figure 4.4. Government support for business R&D expenditures is at the OECD level

Direct government funding and tax support for business R&D, 2021



Note: Data on government tax relief includes subnational tax support for Canada, Hungary, and Japan.
Source: OECD (2024), OECD R&D Tax Incentives Database, https://oe.cd/rdtax, July 2024.

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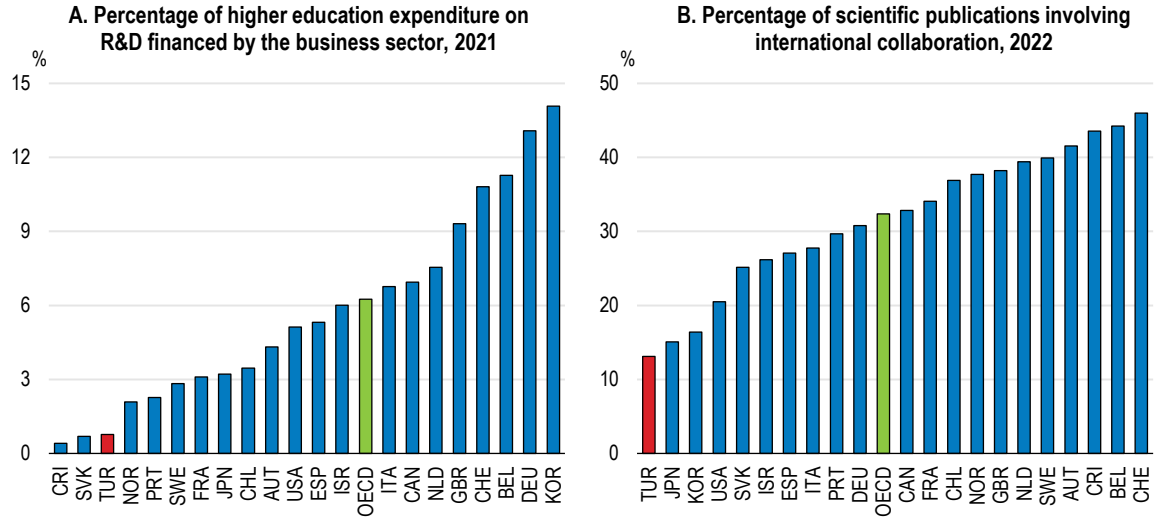
4.2.2. Promoting knowledge transfer and technology diffusion

Despite relatively generous government support, there is only limited adoption of new technology among Turkish companies. More needs to be done to promote links between research activities and broader technology adoption.

One important way to promote technology diffusion is to involve the business sector in the innovation process. This makes research more applicable, increases the chances of successful adoption, and aligns scientific progress with industry or societal needs. However, despite several support programmes such as the University-Industry Cooperation Support Program, collaboration between science and business is an area that Türkiye needs to develop further. Only around 0.8% of higher education expenditure on R&D is funded by businesses, one of the lowest rates in the OECD (Figure 4.5, Panel A). Additionally, the low rate of innovative SMEs collaborating with others and the low number of public-private co-publications indicate a significant gap in research collaboration between the public sector and private enterprises (European Commission, 2024[9]). In 2024, public-private co-publications per capita were only one-tenth of the European average. Furthermore, international research collaboration, which can provide opportunities for firms to absorb the latest technologies and scientific knowledge from the global frontier, is also weak (see Figure 4.5, Panel B).

Programmes that promote research-business collaboration should be expanded. Empirical research identifies financial support as one of the main barriers hindering university-industry collaboration in Türkiye (Kleiner-Schaefer and Schaefer, 2022[23]). Financial support can help improve companies' absorptive capacities, enabling them to make better use of external technologies. While there are already programmes in Türkiye that promote collaboration (Box 4.1), their share needs to be expanded (RIOT, 2020[24]). One example of an effective science-industry program is Austria's COMET Competence Centre Programme, which funds cooperation between science and industry and makes a significant contribution to the innovative output of the companies involved (Dinges, 2015[25]).

Figure 4.5. University-Industry R&D and international R&D collaboration is low



Note: In Panel A, OECD estimate for the OECD aggregate (see the documentation on MSTI for details). In Panel B, unweighted average for the OECD aggregate.
Source: OECD (2024), Main Science and Technology Indicators (MSTI database), July; and OECD calculations based on Scopus Custom Data, Elsevier, Version 1.2024, April 2024.

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Another way to incentivise such cooperation and collaborative research projects is through performance contracts in higher education institutions (HEIs). These contracts set performance targets and tie a portion of block funding to reaching those targets, aiming to promote knowledge transfer by providing incentives for universities and public research institutions to engage with industry and commercialise research results. The share of block funding subject to performance contracts varies from 1% in Denmark and 4% in France to 7% in Latvia and the Netherlands, and up to 94-96% in Austria and 100% in Finland (OECD, 2019[26]). For example, in Austria, the government uses a "funding cooperation indicator", which allocates funds to projects that aim to increase universities' cooperation activities. These funds are competitively allocated; universities must apply for the money to fund up to one-third of the costs of projects designed to strengthen collaboration/cooperation (CHEPS, 2015[27]).

In the OECD, new policy approaches to promote science-industry links are shifting toward a more interactive, longer-term model of knowledge "co-creation" that involves multiple stakeholders from industry, civil society, research, and government and aims to solve broader societal challenges (OECD, 2019[28]). For example, collaborative laboratories in Portugal integrate activities of research institutions and private companies, while the French LabCom programme supports the establishment of joint labs for universities/PRIs and firms (OECD, 2019[26]).

Another important tool for promoting knowledge transfer between academia and business is the mobility of human capital. This involves creating conditions for two-way mobility, allowing researchers to temporarily join the private sector and business sector researchers to participate in university activities. This mobility is important, as OECD research has confirmed that start-up firms founded by students or academics significantly contribute to the commercialisation of knowledge developed through public research (OECD, 2019[26]). Academic entrepreneurship is a significant component of innovative entrepreneurship. Türkiye provides incentives to promote mobility and knowledge transfer from academia: for example, 95% of the salaries of design and support personnel with PhD or a master's degrees in fundamental science working in R&D centres and technology development zones are exempt from income tax through the Law on Supporting Research, Development, and Design Activities. Approaches like the Sector on Campus Program also promote collaboration between universities and the private sector by having credit-bearing courses taught by industry experts. However, more needs to be done to foster mobility, as more than 95% of researchers with a doctorate remain working in universities. This is in sharp contrast with countries like Austria or Korea, where one-third of researchers with a doctorate work in the business sector (OECD, 2023[29]).

OECD countries have implemented various measures to promote researchers' mobility, including industrial PhD programmes based on joint supervision and co-financing; sabbatical periods for professors; professional secondments for university professors; and adjunct professorships for industry professionals. Türkiye's Industrial PhD Fellowship Program, which provides fellowships for PhD students and employment grants for the private sector, could be expanded. For example, Portugal launched a contract for the legislature 2020-2023, with the expectation that at least 50% of new doctorates by 2030 will be carried out in 'co-work' environments with a diverse range of public and private institutions (OECD, 2023[29]). This program aims to promote the professionalisation of researchers in academia. Norway has developed a new national strategy for recruiting researchers and career development with a strong emphasis on intersectoral mobility, including schemes to increase cooperation between academia and industry (OECD, 2023[29]).

Another significant barrier to university-industry collaboration according to Turkish companies is a lack of information, as firms have insufficient knowledge about collaboration opportunities (Kleiner-Schaefer and Schaefer, 2022[23]). Türkiye has in place incentives such as the Infrastructure Information System (LABS), which provides information about laboratories, and the University-Industry Collaboration Centers Platform (ÜSİMP), which works to transform industries into technology producers and exporters while facilitating closer ties between academia and industry. Established in 2007, ÜSİMP aims to foster collaboration and technology transfer, but many firms remain unaware of the potential benefits of engaging with academic institutions. More generally, this lack of information calls for increased attention to technology transfer offices (TTOs) in Türkiye, which are intermediary organisations placed in universities to implement knowledge transfer policies. Their numbers should be expanded and complemented by digital platforms that promote and organise interactions among different actors—facilitating matchmaking between academic and industry partners (OECD, 2019[26]). Other tools include strengthening outreach activities to raise awareness, such as conferences and seminars. Networking events, such as workshops and fairs where firms can express their technology needs and scientists can present the results of their research, can also help promote collaborations.

Another potential tool to better transfer knowledge to companies is the open innovation approach, which allows firms to use external knowledge and external paths to market to advance and commercialise their technology. This approach will create a level playing field among firms in accessing relevant data, as data portability has the potential to boost competition and foster data-driven innovation. Evidence from current initiatives across OECD countries suggests that coordinated efforts and the establishment of common standards facilitated by governments can promote the adoption of data portability (Reimsbach-Kounatze, 2024[30]).

4.3. Enhancing the skills of current and future workers

Empirical analyses across countries show that skills are at the forefront of successful innovation and technology adoption (Andrews, 2017[31]). Qualified personnel help innovative firms expand R&D, collaborate with research institutions, and maximise the returns on innovation.

Türkiye has made significant progress to improve the skills of the future workforce as tertiary education participation has been increasing significantly. Still, many challenges lie ahead. According to the European Innovation Scoreboard, Türkiye lags behind other countries in its human resources (European Commission, 2024[9]). Turkish companies in the survey also confirmed that human resources represent a major challenge for successful digital transformation and technology diffusion (Gajo and Akyuz, 2023[32]). The number of tertiary-educated graduates is increasing steadily but it remains relatively low and their skills do not fully reflect labour market demand. A relatively large number of educated individuals leave Türkiye each year. The country's access to a workforce with digital skills beyond basic proficiency is significantly lower than in other EU countries, and it lacks ICT specialists (European Commission, 2024[9]). Participation in lifelong learning can be further strengthened given that current trends in Türkiye suggest that in order to ensure the country's talent transformation, 21.1 million workers will need to improve their skills in the face of new technological trends (McKinsey, 2020[33]).

4.3.1. Better matching graduates' skills with labour market demand

Tertiary education is essential for stimulating the adoption and improvement of technological innovations in an increasingly knowledge-driven global economy. Tertiary educational attainment in Türkiye remains low compared to many other OECD economies (OECD, 2024[34]). Higher earnings for tertiary-educated workers suggest the need

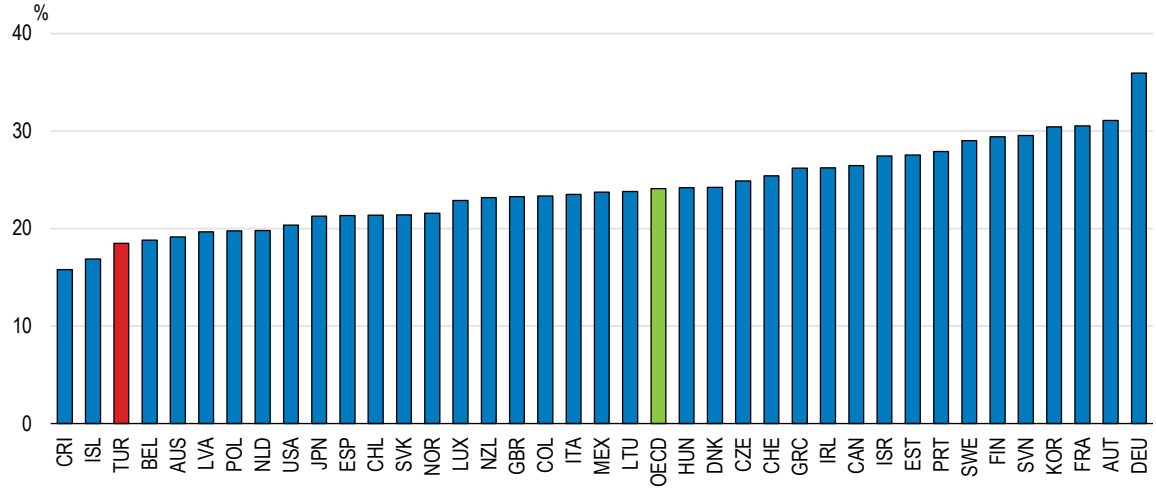
for more graduates with higher education. The relative earnings of tertiary-educated workers compared to those with below-secondary education is around 50% higher, close to the OECD average (OECD, 2024[35]). Additionally, the share of occupations requiring at least a college degree is estimated to increase by at least one percentage point, corresponding to an additional 1.6 million tertiary-educated graduates needed by 2030 (McKinsey, 2020[33]).

Improving the quality of graduates and aligning their skills more closely with labour market needs can importantly complement efforts to increase the number of graduates. Türkiye has significantly increased the number of graduates since 2006, partially satisfying demand, but also leading to higher mismatches. Some empirical research suggests that the sharp increase in university graduates has resulted in a high likelihood of mismatch, especially among recent graduates (Ege and Erdil, 2023[36]). Efforts are currently under way to address the issue. The new skills transitions are currently prioritised by the Higher Education Council and the higher education system has recently been updated at the programme level to enhance digital and green skills in particular. Türkiye is pursuing initiatives to improve graduates' skills levels and reduce skills mismatch through programmes such as METEK III, funded jointly by the EU and Türkiye, which focuses on improving vocational education for example by setting up quality assurance boards in 25 provinces and broadening vocational teacher training. An interesting example in this regard is the recent reform of vocational education in Spain in 2022 which enabled flexible educational pathways from micro-trainings to specialised certifications, encouraged the recognition of past professional skills acquired through work experience to advance workers' qualifications, emphasised career guidance, and promoted international mobility for vocational graduates (OECD, 2023[37]). Initial results suggest that the reform has led to a significant reduction in youth unemployment and sped job entry for new graduates.

Around half of all tertiary enrolments are in short-cycle courses provided by vocational and technical tertiary institutions, which are perceived to be of lower quality and status than bachelor's programmes (Kitchen, H. et al., 2019[38]). A relatively low share of tertiary graduates holds degrees in natural science, mathematics, ICT, and engineering (STEM) fields (see Figure 4.6). In 2022, around 70% of companies in Türkiye reported difficulties finding the talent they need, particularly in the IT sector (Manpower, 2022[39]). In contrast, Türkiye has one of the highest shares of students in the arts and humanities among OECD countries and a large proportion studying humanities, business, administration, and law (OECD, 2024[40]). However, as noted in the previous OECD Economic Survey of Türkiye, these study choices do not align well with employment outcomes. For example, more than 60% of business management graduates earn only around the minimum wage (OECD, 2023[4]). Türkiye has the largest skills gap for workers with tertiary education among OECD countries. There is a persistent mismatch between the skills acquired in the education system and the requirements of the labour market, especially those relevant to digital transformation (European Commission, 2023[41]).

Figure 4.6. Türkiye's share of STEM graduates is low

Share of tertiary education graduates in fields of natural science, mathematics, ICT and engineering, 2022



Note: Tertiary education graduates cover those with bachelor's, master's and doctoral or equivalent degrees.
Source: OECD (2024), "Education at a Glance 2024: OECD Indicators".

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These mismatches have negative consequences for the Turkish economy. Empirical research by the OECD confirms that higher skills mismatches are associated with lower labour productivity due to a less efficient allocation of resources, as more productive firms find it more difficult to attract skilled labour at the expense of less productive firms (Adalet McGowan, 2015[42]). At the individual level, it affects job satisfaction and wages, with earning penalties for mismatched workers in Türkiye being among the highest in the OECD. Overqualified workers in Türkiye earn around one-fourth less than well-matched workers with the same qualifications (OECD, 2017[43]). Tertiary education must therefore ensure that graduates develop the skills needed in the labour market to maximise the return on their human capital investment.

One way forward is to influence students' field of study choices by providing high-quality data and analysis about graduate labour market outcomes. Türkiye has already made significant progress in this regard. The "Mesleğim Hayatım Projesi" (My Job, My Life Project) carried out by the Ministry of National Education provides relevant information. Moreover, an innovative online tool developed by the Human Resource Office of the Presidency helps students obtain information on labour market outcomes of different study choices, offering detailed information on expected wages and time to find a job. As highlighted in the previous OECD Economic Survey of Türkiye, this online tool should be expanded and promoted through awareness campaigns. Another complementary approach could be to implement a signalling framework for quality assessment. For example, England's Teaching Excellence Framework scores institutions based on student feedback and employment outcome metrics (Gunn, 2018[44]).

Widespread information should also be further promoted through effective career counselling. Türkiye has established the legal and administrative infrastructure to ensure students have access to career information. The Ministry of National Education employs school psychologists and counsellors in all secondary education institutions, with an average of 1.5 guidance counsellors per school, to carry out activities aimed at guiding students toward higher education and employment. However, while Türkiye has made significant progress in providing career information, advice, and guidance, the effectiveness of counselling can still be improved. In particular, the system is hindered by a lack of suitably trained and competent guidance counsellors, particularly in state schools (Yesilyaprak, 2017[45]). One solution could be to strengthen employer engagement in career guidance. International evidence shows that secondary school students whose career guidance is enriched by engagement with employers and people in the workforce often experience better outcomes in adult employment (OECD, 2021[46]). For example, in the Canadian province of New Brunswick, the provincial government collaborates with employers to help primary and secondary school students understand and prepare for employment opportunities in areas of strategic economic importance. In some OECD countries, national STEM initiatives are common, designed to help students see the breadth of careers linked to Science, Technology, Engineering and Mathematics (OECD, 2021[46]).

University students in Türkiye do not pay tuition fees, as they were abolished in 2012. No tuition fees are charged to daytime or distance education students enrolled at state universities, provided they do not exceed the standard duration of their programmes. The tuition fees for these students are covered by the state. Reintroducing tuition fees, particularly for programmes with poor labour market outcomes for graduates, could be considered. For example, the "Job-Ready Graduates" package in Australia introduced in 2020 aims to align university funding with labour market needs by incentivising students with both reduced fees to enrol in courses that address national skills shortages, such as STEM, teaching, and nursing, and higher fees for courses deemed less aligned with job market needs (IRU, 2022[47]).

In addition to measures influencing students' choices, the authorities should strengthen incentives for tertiary education institutions to offer courses more aligned with labour market needs. Today, the current tertiary funding system in Türkiye does not sufficiently reflect labour market demands. The financial resources of state universities mainly depend on the national centralised budget. The amount of financial resources allocated to a university is determined after a series of negotiations with the central government each year, based on the previous year's budget. While performance indicators are generally used in Türkiye, in practice universities determine their own performance indicators. As a consequence, performance-based budgeting could be further expanded, strengthened and made more homogenous. (Altundemir and Gungor-Goksu, 2017[48]).

Several options are available to address this. One would be to link public funding of higher education institutions to performance indicators such as the labour market outcomes of graduates (see Box 4.2). Tying funding to these outcomes would encourage universities to offer more programmes aligned with labour market needs. Another strategy is providing one-time capital funding to support the development of skills that are in high demand.

Moreover, several studies of performance funding in Europe find evidence that performance funding has led to higher rates of faculty research productivity. This is the case in Denmark, the Netherlands, Norway, Switzerland, the United Kingdom and Hong Kong (OECD, 2020[49]; Dougherty, 2019[50]).

Box 4.2. Performance indicators in funding – labour market outcomes

Many OECD countries have moved away from enrolment-based funding systems for tertiary education and instead align funding models with performance goals. Some countries include graduates' labour market outcomes in the funding formula.

- In the US, most states now have a funding formula or policy in place to allocate a portion of funding based on performance indicators, including measures of the labour market success of recent graduates. For example, in Minnesota, 5% of base funding is reserved until institutions meet three out of five performance goals. For Minnesota State Colleges and Universities, one of these goals is to increase the employment rate of graduates by at least 4%. In Florida, the university performance funding model adopted by the Board of Governors allocates a part of funding based on the percent of bachelor's graduates employed and/or continuing their education one year after graduation, as well as on the median average full-time wages of undergraduates employed in Florida one year after graduation.
- In Finland, the funding models of universities reflect the labour market outcomes. In the funding formula, the weight of the provision of university's degree programmes is 4% for labour market outcomes of graduates. This weight is 6% for Universities of Applied Sciences.
- France allocates 20% of funding for higher education institutions on the basis of performance measures, including graduate employment.
- Estonia uses a new funding model for higher education which will allocate up to 20% of funds based on performance. One of the six indicators is the labour market outcomes of graduates.

Source: OECD (2017), Financial Incentives for Steering Education and Training, Getting Skills Right, OECD Publishing, Paris. http://dx.doi.org/10.1787/9789264272415-en

4.3.2. Lifelong learning can address skill gaps to promote innovation

Targeted and relevant adult learning can help address skill gaps, particularly among older adults whose qualifications are more exposed to the risk of depreciation as the demand for different skills is constantly changing. This learning should be lifelong, accessible to everyone at any age, and life-wide, encompassing learning outside formal education systems.

The authorities are aware of the importance of lifelong learning and have launched several programmes to promote it. There are a total of 1 032 non-formal education institutions in all provinces and districts of Türkiye, including 1 000 official public education centres and 32 maturation institutes, and the e-Yaygın online platform provides thousands of certifiable courses. All HEIs in Türkiye have Continuous Education Centres that offer certified academic, vocational, and professional courses, as well as seminars and conferences for all ages and subjects. In addition, public education centres within the Ministry of National Education provide training for adults and the remote learning platform Public Education Centers Information Network (HEMBA) has been launched. HEMBA aims to strengthen the IT infrastructure of Public Education Centers (PECs), enhancing digital education opportunities and enabling the digital transformation of lifelong learning. This initiative supports the integration of individuals across Türkiye, particularly disadvantaged groups, into the information society by equipping them with digital skills. Training in specialised areas is also available in Applied Research Centres (OECD, 2020[51]). As in other OECD countries, employers (40%) are the main providers of adult learning in Türkiye, followed by non-formal education and training institutions (30%) and formal education and training institutions (14%).

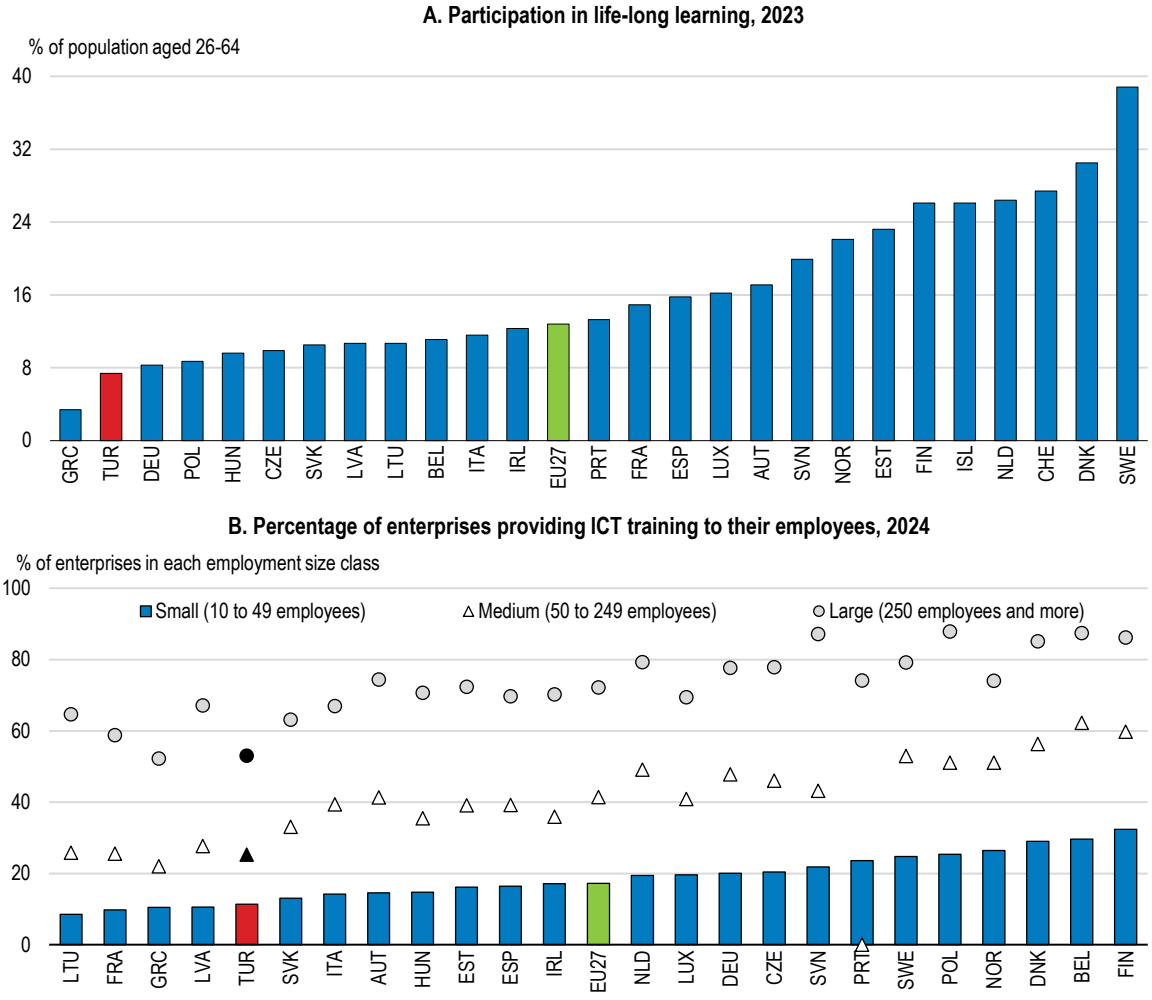
Participation in lifelong learning in Türkiye has increased significantly but remains much lower than in other OECD countries (Figure 4.7, Panel A). The level of training provided by Turkish companies, including digital training, is among the lowest in the OECD. The prevalence of training provision declines with firm size, as in other countries, but the share of firms providing ICT training is the lowest regardless of size (Figure 4.7, Panel B).

The potential benefits of adult training include greater employability and access to better quality jobs, but only if training programmes are of high quality to ensure successful learning outcomes. Therefore, the quality assurance of these training programmes is crucial. Türkiye adopted its National Qualification Framework (NQF) in 2015 to accommodate all quality-assured qualifications. However, principles such as self-assessment and external evaluation remain limited in Türkiye, and greater attention to adult learning will require new methods of recognition that go beyond the current qualifications outlined in the NQF (ETF, 2021[52]). Additionally, the impact of the adult learning system in Türkiye is weaker than in other OECD countries, as measured by a multi-dimensional concept that includes self-reported satisfaction, skill use, labour market outcomes, and wage returns from training participation (OECD, 2019[53]). Therefore, more must be done to strengthen the quality assurance of its programmes, and training providers in Türkiye could benefit from support in implementing quality measures, as well as monitoring and evaluation systems (see Box 4.3).

High-quality training programmes should be expanded. Authorities can either expand regular funding transfers or provide one-time grants to promote specific adult learning programmes. Most financial incentive schemes across OECD countries include a co-financing element where employers and individuals contribute to part of the cost to reduce deadweight losses. For example, many OECD countries use training levies to incentivise investment in training. Firms can "earn back" their levy contributions by providing training that meets the fund's criteria (OECD, 2019[54]). Another way to address capacity constraints is to use economies of scale by providing training in collaboration with other enterprises. In Ireland, "Skillsnets" funds demand-led training through a network model and is largely operated with funding from a national training levy. Company networks representing specific geographic regions or industries jointly deliver training programmes tailored to labour market demands (OECD, 2019[53]).

Many adults face barriers preventing them from participating in adult learning, such as a lack of time, financial resources, or limited flexibility in training provision. In Türkiye, nearly one-third of individuals cited scheduling as the reason for not participating in training (Eurostat, 2022[55]). Many OECD countries offer flexible learning provisions, including distance learning or modular and/or credit-based formats. Another approach is to provide statutory education and training leave. In Belgium, for instance, full-time private sector employees participating in recognised training and education programmes have the right to up to 180 hours of training leave per year (OECD, 2019[53]). Many other OECD countries have similar leave programmes (CEDEFOP, 2024[56]). For example, in Austria, the 'Bildungskarenz' programme provides a 2-12-month training leave paid at the level of unemployment insurance. Another option is a personal account scheme, allowing individuals to save a certain amount of time per year worked for training purposes. For example, France uses such accounts, enabling employees to use training hours to acquire recognised qualifications or basic skills, and the European Union is recommending individual learning accounts for Member States (OECD, 2017[57]).

Figure 4.7. Participation in lifelong learning is low



Note: In Panel A, data refer to the share of adults aged 25 to 64 participated in education and training in the last 12 months. In Panel B, data refer to all sectors except agriculture, forestry and fishing, and mining and quarrying, and financial sector.
Source: Eurostat (2024), Education and training (database); and Digital economy and society (database).

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Box 4.3. Best practices in quality assurance in selected OECD countries

- **Certifications and quality labels to ensure minimum quality levels**. (i) Switzerland's "eduQua" certificate for training providers was introduced in 2000 because the adult education sector in Switzerland was highly heterogeneous, dominated by many small private providers, and lacked nationwide regulation. (ii) In 2018, the French government passed a law requiring all training centres seeking public funds to obtain a new quality certificate—Qualiopi. If non-compliance is detected, the label may be suspended or withdrawn.
- **Quality awards and prizes.** Rather than adopting certification, quality label systems, or external evaluations, some European countries rely on awards and prizes to foster a quality culture in the adult learning sector. For example, in Finland, the Ministry of Education and Culture organises an annual quality award competition for adult education providers. The rationale behind the initiative is to identify best practices that providers across the country can emulate.

- **Publicising information on providers' quality**. In the United Kingdom, the Department for Education publishes summary tables of outcome-based success measures, including sustained employment and learning rates, by provider, on its website. In France, certain public institutions that finance training must review the quality of the training providers they work with and make the outcomes from the review process publicly available.
- **Improving the quality of teaching staff**. The Swiss Federation for Adult Learning introduced the "Train the Trainer" program in 1995. In 2007, Austria established its Academy of Continuing Education (WBA) as a validation system for the qualification and recognition of adult educators.

Source: OECD (2021), Improving the Quality of Non-Formal Adult Learning: Learning from European Best Practices on Quality Assurance, Getting Skills Right, OECD Publishing, Paris, https://doi.org/10.1787/f1b450e1-en

Türkiye should also increase awareness of training support programmes among firms. Various policies, such as awareness campaigns and engagement with social partners, can effectively motivate adults to participate in education and training. Promoting the benefits of adult learning, providing high-quality information, and offering individualised advice and guidance services are some of the ways policies can encourage higher participation. To reach the widest possible audience, campaigns can be delivered through various media channels. In Argentina, for example, the Hacemos Futuro program reaches out to community leaders via WhatsApp (OECD, 2019[53]).

4.3.3. Attracting skilled workers, including returning migrants

Highly skilled foreign workers can also help channel the diffusion of advanced technologies and knowledge embodied in these workers. This has led many OECD countries to design policies to attract immigrants with specific skill sets to support growth and innovation in key sectors. However, talent attractiveness is complex and depends not only on economic factors but also on the ability of migrants to integrate into the host society, as well as the wider economic and social environment.

According to the OECD Talent Attractiveness Index, Türkiye ranked among the least attractive countries for highly skilled migrants in 2023 (Figure 4.8). Factors which particularly penalise Türkiye include the framework for long-term residence, the skills environment and inclusiveness. This is reflected in the low share of high-qualified foreigners: for example, the share of foreign doctorate students is less than half the EU average (European Commission, 2024[9]). Moreover, many highly skilled individuals are leaving Türkiye; the number of bachelor's degree graduates leaving increased by more than 50% between 2011 and 2020 (Metin, 2023[58]). Additionally, Türkiye is losing its talent to international competition. In particular, AI talent is in high demand and remains a highly mobile workforce, with countries competing for a small pool of highly skilled AI workers.

Improving overall talent attractiveness is a long-term goal, as some areas, such as earnings for highly skilled individuals, will require time to converge with the best-performing countries. Nevertheless, implementing less stringent migration policies can help reduce the gap somewhat compared to the leading countries. Policy simulations show that Türkiye can reduce the difference in attractiveness for highly skilled workers compared to best performing OECD country by around 15% (OECD, 2023[59]).

Türkiye has taken several steps to attract highly skilled migrants. For example, the authorities introduced the "Turquoise Card" as an alternative to annually renewing residence permits. This card is a work permit valid for an indefinite period for foreigners with high qualifications and their families. In addition, recent years have seen the introduction of new programs to attract highly skilled migrants. The International Talent Transfer program aims to accelerate and simplify work permit applications for foreign technology experts. The Tech Visa program provides several benefits for tech employees, such as income tax exemptions and a faster work visa process for family members.

Relaxing migration rules for highly skilled workers could go even further. One barrier to international recruitment is friction in matching, which may be due to information shortfalls and processing delays. Therefore, some OECD countries allow highly skilled migrants to enter the country and seek work, thus improving the quality of the match between job seekers and employers. For example, Chile introduced an "International Orientation Visa" for foreigners with a postgraduate degree from one of the top 150 academic institutions worldwide, allowing residence and work in Chile for up to 12 months. The Dutch "Orientation Visa" is available for master's level graduates of high-

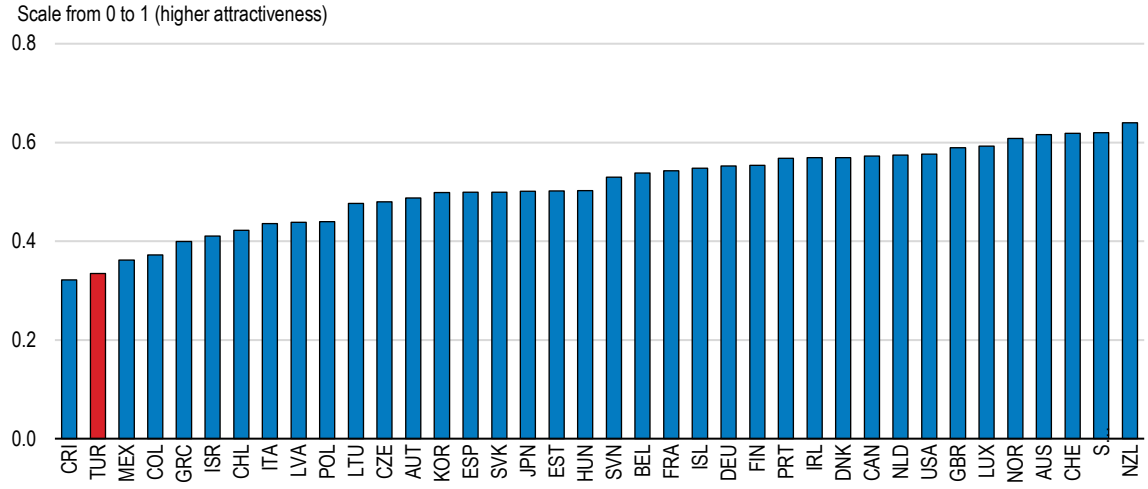
ranked universities (OECD, 2023[60]). However, those visas have tended to be difficult to obtain and have encountered limited success. Since Türkiye has many visa exemptions, an alternative would be to continue simplifying its processes for high-skilled employment in order to streamline administrative procedures, reduce costs and time burdens for skilled professionals, and make Türkiye a more attractive destination for global talent. Recent regulatory changes for high-skilled employment have already made significant progress in that regard. Notably, the Implementing Regulation of the International Labor Force Law, enacted in 2022, has allowed qualified foreign professionals to apply for work permits from within the country. Additionally, as of October 2024, the timeframe for submitting these applications has been made more flexible, allowing submissions at any point during a foreign national's legal stay in Türkiye.

There is also potential to strengthen the processes for recognising foreign qualifications even further. Türkiye has a functioning system for the assessment and recognition of foreign academic qualifications at the associate, bachelor's, and master's levels, managed by the Council of Higher Education (CoHE). At the PhD level, recognition is by the Inter-University Council. The statutory processing time for the assessment of foreign qualifications in Türkiye is 90 days. Some OECD countries have taken steps to speed up the recognition procedure, as employers need to fill shortages quickly. For example, Sweden's fast-track scheme was developed to accelerate the entry of skilled immigrants into shortage occupations such as engineering, technical fields, and the medical profession (OECD, 2017[61]). Additionally, Lithuania provides a shorter statutory period (30 days) for foreign higher education qualifications. Norway has established a fast-track "turbo evaluation" for employers to evaluate job applicants with foreign higher education credentials in non-regulated professions. The online-based procedure is free of charge and verifies within five working days the discipline of the applicant's qualification, whether the education is accredited in the country in question, and whether the qualification is equivalent to a Norwegian degree (OECD, 2017[61]).

An important source of potential skilled labour is Turkish citizens who have emigrated abroad. These return migrants can bring home skills, networks, and financial capital, which can help spur innovation and growth (OECD, 2008[62]). The number of Turkish emigrants living abroad has been expanding rapidly over the last decade. According to recent estimates, over 6.5 million Turks reside abroad, with around 5.5 million living in Western European countries (Ministry of Foreign Affairs, 2023[63]). Working age Turkish-born emigrants with tertiary education living in OECD countries numbered about 290 000 in 2015. Among graduates, information and communication technology (ICT) graduates, who are in highest demand in Türkiye, are the ones most likely to leave (Turkstat, 2024[64]). Türkiye has also experienced a net outflow of AI talent (OECD, 2024[65]).

Figure 4.8. Türkiye's attractiveness for highly skilled workers is low

OECD Talent Attractiveness Index, 2023



Note: The OECD talent attractiveness framework is the inclusion of migration policy as a factor to measure attractiveness. The index is averaged based on seven dimensions (quality of opportunities, income and tax, future prospects, family environment, skills environment, inclusiveness and quality of life) with equal weights, and does not include the health system performance dimension.
Source: OECD (2023), "What is the best country for global talents in the OECD?", Migration Policy Debates, N°29, March.

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Attracting talented citizens back home and providing reintegration assistance have become integral parts of migration management in many OECD countries. The Presidency of Turks Abroad and Related Communities (YTB), established in 2010 to coordinate Turkish citizens living abroad, is developing schemes to attract highly skilled workers back to Türkiye. This includes initiatives in collaboration with private companies, universities, and public institutions to encourage highly skilled children of Turkish emigrants to continue their professional careers in Türkiye. However, compared to some other OECD countries, Türkiye has not established specific schemes to support returnees and their families in reintegrating into society (Sökmen, Kaya and Sánchez-Montijano, 2018[66]).

The longer migrants have been abroad, the less they know about the situation and opportunities in their home country. Therefore, it is important to develop a comprehensive strategy to maintain ties with the large expatriate community. The Irish government has created a "Global Irish" online hub with a regular newsletter that includes details on job, training, and business opportunities in Ireland. Estonia has an internet portal where talented young adults studying abroad can find information about work and internship offers in Estonia, and companies can use the contact network to find employees among those studying abroad (OECD, 2013[67]; OECD, 2018[68]).

One readily available group of high-skilled immigrants are international students, as they have already acquired some cultural and linguistic knowledge during their studies. The number of international students studying in Türkiye grew from around 50 000 in 2013 to over 300 000 in 2023. Scholarships and tuition fee support are offered to international students. Students are allowed to apply for work permits after completing their first year of undergraduate studies and, if granted, may work part-time while studying according to their level of education.

Most OECD countries encourage the temporary or permanent immigration of international students after graduation by providing facilitations in acquiring residence permits. Türkiye enables international students to stay and look for a job upon graduation, with an additional 12 months granted upon request. In Denmark, Estonia, Greece, and Luxembourg, the extension of a study permit is automatic, without request, and students can stay for up to 48 months in Australia. Canada and New Zealand, for example, facilitate the settlement of foreign students who have studied at their universities by granting them additional points in their immigration point systems (OECD, 2011[69]). Spain has improved conditions for students to stay and work post-graduation to encourage employment and self-employment among international graduates from Spanish universities, and Australia has extended post-study work rights for international graduate students from Australian higher education providers in targeted sectors (OECD, 2023[70]).

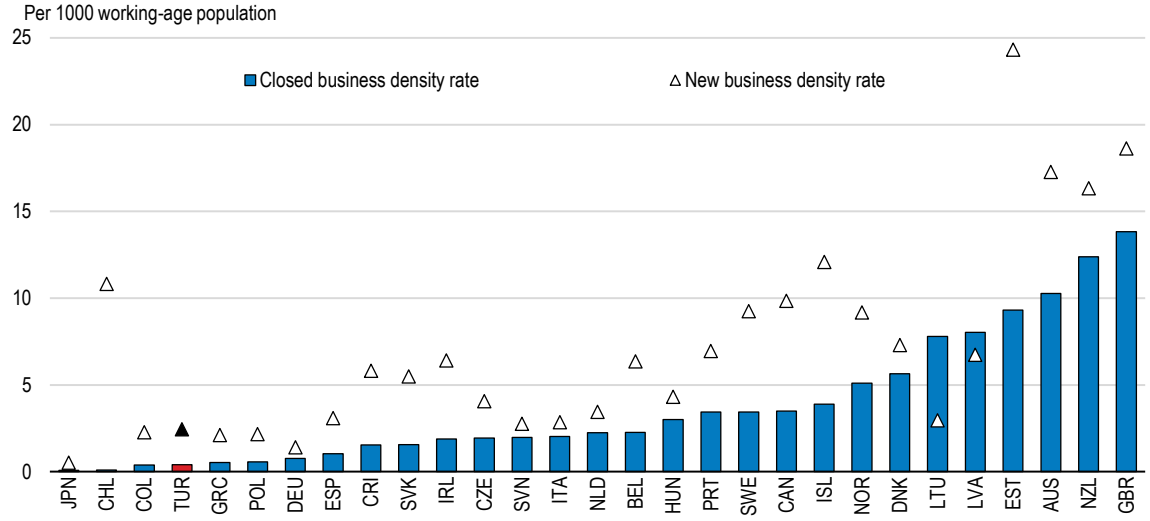
Türkiye is one of the largest countries worldwide hosting people who fled their countries. In particular, it currently hosts some 2.9 million registered Syrians "under temporary protection" (UTP). Türkiye has already made significant and successful efforts in educational integration, increasing school enrolment, improving Turkish language skills, and boosting academic performance among Syrian children. For example, programmes such as PIKTES funded by the European Union aims to facilitate the integration of Syrian children under temporary protection into the education system through measures such as Turkish language instruction and revision curricula. Approximately 870 000 refugee children are now enrolled in schools (European Commission, 2023[41]). Recent developments in Syria suggest that a large share of the Syrian population could eventually return in their country safely, which is a priority of the Turkish government and would be positive for Syria. There could be potential to increase the skills of the labour force by strengthening labour market policies for remaining immigrants and refugees who lack the skills needed in the local labour market. Efforts could be intensified to improve remaining refugees' access to the labour market, particularly formal employment, which has been challenging in the past (European Commission, 2023[41]). In this regard, as of October 2024, some exemptions have been introduced to allow specific groups, such as humanitarian permit holders, to formally join the labour market.

4.4. Buttressing business dynamism

Weak business dynamism hampers productivity. Business dynamism in Türkiye as measured by firms' entry and exit rates as a fraction of the population is one of the lowest in the OECD (Figure 4.9). In addition, it has fallen more than in other countries since the Global Financial Crisis (Calvino, Criscuolo and Verlhac, 2020[71]). Recent evidence also suggests that business dynamism in Türkiye has declined in the last ten years due to a lack of competition and a particular slowdown in the productivity growth of laggard firms (Akcigit et al., 2020[72]).

Figure 4.9. Business dynamism is relatively low given Türkiye's population

Number of newly registered and deregistered companies with limited liability, per thousand of working-age population, 2022



Note: Based on administrative data from business registries and statistical agencies. The new and closed business density rates are calculated as the number of new or closed limited liability companies (LLCs) divided by 1000 people aged 15-64. Data for Canada covers Quebec and Nova Scotia only.
Source: World Bank (2024), Entrepreneurship Database.

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One of the main barriers to stronger business dynamism is the restrictive regulatory framework. Türkiye's overall regulatory framework is the most restrictive in the OECD, as indicated by the OECD product market regulation indicator (Table 4.1 and OECD (2023[73])). The involvement of the government is more significant than in other OECD countries in some areas of the economy: state-owned enterprises (SOEs) are relatively more prevalent and their governance framework does not foster a level playing field with private companies. In parallel, barriers to domestic and foreign entry in some sectors limit competition, although the country compares relatively well regarding competition barriers in digital markets. The administrative and regulatory burden for new companies is relatively more significant. Along with the regulation of product markets, employment protection is also particularly tight in Türkiye. In general, evidence has suggested that the combination of restrictive product market and labour market regulations in OECD countries (OECD, 2020[74]) can be particularly harmful not only to productivity (Andrews, Criscuolo and Gal, 2016[75]), but also to investment (Égert, 2017[76]) and employment (Griffith, Harrison and Macartney, 2007[77]; Nicoletti and Scarpetta, 2005[78]; Gal and Theising, 2015[79]).

Türkiye will be able to fully leverage improved productivity only if it can lift these barriers to the efficient allocation of factors. In that regard, there are two priorities which would support the country's use of its important resources. First, it can boost business dynamism by reducing barriers to domestic and international entry, promoting competition in product markets, and improving the efficiency of the insolvency regime. Second, it can improve the governance environment to bolster competition and trust, and ensure the application of the rule of law to promote confidence and thus investment in all forms of capital.

4.4.1. Facilitating firm entry through a simpler administrative and regulatory framework

Reducing administrative barriers on firm creation would support business dynamism. High costs, lengthy procedures, and the large number of administrative procedures make it hard to set up a company and discourage formalisation (Bripi, 2015[80]). Among OECD countries, only Costa Rica has more barriers than Türkiye for setting up Limited Liability Companies (LLCs) and Personally-Owned Enterprises (POEs). Progress has been made in recent years: for example, the number of public or private bodies to be contacted to start an LLC decreased from 6 to 5 and the government introduced a single webpage presenting information on all procedures required to start a

company. A simplified Investment Procedures Guide is reviewed annually and updated in line with legislative changes, and is made accessible to business people for them to understand the required procedures, permits, licenses, and authorisations, and the expected costs associated with those procedures.

However, large hurdles remain. In best-performing countries, only one body needs to be contacted to start a company. In addition, there is no law or regulation in Türkiye indicating a maximum time within which procedures required to start an LLC must be completed, contrary to the majority of OECD countries. Registration costs also remain relatively high: the typical costs to start a POE or an LLC was around TRL 2000 in 2023 (about USD 84). This is almost double the OECD median for LLCs, and half of the OECD countries have cut POE costs to zero (OECD, 2023[73]). Additionally, the minimum capital requirement for LLCs has increased to TRL 50 000 (about USD 2100), while many OECD countries have lowered or eliminated such requirements. For example, Spain reduced the capital requirement to a symbolic level in 2022, and there is no minimum requirement in New Zealand. While lowering those hurdles would be welcome, Türkiye has made progress in recent years, in particular through the establishment of the Central Trade Registry System in 2014 (MERSIS) in particular to support the establishment of LLCs in a centralised information system.

Table 4.1.Product market regulations are relatively tight

Ranking and scores of Türkiye on the PMR sub indicators, out of 38 countries

		Türkiye's score	Türkiye's rank	Score: top 5 OECD	Score: median OECD	Score: bottom 5 OECD
Overall		2.52	38	0.87	1.35	2.01
Distortions Induced by Public Ownership	Quality and scope of public ownership	2.02	37	0.13	0.54	1.64
	Governance of SOEs	3.56	37	0.44	1.58	3.53
Involvement in business operations	Retail price controls and regulation	4.00	38	0.12	1.03	2.85
	Involvement in business operations in network sectors	1.41	30	0.54	1.06	2.14
	Involvement in business operations in service sectors	3.25	38	0.40	1.24	2.81
	Public procurement	0.80	25	0.15	0.67	2.04
Regulations Impact Evaluation	Assessment of impact on competition	2.67	38	0.12	0.80	2.42
	Interaction with stakeholders	4.20	34	1.04	2.64	4.44
Administrative and regulatory burden	Administrative requirements	2.56	33	0.88	1.88	2.95
	Communication and simplification	3.30	38	0.55	1.46	3.01
Barriers in service & network sectors	Barriers to entry in service sectors	2.63	33	0.65	1.74	3.05
	Barriers to entry in network sectors	2.02	32	0.96	1.43	2.47
Barriers to trade and Investment	Barriers to FDI	0.67	33	0.03	0.14	0.95
	Barriers to trade facilitation	1.10	34	0.41	0.61	1.14
	Tariff barriers	2.00	37	0.00	0.50	1.60

Note: Administrative requirements for limited liability companies and personally-owned enterprises; and communication and simplification of administrative and regulatory burden. The rank is based on the 38 OECD countries. For all indicators, a lower score represents a more competition-friendly regulatory regime.
Source: OECD PMR database. See for more details, www.oecd.org/en/topics/product-market-regulation.html.

The administrative burden on existing firms could also be simplified. Regulatory compliance can be costly, especially for small businesses with lower administrative capacity (Tu, 2020[81]). There is room to reduce the procedural burden for companies in Türkiye. The country does not yet apply a “silence is consent” principle for issuing permits and licenses, whereby tacit approval is granted after a fixed period has expired. The principle has now been adopted by a majority of OECD countries. The country keeps an up-to-date inventory of licensing and permitting requirements, but there is no requirement for a regular review, a procedure that four OECD countries have now implemented, although the Coordination Council for the Improvement of the Investment Environment (YOIKK), a platform operating through specialised working groups composed of public and private sector representatives, monitors those requirements continuously. Furthermore, contrary to most OECD countries, Türkiye has not adopted the "once-only" rule, whereby businesses submit data only once to the government, which can then be shared across public bodies provided consent is explicitly given.

4.4.2. Promoting domestic and international competition in certain network and services sectors

Opening the energy and transport sectors to competition

Productivity growth is hindered by barriers to competition in network sectors – in particular energy and transportation. In these sectors, Türkiye is among the most regulated OECD countries according to the PMR network indicators, without significant improvements since 2018. Efficient resource allocation in these sectors is crucial for boosting aggregate productivity since these sectors are essential in supply chains. Reductions in barriers to entry and vertical unbundling in network industries can help reduce input costs for companies, leading to more efficient technology diffusion and innovation. For example, pro-competition reforms in communications are associated with greater adoption of digital technology and reforms in the energy sector are associated with stronger green innovation (Nicoletti, von Rueden and Andrews, 2020[82]; Agyeman and Lin, 2023[83]). Easing regulations in Türkiye in network sectors to levels seen in Austria or the United States could induce a 0.95 percentage points increase in the productivity growth of the average firm in an average infrastructure-dependent sector (Demmou and Franco, 2020[84]).

To promote competition in the energy sector, Türkiye could consider removing the regulation of retail tariffs in the electricity and gas sectors. Retail electricity tariffs are regulated by the Energy Market Regulatory Authority (EMRA) for small end-users, despite their freedom to change suppliers. For example, they were reduced by 15% a month before the elections in 2023 (European Commission, 2023[41]). Retail tariffs for gas are also regulated. In that regard, it is welcome that the Twelfth Development Plan (2024-2028) aims to increase the competitive environment in the energy sector by planning to adopt cost-based pricing practices in electricity and natural gas markets (while providing support to low-income groups). In addition, no vertical separations are required between gas generation and transmission, or between gas transmission and retail supply, with subsequent risks of discrimination. Today, the state-owned Petroleum Pipeline Company (BOTAŞ) is the sole operator of the gas transmission system and has a market share of more than 90% in natural gas imports. It remains a vertically integrated company despite the Natural Gas Market Law which required separation of its operations, but which has repeatedly been suspended.

The efficient use of energy sources is limited more generally by restricted competition in the electricity and natural gas sectors. Expanding the freedom to choose suppliers beyond small end-users could help (IEA, 2021[85]). In parallel, switching suppliers could be encouraged by introducing a comparison tool for consumers to compare offers. Many OECD countries also use demand-side solutions that reward consumers for adjusting their electricity use upon request, typically through contracts with aggregators (Saviuc et al., 2022[86]). Reducing the dominant position of BOTAŞ and achieving the unbundling of the transmission system operator from commercial activities would enhance third-party access to transmission network capacity and promote transparent, cost-reflective, and non-discriminatory pricing.

Türkiye would benefit from liberalising its water and road transport sectors, given its geographic position as a transit hub and freight destination. Liberalisation in network sectors has been shown to boost productivity in the past, particularly in the transport sector. (Arnold et al., 2015[87]). Currently, 80% of Türkiye's inland freight transport (in tonnes-kilometres) is road-based, with a small share in rail and coastal shipping (ITF, 2022[88]). International trade is mainly conducted through maritime transport: it covered 93% of goods imports and 80% of goods exports in volume in 2023 (Directorate General for Maritime Affairs, 2023[89]). Entry restrictions, such as requiring licenses for road and maritime freight, increase transport costs. Although most OECD countries (except Australia and Chile) also require a license for road freight transport, a third of them do not impose a fixed duration for its validity, contrary to Türkiye. In parallel, only half of OECD countries require notifications to authorities to engage in maritime transport.

Additionally, Türkiye's restrictive rules in water transport prevent foreign companies from operating domestic routes, which raises transport costs and reduces efficiency. Such restrictions are frequently justified by the necessity to prevent shipping shortages, maintaining a national merchant fleet, facilitating international trade, and protecting national security. However, restrictions in Türkiye are tighter than other OECD countries. In water transport, Türkiye is one of only six countries in the OECD which impose jointly that vessels must have a national flag, must be owned by a domestic company, and must have a crew of Turkish citizens. Restrictive cabotage rules in maritime shipping have been associated with higher costs, reduced internal shipments and higher reliance on imports, and higher

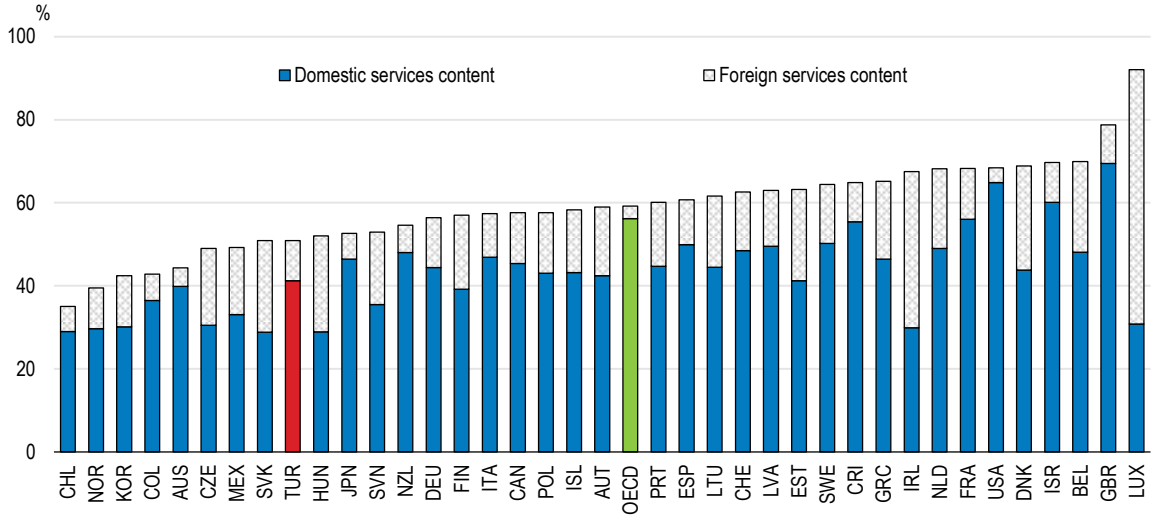
energy prices (Olney, 2020[90]; Kellogg and Sweeney, 2023[91]; Agostini, Briones and Mordoj, 2022[92]). In parallel, the relaxation of such rules in the EU and New Zealand in the 1990s suggests that liberalisation leads to efficiency gains and reduced freight rates (UNCTAD, 2018[93]). Opening up transport routes to foreign operators could lower costs and increase productivity in Türkiye.

Loosening regulations in professional services to boost productivity and export

The regulations of the conduct of activity in professional services hamper productivity growth and export potential. As discussed previously, services in Türkiye are less knowledge intensive, and domestic services are used less in services and manufacturing exports relative to other OECD countries (Figure 4.10). This is partly due to strict regulations. The low productivity and the regulation of services can pose particular problems when they are used in the value chains. In particular, the manufacturing sector is increasingly relying on services as inputs, activities within firms, or as output bundled with goods (Miroudot, 2017[94]). Indeed, the liberalisation of services tend to benefit manufacturing firms and export performance (Arnold, Javorcik and Mattoo, 2011[95]; Arnold et al., 2015[87]). Evidence shows that productivity gaps in manufacturing firms in Türkiye appear in firms which have services affiliates in the same areas where services are more restricted, suggesting an inefficiently low level of outsourcing, while in other countries the firms producing services in-house actually tend to be more productive (Haven and Marel, 2018[96]).

Figure 4.10. The use of services in exports is relatively low

Services content of gross exports, 2020



Source: OECD Trade in Value Added (TiVA) 2023 edition: Principal Indicators, shares (database); and TiVA country notes: Türkiye, https://www.oecd.org/en/topics/sub-issues/trade-in-value-added.html .

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There is ample room to reduce regulations in professional services to improve economy-wide productivity and boost business dynamism. In the professional services covered by the PMR indicators (lawyers, notaries, accountants, architects, civil engineers, and real estate agents), barriers to entry are generally in line with the average OECD country. Two barriers could be lowered. First, there is a requirement of Turkish nationality for lawyers, notaries, accountants, and for some activities for architects. Second, there are typically fewer pathways to access those professions than in other OECD countries. Beyond entry barriers, restrictions on foreign entry and on the conduct of activity in professional services are the highest in the OECD (Figure 4.11). They are common among professions:

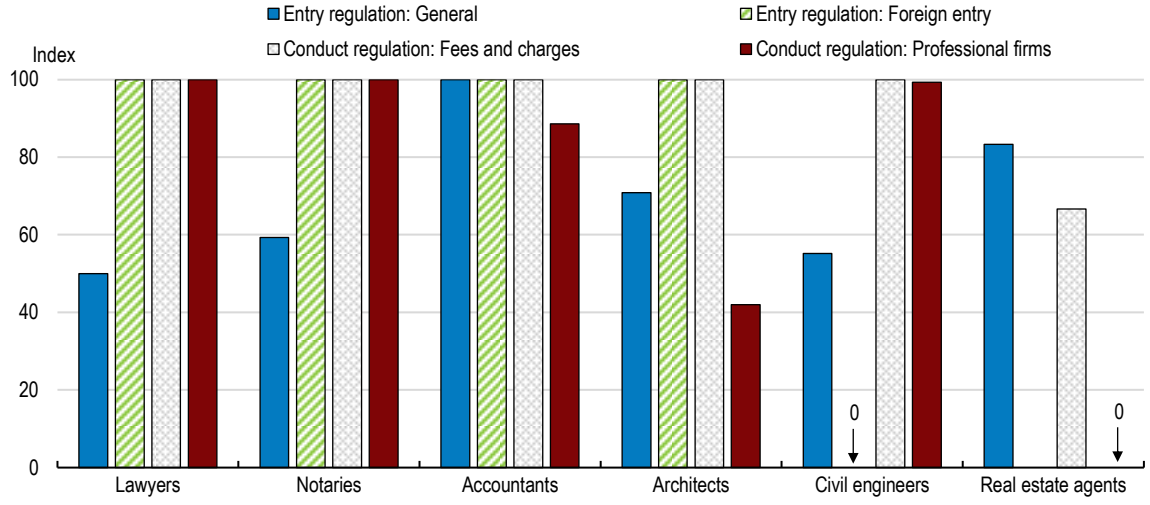
- As opposed to most OECD countries, fees are regulated in all professions in Türkiye: in particular, fees for lawyers and notaries are typically not regulated in OECD countries;

- All other countries covered by the PMR database restrict advertising and marketing in fewer sectors that Türkiye. All forms of marketing and advertising are allowed for lawyers and notaries in most countries;
- In most OECD countries, there is no restrictions on the legal forms for accountancy and architectural firms, while Türkiye imposes limitations on the trading of shares on the stock market. In addition, ownership and voting rights in most professional services enterprises are restricted to members of the profession in Türkiye;
- Membership in professional organisations is mandatory in all of these services, which is only the case in Austria and Indonesia among the 47 countries covered by the PMR indicators. Such occupational licensing can increase wages but tend to reduce employment significantly, while delaying the entry of younger workers into those occupations beyond the increase in years of education (Kleiner and Soltas, 2023[97]).

All of these restrictions also more generally limit the sources of funding and skills that professional services firms can access. In addition, they can reduce business dynamism significantly, which could partly explain the low level of dynamism of services firms relative to industry firms in Türkiye compared to other OECD countries (Bambalaite, Nicoletti and von Rueden, 2020[98]; Canton, Ciriaci and Solera, 2014[99]).

Figure 4.11. The conduct of professional services is highly restricted

Türkiye's position in PMR indicators in professional services



Note: The PMR sub-indicators are normalised to range between 0 (best) and 100 (worst) according to the following formula: (indicator value - minimum value) / (maximum value - minimum value) x 100. Data on real estate agents is not available for entry regulation: foreign entry.
Source: OECD PMR database. See for more details, www.oecd.org/en/topics/product-market-regulation.html.

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Opening services sectors to international competition to boost competitiveness

Additional restrictions on services trade and foreign direct investment (FDI) reduce competition and hamper the development of services exports. Despite efforts to attract FDI through a 2021-2023 strategy targeting high-tech services, both services exports and inward FDI remain low relative to the country's GDP. In addition, as discussed previously, services exports are concentrated in transport and tourism while inward services FDI consists mostly of transportation and storage, and real estate services, while the share of ICT and professional services is relatively low (Figure 4.12, Panel A and B). Services trade and foreign investment are determined significantly by factors that go beyond regulations. To attract more FDI, Türkiye needs consistent macroeconomic policies (see Chapter 1) a more competitive domestic environment (see section above), and stronger rule of law (see section below) (U.S. Department of State, 2024[100]; EIU, 2024[101]). However, domestic regulations can also play a significant role. Restrictions on services trade have a significantly negative impact on imports and even more on exports, while regulatory barriers to FDI inflows are negatively associated with higher productivity and higher value-added exports

(OECD, 2023[4]; Nordås and Rouzet, 2016[102]). Estimates suggest that the barriers to services trade in Türkiye were equivalent to ad-valorem tariffs of 78% in business services (Benz and Jaax, 2020[103]).

Türkiye's restrictions on foreign entry in some specific services sectors hinder services exports and FDI. While Türkiye has a liberal FDI regime for industry sectors, there are more restrictions on foreign participation in services sectors relative to other OECD countries (Figure 4.12, Panel C and D, and WTO (2023[104])). For example, in the air transport sector, a majority of shareholders of aircraft operators needs to be of Turkish citizenship, and a Turkish aircraft must be owned by a Turkish citizen or a company or cooperative where a majority of the governing board and of the ownership is Turkish (Civil Aviation Act No. 2920). In media, foreigners cannot own more than 50% of media service providers and are not allowed to be the direct shareholders of more than two providers (against four for Turkish nationals) or own privileged shares.

Additional requirements on citizenship and physical presence thwart trade and investment. Beyond statutory FDI restrictions, broader restrictions on foreign participation in services trade in practice, as measured by the Services Trade Restrictiveness Index (STRI) of the OECD, hamper services trade and FDI. In that regard, it is welcome that the government has planned to ease visa restrictions for early-stage entrepreneurs as part of its FDI Strategy for the next four years. Sizeable barriers remain:

- Beyond restrictions on board membership based on nationality as mentioned above (in most business services, a majority of board members have to be Turkish nationals), in accounting, broadcasting, or warehousing for example, there must be at least five Turkish employees for each foreign citizen. Media services are particularly restricted as managers in broadcasting need to be Turkish citizens;
- The acquisition of land for any project is allowed under specific conditions, but subject to relatively tight regulations. Only citizens of countries designated by the President can acquire land. The total size of land that can be acquired by foreign individuals cannot exceed 10% of the total surface area allowed for private ownership in the same district, and 30 hectares in total;
- Commercial presence is typically required to provide cross-border services, for example for accounting and legal services. In addition, local presence is also required for broadcasting services;
- To protect the value of the currency, a recent decree mandated business services exporters to bring their export proceeds to Türkiye within 180 days of the export date, while exporters were initially free to dispose of revenues as they wished.

Following up on the implementation of an efficient investment dispute mechanism would also help attract FDI. Surveys of investors typically suggest that grievances related to adverse regulatory risks are the most important government actions leading to FDI cancellations (Echandi, Nimac and Chun, 2019[105]). While in 2021, Türkiye's Economic Reform Plan proposed creating a new investment dispute institution, the "Investment Dispute Authority", to strengthen investor protection, this authority was never established and Turkish authorities recently concluded that a new institution was not the most effective solution to improve dispute settlement after consultations with public and private sector bodies. Therefore, it is encouraging that the new FDI Strategy for 2024-2028 plans to develop "alternative resolution mechanisms". The World Bank has provided practical guidance for establishing an effective investor-state grievance mechanism. This includes empowering a dedicated government agency, which would use an early alert system and tracking tools for potentially problematic investments (such as Canada's Trade Law Bureau in the Department of Foreign Affairs or the Committee on Foreign Investment in Chile). It could also serve as a repository of information and help ensure consistency in dispute settlement provisions included in investment agreements (World Bank, 2022[7]; UN CITRAL, 2023[106]).

Reducing tariffs and non-tariff barriers

Reducing barriers to trade more generally would improve productivity. Turkish importers and exporters show significantly higher productivity growth than non-importers or non-exporters and evidence suggests that the average productivity of exporters increases when they actually enter the export market. Both within- and between-firm productivity in Türkiye has also tended to grow faster in trade-intensive sectors all the more when those are strongly integrated in GVCs (World Bank, 2019[107]).

Türkiye proposes tariffs in line with world averages but complements them with additional duties. Türkiye's tariff rates are higher than most OECD countries but do not differ with levels in upper middle-income countries and are lower than those in Brazil, India, and South Africa for example. In particular, tariffs levels are pulled down by the Türkiye-EU Customs Union (CU) (Figure 4.13, Panel A). Still, imports of some products from non-EU countries, including those transiting through the EU, face "additional duties" above the EU common external tariff (CET). Since 2011, Türkiye has imposed those additional duties on an increasing range of products. They go up to 30% of products' values and affect around 30% of Türkiye's tariff lines at the Harmonised System's 10-digit level (WTO, 2023[104]). In addition, since 2017 Türkiye has levied "additional liabilities", representing today 5% of all tariff lines including agricultural, fish and fishery products, arising from the difference between Turkish tariffs and tariffs applied as part of the EU's Generalised Scheme of Preferences.

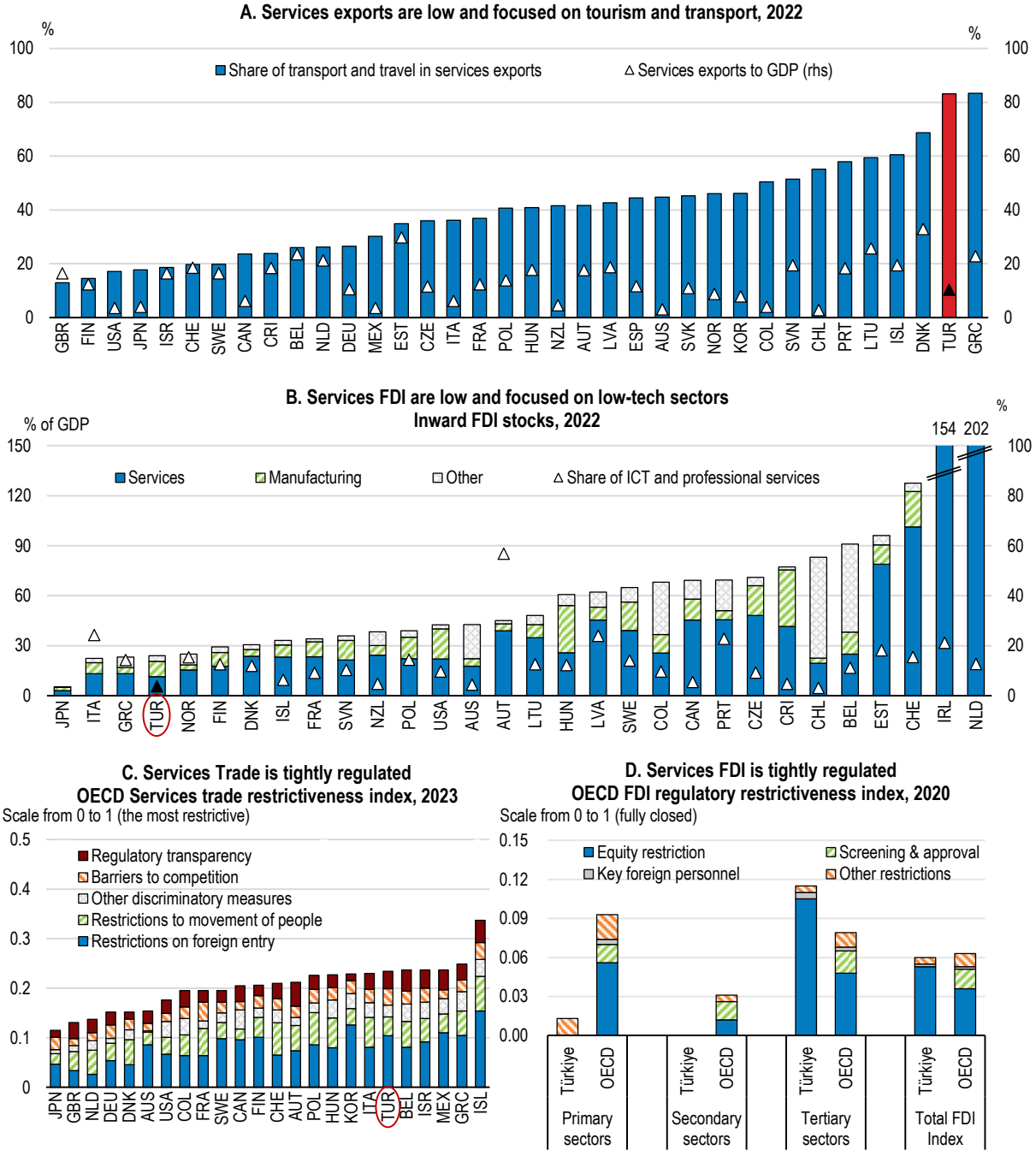
Türkiye's tariff barriers have increased in recent years. Overall, there has been a significant decrease in the share of tariffs falling below 10%. Tariffs can be particularly high for some agricultural products not covered by the CU: the highest tariffs of 225% apply to 68 products. 31 tariff lines still exceed the maximum applicable agreed to at the WTO. Because of those additional duties, unilateral changes to tariffs have been relatively frequent (World Bank, 2022[7]). While the declining trend in tariffs from the mid-1990's and the mid 2010's has recently plateaued worldwide, Türkiye's average effectively-applied tariff has evolved less favourably than the countries covered by the PMR indicators.

Non-Tariff Barriers (NTB) have also increased in the last 10 years, although the most recent rise since 2020 has been in line with other OECD countries and partly temporary because of the pandemic (Figure 4.13, Panel B). In 2022, the World Bank reported that Türkiye had the 12th highest frequency of NTBs on imports worldwide with a large use of anti-dumping measures and safeguards. In 2023 Türkiye was the heaviest user of safeguards in the world (World Bank, 2022[7]; Thompson, 2023[108]). In particular, sanitary and phytosanitary measures, along with anti-dumping measures and bilateral safeguards, are allowed under the CU. In 2018, the OECD quantified the impact of those NTBs as equivalent to a 14% tariff, mostly due to technical barriers (Cadot, Gourdon and van Tongeren, 2018[109]). The European Commission has recently complained of an increasing use of the import surveillance mechanism (a requirement to obtain a surveillance license prior to imports if the price is below a certain threshold unit value) and an increase in complaints from EU companies experiencing excessive requests for documentation and submission of test results when importing into Türkiye (European Commission, 2023[41]). The relevance of the current stock of NTBs could thus be reviewed.

Restrictions on foreign participation to public procurement have recently been tightened. Public procurement, a market of 4.8% of GDP in 2022 in Türkiye, features some strong national preference. Participation in procurement processes can be limited to domestic bidders if the tender's value is below a certain threshold. Domestic bidders may be granted up to 15% price advantage in procurement of services or works. Moreover, both domestic tenderers and foreign tenderers offering domestic products in procurement of goods may be granted up to 15% price advantage. This 15% price advantage is mandatory for some high-tech and software products since 2016. In 2023, 48% of the value of international tenders (and 40% of tenders) used the domestic price advantage (WTO, 2023[104]; European Commission, 2024[110]). Local content requirements have been frequently included in government tenders, particularly in the ICT and pharmaceutical sectors (EIU, 2024[101]). The government has also expanded the use of offsets – which were traditionally used for military procurement – in public procurement for civilian use via the Industry Cooperation Programme. This now applies to sectors such as energy, transportation, medical devices, and telecom sectors. In particular, for public contracts above USD 5 million, companies must invest up to 50 percent of the contract value in Türkiye and "add value" to the local sector (U.S. Department of State, 2024[100]). Such non-military offsets are, in principle, contrary to EU law.

The EU is Türkiye's biggest trading partner. Therefore, the Customs Union with the EU has a large impact on Türkiye's trade policies. With the Customs Union, Türkiye has aligned with the EU's common external tariffs in industrial products (excluding coal and stell products) and the industrial component of processed agricultural goods. Moreover, in industrial products, customs duties and quantitative restrictions are removed between the Parties.

Figure 4.12. Services exports and FDI are low, focused on low-tech sectors, and tightly regulated



Note: In Panel B, some countries with no triangles have incomplete information to compute the detailed sectoral shares of FDI. Panel C shows average STRI score by policy and country, based on the STRI simulator (https://oecd-main.shinyapps.io/STRI_Explorer/). The STRI database records measures on a Most Favoured Nation basis. The indices are based on laws and regulations in force on 31 October 2023.

Source: OECD (2024), OECD Balanced trade in services (BaTIS); OECD FDI main aggregates, BMD4; OECD FDI by counterpart area and by economic activity, BMD4, OECD Services Trade Restrictiveness Index Explorer; and OECD FDI Regulatory Restrictiveness Index -Archive; and World Bank (2024), World Development Indicators.

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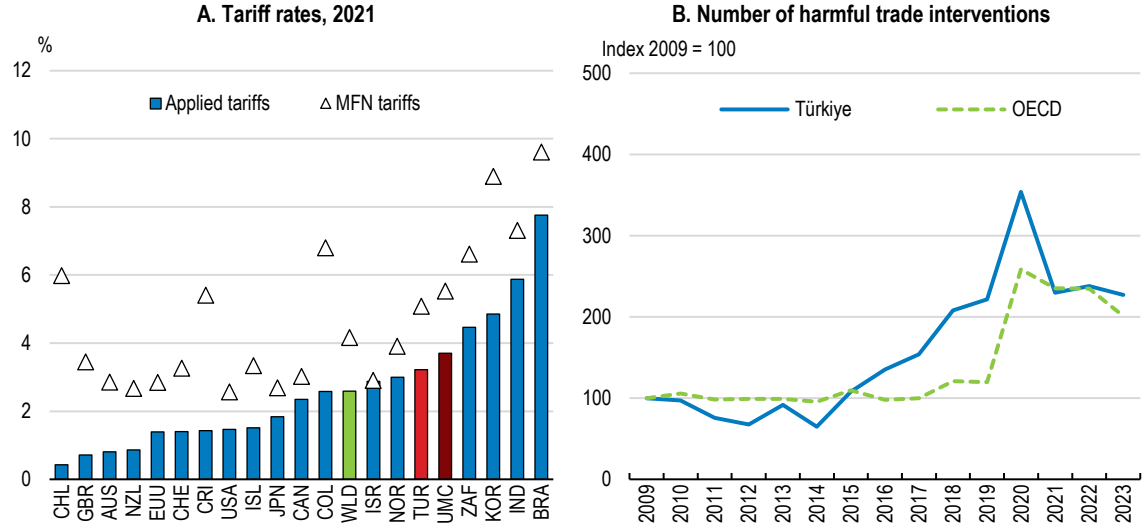
The scope of the Customs Union remains relatively limited. Trade in services is not included in the CU or any preferential agreement, and thus follows WTO rules. Trade in non-processed agricultural products is governed by a separate preferential agreement. Under this agreement, the EU phased out most tariffs on agricultural products, while Türkiye kept relatively higher tariffs. In 2022, for example, the effectively applied tariffs on agricultural imports from France to Türkiye averaged 20.2%, while Türkiye's agricultural exports to France faced only tariffs of 0.9% on average (World Bank, 2024[111]). Similarly, public procurement can be restricted to domestic tenders both in the EU and Türkiye since the CU does not include relevant provisions in this regard (Weyerstraß and Ertl, 2022[112]; Yalcin, Aichele and Felbermayr, 2016[113]).

Expanding the Customs Union could significantly improve trade, increase investment, and boost productivity. Extending coverage to the agriculture and services sectors would grow bilateral trade significantly. Recent estimates suggest that Turkish exports to the EU could increase by almost 70% and GDP could be 1.8% higher (Yalcin and Felbermayr, 2021[114]). Discussions on reforms of the CU have already known fits and starts in 2016 and 2020 and should be pursued. In that regard, it is welcome that a new High-Level Dialogue on Trade has met for the first time in July 2024 to discuss strengthening the CU, and that Türkiye has officially requested to upgrade the CU to include trade in services. Both Türkiye and the EU have already implemented such agreements with wider scope with different countries. For example, the Türkiye-Singapore Free Trade Agreement (TRSFTA) signed in 2015 covers goods, services, public procurement, investment, and intellectual property. In particular, public procurement is open to both countries and there are no foreign equity limits on foreign investors. Similarly, the EU agreements with Chile and Canada (CETA) also cover several services and facilitate the participation of EU firms in public procurement.

Figure 4.13. Tariff rates are relatively high, and non-tariff barriers have increased quickly



Note: In Panel A, data are based on the average of applied and most favoured nation rates weighted by the product import shares corresponding to each partner country. Most-favoured nation (MFN) tariffs rates are the highest that WTO members promise to charge one another. The "applied" tariffs are the lowest rates that are effectively available. Data refer to 2017 for the World (WLD) and Upper Middle Income (UMC) countries. In Panel B, data are based on the total number of policy instruments harming foreign commercial interests of a given nation or customs territory, considered by the Global Trade Alert. It covers trade in goods and services, investment as well as labour force migration. See the source for the details on the list of harmful trade measures.

Source: World Bank (2024), World Development Indicators; and Global Trade Alert, https://data.globaltradealert.org/threads/harmful-trade-interventions.

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Changes to the EU-Türkiye Customs Union should also ensure the creation of a well-functioning trade dispute resolution mechanism (DSM). This could be based on examples from existing Free Trade Agreements, like those the EU has with Japan and Canada. Today, trade disputes between the EU and Türkiye are rarely solved within the existing DSM. In principle, the Ankara Agreement includes a DSM for a wide range of potential conflicts. However, it requires a mutual consent of both parties to initiate a dispute settlement. Another DSM within the CU agreement is limited to disagreements on the duration of safeguard measures (Weyerstraß and Ertl, 2022[112]; World Bank, 2014[115]).

Even with a stronger Customs Union, Türkiye will need to improve existing trade deals and negotiate new ones, especially with countries that have Free Trade Agreements (FTAs) with the EU. The EU has signed more bilateral FTAs with third countries in recent years. As a consequence, Turkish companies face more competition from third-country exporters, while EU exporters may find it harder to use Turkish inputs as part of their agreements with third countries. To address this, Türkiye should prioritise negotiating FTAs with countries that already have FTAs with the EU. Aligning its FTAs with the EU, in addition to deepening the CU to agriculture and services, could boost Türkiye's GDP by 2.5%, thanks to a rise in exports (Yalcin and Felbermayr, 2021[114]).

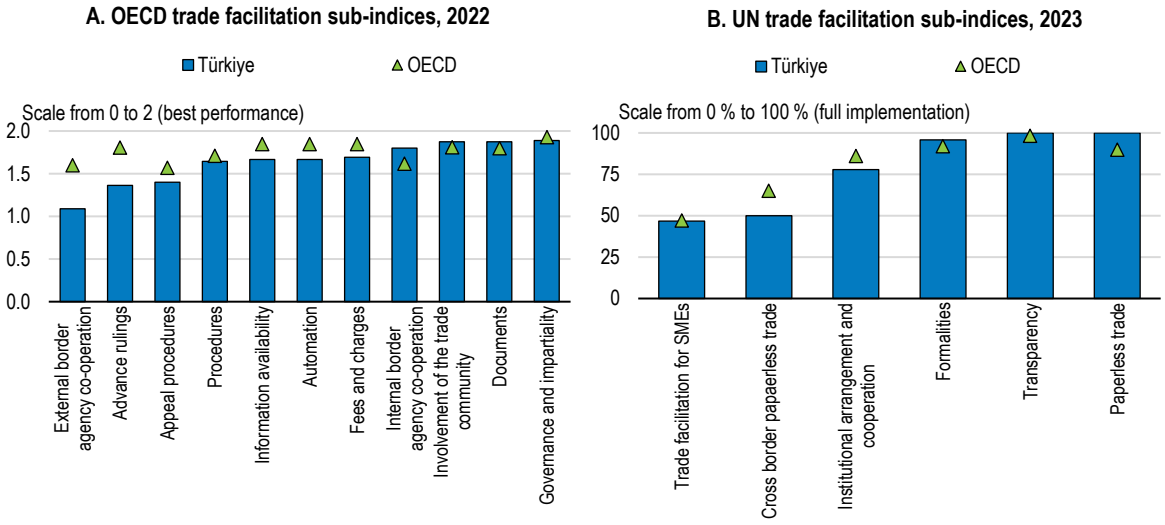
Negotiating new FTAs or deepening existing FTAs outside of any CU-related policies would still be highly beneficial. Most of Türkiye's FTAs cover goods only. In the past, Türkiye's merchandise exports with a partner country increased by 180 percent in the five years after a trade agreement came into force. Expanding existing agreements (outside of the CU) to the levels of coverage in the broadest agreement signed by Türkiye to date could increase exports by 10% (World Bank, 2022[7]). In that regard, it is welcome that the country is currently negotiating with the Gulf Cooperation Council, Japan and Indonesia, and with the United Kingdom to expand and update the existing FTA.

Beyond tariff and non-tariff barriers, technical and legal procedures for products entering or leaving the country could be streamlined. Facilitating trade can help boost trade by reducing hidden trade costs: for example, the OECD has estimated that shifting to best trade facilitation practices could reduce trade costs by 15% (Moïsé and Sorescu, 2013[116]). Surveys typically find that burdensome procedures are among the top obstacles to international trade in particular for SMEs (López González and Sorescu, 2019[117]). Although Türkiye has made significant improvements in recent years in facilitating trade, in particular in digitalising customs procedures, there is still room for progress (Figure 4.14). For example, in the latest Logistics Performance index, while Türkiye performs relatively well in its ability to arrange competitively priced shipments, it ranks 6th lowest among OECD countries in the perceived efficiency of the customs clearance process.

One way forward could be to improve coordination with customs agencies of trade partners, which is underdeveloped (Moïsé and Sorescu, 2013[116]; UNCTAD, 2023[118]). In particular, formalities and procedures with neighbouring countries at border crossings are still not fully aligned, the alignment of working hours is only at a planning stage, and there are no common facilities at border crossings or one-stop border posts. Türkiye already made some efforts in this area and signed a protocol with Azerbaijan and Georgia to enhance customs cooperation and enforcement and facilitate trade (WTO, 2023[104]). Türkiye could also improve the digitalisation of exchanges of trade-related information across borders. While it has fully implemented the recommendations of the WTO's Trade Facilitation Agreement regarding the digitalisation of trade procedures, it is still lagging in enabling cross-border mutual recognition and the exchange of trade-related data and documents in electronic form.

More support could also be given to SMEs, as the fixed costs of trading can be more burdensome for them. Although Türkiye has now fully implemented a single window system (a single portal through which trade documents can be submitted to customs authorities) for trade-related information and procedures, it has not made it more accessible to SMEs. For example, Thailand has developed a training programme for SMEs to access and use its single window (UN/ESCAP and ITC, 2016[119]). The UN has recently suggested the implementation of an Integrated Services for SMEs in International Trade (ISMIT) which would help SMEs in the provision of standardised information and documents to the national single window. For example, China established the OneTouch system in 2010 to provide support – specifically targeted to SMEs – for services such as customs clearance, VAT refunds and logistics, connected to the Chinese Single Window (UN/CEFACT, n.d.[120]). Other helpful measures could include options like deferred duty payments and reduced fees and charges. The United States, for example, has an expedited shipments program that sets a minimum value for applying import duties on goods. Furthermore, a single window system for trade finance – connecting financial institutions and authorities, can make it easier for SME to access funds (UNCTAD, 2023[118]).

Figure 4.14. There is room to facilitate trade via streamlined procedures and cross-border cooperation



Note: The OECD trade facilitation performance indicators are composed of eleven variables measuring the actual extent to which countries have introduced and implemented trade facilitation measures in absolute terms, but also their performance relative to others. The UN Trade Facilitation Survey consists of a set of sixty digital and sustainable trade facilitation measures. Each aggregate index averages the scores for its sub-indices. The OECD number is an average of 34 OECD countries with available data.
Source: OECD (2024), OECD Trade Facilitation Indicators 2022 edition; and United Nations (2023). Digital and Sustainable Trade Facilitation: Global Report 2023.

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4.4.3. Improving the efficiency of the insolvency regime

A more efficient insolvency regime would enhance business dynamism by boosting renewal of business. As barriers to entry and to conduct activity are eased, the exiting of non-viable, unproductive firms could also be facilitated. An efficient insolvency regime supports productivity by reducing the share of capital sunk in zombie firms, a speedier recovery of temporarily non-viable firms, and by facilitating innovation and experimentation by encouraging risk-taking (André and Demmou, 2022[121]; Adalet McGowan and Andrews, 2018[122]). Addressing insolvency frameworks also has important financial stability implications as, for example, a high prevalence of non-performing loans can act as a constraint on the supply of credit by banks and the allocation of financial resources. In Türkiye, the insolvency regime appears particularly inefficient for services firms where exiting firms tend to actually have higher productivity than remaining ones (World Bank, 2019[107]). In the latest available data of the Doing Business Survey from the World Bank, the time for resolving insolvency was five years in 2019 against 1.8 years in the OECD, and the recovery rate was 10.5% against 27.3% in MENA countries and 70.2% in OECD high income countries.

The insolvency regime in Türkiye can improve on standard policies which can help smooth the transitions (Figure 4.15). The treatment of failed entrepreneurs is fairly generous, with a discharge time in line with the OECD median and generous asset exemptions. However, Türkiye lacks an early warning mechanism such as training to firms or on-line tests to assess their financial position, and financial and debt counselling to companies with financial difficulties. For example, in 2006, France introduced a 'safeguard' procedure for firms that are not yet insolvent but are experiencing financial difficulties. If a court accepts their application, these firms follow a process similar to traditional insolvency, significantly improving their chances of successful restructuring (Epaulard and Zapha, 2022[123]).

Furthermore, Türkiye's insolvency system does not have a streamlined system targeted towards SMEs. For example, the United States recently introduced a restructuring procedure specifically for small businesses allowing debtors to retain control over their operations and empowering courts to override dissenting creditors for firms with debts below USD 2.7 million. Colombia implemented simplified restructuring and liquidation procedures during the pandemic, which included mandatory mediation meetings early in the insolvency process and tighter timelines for small companies (André and Demmou, 2022[121]).

While Türkiye has recently modernised its insolvency framework to align with global best practices, it still imposes barriers to restructuring which could be loosened:

- Before 2023, Türkiye was one of only nine OECD countries where creditors could only initiate liquidation while only debtors can initiate restructuring. This could reduce the probability of successful restructuration in a timely fashion. However, the Financial Restructuring Framework Agreements reintroduced in December 2023 established a financial restructuring framework that enabled creditors to restructure debts of viable companies facing temporary financial difficulties;
- There is no limit on the length of stay on assets in financial restructuring proceedings while most OECD countries impose a time limit, but amendments to the Enforcement and Bankruptcy Law introduced a temporary respite period during concordat proceedings (a court-supervised restructuring process);
- Since 2019, the framework allows the overriding of the votes of a minority of creditors voting against a restructuring plan. Still, it does not guarantee that they receive as much under restructuring as in liquidation. This is the case in a majority of OECD countries;
- Credit obtained by the debtor after the initiation of insolvency proceedings is not given priority over either secured or unsecured creditors. This can limit the possibility to inject new capital to facilitate internal reorganisation. Two thirds of OECD countries give priority to new financing over unsecured creditors.

4.4.4. Providing a sound institutional framework for the economy

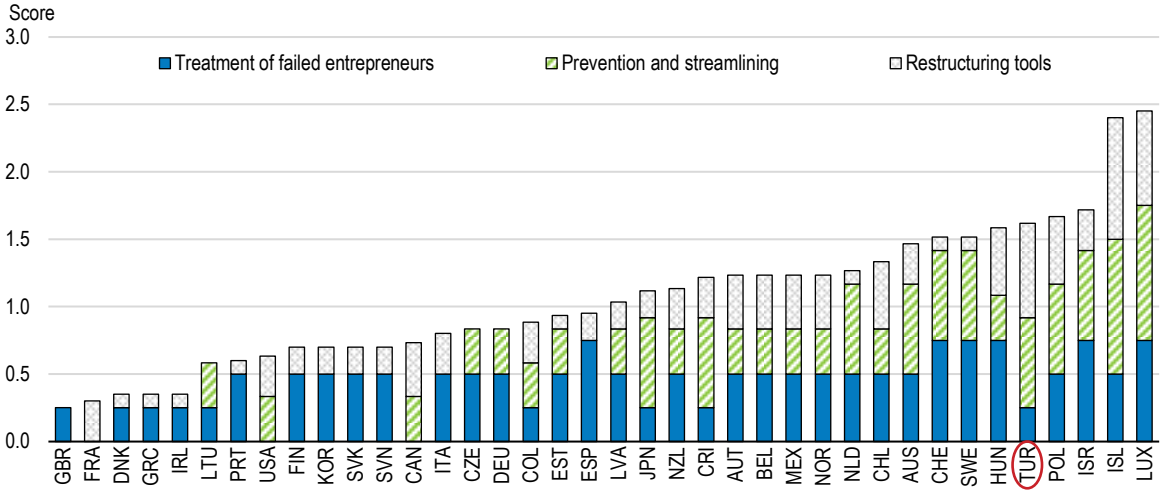
The government plays a major role in the economy not only through its significant interventions in the conduct of business activity, but also more directly through the importance of state-owned enterprises. In order to provide a level playing field for the private sector and limit potential distortions of economic activity, the government needs to make sure that a rationale exist for its involvement in business activities, and ensure that the institutional setup is in place to protect decision makers against undue influence.

Rationalising the role of the state in the economy

While Türkiye went through several waves or privatisations in the last 40 years, state ownership of companies remains relatively large compared to other OECD countries. A recent estimation from the World Bank suggests that SOEs are present in almost half of all business sectors. In addition, the state owns more than 10% of companies in 80% of business sectors (World Bank, 2023[124]). For example, public companies hold significant positions in network sectors (e.g. telecommunications; oil, gas and electricity transmission) where there are natural monopolies, and in strategic sectors like defense. However, they are also present in banking, and in industry and manufacturing sectors such as the manufacturing of rail vehicles (TÜRASAŞ), the manufacturing of meat and milk (ESK), or the processing of tea (ÇAYKUR) where the public policy role is less justified. For example, state-owned banks' assets represented 38% of the banking sector's total assets in 2023, the sixth highest in the OECD (U.S. Department of State, 2023[125]).

Figure 4.15. The insolvency regime could be more efficient

OECD Insolvency indicator, main components, 2022



Note: The scores for the three main sub-categories are scaled from zero to one, with lower scores indicating more favourable frameworks.
Source: André, C. and L. Demmou (2022), "Enhancing insolvency frameworks to support economic renewal", OECD Economics Department Working Papers, No. 1738.

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High SOE presence can hamper productivity when they do not solve market failures. While countries have typically shifted away from full ownership of SOEs, most Turkish SOEs are wholly owned by the government – an important consideration as private involvement in SOEs is associated with higher productivity (IMF, 2020[126]; Ministry of Treasury and Finance, 2023[127]). State ownership can be justified to address market failures – such as the existence of a natural monopolies because of strong economies of scale, the provision of public or merit goods, and the existence of externalities – or based on other social objectives (Szarzec, Dombi and Matuszak, 2021[128]; OECD, 2005[129]). However, the prevalence of SOEs can threaten fair competition in commercial activities where market failures are limited. In Türkiye, sectors with state involvement have fewer new businesses, higher market concentration, slower job growth, and lower productivity. Those sectors also appear to be significantly more protected from outside competition: sectors with strong state involvement have significantly higher import tariffs and nontariff barriers (World Bank, 2023[124]).

As a consequence, governments should transparently present strong grounds for the ownership of enterprises in commercial sectors. However, despite its wide coverage, Türkiye does not provide a publicly accessible document detailing the rationale behind state ownership. For example, in Norway a whole-of-government state ownership policy is expressed as a white paper which is renewed every four years after each parliamentary election. The White Paper includes the overall objectives for state ownership and for each individual company in which the state is a shareholder, and states how the government intends to exercise its ownership. In Germany, the portfolio of SOEs is reviewed every two years and state ownership must be justified or the enterprise will be privatised (Lewis et al., 2022[130]).

Creating a clear rationale for state ownership could help identify areas for potential future privatisations in Türkiye. The large number of SOEs and the relative underperformance in sectors where they operate suggest room for more privatisation. In addition, since 2017 many Turkish SOEs have struggled to cover their financial expenses (including interest expenses and foreign exchange losses) with operating profits. Evidence suggests that the privatisation of such “zombie firms” could be particularly beneficial (Wang et al., 2024[131]).

In the past, the country went through several waves of privatisations, but the pace has slowed down in recent years. 210 companies out of 278 once owned by the government have been privatised since the first law on privatisation was passed in 1984. Overall, revenues from privatisation were around USD 5 billion per year between 2005 and 2015, but fell to USD 504 million in 2022 or less than 0.1% of GDP. Revenues were projected to be 0.05% of GDP in

2023 mostly deriving from the sale of infrastructures belonging to the Electricity Generation company EÜAŞ. In the past, privatisations have typically tended to improve profitability and efficiency, at least when realised in economies with strong economic institutions in place (Guriev and Megginson, 2006[132]). For example, the privatisation of cement plants in Türkiye between 1983 and 1999 has been associated with higher productivity (Okten and Arin, 2006[133]). The OECD has provided a privatisation guide for policymakers and a stock-taking of country experiences (OECD, 2018[134]; OECD, 2019[135]).

Türkiye could consider the privatisation of several SOEs which were in the original scope of privatisation programmes but were never transferred to the private sector. For example, the state-owned banks Ziraat Bank and HalkBank were planned to be privatised in 2004 but are now held by the Türkiye Wealth Fund (TWF) established in 2016 (Box 4.4). Likewise, Turk Telekom had been partly privatised in 2005 but TWF now holds 62% of the capital; and Türkiye Sugar Factories was included in the scope of privatisation in 2000 but was removed in 2021, with its shares transferred to TWF (Ministry of Treasury and Finance, 2023[127]).

For the enterprises which are kept in the state's hands with a rigorous rationale, their governance should be aligned with OECD guidelines to ensure a level-playing field (OECD, 2015[136]). Evidence at the micro and macro level suggests that the positive impact of SOEs on growth and productivity is highly dependent on the actual and perceived quality of governance and institutions (OECD, 2020[137]; Szarzec, Dombi and Matuszak, 2021[128]; IMF, 2020[126]). In that regard, it is welcome that the latest medium-term program has proposed a review of SOE governance. This is important because, despite the relatively broad coverage of SOEs, Türkiye strays away from some of the good practices set up in the OECD Guidelines on the Governance of SOEs. For example:

- It is important to separate ownership from regulation and policies. In Türkiye, line ministries that manage SOEs often also regulate the sectors where those SOEs operate, leading to potential conflicts of interest (Edwards and Waverman, 2006[138]; World Bank, 2023[124]). Centralising SOE ownership can help separate ownership from regulation and policy. Brazil, for instance, created a Secretariat in 2016 to manage SOEs independently from line ministries (OECD, 2020[139]). Türkiye made some progress with the creation of the Türkiye Wealth Fund (Box 4.4). However, the TWF's governance could be more transparent, as companies established by the TWF or by its subsidiaries are not audited by the Turkish Court of Audit (but companies which were transferred to the TWF and have public ownership above 50% are audited by the Turkish Court of Audit), and its audits have not been published since 2021.
- Independence of the management of SOEs should be strengthened. In Türkiye, public authorities appoint the CEOs of SOEs, and there is no requirement that at least part of the board of directors must consist of independent members. This lack of independence can lead to conflicts of interest in decision-making. Additionally, politicians can serve as board members, which poses a risk if they have the power to influence the SOEs' operations (OECD, 2013[140]; OECD, 2019[141]). Most OECD countries have stricter rules to support board independence (OECD, 2020[139]).
- SOEs should broaden its measurable targets to add targets on their rate of returns. Many OECD countries have formal rate-of-return targets set by their owners and boards. As part of proposed governance reforms, Türkiye is considering using performance-based methods to enhance SOE accountability.
- Most commercial SOEs in Türkiye have access to explicit guarantees from the Ministry of Finance for borrowing from international financial institutions, while most OECD countries provide no or very limited guarantees on contracted debts.

Box 4.4. The Türkiye Wealth Fund (TWF, *Türkiye Varlık Fonu*)

The TWF has quickly acquired a broad portfolio of companies

The Türkiye Wealth Fund (TWF) was established in 2016 with a capital of USD 15.6 million. In 2017, TWF acquired the license for the national lottery and the Treasury's shares in the two largest public lenders Ziraat Bank and Halkbank, the Turkish Petroleum Corporation, Turkish Airlines, and Turk Telekom. In 2020, it acquired the shares of the public insurance companies and 26% of the mobile phone operator Turkcell. Today, the fund has (usually full) participation in 30 companies. More than 70% of its assets are shares in financial services companies. An additional 12% are invested in energy companies and 10% in transport and logistics companies. Its assets were evaluated to TRL 5600 billion (37% of GDP) at the end of 2022.

TWF has benefited from strong government support

TWF has been funded by the transfer of SOEs through equity injections, and by bond issuances. The fund benefits from a full guarantee of the Treasury on 95% of its syndicated euro loan contracted in 2020 (30% of outstanding debt in February 2024) and has benefited from funding from the Treasury to recapitalise its state-owned banks. The TWF also benefits from tax exemptions. The Law on the Establishment of the Türkiye Wealth Fund Management Company states that "the Türkiye Wealth Fund and the companies and sub-funds to be established by the Company are exempt from income and corporate tax."

The transparency of TWF could be improved

The TWF has been chaired by the President of the Republic since 2018, who also appoint the auditors performing the audit of the fund. The fund is not audited by the Turkish Court of Accounts (TCA) but by an independent audit firm, and not all companies in TWF's portfolio are audited by the TCA. The 2021 audit report distributed to Parliamentarians was designed as secret in 2021 and audit reports have not been published on the TWF websites since then.

TWF ranked slightly below the average and the median of 52 sovereign wealth funds in the Linaburg-Maduell Transparency Index, an index developed by the Sovereign Wealth Fund institute on 10 transparency indicators (including the provision of up-to-date, independently audited annual reports).

Source: TWF, (Erdemir, 2024[142]), Fitch, (European Commission, 2023[41]), (U.S. Department of State, 2023[125]).

Increasing transparency in government action

The large role of the state in the Turkish economy emphasises the importance of tight lobbying regulation to avoid economic distortions. Improving the regulation of the lobbying process is important to strengthen competition. Public policies that respond only to the needs of a special interest group undermine competition as these groups can interfere with competitors' businesses or to secure economic advantages. Moreover, high perception of unfair competition can dismantle trust, increase uncertainty, and deter investments. Therefore, it is important to set standards and principles for the lobbying process to provide a level playing field by granting all stakeholders fair and equitable access to the development and implementation of public policies.

There is room to improve transparency in decision-making in Türkiye. To enhance scrutiny of public decisions, transparency measures should be applied to all actors attempting to influence decision-making. However, Türkiye still falls short compared to other OECD countries in following proper lobbying principles (OECD, 2021[143]). Currently, lobbying activities in Türkiye lack transparent regulations. For instance, lobbyists are not required to register or disclose their activities. Some OECD countries also place requirements on public officials who are being targeted by lobbying activities to disclose information on their meetings with lobbyists, either through a registry (Chile, Peru, Lithuania and Slovenia), "open agendas" (Lithuania, Spain, United Kingdom and the EU), and/or by requiring public officials to disclose their meetings with lobbyists to their superiors (Hungary, Latvia, Lithuania, Slovenia) (OECD, 2021[143]). In addition, in Türkiye it is not mandatory to disclose the names of the members of permanent advisory bodies. Unlike most OECD countries, the country has not set up regulations specifically dealing with conflicts of interest for members of cabinet, senior civil servants, appointed public officials, and members of parliament.

Strengthening anticorruption efforts

Beyond the economic distortions created by lobbying, the potential for corruption can have a significant impact of productivity. Corruption affects key determinants of productivity growth, including innovation and diffusion of new technologies, competition and private investment decisions. Surveys consistently show that citizens believe corruption is prevalent in various sectors, including business, and public services. According to Transparency International, the perception of corruption worsened in 2023 and Türkiye now ranks 115th among 180 countries surveyed. Other indicators confirm high corruption perception in Türkiye (Figure 4.16).

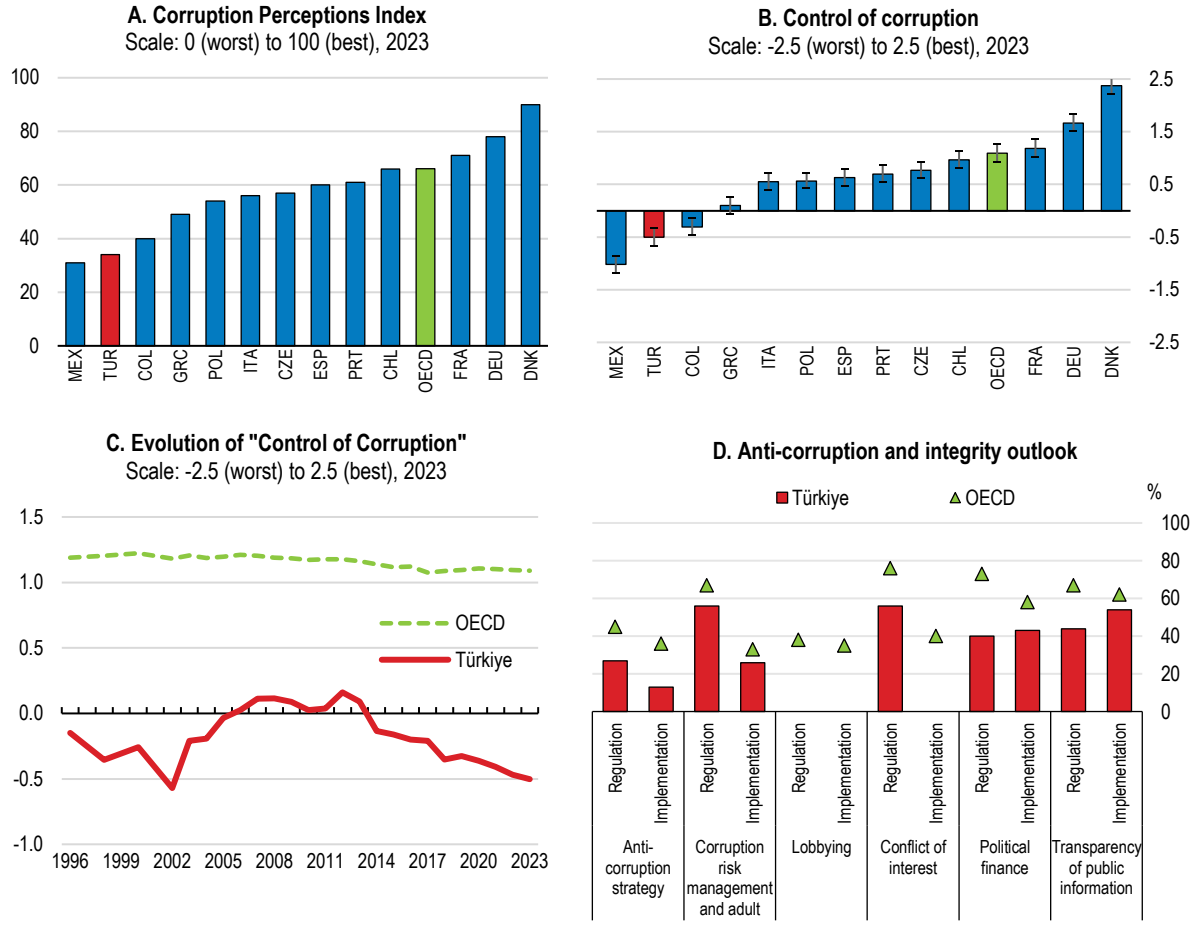
A strategic approach to anti-corruption allows governments to identify the main challenges, establish objectives and define specific actions for achieving desired results. As outlined in the OECD Anti-Bribery Convention, Türkiye had created several anti-corruption strategies, but they have not been maintained or updated. Many are no longer in force and have not been replaced, resulting in a lack of national strategic policies on either domestic corruption or foreign bribery (OECD, 2024[144]). Moreover, a fully-fledged corruption prevention policy still remains to be developed and Türkiye has also not made progress to introduce whistleblower protection legislation.

The legal framework and institutional architecture also need to be improved. Türkiye has not set up anticorruption bodies in line with the United Nations Convention against Corruption (European Commission, 2023[41]). In addition, Türkiye, contrary to most of the OECD countries, does not have an independent body with a mandate to oversee political financing (OECD, 2024[145]). This might help to provide effective oversight institutions with the independence and legal authority to meaningfully regulate potential violators.

Transparency is essential for reducing the perception of corruption. When citizens have access to public information, they can better understand government activities, which encourages public officials to act responsibly and increases accountability in policymaking. High levels of public access to information are linked to greater trust in government and satisfaction with public services (OECD, 2024[145]).

Most OECD countries have clear procedures for requesting information and regulations ensuring that all public institutions and individuals performing public duties must provide access to that information. In contrast, Türkiye lacks such regulations and does not have a "default open government data" policy OECD, 2024[144]). Additionally, there is limited parliamentary oversight of the budget, leading to low budget transparency (European Commission, 2023[41]).

Figure 4.16. The corruption perception in Türkiye is high



Note: Panel B shows the point estimate and the margin of error. Panel D are based on the OECD Public Integrity Indicators (PIIs), https://oecd-public-integrity-indicators.org/. How to read: As measured against OECD standards on anti-corruption strategy, Türkiye fulfils 27% of criteria for regulations and 13% for implementation compared to the OECD average of 45% and 36%, respectively. The country does not fulfil any criteria on regulations and practice to mitigate corruption risks related to lobbying, as there is no legislation in this area, while it fulfils 56% of criteria regarding regulations on OECD standards on conflict of interest and does not track the necessary data in practice.

Source: Panel A: Transparency International; Panels B & C: World Bank, Worldwide Governance Indicators; Panel D: OECD Anti-Corruption and Integrity Outlook 2024 – Country Notes: Türkiye.

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Table 4.2. Recommendations

MAIN FINDINGS	RECOMMENDATIONS (Key recommendations in bold)
Encouraging innovation and promoting the adoption of new technologies	
Public R&D support is at the OECD average. Although, the country has systematic and regular impact assessments and most programmes are evaluated, their social and economic impacts are measured with a tailored approach to each support mechanism, and it lacks a unified approach.	Develop a common and unified evaluation framework for public R&D support to identify best practices and challenges.
Despite relatively generous government support, there is only limited adoption of new technology among Turkish companies. Only one-third of Turkish companies reported introducing an innovation in 2018-2020, compared to around half of the companies in the average OECD country.	**Expand further the programmes that promote research-business collaboration, and allow researchers to temporarily join the private sector and vice-versa.**
One of the significant barriers to higher innovation, according to Turkish companies, is a lack of information about government R&D support and insufficient knowledge about collaboration opportunities.	Expand technology transfer offices in Türkiye and complement them by digital platforms that promote and facilitate matchmaking between academic and industry partners.
Enhancing the skills of current and incoming workers	
The sharp increase in university graduates has resulted in a high likelihood of mismatch, especially among recent graduates. Türkiye has the largest skills gap for workers with tertiary education among OECD countries.	Strengthen career counselling by employer engagement in career guidance. **Further enhance incentives for tertiary education institutions, including funding to offer courses more aligned with labour market needs.**
Participation in lifelong learning in Türkiye remains much lower compared to other OECD countries. The level of training provided by Turkish companies, including digital training, is among the lowest in the OECD.	Expand high-quality adult training programmes, including distance learning and modular and/or credit-based formats. Consider establishing personal account schemes, which allow individuals to save a certain amount of time per year worked for training purposes.
Türkiye ranks among the least attractive countries for highly skilled migrants.	Continue ongoing efforts to relax migration rules for highly skilled workers further, including allowing highly skilled migrants to enter the country and seek work. Ease immigration policies to encourage the temporary or permanent immigration of skilled workers and international students.
Reducing regulatory barriers to business dynamism	
Burdens on setting up Limited Liability Companies and Personally-Owned Enterprises are significant.	Reduce capital requirements and registration costs for POEs and LLCs. Consider applying a "silence is consent" principle for issuing permits and licenses.
Regulations in network sectors are relatively high.	Remove the regulation of retail tariffs in electricity and gas sectors. Reduce the dominant position of BOTAŞ and unbundle the transmission system operator from commercial activities.
Services in Türkiye are less knowledge intensive, and domestic services are used less in services and manufacturing exports relative to other OECD countries. Productivity gaps in manufacturing firms in Türkiye appear in firms which have services affiliates in more restricted sectors.	Drop the nationality requirements for professional services providers. **Reduce barriers to the conduct of activity in professional services by easing the regulation of fees, restrictions on advertising and marketing, limits on firms' legal forms, and occupational licensing.**
Restrictions on services trade and FDI reduce competition and hamper the development of services exports. There are tight restrictions on foreign participation in services sectors, and requirements of citizenships and physical presence. Estimates suggest that the barriers to services trade are equivalent to ad-valorem tariffs of 78% in business services	**Loosen foreign participation restrictions in services sectors where they have hampered beneficial competition.**
Surveys of investors typically suggest that grievances related to adverse regulatory risks are the most important government actions leading to FDI cancellations.	Follow up on the commitment to develop alternative resolution mechanisms, e.g. by empowering a dedicated government agency to track problematic investment and serve as a repository of information.
The Customs Union with the EU does not cover non-processed agricultural products, trade in services, and public procurement. The EU has been expanding free trade agreements with third parties in recent years, raising competitive pressure for Türkiye.	**Support expanding the Customs Union to agriculture, services, and public procurement.** Negotiate wide-ranging FTAs in priority with countries already in trade agreements with the EU, and deepen existing agreements.
The insolvency regime appears particularly inefficient for services firms where exiting firms tend to have higher productivity than remaining ones. The treatment of failed entrepreneurs is fairly generous.	Implement early warning mechanisms such as training to firms or on-line tests to assess their financial position. **Provide a simplified insolvency system for SMEs.** Ease barriers to restructuring, e.g. by imposing a time limit on the stay on assets in restructuring proceedings.

MAIN FINDINGS	RECOMMENDATIONS (Key recommendations in bold)
Providing a sound institutional framework for economic activity	
State ownership of companies remains relatively widespread. Most Turkish SOEs are wholly owned by the government.	Set up a clear rationale for state ownership of SOEs.
Türkiye does not provide a public document detailing the rationale behind state ownership.	Separate ownership rights and regulatory responsibilities e.g. by centralising SOE ownership through a more transparent Türkiye Wealth Fund.
SOE governance in Türkiye does not follow the OECD Guidelines on the Governance of SOEs, which can weaken the competitive environment.	Improve the governance of SOEs by requiring the independence of board members, formal agreements on rate-of-return targets, and by limiting preferential access to financing from state-owned financial institutions.
Transparency International's perception of corruption index worsened in 2023. Türkiye's now ranks 115th among 180 countries surveyed.	Adopt an anti-corruption strategy underpinned by credible action plans. **Establish a permanent and independent anti-corruption body.** Introduce whistleblower protection legislation.

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Türkiye has been one of the fastest-growing economies in the OECD over the past decade. However, the income gap with OECD countries remains large and structural challenges persist. More prudent macroeconomic policies are helping to restore sustainable growth and to reduce economic imbalances, and should be pursued. Over the long term, improving public finances will require more efficient consumption taxes, a broader income tax base, and strengthened social assistance. Higher labour market participation is also key. Women's participation remains particularly low and would benefit, among other measures, from expanding affordable early childhood education and care. Türkiye has made significant progress in addressing climate change, but emissions are still growing. Reaching the target of zero net emissions by 2053 would require higher effective pricing of carbon and transitioning away from coal. Finally, potential growth per worker in Türkiye has been slowing down and productivity remains relatively low, notably in services sectors. To boost living standards in a sustainable way, the country needs to improve productivity by upskilling the labour force, enhancing innovation, and easing business regulations.

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