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OECD Economic Surveys: Tunisia 2022

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Foreword

The draft report was discussed at a meeting of the Economic and Development Review Committee on 2 November 2021, with participation of representatives of the Tunisian authorities.

The Survey was prepared by Andrea Goldstein and Robert Grundke, under the supervision of Isabelle Joumard. The special chapter greatly benefitted from financial and logistical support by the GIZ (*Deutsche Gesellschaft für Internationale Zusammenarbeit*). Research inputs by Przemyslaw Kowalski from the OECD Trade and Agriculture Directorate, Flavio Calvino, Francesco Manaresi, and Rudy Verlhac from the DynEmp team of the OECD Directorate for Science, Technology and Innovation, Steven Cassimon, Bishoy Sadek, Jibrane Soltani, and Youssef Charfi are gratefully acknowledged. The Embassies of France, Germany and Italy in Tunisia supported the field research for the special chapter. Other valuable inputs and comments were received from the OECD's Directorate for Financial and Enterprise Affairs; the Centre for Tax Policy and Administration; and the Directorate for Employment, Labour and Social Affairs. Anne Legendre, Steven Cassimon and Lutécia Daniel provided statistical assistance and Gemma Martinez provided editorial support. The previous OECD Economic Survey of Tunisia was issued in March 2018. Information about the latest as well as previous Surveys and more information about how Surveys are prepared is available at <http://www.oecd.org/eco/surveys>.

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BASIC STATISTICS OF TUNISIA, 2019¹
(Numbers in parentheses refer to the OECD average)²

LAND, PEOPLE AND ELECTORAL CYCLE				
Population (million)	11.7		Population density per km ²	75.3 (38.4)
Under 15 (%)	24.2	(17.9)	Life expectancy at birth (years)	76.7 (80.2)
Over 65 (%)	8.6	(17.1)	Men	74.7 (77.6)
International migrant stock (% of population)	0.5	(13.2)	Women	78.7 (82.9)
Latest 5-year average growth (%)	1.1	(0.6)	Latest general election	October-2019
ECONOMY				
Gross domestic product (GDP)			Value added shares (%)	
In current prices (billion USD)	39.2		Agriculture, forestry and fishing	10.8 (2.6)
In current prices (billion TND)	115.0		Industry including construction	24.0 (25.7)
Latest 5-year average real growth (%)	1.6	(2.2)	Services	65.2 (71.7)
Per capita (thousands USD PPP)	11.2	(47.6)		
GENERAL GOVERNMENT³ (Per cent of GDP)				
Expenditure	31.6	(40.6)	Gross financial debt (OECD: 2018)	71.8 (107.8)
Revenue	27.7	(37.6)		
EXTERNAL ACCOUNTS				
Exchange rate (TND per USD)	2.93		Main exports (% of total merchandise exports)	
PPP exchange rate (USA = 1)	0.88		Machinery and transport equipment	36.5
In per cent of GDP			Miscellaneous manufactured articles	28.5
Exports of goods and services	48.7	(53.7)	Manufactured goods	9.8
Imports of goods and services	59.3	(50.4)	Main imports (% of total merchandise imports)	
Current account balance	-8.4	(0.3)	Machinery and transport equipment	30.1
			Manufactured goods	21.1
			Mineral fuels, lubricants and related materials	16.8
LABOUR MARKET, SKILLS AND INNOVATION				
Employment rate (aged 15 and over, %)	40.2	(57.5)	Unemployment rate, Labour Force Survey (aged 15 and over, %)	14.9 (5.4)
Men	60.3	(65.6)	Youth (aged 15-24, %)	33.8 (11.8)
Women	21.1	(49.9)	Long-term unemployed (1 year and over, %, 2017, OECD: 2019)	9.2 (1.3)
Participation rate (aged 15 and over, %)	47.3	(60.8)	Tertiary educational attainment (aged 25-64, %, 2016, OECD: 2019) ⁴	15.2 (38.0)
			Gross domestic expenditure on R&D (% of GDP, 2018)	0.6 (2.6)
ENVIRONMENT				
Total primary energy supply per capita (toe, 2018, OECD: 2019)	1.0	(3.9)	CO2 emissions from fuel combustion per capita (tonnes, 2018, OECD: 2019)	2.3 (8.3)
Renewables (% , 2018, OECD: 2019)	10.5	(10.8)	Renewable internal freshwater resources per capita (1 000 m ³ , 2017)	0.4
Exposure to air pollution (more than 10 g/m ³ of PM 2.5, % of population)	99.6	(61.7)		
SOCIETY				
Income inequality (Gini coefficient, 2015, OECD: latest available)	0.328	(0.318)	Education outcomes (PISA score 2015)	
Poverty gap at \$USD 3.20 a day (2011 PPP, %, 2015)	0.6		Reading	361 (492)
			Mathematics	367 (490)
Public and private spending (% of GDP)			Science	386 (493)
Health care (2018)	7.3	(12.5)	Share of women in parliament (%)	22.6 (30.8)
Education (% of GNI)	5.9	(4.4)		

1. The year is indicated in parenthesis if it deviates from the year in the main title of this table.

2. 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.

3. Data for Tunisia refers to central government and local authorities.

4. For Tunisia, data refers to aged 25 and over.

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.

Executive summary

The deep COVID-19 recession is laying bare various vulnerabilities

The pandemic hit an economy that was already suffering from low growth (Figure 1). In 2020, activity experienced a severe contraction, despite swift policy interventions, and poverty has increased. The recovery will be sluggish as global growth slows down, domestic demand remains subdued and uncertainty concerning the functioning of political institutions persists. High public debt requires reducing current government spending and complicates monetary policy.

The recession was unprecedented. Most sectors contracted, especially tourism and other labour-intensive services, which were particularly affected by containment measures. Investment plummeted and private consumption shrunk due to income losses. Strong foreign demand for ICT and medical goods and olive oil and rising construction activity only partially compensated. Although tourism receipts plummeted, the current account deficit narrowed thanks to weak import demand and rising remittances from Tunisians living abroad.

The healthcare system is under duress. The COVID-19 outbreak was intense, but vaccination is progressing and the health situation is slowly improving. Migration of health professionals increased and is a cause of concern.

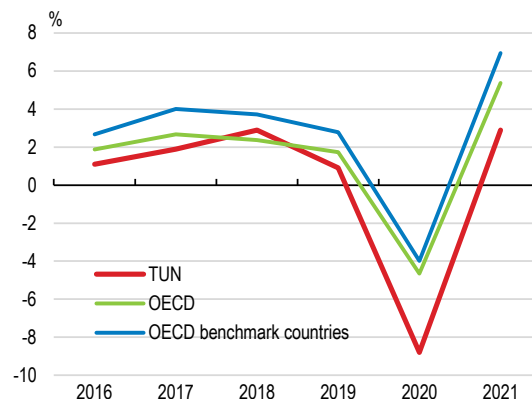
The social fallout is severe. Unemployment has risen from already high levels, with youth disproportionately hit. In the informal sector, workers suffered a severe income shock. School closure and rudimentary distance learning penalised children from low-income households. The number of migrants started growing again.

The recovery will be slow (Table 1), with considerable downside risks. Mobility restrictions hold back the tourism revival and weigh on labour-intensive services. High unemployment dampens private consumption, political uncertainty weighs on the implementation of reforms and investment and weakening external demand holds off the recovery in manufacturing. On the other hand, the commissioning of new fields gives a short-term boost to energy production. Inflation resumed in 2021 and could rise further due to the spike in global commodity prices caused by the

Ukraine war. It is crucial to minimise the risk of a price/wage spiral. High commodity prices weigh on the current account and the fiscal deficit, as Tunisia is a net importer of hydrocarbons and cereals and energy subsidies are still high.

Figure 1. A growth slowdown followed by a deep recession

Real GDP growth, y-o-y % changes



Note: Benchmark countries include Chile, Colombia, Costa Rica, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Mexico, Poland, Slovakia, Slovenia and Turkey.

Source: OECD Economic Outlook, No. 110, database.

StatLink <https://stat.link/6mnwgp>

Table 1. The recovery will be slow

(annual growth rates, unless specified)	2021	2022	2023
Gross domestic product (GDP)	2.9	3.2	3.0
Private consumption	2.6	2.4	3.3
Government consumption	-0.9	0.4	-1.2
Gross fixed capital formation	-5.3	5.0	7.6
Exports of goods and services	8.2	7.3	6.7
Imports of goods and services	6.8	5.5	5.9
Unemployment rate (% of labour force)	17.7	17.0	16.4
Consumer price index	5.6	6.3	5.8
Fiscal balance (% of GDP)	-8.2	-6.0	-5.3
Current account (% of GDP)	-6.1	-6.4	-6.3

Source: OECD Economic Outlook, No. 110 (the cut-off date for information used in the projections is 25 November 2021).

The room for fiscal support and much-needed infrastructure investment is constrained by high fiscal deficit and public debt, partly reflecting a large and expanding public wage bill. The deficit-to-GDP ratio has receded slightly from 10.2% in 2020 to 8.2% in 2021. Protecting the most vulnerable and investing in social and physical infrastructures will depend on rebalancing budget outlays and increasing public spending efficiency. Priorities include reining in staffing and

pay levels in the public administration, gradually replacing regressive and inefficient energy subsidies with targeted income support for the poor, widening the tax base by eliminating exemptions and special regimes, and improving tax enforcement.

Monetary policy should be on watch to maintain inflation moderate. The central bank cut its policy rate by 150 basis points in 2020 while also injecting liquidity into the money market. It was requested to intervene in support of deficit financing but, going forward, it is important to respect clear boundaries between fiscal and monetary policy.

Public and external debt are high and exacerbate vulnerabilities. Financial stability is put at risk by high public debt in foreign currency. Risk spreads signal a deterioration of creditworthiness. Investor sentiment remains fickle and any sudden deterioration may rapidly trigger a vicious currency depreciation and inflation cycle.

Poverty is rising again. Prior to the COVID crisis, poverty was declining and a sizeable middle class had emerged. Some of these advances have been reverted, as jobs were lost and living conditions deteriorated. Social policies have contained the damage and should be further improved and better targeted, including through the use of digital tools and linking administrative data sources.

Substantial gains can be expected from structural reforms. Model-based simulations show that in a reform scenario – which includes lowering regulatory barriers, raising the quality of institutions and reducing corruption, improving education outcomes and reducing the tax burden on labour – income per capita after 15 years would be 15% higher than in a no-reform scenario. A structural reform plan should be adopted rapidly and be accompanied by an implementation monitoring mechanism.

State-owned enterprises and barriers to competition limit business dynamism

There are numerous obstacles to competition, due to market reserves for public enterprises, authorisation regimes and tariff and non-tariff barriers that hurt imports, including of capital goods.

SOE reform should be a top priority. The state's dominant role in many sectors is meant to favour productive transformation, but inefficiencies and high costs mar these efforts. SOEs enjoy market power and favourable financing, but their performance is poor, requiring capital injections and government guarantees on their rising debt that represent a fiscal risk. The creation of a government shareholding agency would bring benefits, provided clear guidelines are established on the scope of state intervention in the economy. Corporate governance should be improved and competitive competence-based procedures be adopted for board and management appointments.

Some progress has been made in removing obstacles to domestic competition, but extra efforts are needed. Authorisation regimes for market entry and a complex tax system discourage entrepreneurship and investment. In the banking sector, low competition and the rising share of loans to the public sector reduce access to finance for private businesses, in particular smaller firms. Competition enforcement should be reinforced. Sectoral regulation is still incomplete and more ambitious anti-graft policies are needed to enhance business integrity.

There is considerable unexploited trade potential. Tunisia has a special regime for export-processing firms. This offshore sector is well-integrated into global value chains and operates in promising sectors, but has few linkages with the domestic economy. Other (onshore) firms are less efficient. Lowering tariffs and non-tariff barriers, especially on inputs and capital goods, would reduce their production costs, facilitate technology adoption and raise productivity and exports.

Comprehensive trade agreements can open new opportunities. Preferential market access is a potential boon for exporters that must be complemented by progress in customs procedures and product quality. More competition from imports can reduce the market power of incumbent firms, lower prices and benefit consumers, particularly poorer ones.

Infrastructures have deteriorated due to insufficient investment, hampering domestic and international market integration. Firms see ports as poor and sea transport as unreliable. Digital infrastructure is relatively weak, in particular

in interior regions. Filling infrastructure gaps requires significant financial resources that could be sought from private investors. Air transport is crucial to the development of tourism and existing limitations on the operations of low-cost carriers should be removed.

Protecting the environment to the benefit of all

Abating greenhouse gas emissions and improving waste management are pressing issues. Greenhouse gas emissions increased in the past decade. Renewables still account for a marginal share of electricity generation. Air pollution is a major concern. In view of the importance of tourism and the country's rich natural assets, bolder actions are needed to protect the environment and promote investment in clean energy.

Improving skills and employment opportunities

Despite progress in educational attainment, graduates lack the skills demanded by firms and labour market policies complicate the matching process in the labour market.

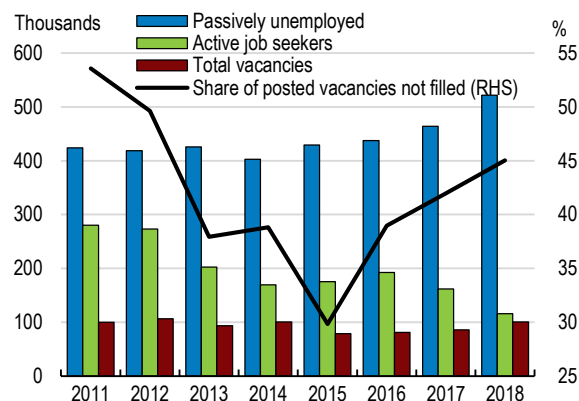
Unemployment rates have been persistently high, particularly for youth. Rising access to education has increased the supply of high-skilled labour, but the private sector has mainly created jobs in low-skill intensive and low-productivity activities. Unemployment rates are high among tertiary graduates, particularly for women.

Many firms do not find workers with the skills they need (Figure 2). This is due to the low quality of education and training systems and their weak responsiveness to the skills needs of the private sector. Other factors relate to regional concentration of economic activities combined with low interregional labour mobility, as well as high reservation wages of tertiary graduates who prefer to remain unemployed and wait for better-paid public sector jobs.

Barriers to firm entry and growth discourage the creation of more and better jobs. Raising productivity and formal job creation requires lowering entry barriers and reducing the administrative burden related to authorisation

regimes and complex tax incentive and subsidy regimes. Reducing the income tax rate for the lowest-income bracket and allowing for more flexibility in wage setting for smaller firms would raise formalisation.

Figure 2. High unemployment coincides with skills shortages



Note: Passively unemployed do not regularly visit the public employment agency ANETI, as active job seekers do.

Source: ANETI and Labour Force Survey Tunisia (INS).

StatLink  <https://stat.link/hzwfxfv>

Although education spending is high, outcomes are relatively poor. Improving teaching quality requires enhancing teacher selection, evaluation and training, providing high-quality language teaching from an early age, and focusing on soft skills. The rising wage bill has reduced resources for investments in education infrastructures. Expanding access to early-childhood education, particularly for low-income and single-parent families, would reduce inequality in opportunities.

Governance of active labour market policies (ALMPs) is highly fragmented, targeting is weak and labour mobility is low. Training subsidies go to firms and only reach formal workers. Wage subsidies reach mainly tertiary graduates. It is key to centralise governance, conduct impact evaluations and extend the coverage of ALMPs to all unemployed and disadvantaged workers. To increase labour mobility and allow for better labour market matching, it is crucial to improve public employment services by allocating more resources to personal counselling services, training counsellors, combining counselling with targeted training support, and allowing for more competition from private providers.

MAIN FINDINGS	RECOMMENDATIONS
Achieving a sustainable recovery through macroeconomic policies	
Despite the summer acceleration, the vaccination rate remains lower than in OECD countries. Access to certain activities is subject to the presentation of a health pass or a negative test.	Consider extending the health pass to most activities and the exercise of some professions. Intensify efforts to better cover rural areas, notably through mobile vaccination centres and the engagement of local actors.
A relapse cannot be ruled out and other considerable risks surround the outlook.	Continue to provide fiscal support to the most vulnerable households and economic sectors until the economic recovery is well underway.
Consumer price inflation is likely to increase in the short term due to high global price for commodities and remaining supply chain bottlenecks.	Maintain moderate inflation by consolidating central bank independence and avoiding monetisation of the fiscal deficit.
Explicit inflation targeting would allow the central bank to maintain price growth at low, stable and predictable levels and favour better coordination between monetary and fiscal policies.	In order to adopt an inflation target policy, follow a roadmap that includes transparent and credible communication, the ability to produce inflation forecasts based on a variety of indicators, including regular inflation expectation surveys, and a forward-looking operational approach for conducting monetary policy.
High debt levels make it a priority to launch a comprehensive package of measures to raise revenue, curb spending and reduce the debt-to-GDP ratio to sustainable levels.	Design, announce and carry out a medium-term fiscal plan that will make it possible to reduce current spending, while building fiscal space to address contingencies and increase public investment in infrastructure bottlenecks.
The tax system is complex, with many special regimes and tax exemptions; the collection rate is low and tax evasion is rife, notably for the <i>régime forfaitaire</i> , which leads to inequalities among taxpayers.	Reduce special regimes and VAT exemptions, better control the <i>régime forfaitaire</i> , enhance tax enforcement and draft a comprehensive general tax code.
Public sector employment and the wage bill are very high by international standards.	Limit new hiring and internal promotion in the public sector; facilitate voluntary exit; and make any wage adjustment conditional on the achievement of productivity improvements.
The protection of creditors and minority investors is weak due to lengthy insolvency procedures, which reduces access to finance for many firms.	Speed up corporate and debt restructuring procedures through out-of-court insolvency schemes and the establishment of dedicated tribunal chambers tasked with corporate cases.
Opening the economy and strengthening competition	
Rules and regulatory procedures are complex, have potential economic impacts, including on competition, and may contribute to corruption.	Introduce the obligation of carrying out <i>ex ante</i> (and if possible <i>ex post</i>) economic impact evaluation of any new regulation.
High import barriers reduce access to high-quality inputs and capital goods for onshore firms and raise consumer prices.	Reduce tariffs and non-tariff barriers for onshore enterprises, starting with capital goods and intermediate inputs.
Infrastructure gaps remain huge and custom procedures are long and expensive.	Improve the investment framework for infrastructure and accelerate digitalisation and simplification of custom procedures, including through the introduction of automatic import and export licenses combined with risk-based ex-post controls.
Reforming state-owned enterprises (SOEs) and upholding public sector integrity	
SOEs generate fiscal and financial risks, the operational and financial performance of many SOEs is poor, the quality of their services is low and prices are high.	Establish a state shareholdings agency, provided with sufficient resources, to evaluate financial performance and restructuring options, including privatisation, and strengthen performance targets.
The anti-corruption authority (INLUCC) has unearthed cases at all levels but is under-financed and under-staffed.	Preserve independence of the anti-corruption authority and provide it with the necessary resources.
Realising the green transition	
The electricity generation mix is dominated by natural gas and the share of renewables is modest.	Promote the ecological transition and renewable energy sources by encouraging investment and private-public partnerships; adjusting the regulatory framework and carbon taxation; trimming energy subsidies; and increasing direct transfers to needy households.
Promote the creation of more and better jobs	
In the onshore sector, authorisation regimes for entering a new market or offering a new product or service are numerous and involve opaque and lengthy procedures, discouraging entrepreneurship and investment.	Reduce prior authorisation for market entry and investment while maintaining transparent ex-post controls to ensure regulatory compliance. Apply silence-is-consent rules and introduce one-stop shops whenever possible.
Overly-complex tax incentive and subsidy regimes increase administrative burden, particularly for small firms, and hinder market entry and formalisation.	Conduct a comprehensive review and impact evaluation of existing subsidies and tax incentives and simplify the tax system.
Improving skills and labour market policies	
Access to early-childhood education and child-care is low, particularly for low-income households and in interior regions, which hinders skills development and reduces labour market participation of women.	Raise spending efficiency in other parts of the education system to finance the expansion of early childhood education, prioritising access for low-income and single-parent families.
Many newly-employed teachers lack a formal pedagogical education. The quality of initial and continuous teacher training is low due to a lack of teacher instructors and outdated curricula.	Improve selection as well as initial and continuous teacher training in basic education and VET, with a special focus on pedagogical skills.
Although spending on active labour market policies is relatively high, their governance is highly fragmented, targeting is weak and results are modest.	Centralise the governance of active labour market programmes, including public works and entrepreneurship support, increase spending efficiency by better targeting towards individuals most in need and improve impact evaluation.
More than 80% of the unemployed are not registered at the public employment agency, due to severe capacity constraints, and mainly use personal contacts for searching a job. However, private job placement services face legal difficulties to operate.	Allow for more competition from private employment service providers and consider outsourcing certain tasks to private providers using performance-based incentive contracts.

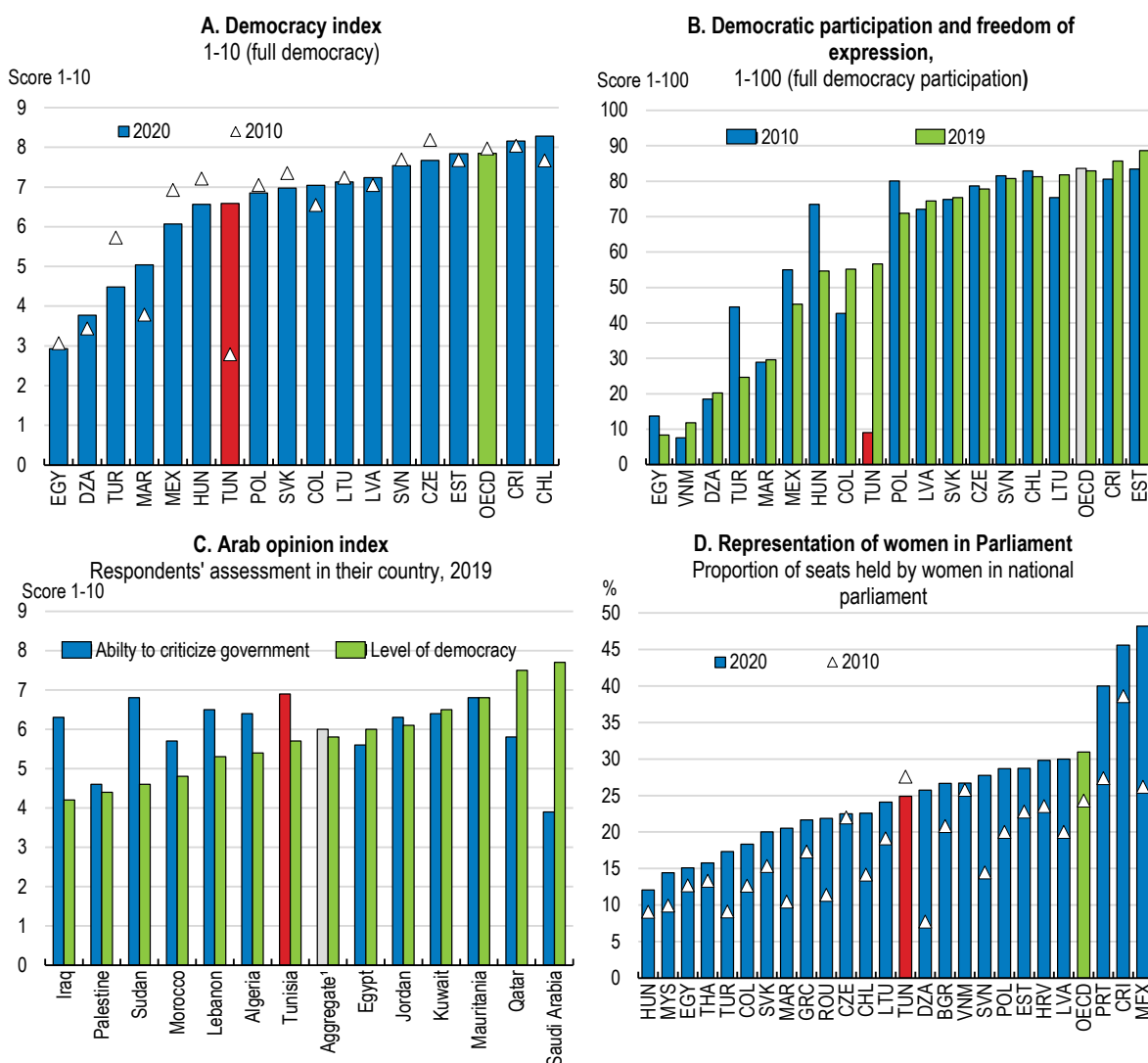
1 Key policy insights

Tunisia has been among the emerging market economies hardest hit by the COVID-19 crisis, which caused the deepest economic contraction ever, with a heavy social cost. The vaccination campaign, which started slowly, gained momentum in summer 2021 but has seemingly reached a plateau more recently. The economic recovery will be soft due to lingering health and political uncertainty that weakens household and investor confidence, the slow return of tourists and insufficient progress in implementing structural reforms. In the context of the Ukraine war, rising energy and commodity prices weigh on purchasing power. Fiscal and external imbalances persist and made it necessary to seek external financing. Public spending is skewed towards wages of civil servants, subsidies, and transfers to state-owned enterprises (SOEs), leaving little room to finance physical and social infrastructure. Businesses, and in particular small ones, are penalised by conditions attached to access to finance, red tape and obstacles to competition. This chapter analyses the macroeconomic and social impacts of the pandemic and the policy responses necessary to ensure macroeconomic stability and to resume income and well-being convergence towards the OECD levels.

To be fast and sustainable, the post-pandemic recovery should be built on sound reforms

In January 2011, Tunisia embarked on a political transition that has enabled several major achievements: Tunisia has become a democracy, with a new Constitution, fair elections and a broad range of *de jure* civil and political freedoms. Thanks to its success in organising the dialogues among all major political parties, the National Dialogue Quartet (*Quartet du dialogue national*), brokered by key civil society organisations, gained the Nobel Prize for Peace in 2015. Human rights are better protected than in other Middle Eastern and North African (MENA) countries. The 2017 enactment of a law aimed at combating violence against women was described as “historic” by the UN (UNWOMEN, 2017^[1]). The share of the population that in 2020 felt safe in expressing their opinion was higher than in any other Arab country, a sign of the vibrancy of the Tunisian democracy (Figure 1.1).

Figure 1.1. The political transition has strengthened democracy



1. Aggregate refers to the total responses in the sample used to Arab-Opinion index.

Source: World Bank, World indicators of governance and WDI; Arab opinion index 2019-20; and The Economist Intelligence Unit.

Still, political instability has been high and damaging. With frequent changes in government (Box 1.1), public policies have often been unfinished in design and indecisive in execution due to institutional gaps. The political transition remains incomplete in some of its basic elements, such as the Constitutional Court. Uncertainty about the governments' commitment to reform has slowed down growth, interrupted the long-term process of income convergence and drained economic resilience. Investment, as well as business dynamism, have been weak and the migration of highly-skilled professionals has resumed.

Box 1.1. Recent political developments

Tunisia is a semi-presidential regime, with a head of state elected by popular vote who must instruct the party that wins the legislative elections to form a government. Between December 2011 and July 2021, the country has had seven heads of government and none has been in the office for more than 3 ½ years. Kais Saied won the October 2019 presidential election run-off and appointed Habib Jemli of the Ennahdha Islamist party, who did not win the confidence of the Assembly of People's Representatives (ARP). A technocratic government ruled in February-July 2020, before a new apolitical cabinet led by Hichem Mechichi and also consisting of non-party technocrats was sworn in on 2 September 2020. Prime Minister Mechichi announced a major government reshuffle in early 2021, but numerous appointments were not ratified by the President. On 25 July, President Kais Saied invoked emergency powers from Article 80 of the Constitution to dismiss the Prime Minister, grant himself full powers and suspend the ARP activities for 30 days. The latter decision was confirmed on 24 August until further notice. A care-taker government was formed on 2 August, although no Prime Minister was appointed.

The 22 September decree regarding exceptional measures states that the danger is “real, in particular within the People Representatives Assembly”. It extends sine die the Parliament suspension and grants the President the power to make laws through decrees that “cannot be challenged for annulation”. The Instance provisoire de contrôle de la constitutionnalité des projets de loi is suppressed. The President also exercises executive powers, with the “assistance” of the government, and is in charge of developing political reforms, aided by a commission, in view of establishing “a true democratic regime where the people is effectively sovereign”. The Prime Minister – a woman, for the first time in an Arab country – was appointed end-September 2021. Ministers were appointed two weeks later.

In December, the President laid out the timeline for constitutional reform. An online public consultation started in January 2022 and a committee of experts will be designated to draft a new Constitution, to be ready by June. The text will be submitted to a referendum that would take place on 25 July, while Parliamentary elections would be held on 17 December.

The COVID-19 recession has hit an economy that was already weak and resulted in an unprecedented real GDP contraction of 8.8% in 2020. High fiscal and current account deficits before the pandemic limited the scope for a stronger fiscal policy response. Although policy support helped to mitigate the shock, the most vulnerable groups such as informal workers, women and young adults were exposed to job cutbacks and income losses.

Resuming the growth process, creating more and better jobs, restoring macroeconomic balances and consolidating social stability and cohesion are all challenges in the context of a pandemic-induced recession. To achieve them, the main messages from this *Survey* are the following:

- It is essential to conclude the political transition, put in place all the institutions of democracy and consolidate the foundations of good governance in order to accelerate structural reforms and restart growth to the benefits of all Tunisians. Lowering regulatory barriers to domestic competition and administrative burden for firms, removing barriers to international trade and reducing the tax

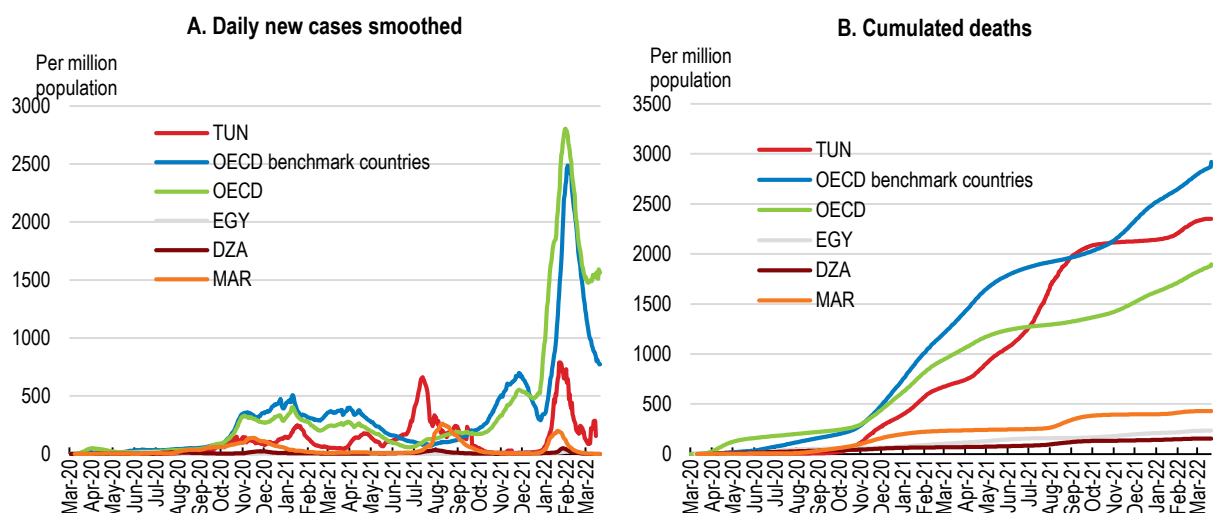
burden on labour would foster business dynamism and formal job creation. Better education, professional training and active labour market policies will improve labour market matching.

- In the short term, policies should focus on consolidating recent advances in the vaccination campaign and supporting hardest-hit households and firms until the recovery is well under way.
- Over the medium term, it is essential to bring public finances on a sustainable pattern. Containing the public sector wage bill, reforming state-owned enterprises and the subsidy system, reducing corruption and enhancing tax enforcement could free resources to be used for growth-enhancing public investment in both physical and social infrastructures and well-targeted safety nets.

A quick policy reaction has helped mitigate the social and economic impacts of the pandemic

After the first COVID-19 case was confirmed on 2 March 2020, restrictions on social and economic activities were imposed, that became more stringent over time (Figure 1.2, Box 1.2). Even though COVID-19 underreporting is likely to be non-trivial (Redissi, 2020^[2]), as of 20 March 2022, around 1 million cases and 287 000 deaths had been confirmed. Vaccination began in mid-March 2021, with vaccines sourced through the COVAX initiative. At the time, it was estimated that 15% of the population already had antibodies. The initial target was to vaccinate 3 million persons (around 25% of the population) by mid-year. The objective was achieved only in August due to problems in securing and distributing the vaccines, as well as cultural reticence. The campaign gained strong momentum since the summer. At mid-March 2022, 54% of the population had received two jabs and around 61% at least one. Nonetheless, progress in the number of people vaccinated has slowed down since the autumn.

Figure 1.2. The COVID-19 outbreak has hit Tunisia hard



Note : Benchmark countries include Chile, Colombia, Costa Rica, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Mexico, Poland, Slovakia, Slovenia and Turkey.

Source : <https://ourworldindata.org/coronavirus>

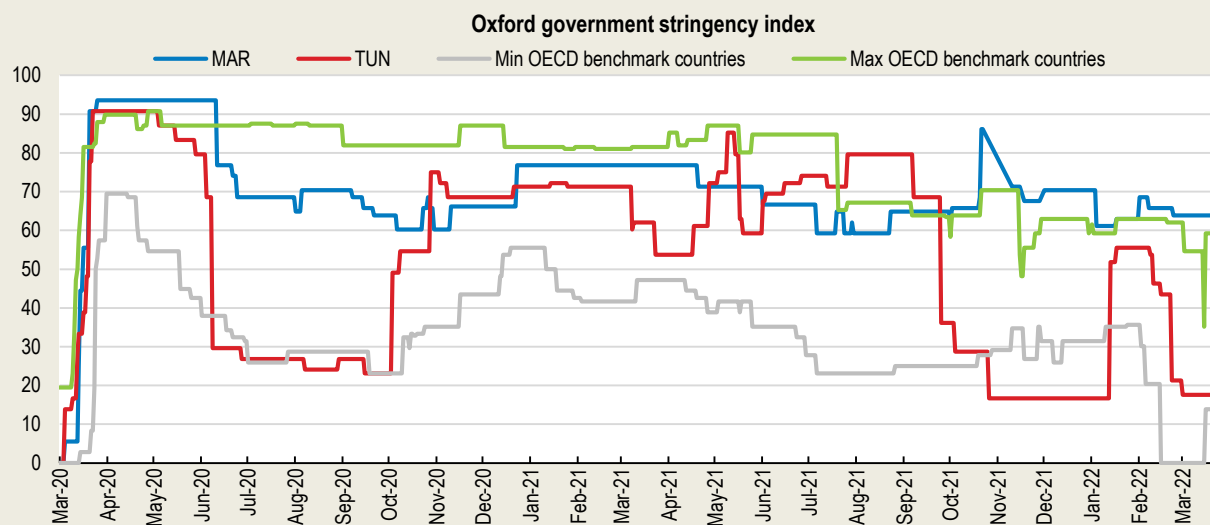
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Box 1.2. Tunisia's strategy to contain the spread of the COVID-19 virus

The containment strategy (Figure 1.3) has featured the following elements:


- **Foreign entry controls:** A ban on the entry of travellers coming through all air, sea and land borders was in effect between 18 March and 27 June 2020. A colour-coded system was used to show which countries' nationals might enter with and without restrictions. In May 2021, entry conditions were relaxed for fully-vaccinated travellers and cases older than six weeks; the loosening was reversed in July. Since 27 October, all foreign travellers, including those that have received two doses, must show a negative test performed in the 72 hours prior to entry in Tunisia.
- **Internal mobility restrictions:** All domestic travel was forbidden in both 2020 and 2021 for the Aïd al-Fitr and Eid al-Adha festivities, traditionally marked by religious and social gatherings.
- **Large-scale social restrictions.** In March-June 2020, public gatherings were prohibited and employers were required to use home working where possible; a curfew was introduced and confinement measures were applied. In summer 2020, business was still encouraged to make the widest possible use of remote working and commercial activities were subject to respect of social distancing rules. In January 2021, restrictions were reintroduced, with frequent adjustments made in terms of stringency, duration and penalties. Schools have remained closed between mid-April 2021 and the start of the new year in September. A curfew was in place in the whole country between mid-night and 5 a.m. until 24 September. Since 23 October, the health pass is mandatory to access public spaces, while mask-wearing is required in all public offices and covered spaces. Masks are also required for all mass events.

Figure 1.3. Restrictions on economic activities have become progressively tighter



Note: The stringency index is a composite indicator based on nine sub-indicators including school closures, workplace closures, and travel bans. Aggregate series are simple averages.

Source: Oxford COVID-19 Government Response Tracker.

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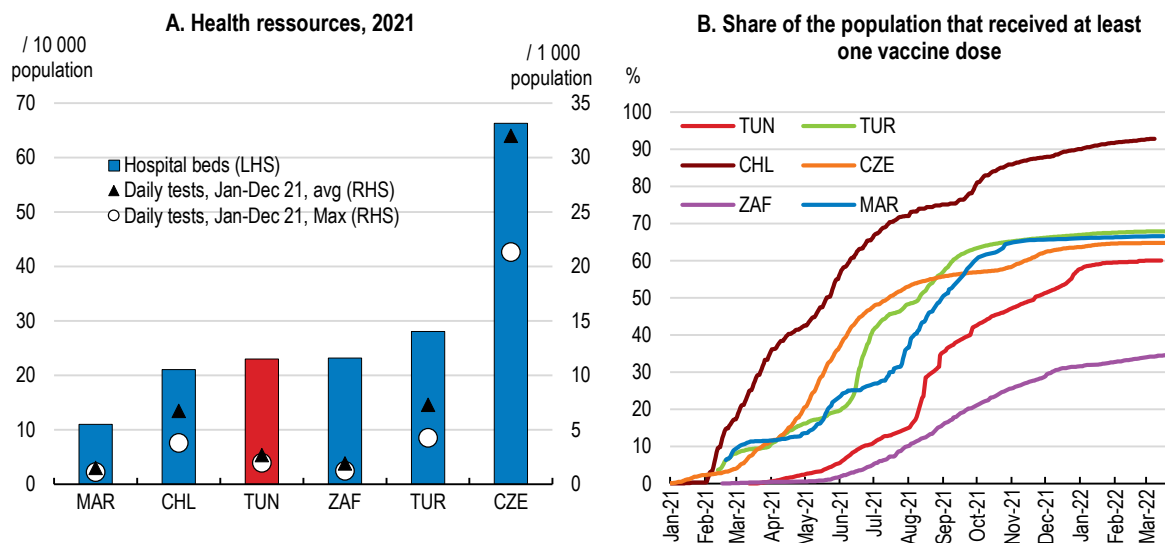
- **Testing:** Testing is free for patients with symptoms at a government hospital. Narrow testing has limited the ability to detect asymptomatic and mild cases. Open-air free testing campaigns have been organised in Tunis, but the numbers of tested individuals remained modest.

- **Tracing:** In May 2020, “Ihmi” (Protect), a mobile app to trace and track confirmed or suspected cases, was launched. Uptake has been modest reflecting economic concerns, low trust, and stigmatisation fears.
- **Treating:** There are around 500 beds in intensive care units distributed between the public sector (237 beds, or 0.5 per 10 000 inhabitants) and the private sector (around 280 beds).

High population and housing density in urban areas, as well as differences in the public’s response to containment measures, partly explain the dramatic course of the pandemic in Tunisia. In particular, in view of the proven efficacy of the test-trace-isolate policy, limits on this front have had a bearing on outcomes. Capacities and vulnerabilities in the health-care system also influence rates of infection and recovery (Figure 1.4). Health care spending per person fell by 14% between 2014 and 2018 and the number of healthcare personnel per 10 000 people is below the WHO-suggested minimum threshold. The annual number of medicine graduates is high – more than 1 500 since 2012 – but the National Council of the Order of Physicians estimates that 40% of its members practise abroad.

Source: Institut Pasteur (Tunis), OECD and WHO.

Figure 1.4. The public health capacity is generally well-funded and the vaccination rate advances



Source: <https://ourworldindata.org/coronavirus>

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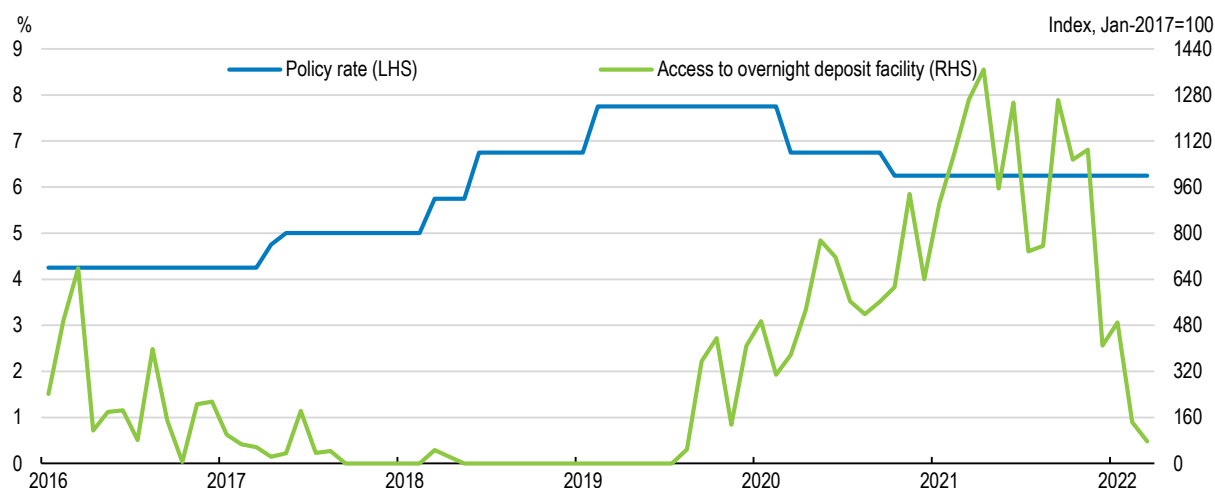
The global spread of COVID-19 disrupted Tunisia’s economic activity already in the first few months of 2020. Containment measures suppressed domestic supply and demand simultaneously. In addition, the lock-down in all major trading partners run amok with supply chains and halted foreign trade in parts and components, as well as tourism activity.

The 2020 emergency fiscal package amounted to TND 2.6 billion (2.3% of GDP) in direct measures. Around TND 950 million (0.9% of GDP) have supported households, including the deferral of social contributions and certain tax payments; cash transfers and free supply of electricity and running water to low-income and vulnerable households; and housing for homeless people. Aid to business (1.4% of GDP) have included granting sovereign guarantees on new credits to companies that committed to limit lay-offs; a support fund of TND 300 million for small- and medium-sized enterprises (SMEs); and a flexible investment fund managed by the Caisse des Dépôts et Consignations, a long-term public investor. The job retention scheme and state-guaranteed loans were renewed with the June 2020 economic recovery

plan which also created a fund to support business reconversion. Exceptional measures have been taken to assist companies and professionals operating in all economic sectors, including tourism and crafts, with the extension until the end of September 2021 of the suspension period of credit maturities and to the end of 2021 of the maximum period for granting exceptional financing, with the possibility of admitting such credits as a counterpart to refinancing operations. A special vehicle, Fonds 1818, was established in March 2020 to collect citizens' contributions to purchase medical equipment and pay salaries of health professionals. At end-2020, it had received TND 204 million (0.2% of GDP).

The Central Bank of Tunisia (BCT) lowered its main policy rate in March 2020 (by 100 bps, the first cut in nine years) and October (50 bps), injected TND 9.9 billion to increase bank liquidity and instructed banks to defer all loan repayments (Figure 1.5). The results of a stress test conducted in the second half of 2020 revealed a satisfactory level of resilience of the sector in the event of exogenous shocks. As a result, the BCT has revised the methodology for calculating the collective provisions used to cover latent risks to include a component related to the expected forward looking risk. In spring 2020 banks were instructed to suspend dividend payments. One year later, the constrain was lifted, subject to two conditions: *i*) the solvency and Tier 1 ratios must exceed the regulatory minima (10% and 7%, respectively) by at least 2.5%, net of the pay-out and *ii*) the pay-out itself cannot exceed 35% of the 2019 and 2020 profits.

Figure 1.5. Monetary policy has reacted promptly to the economic disruption



Source: BCT; and CEIC.

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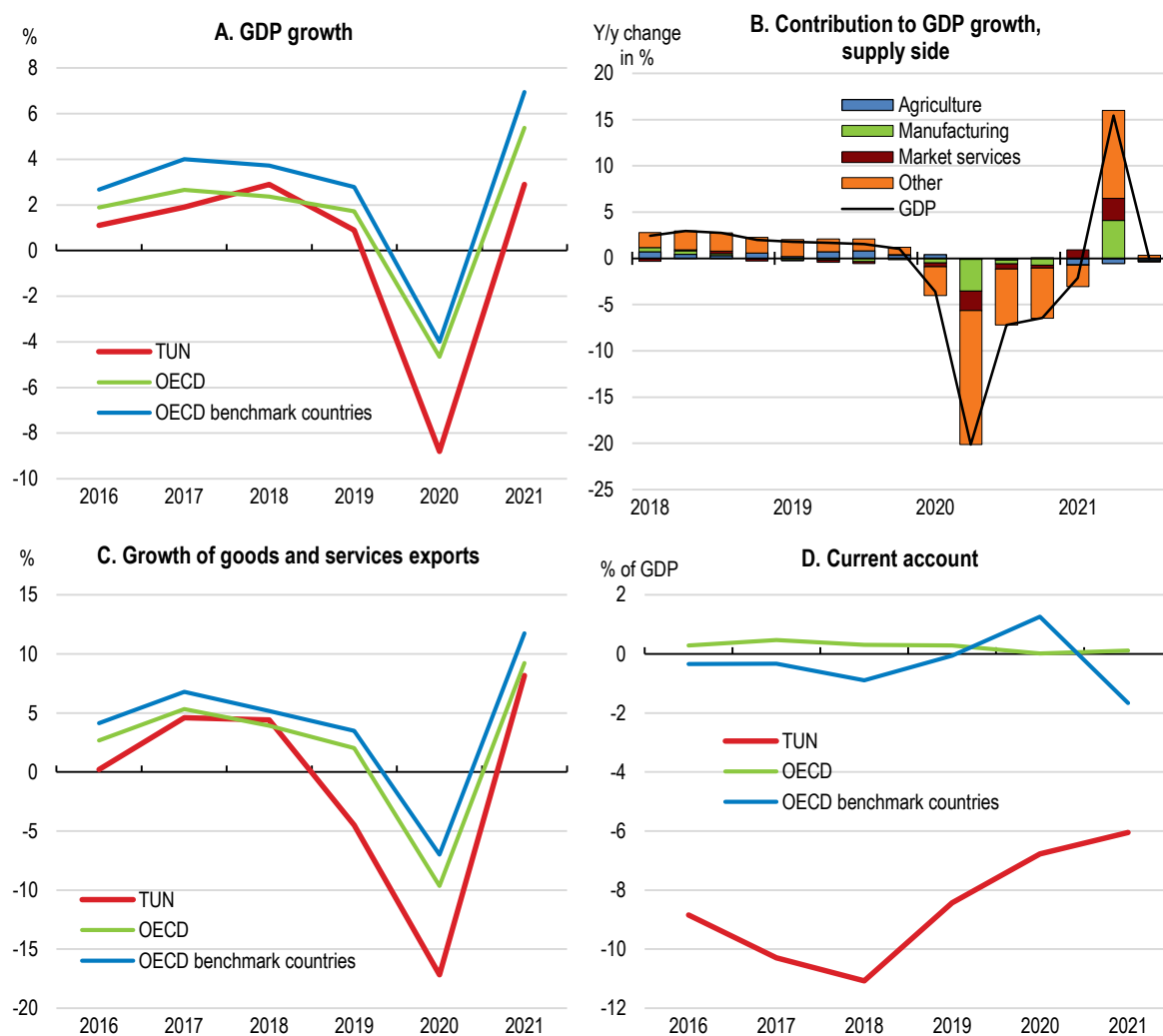
Tunisia has benefitted from its partners' support to meet urgent fiscal and balance of payments needs and catalyse much-needed financing from international markets. In particular, Tunisia has been among the earliest beneficiaries of the IMF Rapid Financing Instrument and the second-largest recipient of EU support under the AMF (macro-financial assistance) programme, with funds disbursed in 2021. Tunisia requested a new IMF programme on 19 April 2021.

The pandemic hit most sectors and inflation rose again

The economy contracted sharply in the first half of 2020 and registered one of the deepest falls in the Middle East and North Africa (Figure 1.6 and Figure 1.7). Activity rebounded in Q3 2020, only to experience very low growth in the next four quarters, including a dip in Q2 2021 due to the virus resurgence. At the sectoral level, agriculture recorded positive growth, mechanical and electrical industries strongly rebounded with recovering demand in Europe, textiles limited the damage by switching production to personal protective equipment, and the commissioning of new fields in Nawara and Halk el Menzel in

2020-2021 boosted hydrocarbons production. Common to all sectors was a lack of domestic consumption, especially of durable goods, attributable to high unemployment and consumers' falling purchasing power. At the aggregate demand level, investment has fallen to 13.3% of GDP in 2020, while gross savings shrunk by more than five points to 4% of GDP (Banque centrale de Tunisie, 2021^[3]). In order to offset the income decline, many households turned to their savings, often complemented by remittance transfers, to finance their current spending.

Figure 1.6. GDP growth and export performance have been poor

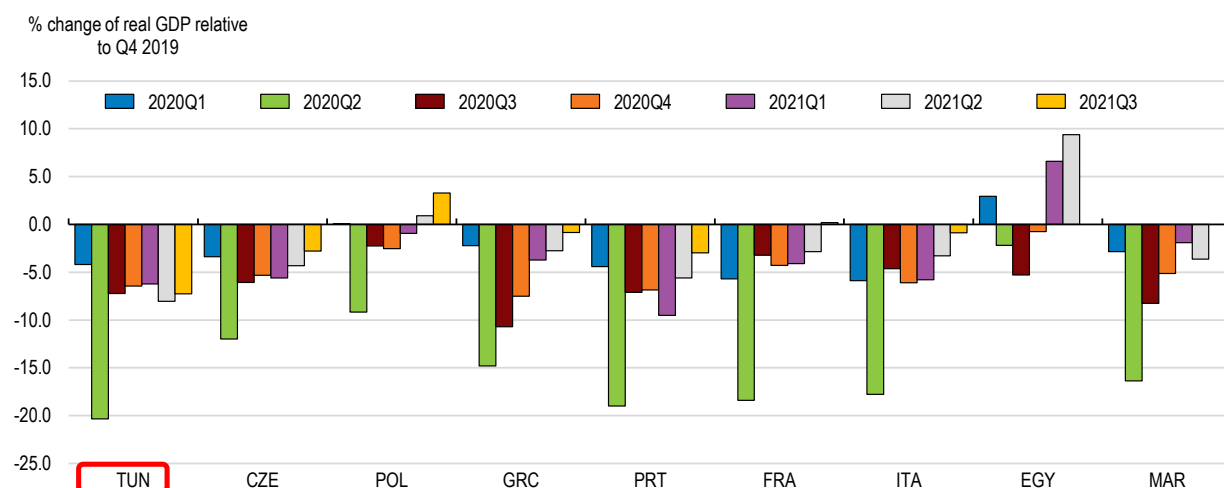


Note: Benchmark countries include Chile, Colombia, Costa Rica, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Mexico, Poland, Slovakia, Slovenia and Turkey.

Source: INS; CEIC; and OECD Economic Outlook 110 database.

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Figure 1.7. The COVID-19 recession was deep and the recovery is slow



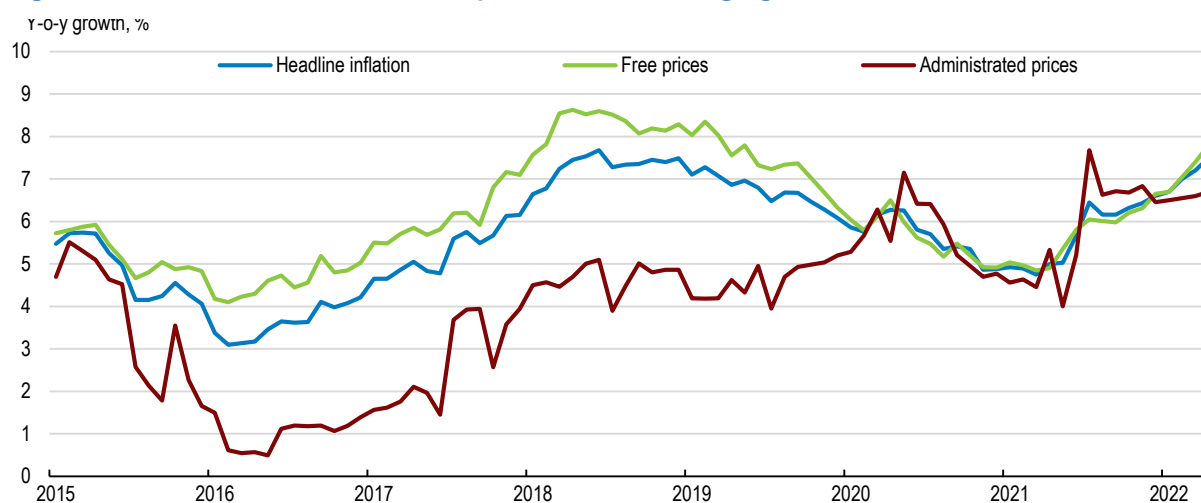
Note: For Tunisia GDP is calculated from the supply (sectoral production) basis, while for OECD countries the demand (spending) approach is used.

Source: OECD Economic Outlook 110 database; CEIC.

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Consumer price inflation declined steadily from early 2018 onwards, reaching 4.8% in March 2021, before bouncing significantly up to 7.5% in April 2022 (Figure 1.8). The demand contraction had initially offset the impact of supply chain disruptions generated by the health emergency and of wage pressures, especially in government and state-owned enterprises (SOEs) where unions have strong bargaining power. Since 2021, the firming of international prices of energy and agricultural commodities has put pressure on domestic prices. This dynamic, which is particularly penalising for the poorest households, is strongly affected by the Ukraine war (Box 1.3).

Figure 1.8. On the inflation front, new pressures are emerging



Note: headline inflation corresponds to the evolution of the Consumer Price Index (base year 2015), which covers 720 products and 5 174 varieties. The most important product clusters in the CPI basket are food and beverages (26%), housing and utilities (19%) and transport (13%).

Source: INS.

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Box 1.3. The Ukraine war and its implications for Tunisia

Weak cereals storage capabilities, limited to three months, and the current unfavourable budget situation, as well as the three-year drought which affects agricultural production, make Tunisia very vulnerable to the on-going Ukraine conflict. Imports account for 84% of tender wheat needs, roughly 40% for durum wheat and 50% for barley. Ukraine was Tunisia's main supplier and the production fall will make it necessary to adapt procurement strategies. Moreover, the jump in the price of cereals since the Russian invasion seems bound to persist, with considerable fiscal consequences due to the compensation scheme for the price of basic necessities, notably pasta, and cattle feed. As far as energy is concerned, a USD50 rise in the price of oil per barrel with respect to the USD75 assumption used in the 2022 Budget Law would multiply by two the amount devoted to the compensation regime for energy.

The war and the sanctions will also have a sizeable impact on the tourism sector. In 2019, Russian visitors accounted for 7% of total entries, making Russia the second most important market, only trailing France (9.5%), while Ukraine had a marginal presence (less than 0.5 %).

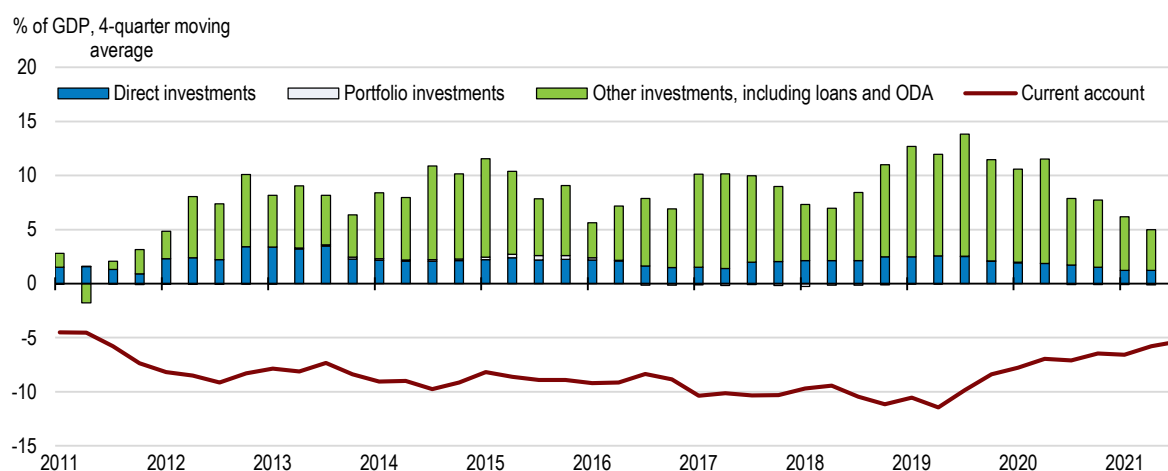
The current situation may also open some opportunities for Tunisia. An increase in European natural gas imports from Algeria using the pipeline that goes through Tunisia before reaching Italy would allow to source according to needs, thanks to the transit royalty. The need to adapt the location of supply chains of multinational enterprises due to disruptions in Ukraine, such as in the automotive industry, could also bring benefits to the country.

Source : IACE (2022), La Guerre en UKRAINE : Impacts et Mesures à prendre and OECD.

Stumbling imports and resilient remittances reduced the current account deficit.

Since 2019, the economic slowdown, a tightening of import restrictions and rising remittances have been reflected in a smaller current account deficit after a 15-year trend deterioration (Figure 1.9). Following an abrupt fall in 2020, both export and import values rose by well above 20% in 2021 to reach levels 6% higher and 1% lower, respectively, than in 2019, before the COVID-19 crisis. Remittances by overseas Tunisians rose by 3.2 percentage points to reach 5.6% of GDP in the first ten months of 2021, twice as large as foreign direct investment (FDI) flows.

Figure 1.9. The current account deficit is primarily financed through loans



Source: CEIC; BCT; and INS.

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Tunisia has a large diaspora, estimated at around 1 200 000 adults (when also including holders of double nationality) on the basis of national data. Total outflows, that were particularly intense in the mid-2010s, were slowing down before the pandemic. The majority of migrants live in Europe, and more than half in France, although North America is attracting an increasing number of qualified leavers (OECD, 2018^[4]).

Recent labour market developments have been unfavourable

Since 2011, about 40 000 young Tunisians join the working age population every year. Sluggish economic growth in recent years has added to structural and institutional factors that make it difficult to generate the number of jobs needed to keep unemployment stable, let alone to make a dent on the jobless rate. Equally concerning is the low employment rate (46.9% in the third quarter of 2021), which strongly differs between men and women. The labour force participation rate stands at 29% for women and 67% for men (INS, 2021^[5]).

Due to the COVID-19 crisis, unemployment increased from 14.9% in the fourth quarter of 2019 to 18% in the second quarter of 2020, a level last reached in 2011. It receded marginally in the second semester but rose again to 18.4% in the third quarter of 2021. The jobless rate is much higher among youngsters (42.4%) and university graduates, particularly for women. Informality increased to 47% of total employment and affects mainly men working in agriculture, construction and retail. The participation rate for women, which had increased by 17 percentage points (p.p.) in 2011-2019, compared with + 5 p.p. for men, has fallen by 1.4. p.p. in 2020.

The recovery will gain some momentum in 2022, but risks loom large

After an abrupt fall in 2020 (-8.8%), GDP is projected to recover slowly (Table 1.1). Economic activity may return to pre-pandemic levels no sooner than late-2023. Tighter containment measures in the first half of 2021 due to rising infections have particularly affected labour-intensive services sectors and the situation will remain fragile. High unemployment will weigh on household income and damp private consumption, whereas investment could climb back with the realisation in 2022 of projects that were initially planned for 2021. Inflation should exceed the 6% mark in 2022, due to wage pressures in the public sector, global commodities developments and supply chains bottlenecks. Unemployment will fall but will remain higher than before the crisis. Certain groups – women, youth and tertiary graduates – will still struggle to find stable and quality jobs. The current account deficit will remain high as tourism receipts underperform and despite phosphates exports' recovery.

The principal upside risk is that the recovery of tourism happens earlier and proves stronger than assumed. In the medium run, production disruptions in the wake of the COVID-19 crisis and the Ukraine war and possible global trade tensions may also lead to relocalisation ('reshoring' and 'near-shoring') of value chains by EU-based firms and create new opportunity for Tunisia. On the other hand, there are various downside ones. The steep increase in global energy and agricultural prices due to the Ukraine war could persist over the projection period, lead to higher inflation, depress purchasing power, and adversely affect both the fiscal balance and the current account. Despite the recent rise, the vaccination rate remains low and new COVID-19 waves cannot be ruled out, with associated renewal of containment measures. Lack of progress in reforming institutions, insufficient jobs creation and worsening social indicators could unleash social conflicts that would dampen investors' confidence and accrue political uncertainty. Regional inequalities are huge and in certain zones poor security still poses a risk. The economy may also have to face external shocks with potential repercussions that are difficult to integrate into forecasts (Table 1.2).

Table 1.1. Recent developments and projections

	2018	2019	2020	2021	2022	2023
	Current prices in millions of TND	Percentage change in volume (2010 prices)				
GDP at market prices	106.3	0.9	-8.8	2.9	3.2	3.0
Private consumption	76.3	2.1	-5.3	2.6	2.4	3.3
Public consumption	21.0	2.6	-4.3	-0.9	0.4	-1.2
Gross fixed capital formation	19.5	0.3	-33.7	-5.3	5.0	7.6
Final domestic demand	119.9	1.9	-9.8	1.0	2.3	2.9
Exports of goods and services	51.1	-4.5	-17.2	8.2	7.3	6.7
Imports of goods and services	64.7	-7.8	-16.5	6.8	5.5	5.9
Net exports ¹	-13.6	2.6	1.5	-0.1	0.3	-0.1
Memorandum items						
GDP deflator		7.2	5.3	5.8	6.2	5.9
Consumer price index		6.7	5.4	5.6	6.3	5.8
Unemployment rate (% of active population)		15.1	16.7	17.7	17.0	16.4
Current account balance (% of GDP)		-8.4	-6.8	-6.1	-6.4	-6.3

Note: Contributions to changes in real GDP from 2019 until 2023, effective volumes for 2018 in the first column. Tunisia has recently changed the base year of the Statistics of National Accounts to 2015 and has revised GDP data, which leads to revisions for annual GDP growth (for example, provisional GDP growth in 2020 is -8.7 %). However, as the recently-published data is not complete yet, this *Survey* uses the previous data vintage.

Source: OECD Economic Outlook, No. 110.

Table 1.2. Events which could affect economic performance

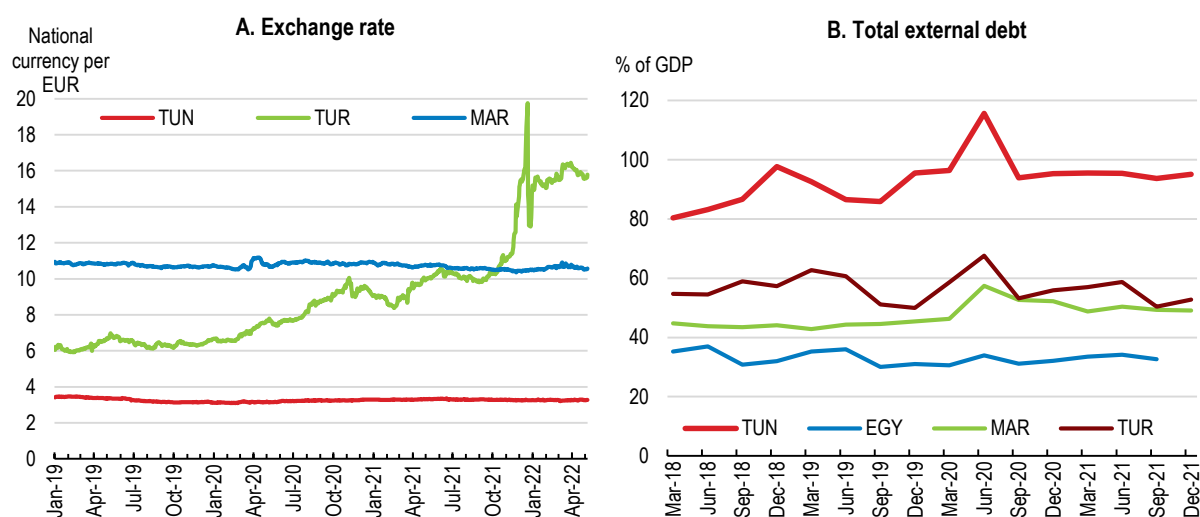
Shock	Possible impact
Little visibility concerning the return to the normal functioning of political and democratic institutions in Tunisia	Lingering political uncertainty would weigh on the implementation of structural reforms, the economic recovery and the cost of accessing financial markets.
Greater political instability in emerging market economies, especially in the MENA region	Turmoil in neighbouring countries and other emerging and frontier markets would weaken investors' sentiment, multiply refinancing costs and put pressure on the budget and the balance of payments.
New wave(s) of COVID-19 infections	An increase in cases and deaths due to new variants would affect the economy, and in particular tourism and other labour- and contact-intensive services.
Shortening of supply chains in partner countries, increase in protectionism and slowdown in world trade	The export sector would be affected, and job creation along with it, although Tunisia may benefit from near-shoring.
Persistently rising prices of commodities, including oil	Insofar as Tunisia is a net importer of hydrocarbons and petroleum products are subsidised, rising prices of raw materials would lead to a deterioration of the current account and of the fiscal budget.
Persisting inflation pressures in advanced economies	Monetary tightening in advanced economies could put pressure on financing conditions and exchange rates in emerging market economies.

The COVID-19 crisis has exacerbated macro-financial vulnerabilities

Foreign debt is growing

Financial markets have become edgier towards Tunisia since 2020 (Figure 1.10), as reflected in the interest rate spread and rating agencies' downgrading decisions (Figure 1.11). Sovereign loans, partly concessionary, represent the main source of Tunisia's external financing and external debt has been trending upwards (Figure 1.9). The public sector is responsible for over ¾ of the external debt. More than 70% of total central government debt is external, mostly in Euros (Figure 1.12). External debt servicing reached 8% of GDP in October 2021, an all-time high. Against this background, authorities have found it difficult to build up foreign exchange reserves. They stood at 131 days of import in late January 2022 (against 160 days one year earlier), despite the allocation by the IMF to Tunisia of special drawing rights.

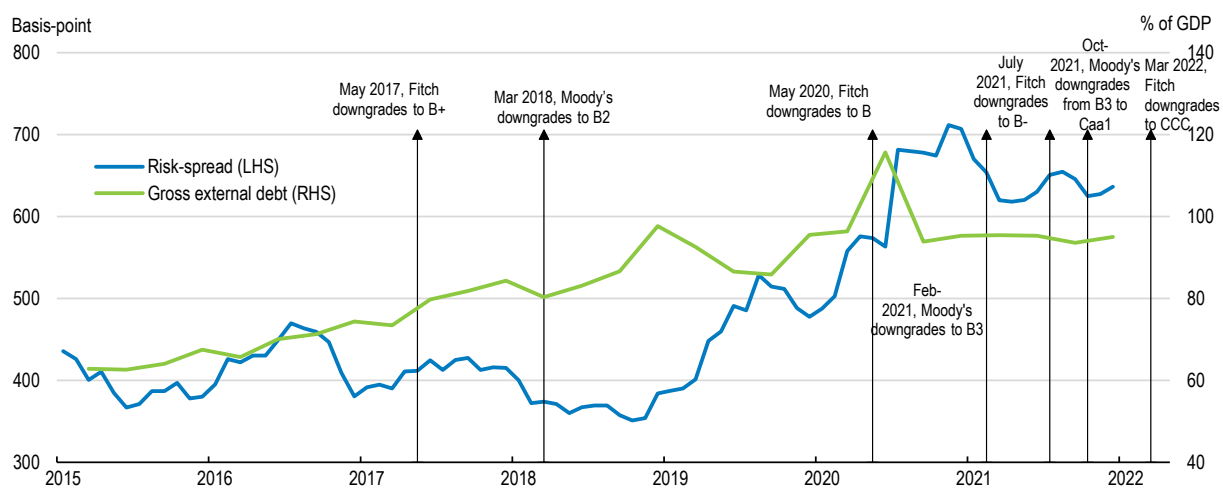
Figure 1.10. Recent developments in financial markets



Source: CEIC; Central Bank of Tunisia; IMF, Financial soundness indicators; and Refinitiv.

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Figure 1.11. External debt and risks have increased

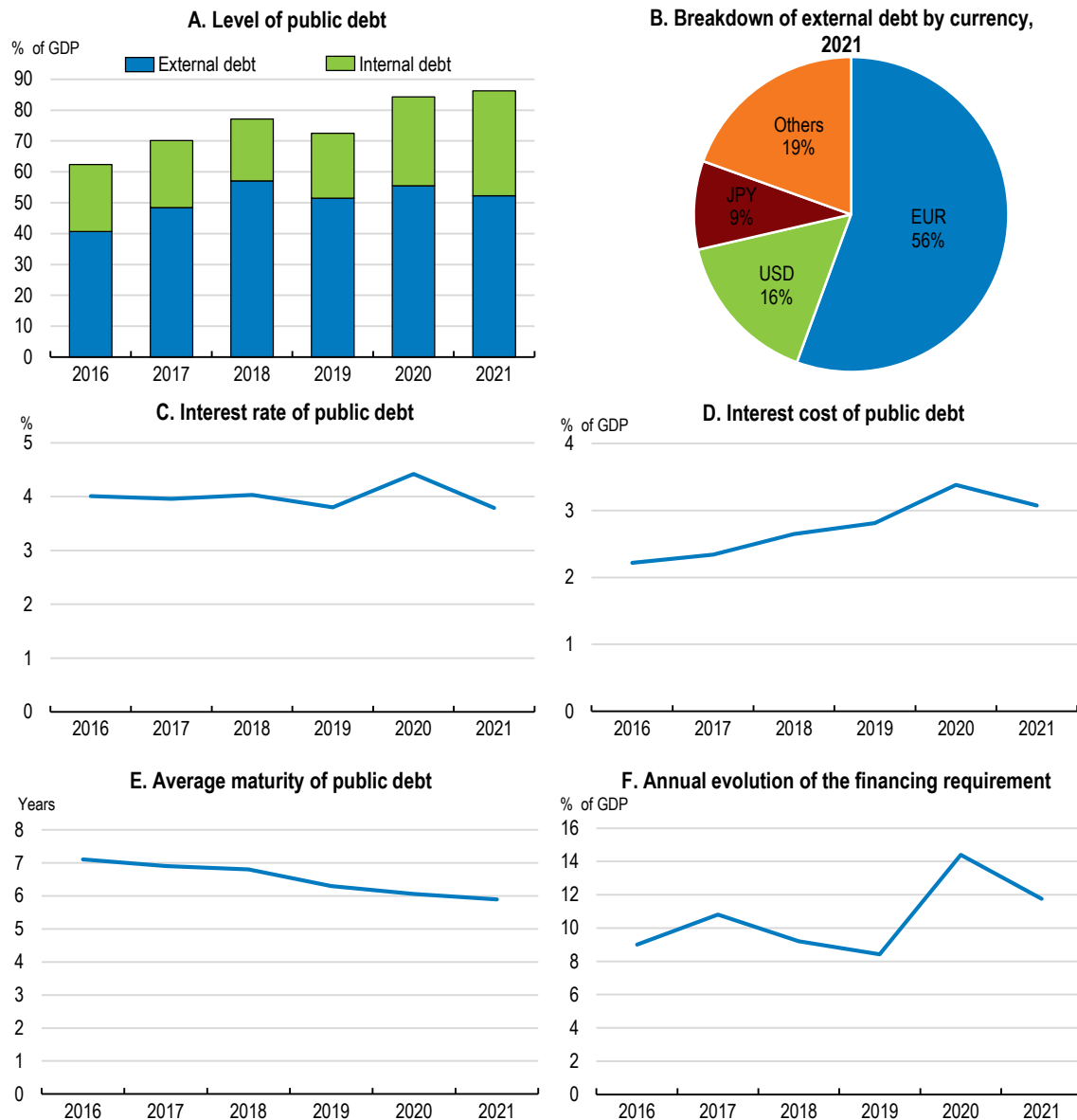


Note: Spread is the difference between Tunisia and the United States in yields on 10-year government securities.


Source: CEIC.

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Figure 1.12. Public debt is a source of vulnerability



Source: Ministère des Finances, Rapport sur la dette publique 2020 et 2021 ; Ministère des Finances (2021), *Brochure de la dette de l'Etat, December*; and BCT.

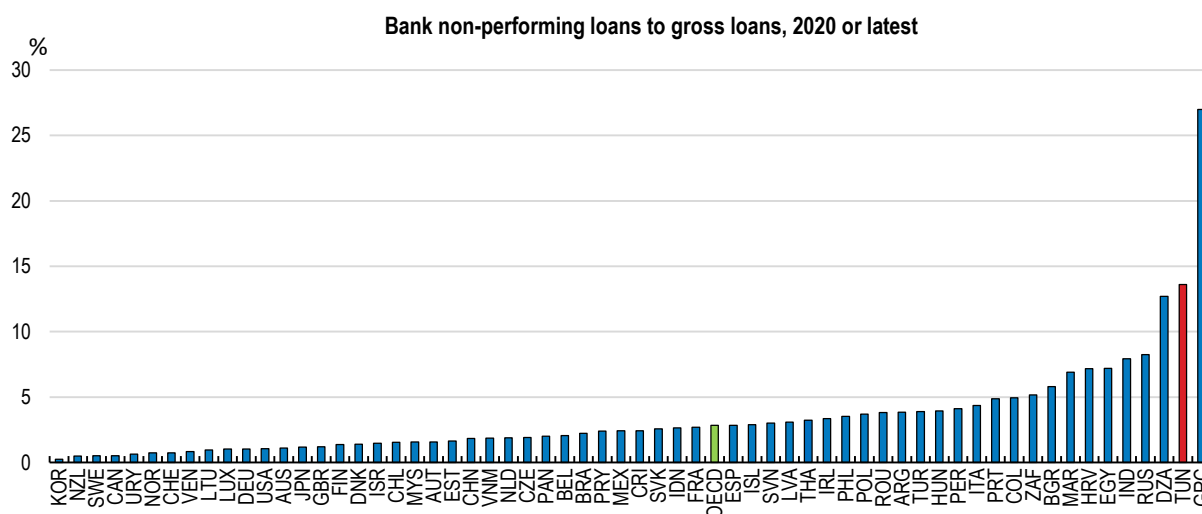
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Banks face a challenging environment

The pandemic has worsened the fiscal outlook and the operational performance of banks, under the double burden of increasing holdings of government securities and direct lending to the state (three syndicated loans have been issued between January 2020 and February 2021, for EUR 972 million and USD 280 million) and growing government liabilities. (Fitch Rating, 2021^[6]) estimates that the banks' exposure to the sovereign hovered around 15% of assets at end-November 2020. Additionally, the banks are highly exposed to SOEs, with credits adding up to around 20% of GDP (IMF, 2021^[7]). Dealing with the risks to financial stability requires reinforcing the tools for stress testing and the crisis management framework.

Support measures for companies and self-employed, such as the exceptional financing of the exploitation cycle, are applied until the end of December 2021. The burden of non-performing loans is considerable by international standards (Figure 1.13) and the capital adequacy ratio of some public-sector banks is vulnerable to challenging operating conditions and high unreserved impaired loans. In addition, the move to IFRS (International Financial Reporting Standard) 9 from end-2021 is likely to weaken reported asset quality metrics and require additional provisioning. With the goal of solving the NPL issue, the BCT has established a programme that is focused on reinforcing the banks' prevention capacities, reviewing and improving the bankruptcy procedures and the legal recovery framework, as well as activating the corresponding budgetary resources.

Figure 1.13. The incidence of non-performing loans is high



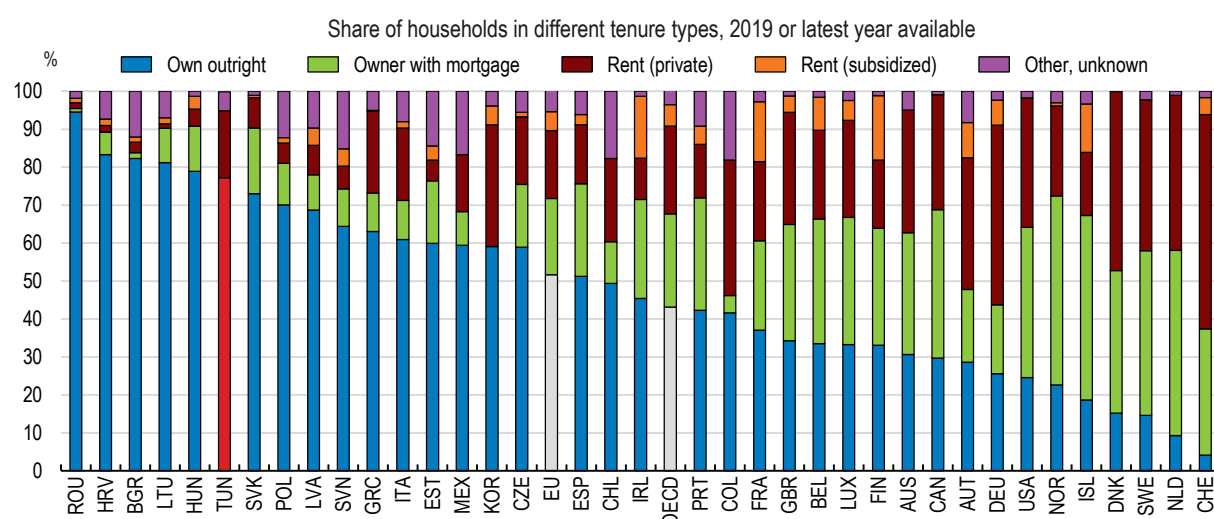
Source: IMF, Financial soundness indicators; and BCT.

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Fast-growing consumer credit is a concern (Banque centrale de Tunisie, 2021^[3]) and household debt could also become a source of instability. Part of it is backed by real assets, as the housing ownership rate is relatively high (Figure 1.14). Housing prices have increased by 43% since 2015. Almost half of households take a loan to cover basic needs (43% of households according to (INC, 2019^[8]), and the incidence is higher among low-income households. The recovery rate for the outstanding obligations to micro-finance institutions (MFIs) has also suffered due to the recession.


In theory, the high degree of market fragmentation (the largest three banks each account for about 12% of assets and the five largest combined for about 57%) should encourage banks to compete and innovate, with a positive impact on the functioning of capital markets. In practice, competitive pressures are weak, as reflected in the strong weight of banking commission in net product and the quasi-perfect alignment of banking fees, which reflects various forces (OECD, forthcoming^[9]). Governance of state-owned banks is prone to interferences (despite some improvements since the mid-2010s, with the appointment of better-qualified directors and executives). The regulatory and supervisory framework is outdated (Basel II is not fully implemented and supervisors makes incomplete use of risk-based methodologies). Interest rate caps limit competition and the bankruptcy and collateral regimes have proven rather inefficient. Supporting the consolidation of the banking sector, developing credit bureaux and collateral registries and integrating micro-finance institutions (MFIs) into formal credit reporting systems (see below) could improve the quality of financial intermediation.

Figure 1.14. Most households own their house



Note: No data on "Owner with mortgage" available for Tunisia.

Source: OECD calculations based on European Union Statistics on Income and Living Conditions (EU SILC) survey 2019 except for Iceland, Ireland, Italy, and the United Kingdom (2018) ; the Household, Income and Labour Dynamics Survey (HILDA) for Australia (2019); the Canada Income Survey (CIS) for Canada (2017); preliminary data from National Administrative Department of Statistics DANE-ECV for Colombia (2019), Encuesta de Caracterización Socioeconómica Nacional (CASEN) for Chile (2017); the Korean Housing Survey (2019); Encuesta Nacional de Ingresos y Gastos de los Hogares (ENIGH) for Mexico (2018); American Community Survey (ACS) for the United States (2019); and Recensement general de la population et de l'habitat 2014: Volume 6, Logements, menages et technologies de l'information et de la communication (TIC) for Tunisia (2014).

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Monetary authorities' pursuit of macroeconomic stability is hampered by structural fault lines

Monetary policy's primary objective is maintaining price stability and the BCT also contributes to financial stability, thereby sustaining economic growth. Albeit reverted in 2020 due to the pandemic, tightening of both monetary and macroprudential policies in 2018 signalled concerns with inflation and credit supply growth. It was successful in containing inflation pressures and reinforced the credibility of the BCT. The BCT has also signalled its support to the transition toward a sustainable economy by joining the Central Banks and Supervisors Network for Greening the Financial System.

Adoption of explicit inflation targeting would clarify the monetary policy framework and make it more efficient. Building a stronger anchor for inflation control has been proposed since the early 2000s (Boughrara, 2007^[10]) and advances have been made in the 2010s, such as implementing an interest rate mid-corridor system, developing macro-forecasting models and introducing foreign exchange auctions (El Hamiani Khatat, End and Kolsi, 2020^[11]).

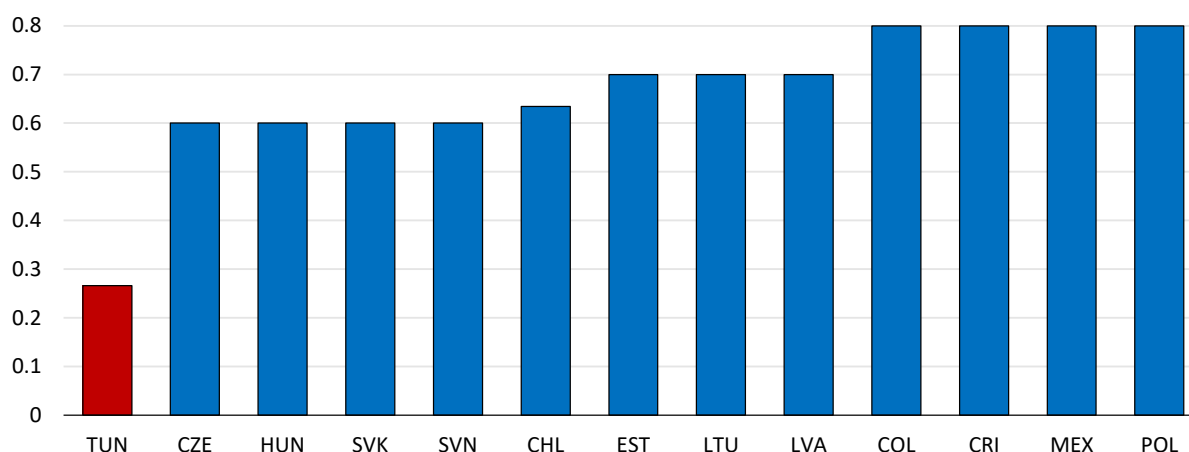
Some necessary conditions for the successful implementation of inflation targeting (i.e. an ability to carry out an independent monetary policy and to develop a empirical analytical framework linking policy instruments to inflation) are yet to be completely fulfilled. On the one hand, the growing debt/GDP ratio induces the central bank to pay increasing attention to reducing the costs of serving the public debt (so-called fiscal dominance). On the other hand, a weak bank-centred financial system is an additional hindrance, insofar as it makes it difficult to model the monetary transmission mechanism with accuracy

(Przystupa and Wróbel, 2016^[12]), although the pass-through from the policy rate to the money market rate has increased (El Hamiani Khatat, End and Kolsi, 2020^[11]).

It will be important to adopt a roadmap for implementing an inflation targeting regime that spells out the milestones and the condition to satisfy – in particular, a transparent and credible communication strategy; to develop a model or methodology to produce inflation forecasts on the basis of various indicators; and to draw a forward-looking operational procedure that allows to adopt monetary policy according to the appreciation of inflation expectations (Jahan, 2012^[13]). It will also be necessary for the BCT to acquire the appropriate tools for measuring households' inflation expectations. In addition, certain institutional interventions could prove useful. The BCT – that enjoys a lower degree of independence than central banks in other countries, in particular in terms of the appointment of members of the monetary policy council (Figure 1.15) – could start communicating its medium-term inflation targets with the aim of helping the markets understand the reference disinflation pattern. It could also publish in advance the annual calendar of monetary policy meetings.

Figure 1.15. The Central Bank of Tunisia enjoys a lower degree of independence than its peers

Index of central bank independence, 2017

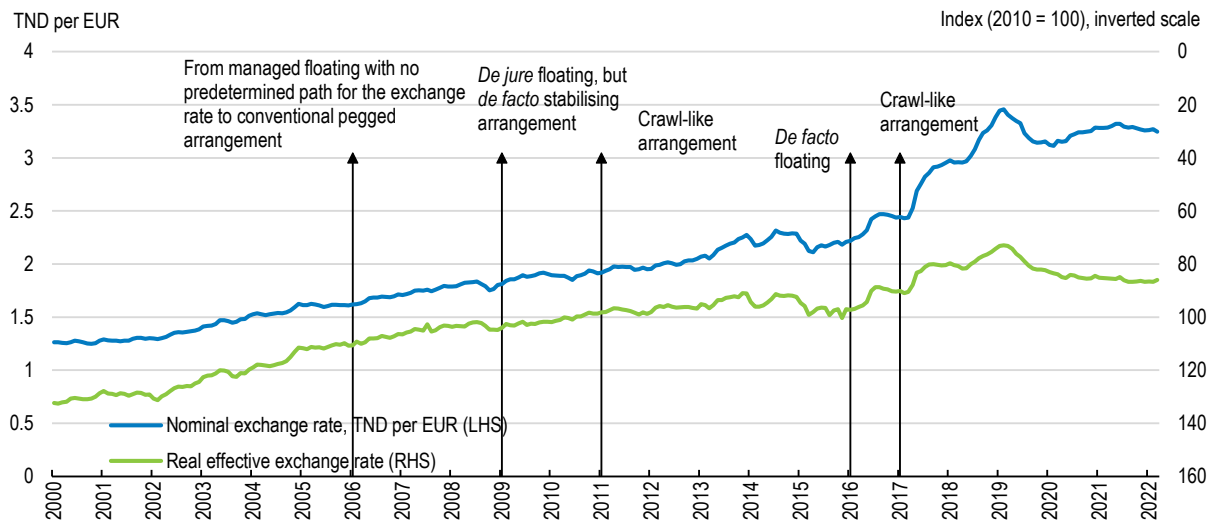


Source: (Romelli, 2022^[14]).

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Monetary policy alone, however, cannot offset the structural deficiencies affecting the Tunisian economy and producing long-term imbalances. Given the large outstanding debt and the weight of sovereign paper in the banks' balance sheets, any build-up of inflationary pressures requiring higher interest rates may impact financial stability. Given the large share of debt in foreign currency, exchange rate movements also weigh on financial stability (Figure 1.10). The central bank has adjusted the exchange rate strategy over the years (Figure 1.16), while capital controls have remained rather strict. In the 1990s, it pursued a constant real exchange rate rule, that accompanied a strong economic performance but became less effective as the opening and liberalisation process advanced and the build-up of net foreign assets led to a significant real appreciation (Fanizza et al., 2002^[15]). This phase came to an end with the political transition in the early 2010s, that caused capital outflows and prompted the move towards a *de jure* floating exchange regime, more adequate for Tunisia. *De facto* it appears that the approach was more akin to a crawl-like regime, as it is indeed classified by the IMF, with the implicit weight of the US dollar becoming higher than the Euro since 2017 (Bouabidi, 2020^[16]).

Figure 1.16. The exchange rate regime has changed over time



Note: changes and resulting reclassifications of Exchange Rate Arrangements, based on available information on members' de facto arrangements, as analysed by IMF staff. For the real exchange rate series, an upward movement corresponds to a depreciation.
Source: IMF AREAR database; and CEIC.

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In the 1990-2020 period there have been frequent misalignments between the nominal and the real effective exchange rate (Derbali and Eugène-Rigot, 2021^[17]). The real appreciation of the dinar has weighed on Tunisia's competitiveness. Nonetheless, a nominal depreciation to make exports cheaper would have larger costs, in terms of imported inflation and higher costs of debt servicing, than benefits. The CBT has progressively reduced the amount of its foreign exchange interventions, now exclusively aimed at supporting price discovery. Further efforts to liberalise the capital account are welcome to strengthen investment and attract foreign investors, though the sequencing matters. The experience of other countries suggests that this phase should be preceded by trade and product market liberalisation.

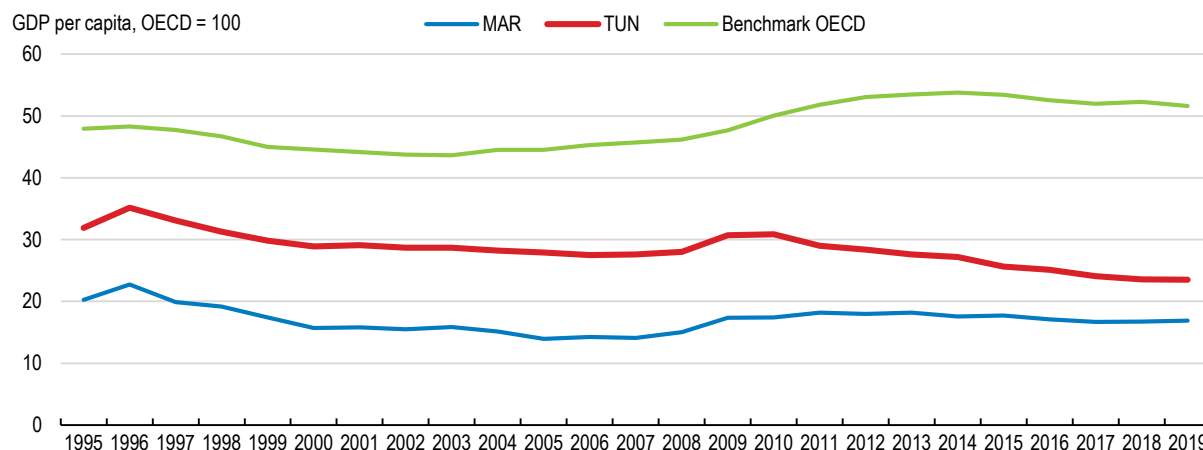
Monetary authorities face considerable challenges in pursuing price and financial stability, in a context of fiscal imbalances and political instability. BCT financing of the fiscal deficit was exceptionally authorised in 2020 within the TND 2.8 billion (2.5% of GDP) limit. Money supply, as measured by M1 (currency held by the public + transaction deposits at depository institutions) experienced as result a sizeable increase, to reach in October 2021 +12.9% on an annual basis. The weight of government securities in the BCT balance sheet rose from 14% to 22% in one year. The BCT has warned that debt monetisation would lead to three-digit inflation and possibly a major crisis (El Abassi, 2021^[18]).

Reigniting income convergence and reducing macro-economic imbalances requires rebooting structural reforms

Tunisia has experienced a marked growth slowdown in the 2010s, a process of income divergence vis-à-vis OECD countries – but also comparable emerging market economies – that can be attributed to structural reforms insufficient to accelerate structural transformation (Figure 1.17). Structural transformation is a feature of high-growth economies and takes the form of a fundamental shift in a country's methods of economic organization, in particular the reallocation of factors of production among the different sectors and activities. From this perspective, Tunisia seems to be experiencing “premature deindustrialisation” (Rodrik, 2016^[19]) and (Mouelhi, 2020^[20]), while the growth of services in GDP is more due to a bloated public administration than to the dynamism of high value-added tertiary activities. The

institutional and policy setting does not allow Tunisia to fully exploit new opportunities, notably the ICT revolution. Resource reallocation towards promising and more productive activities is limited, which explains the weak dynamics of production and job creation.

Figure 1.17. Income convergence stalled



Note: Benchmark OECD includes Chile, Colombia, Costa Rica, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Mexico, Poland, Slovakia, Slovenia and Turkey.

Source: Feenstra et al. (2015).

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Private business's weak dynamism, the rising public wage bill, inefficient state-owned enterprises (SOEs), regressive and costly subsidies and tax incentives, poor tax enforcement and growing informality combine to put enormous pressures on the fiscal balance and public debt. Much needed public infrastructure investment has been cut to compensate other, rigid expenditures, thus reducing the growth potential of the economy and limiting the flexibility of launching counter-cyclical fiscal policy. A rising share of public debt is financed by domestic banks, crowding out private investment and raising their exposure to sovereign debt risks and therefore their own soundness. When the currency depreciated during 2017 and 2018, the current account deficit even increased, as export supply has not been able to react to higher relative export prices. Reducing macro-economic imbalances and returning on the convergence path hinges on rebooting structural reforms.

The gains from reforms would be sizeable and their quantification could facilitate social dialogue. Simulations based on the OECD long-term growth model (Guillemette and Turner, 2018^[21]) suggest that reforms which move Tunisia closer to the peer group of OECD EMEs would accelerate the recovery and pay off in terms of equity (Table 1.3). Reducing regulatory barriers to firm entry and growth, entrepreneurship, and trade, raising the quality of institutions and reducing corruption, improving education outcomes and reducing the tax burden on labour would produce an average annual per capita growth dividend of 1% over 15 years (Figure 1.18). Stronger growth implies that per capita GDP could be 15% higher after 15 years and 39% higher at mid-century. Although the growth effects of improving the quality of education and governance will take more time to materialise compared to the other two reform scenarios, the magnitude of these effects is substantial in the long-run (Table 1.3).

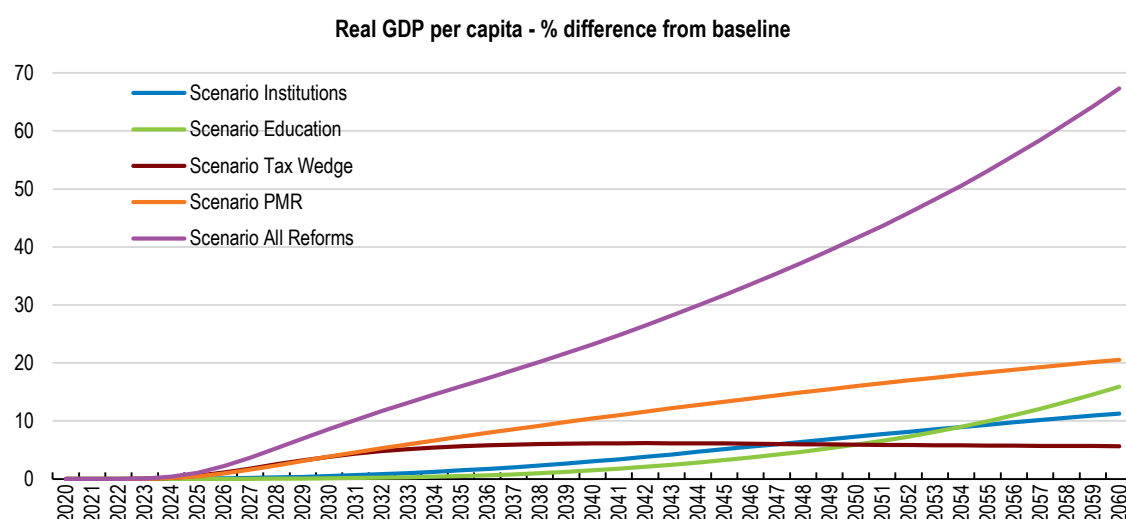
Table 1.3. Some structural reforms would kick-start growth

Estimated impact of selected reforms on real GDP after 15 years

REFORM	IMPACT ON REAL GDP PER CAPITA
Scenario A: Improve institutions, economic governance and reduce corruption	+ 1.2%
Scenario B: Enhance education performance	+ 0.4%
Scenario C: Reduce taxation on labour income	+ 5.4%
Scenario D: Lower barriers to entrepreneurship and competition (e.g. by reducing the role of the State in the economy, cutting administrative burdens and streamlining licensing requirements)	+ 6.7%
Scenario ABCD: Implementing all reforms	+ 14.6%

Note: These estimates were obtained on the basis of the OECD Long-term growth model (Guillemette and Turner, 2018^[21]). Scenario A assumes that institutional quality, as captured by the rule of law index (Kaufmann, Kraay and Mastruzzi, 2010^[22]), converges to the current OECD emerging market economies 5-year average by 2041. Scenario B assumes reaching OECD emerging market economies' PISA average score over 20 years (on the basis of the conversion of three years of extra schooling into 90 additional PISA scores). In Scenario C, the tax wedge decreases by 10 ppt. Scenario D assumes aligning product market regulations (PMR) as captured by the OECD PMR indicator with the current OECD emerging market economies' 5-year average by 2026. The individual reform effects do not sum up to the effect of the ambitious reform Scenario ABCD due to non-linear effects in the model.

Source: OECD calculations.

Figure 1.18. Lifting growth through structural reforms is possible

Note: Scenario "PMR" improves product market regulation to the average level among Benchmark countries over five years. Scenario "Education" simulates an improvement in educational outcomes to the average level of Benchmark countries during the next 20 years. Scenario "Institutions" raises the quality of institutions to the average level of Benchmark countries over 20 years, and scenario "Tax wedge" reduces the tax wedge to the OECD average as of 2022.

Source: OECD Long-Term Model.

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While only indicative, these simulations may be helpful in convincing stakeholders that the reforms, some of which might be politically challenging due to opposition from certain interest groups, are implemented in the pursuit of the common good and social development. The Australian experience (Box 1.4) shows clearly how progress in implementing market reforms depends on achieving greater awareness of the societal benefits, to counter the public influence of those groups facing adjustment costs and generate the necessary domestic commitment to resist backsliding. Insofar as distributional effects can make reforms derail, it is important for Tunisia to develop tools of ex ante evaluation that assist policy-makers in

identifying losers and winners and design appropriate and cost-effective compensation policies. Similarly, an ex post assessment can assuage fears that unanticipated adjustment difficulties will be left unaddressed.

The sequencing of reforms is another important issue. The international experience suggests that, during a crisis, it is easier to launch a large programme that puts together ambitious measures in different domains. This has the advantage of compensating winners and losers. This strategy is even more effective when the government has just been appointed, since it enjoys a “honeymoon” period with public opinion. Under more normal conditions, maximising the success chances of the reform programme requires a clear identification of the constraints – notably State capacity and the strength of the interest groups that oppose the reforms – and the viability of finding allies to overcome resistance. Sequencing is equally important. The priority should be to strengthen the condition for domestic competition, notably by reducing entry barriers for markets and investment. In addition, foreign trade liberalisation should precede that of financial exchanges. In the case of SOEs that operate in imperfectly competitive markets, it is necessary to introduce updated regulation ahead of changing the shareholders’ structure.

Another important lesson is to maintain an open and relatively well-informed debate on what may *prima facie* appear to be highly technical issues. Political representatives themselves play a pivotal role, since they are best placed to sell reform to the community at large (Banks, 1998^[23]). Their attitudes and actions shape the environment in which stakeholders’ expectations are formed. In Tunisia, the National Council for Social Dialogue (*Conseil national du dialogue social*) was envisaged in the January 2013 *contrat social* between social partners, but it only became reality in July 2017. Its ample mandate and credibility in the eyes of stakeholders could accelerate the approval of major economic and social policy measures, but in practice the Council first met in November 2018 and its activities were suspended due to the pandemic.

Various other factors may delay or even impede progress in reforms, despite the appeal of substantial gains, and the clear socio-economic cost of the current stalemate. The approval process for any ambitious reform is complex, as it entails the sequential participation of the tutelage ministry, of the Council of ministers in different configurations, and of Parliament (*Assemblée des Représentants du Peuple*, ARP), again both in the policy-specific commission and in the plenary. Once a framework law is promulgated, the implementation regulation (*décret*, *circulaire*, etc.) must be written. The cycle is very long and, at each stage, it is vulnerable to pressures from interest groups. Groups that resist change are usually smaller, well organised and dispose of the necessary means, including media influence, to influence public opinion.

Box 1.4. Structural adjustment insights from Australia’s experience with broad-based reforms

Over the past three decades, Australia has implemented an extensive range of structural reforms. Foreign trade, the exchange rate and the financial sector have been liberalised, labour market regulation made more flexible, the public sector monopolies that dominated the supply of basic infrastructure services have been eliminated, anti-competitive regulation has been reviewed and reformed through a comprehensive “national competition policy”.

The reforms have generated a range of benefits across the economy. They have also often created adjustment costs for specific firms, workers and regions. While these pressures have typically been concentrated on relatively small groups and been evident from the outset, the benefits have usually been dispersed throughout the community and have taken time to accrue. This highlights the perennial difficulty of achieving support for worthwhile reform.

The Australian experience also highlights the importance of macroeconomic stability in creating an environment which is conducive to successful policy reform and structural change. However, it also

shows the importance of addressing adjustment issues and implementing appropriate adjustment policies. Some key lessons from the Australian experience are noted below.

Effective policy evaluation processes are fundamental. Decision-makers need information and analysis of whether a proposed structural reform is in the overall interest of the community, having regard to its expected benefits and costs and any significant distributional consequences. Where appropriate, different implementation strategies need to be examined and the basis for particular policy choices made clear.

Independent review processes can facilitate acceptance of the need for reform. Governments and communities need to understand the rationales and consequences of different policy choices. Review bodies that operate at arm's length from government and interest groups and whose processes provide for extensive consultation and public scrutiny can help governments "sell" reform and enhance community understanding that the benefits will outweigh the costs.

Broad-based reforms can reduce adjustment costs. Notwithstanding the substantial challenges involved, undertaking reforms concurrently across different policy areas can reduce resistance to change. This is because those adversely affected by one reform may receive offsetting benefits from others. For example, modelling undertaken by Australia's Industry Commission of tariff, electricity, telecommunications and public sector reforms demonstrated that, although trade liberalisation would reduce manufacturing employment by 0.3%, the net effect of all four reforms would be to increase employment in that sector by about 1.2%. A broad-based reform programme also made it harder for individual industries to argue for exemption.

Reliance on generally available adjustment measures, wherever feasible. The advantages of general social safety nets – such as the social security/tax transfer system, job search assistance and training programmes – are that they treat individuals in similar circumstances equally, target assistance to people in genuine need and support people rather than particular industries or activities. Even so, such measures cannot handle all contingences and additional measures may be needed. There are, however, few hard and fast rules for determining when additional assistance might be warranted and what will work best.

Other industry-specific adjustment assistance needs case-by-case evaluation. Special assistance packages have been used to ease the transition to lower levels of assistance for Australia's dairy, passenger motor vehicle, and textile, clothing and footwear industries. Specific adjustment measures should facilitate rather than hinder change, be targeted to adjustment problems, be cost-effective and compatible with general safety net arrangements, involve an equitable sharing of financing costs and be transparent, with clear lines of accountability. The risk with special industry "deals" is that they can create incentives to hold out for compensation (thereby slowing adjustment) and encourage other firms and workers to seek favourable treatment.

Incremental reform can facilitate adjustment. One implementation strategy that can ease adjustment pressures is the phasing of reform. It has distinct advantages when gradual, sequential changes would smooth the transition path by allowing affected parties time to adapt to a new policy environment and when there is limited information on the adjustment capacity of different groups of workers and firms. For example, phasing has been used in Australia's programmes of reform for tariffs, subsidies and public utility pricing. The graduated introduction of reforms can delay receipt of the benefits, however, and in some cases may increase the scope for policy reversal.

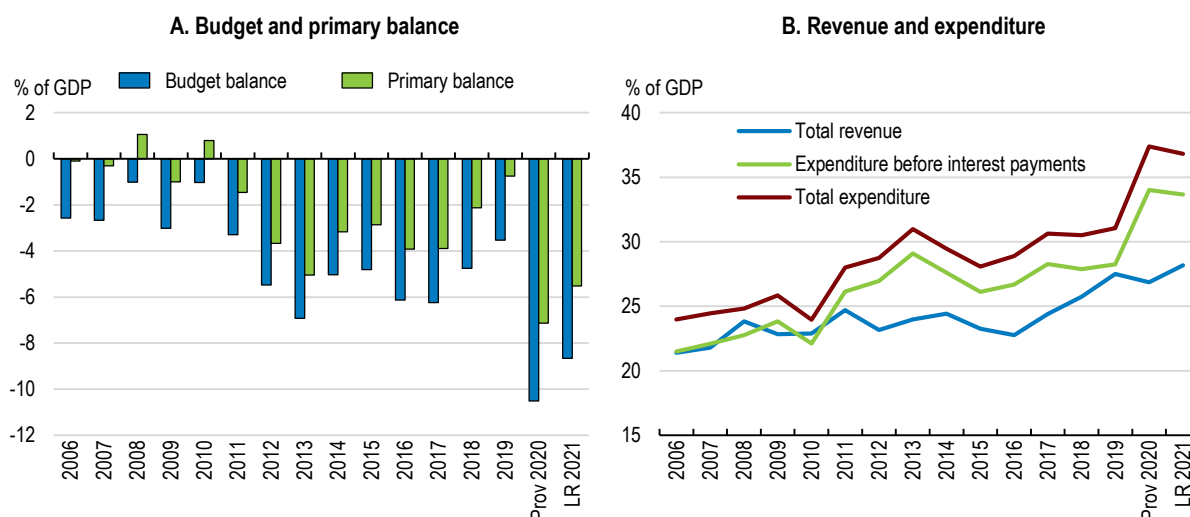
Ex post evaluation can help keep reforms on track. The ability of policy makers to identify and address possible adjustment or distributional problems in advance is often limited. Difficulties associated with a reform might only emerge during implementation. Consequently, there is a role for ex post assessment and, where appropriate, associated modification of reforms. This can help reassure the community that unanticipated adjustment difficulties will be addressed.

Source: Australian Productivity Commission.

A fragile fiscal situation requires interventions on spending, revenues and State-owned enterprises

The 2020 fiscal deficit widened to over 10% of GDP, due to lower revenue, additional transfers to SOEs and emergency support to firms and households (Figure 1.19). Despite ad hoc provisions putting limits on hiring, promotions and overtime hours in non-priority areas, the civil service wage bill grew to 17.5% of GDP. The 2021 budget aimed to narrow the deficit to 6.6% of GDP, but not all specific cost-cutting measures required to reach this target have been activated. The 2021 supplementary budget law (LFR-21) reports a sizeable increase in budget receipts (+13% year-on-year) and an even faster increase of public spending (+13.7%), primarily due to the large resources devoted to capital reimbursement, as well as to the dynamics of the wage bill and social outlays. For 2022, the budget law (LF-22) foresees that the fiscal deficit would equal 6.7% of GDP. The assumptions used in LF-2022 are 2.6% for GDP growth and average oil price at USD 75 per barrel. Financing needs would remain stable at TND 20 billion, which includes public debt reimbursement. LF-22 includes tax and non-tax measures that aim at helping some suffering sectors, such as agriculture, tourism, air transport and public works, as well as in support of digitalisation and of the strengthening of the public administration and tax controls. From the viewpoint of structural interventions, the introduction of an early retirement plan in the public administration, at 57 years over three years, is a first step to reduce the wage bill. The budgetary process would gain in transparency from the adoption of a comprehensive communications strategy.

Figure 1.19. The fiscal deficit is large



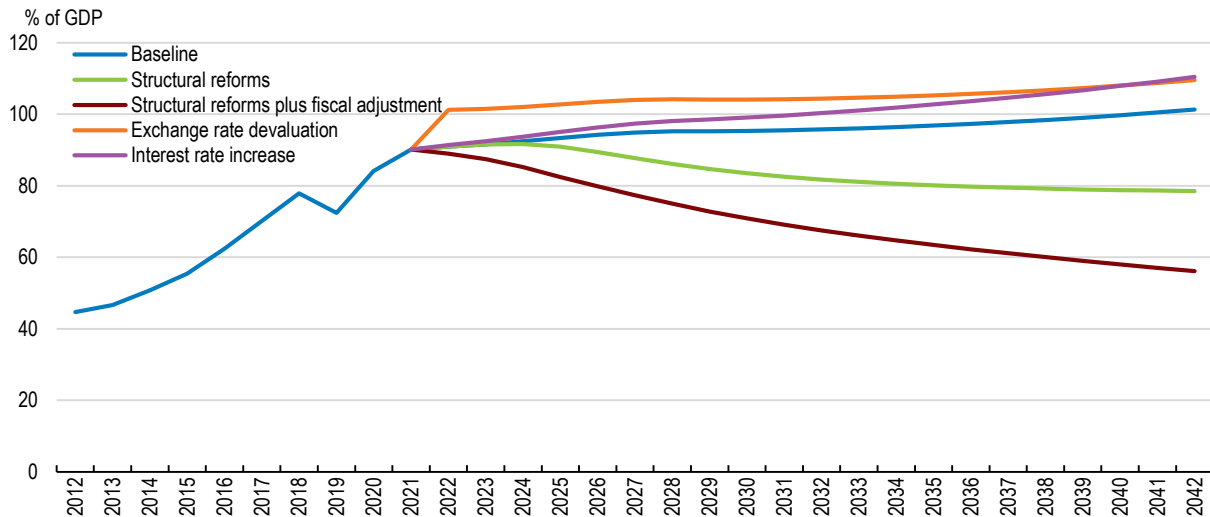
Note: In the EO 110 (December 2021) round, the OECD projects the central government financial balance to be -8.2% of GDP in 2021.

Source: Ministry of Finance.

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The recession-induced fiscal expansion increased the public debt ratio from 72% of GDP in 2019 to 89% of GDP in December 2021. Assuming the primary balance improves progressively and the long-term interest rate rises gently from current levels (a relatively benign baseline scenario), the debt ratio would reach 100% in 20 years. Economic policies would make a substantial difference to debt sustainability by both recalibrating public spending and boosting economic growth. In the structural reform scenario (see above), debt-to-GDP could steadily decline over the same time horizon (Figure 1.20). Were structural reforms also be accompanied by a more ambitious fiscal consolidation effort, the debt situation could improve even faster. On the other hand, a one-off depreciation of the currency would immediately bring about a jump in the ratio, which would then continue to rise further.

Figure 1.20. With ambitious structural reforms to spur growth, public debt to GDP may start diminishing



Note: The baseline scenario assumes that the primary balance deficit (equal to -0.8% of GDP in 2019) is reduced from -5.5% of GDP in 2021 to -1% of GDP by 2029 and stays constant from 2030 on. The structural reform scenario includes reforms that raise the growth potential of the economy, such as easing product market regulation, raising the quality of education, improving governance and the rule of law, and lowering the labour tax wedge (see above), which also raises tax revenues and reduces the primary deficit compared to the baseline. The scenario "structural reforms plus fiscal adjustment" includes additional cuts in public spending which result in a surplus in the primary balance of 0.3 % of GDP in 2025, staying constant thereafter. The scenario "Exchange rate devaluation" adds a devaluation of 15% in 2022 to the baseline scenario, and the scenario "Interest rate increase" models a 0.5 percentage point higher interest rate on public debt than in the baseline scenario. The simulations do not include ageing-related public finance costs, as the necessary data was not available.

Source: OECD calculations based on BCT, Ministry of Finance and the OECD Long-Term-Model.

StatLink  <https://stat.link/np3twr>

In order to stabilise public debt and bring it on a downward trajectory it will be necessary, if structural reforms are implemented correctly, to generate a small primary surplus (0.3% of GDP) by the middle of the decade, as assumed in the debt simulations above. Taking as reference the 2019 primary deficit of -0.8% of GDP, this would imply a total fiscal adjustment of 1.1% of GDP. There is also a strong case for public policies to boost human capital investment (by expanding spending on training and some well-targeted social benefits to reduce inequality and poverty) and infrastructure. Assuming additional spending of around 1.5% of GDP on these items, and lower revenues of 0.4% of GDP due to the halving of import taxes and duties, the total fiscal adjustment would need to be around 3% of GDP.

This adjustment could be achieved without raising tax rates or introducing new taxes (Table 1.4). Instead, there is ample scope for raising spending efficiency without jeopardising social and economic objectives (World Bank, 2020^[24]). This could include better managing public payroll expenses, phasing out some current expenditures that are no longer priority or have proven ineffective, and trimming tax expenditures that create distortions without generating much benefit. Finally, there is scope to reduce the waste of public resources due to corruption and avoid pork-barrel spending aimed at building political consensus.

Table 1.4. Fiscal impact of recommendations

Fiscal recommendation	Estimated impact on fiscal balance, percentage points of GDP
Reduce public payroll expenses (headcount and wages)	+1.5%
Reduce subsidies and tax exemptions	+1.5%
Halve import duties and taxes	-0.4%
Raise spending on training and well-targeted social benefits	-0.5%
Raise spending on infrastructures	-1.0%
Resulting change in primary balance	+1.1%

Note: Numbers in this table are estimates and are subject to considerable uncertainty. Implementation would take several years.

Fiscal imbalances cast a shadow over the solvency of Tunisia in the medium run and make it a priority to adopt a credible strategy. In particular, there would be great value in the introduction of a fiscal rule that ties down gradually the growth of current spending, notably by conditioning it upon the level of public debt, as for example in Costa Rica (see Box 1.5).

Box 1.5. Fiscal rules to put public finances on a sounder footing – the experience of Costa Rica

Costa Rica passed a historic fiscal reform law in December 2018, after two decades of preparatory works and under a complex social situation, including a three-month public sector strike. A critical element in the reform is the introduction of a fiscal rule that ties down gradually the growth of current spending (Table 1.5).

Table 1.5. The fiscal rule in Costa Rica

When the debt at the end of the previous fiscal year is	The annual growth of current expenditure should not exceed
Under 30% of GDP ¹	The average nominal GDP growth in the past four years
Between 30% and 45% of GDP	85% of the average nominal GDP growth in the past four years,
Between 45% and 60% of GDP	75% of the average nominal GDP growth in the past four years.
Above 60%	65% of the average nominal GDP growth in the past four years.

Note 1. Or the current expenditure-to-GDP ratio is below 17%.

The spending of all non-financial entities of the public sector, i.e. the central government, all deconcentrated bodies, the legislature, the judiciary, local governments or non-financial public companies, are subject to the rule. Exceptions are the Costa Rican Social Security Fund (CCSS), the Costa Rican Oil Refinery (Recope) and state-owned enterprises, concerning the part of their activities subject to competition.

The Finance Ministry is in charge of ensuring that the formulation of the budget for central government and deconcentrated bodies is compliant with the fiscal rule. For the central government, the General Comptroller will verify during the budget approval phase that the budget is in line with the law. At the end of the fiscal year, the General Comptroller will also verify if the fiscal rule has been met. The independent fiscal council will also make an assessment on this. A final report on compliance will be delivered to the General Comptroller Office in April of the following year and published on the website of the Ministry of Finance. The General Comptroller Office will verify that the budget of state-owned enterprises is in accordance with the law.

Source: OECD (2020), *OECD Economic Surveys: Costa Rica 2020*.

Government spending is dominated by current expenditures, leaving little space for financing social policies

The composition of public spending reflects the view of “the State as a provider of jobs and of subsidized goods and services” (World Bank, 2020^[24]). Since the early 2010s, the steep increase in personnel outlays (Table 1.6), reflecting both headcount additions and salary increases (IMF, 2021^[7]), has been the main factor behind the worsening of the fiscal deficit (Figure 1.21). This, in turn, has made it necessary to issue more debt both to finance current expenses and debt service, leaving insufficient resources available to strengthen the quality of infrastructure and public services. Implementing recommendations from (OECD, 2018^[25]) would be helpful (Table 1.7). In particular, putting public debt back on a sustainable track requires a combination of gradual fiscal consolidation, focused on the volume of public spending and the systematic assessment of fiscal incentives, with structural reforms that can support growth. Tax justice must be strengthened and the bias of subsidies to better off households must be corrected.

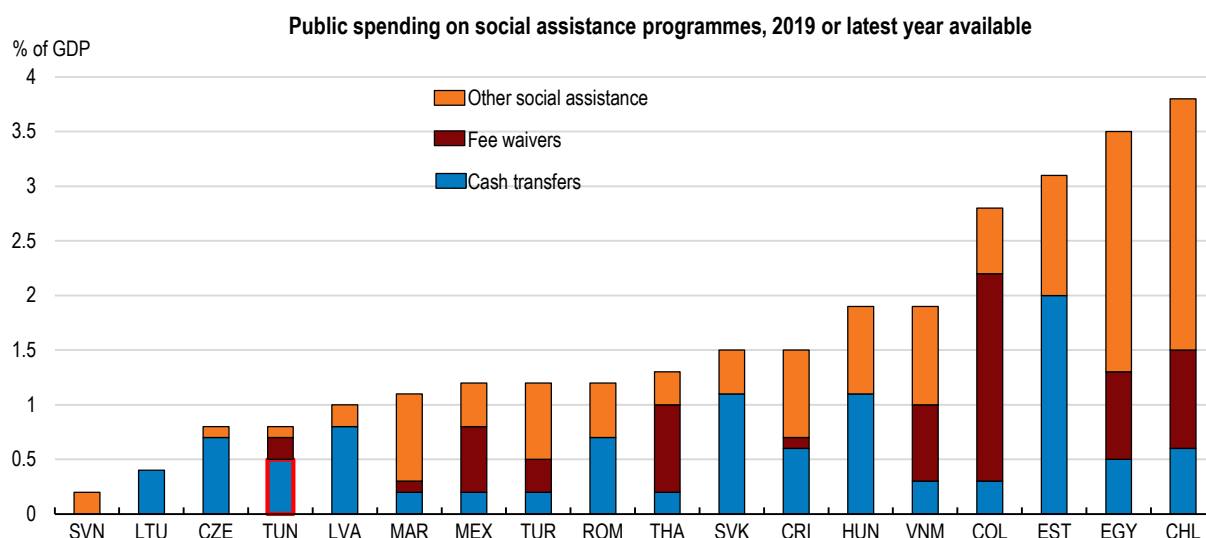
Table 1.6. Composition of government spending and revenue¹ (in % of GDP)

	2010	2016	2019	2020	LF2021	LR2021
1.Total revenue	22.9	22.7	27.5	26.9	26.3	28.2
Tax revenue	20.1	20.8	25.1	24.6	24.4	25.6
Non-tax revenue	2.8	1.9	2.4	2.3	2.0	2.5
2.Total expenditure	23.9	28.9	31.0	37.5	33.8	36.8
Current expenditure	17.9	23.4	27.8	33.6	29.4	33.9
of which: Wages	10.7	14.6	14.5	17.4	16.4	16.9
Subsidies	2.4	2.4	4.7	4.0	2.6	..
Food	0.9	1.7	1.6	2.2	1.8	..
Transport	0.3	0.5	0.4	0.5	0.4	..
Energy	1.2	0.2	2.8	1.3	0.3	..
Interest payments	1.8	2.2	2.8	3.4	3.3	3.1
Capital expenditure	6.5	5.3	3.3	3.5	3.4	3.5
Lending	-0.5	0.1	-0.1	0.4	0.0	0.0
Deficit (1-2)	-1.0	-6.1	-3.5	-10.5	-6.5	-8.7
Memorandum item						
Grants	0.0	0.1	0.3	0.0	0.0	..
Privatizations	0.0	0.1	0.3	0.0	0.0	..
Confiscated assets	0.0	0.3	0.5	0.1	0.1	..

1. Central government, excluding revenues and expenditures of the social security system.

Source: Ministry of Finance.

Figure 1.21. Social spending is low relative to total expenditure



Source: World Bank, ASPIRE database.

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Table 1.7. Past recommendations on macroeconomic policies

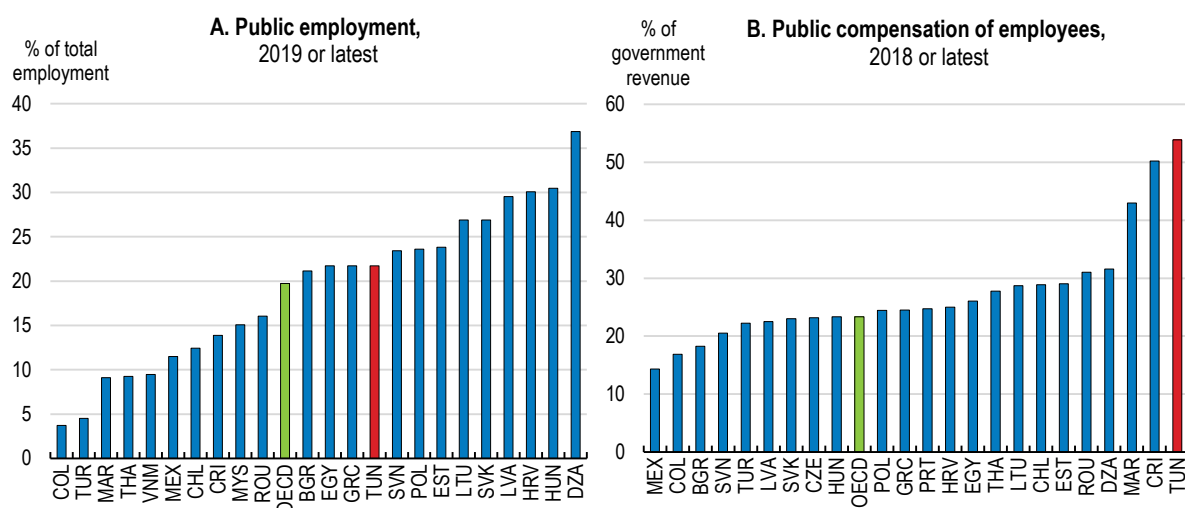
PAST OECD RECOMMENDATIONS	ACTION TAKEN
Accompany fiscal adjustment with structural reforms to set the ratio of government debt to GDP on a downward trend over the medium-term.	Little progress, even before COVID-19.
Carry out spending reviews on the utility of public programmes, including infrastructure projects, in order to prioritise public spending.	Since 2021, the Ministry of Finance publishes an annual review of tax incentives.
Restore tax justice by facilitating the cross-check of information and increasing tax inspections in order to better combat tax evasion and fraud.	Little progress.
Systematically assess the impact, costs and beneficiaries of tax incentives, especially for housing and business investment.	Since 2021, the Ministry of Finance publishes an annual review of tax incentives.
Gradually reduce public sector employment by maintaining the rule of partial replacement of persons leaving for retirement.	The government has maintained annual hiring limits and is committed to limiting promotions. It also launched a voluntary departure program and an early retirement programs in 2017-2018 but with a limited take-up.
Gradually increase the legal age of retirement and undertake reforms to guarantee the financial sustainability of the pension regimes.	The retirement age has been raised from 60 to 62 years in the public sector system, but the reform of the private sector system is still pending. The social solidarity contribution was introduced to diversify the financial sources of the social security system.
Reform subsidies by implementing automatic adjustment rules for hydrocarbon products and, for other products, replace them by cash transfers to households.	An automatic price adjustment mechanism has been introduced in 2020 for hydrocarbon products, but it has not been fully implemented.
Speed up the introduction of legislative changes allowing banks to reduce levels of non-performing loans.	Little progress.
Continue to disengage the State from public banks and banks in which it has shareholding interests.	Little progress.

The public sector wage bill is one of the highest in the world

Since 2011, public sector (including SOEs) employment and the wage bill have grown significantly (Figure 1.22). Job creation in the public administration and public enterprises, for low-qualified and long-term unemployed individuals, has partly been used to avoid an excessive increase in unemployment and related social tensions. The 2011 general amnesty led to the reintegration of civil servants that had

been fired for political reasons, recreating their career path including all promotions. While the legal framework provides for competitive recruitment and promotion, there is in practice little use of adequate performance evaluation and financial incentives. In light of this situation, and also of the relatively high degree of system centralisation, it is very hard to take organisational needs and workforce characteristics into account in the recruitment process.

Figure 1.22. The public sector is a large employer and pays well



Source: ILOSTAT database; IMF, WEO database.

StatLink  <https://stat.link/gbs1ay>

In the medium term, deeper reforms are needed to improve operational performance and reduce the costs of the public sector, such as suspending derogatory, non-competitive hiring and promotions, making it mandatory to publish vacancies, and applying uniformity, equity, fairness and transparency principles to strengthen career-long review processes of civil servants. Similar reforms that earmarked operational expenditure for savings have been implemented in some OECD member countries (Box 1.6). Greater digitalisation would also potentially make public administration more efficient. Resistance to change, however, remains very strong. In May 2021, in particular, trade unions rejected a government plan to trim the wage bill through attrition and voluntary departures.

Box 1.6. Reforming the public sector: the Slovenian and Estonian experiences

In Slovenia, the public sector salary system had evolved into a complex, opaque structure. In 2010, the government implemented a new public sector salary system, after drawn out negotiations with representative trade unions for public employees. The government was innovative and resourceful in the way it managed both the reform process and the required bargaining. The freezing of salary increases, creating a virtual pool of unallocated salary increases available for re-distribution, was probably a decisive factor enabling an agreement. Another lesson is that continued and sustainable reform should include the strengthening of a professional central public employer office. This is critical to ensuring a coherent system. The new function should be empowered to represent the public employer in collective bargaining.

Estonia testifies to the potential of e-government. Citizens can do basically anything online except for a very few things like getting married or divorced and selling or buying real estate. The X-road, the secure communication protocol underlying e-government services, was built on the same principles as the

block chain, even before the word block chain was invented. Estonia is also a leader in digitalising public procurement, one of only four OECD countries with a full range of functions built in to its e-procurement systems. During the COVID-19 emergency, it implemented innovative solutions in the way health care services are provided, encouraging electronic consultation.

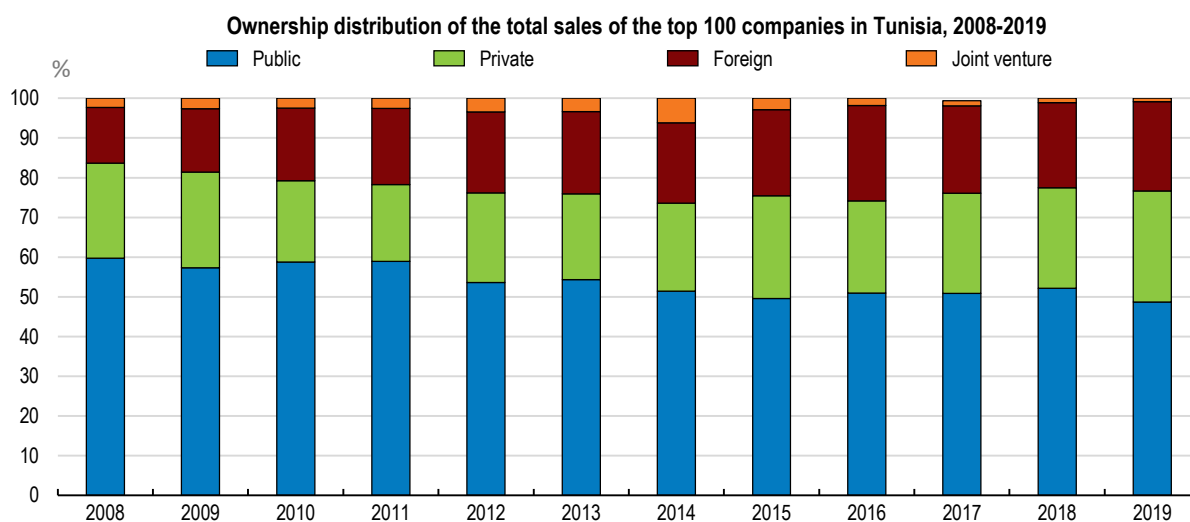
Source: OECD (2012), [The Public Sector Salary System in Slovenia](#); OECD (2021), [Government at a Glance 2021: Country Fact Sheet Estonia](#).

State-owned enterprises play a dominating role in the economy

SOEs have played an important role in the Tunisian economy since independence in 1956, when the government took over many firms. However, by the 1980s they had become in most cases inefficient, loss-making and debt-accumulating, contributing to the liquidity crisis that in 1986 forced Tunisia into a structural-adjustment programme overseen by the IMF. That programme included the gradual withdrawal of the state from "non-strategic" sectors. About 144 SOEs were fully privatised between 1987 and 1999, including cement factories and banks.

There are multiple reasons why SOE governance is a crucial issue for Tunisia's socio-economic development. First, SOEs dominate various sectors -- such as transport, banking and energy -- that have an important weight in the cost of living and provide important inputs for firms. They also account for a sizeable share of the economy and in particular represent most of the country's large enterprises -- with SOE share of the total turnover of the 100 largest companies in Tunisia exceeding 50% (Figure 1.23). Second, the bad financial performance of SOEs worsens the state of public finances and their contingent liabilities are considerable (14% of GDP according to (World Bank, 2020^[24])). And third, SOEs were a cornerstone of crony capitalism before the political transition and the creation of a fairer and sustainable economic and societal system hinges on making them more transparent.

Figure 1.23. SOEs occupy a central role in the business landscape



Source: OECD elaboration from *L'Économiste maghrebin*, « Classement annuel des entreprises tunisiennes », various years.

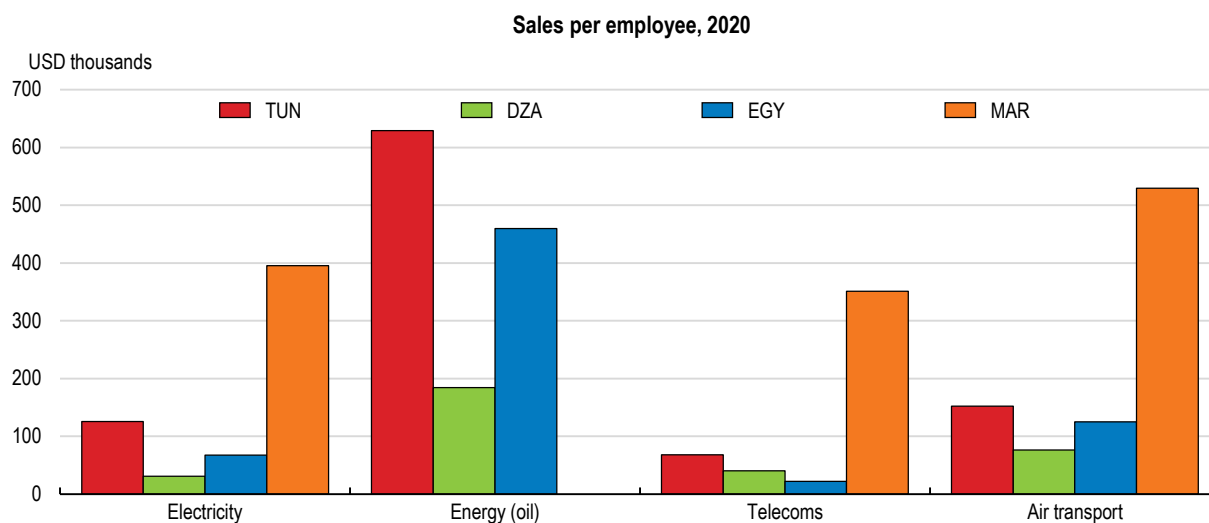
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SOEs tend to suffer from poor management, perform badly, pose fiscal risks and ultimately distort markets. The state currently runs 110 enterprises (Ministère de l'économie, des finances et de l'appui à l'investissement, 2021^[26]) (the OECD average is about 13), which together have sales equivalent to almost


10% of GDP. SOEs' average annual net losses between 2013 and 2016 have been TND 400 million, despite close to TND 5 billion (4.5% of GDP) in operating subsidies (World Bank, 2020^[24]). At the end of 2019, the 30 biggest SOEs had aggregate debt equivalent to 40% of GDP, including debt to local banks equivalent to 17% of GDP (IMF, 2021^[7]). Moreover, debt equivalent to 15% of GDP was covered by government guarantees, which poses a risk to fiscal stability. SOEs have large arrears and cross-arrears with each other, the government, social security funds and private entities. At the end of June 2020, arrears by the SOEs to the government equalled 5.6% of GDP, whereas the government's arrears to SOEs amounted to 7.9% of GDP and SOEs' arrears to private firms was around 3% of GDP.

SOEs typically enjoy a monopoly in their fields of operation, which reduces incentives to improve productivity, creates extra costs on the private sector and opens opportunity for corruption (Ades and Di Tella, 1999^[27]). A very simplistic performance indicator (sales per employee) shows Tunisian SOEs not doing particularly well even in the MENA context (Figure 1.24). The case of state power utility company STEG is an example. STEG controls 91.5% of the country's installed power production capacity and produces 81% of the electricity. However, as a result of delays in power plant construction, there is scarce excess generation capacity and brownouts are frequent (AfDB, 2019^[28]). STEG is hard-pressed to meet peak summer electricity demand, let alone keep up with Tunisia's annual 5% growth in power consumption. Since 2011, STEG expansion in generation capacity has slowed down by 3.5% compared to the previous decade, while increasing theft and lower customer payment discipline have weighted on financials (World Bank, 2019^[29]). On the other hand, the payroll has grown from 9 260 people in 2010, to 12 753 in 2013 and 13 467 in 2019.

Figure 1.24. Utilities perform rather poorly



Source: OECD Secretariat based on company reports.

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SOE governance could be improved

OECD analysis reveals that all STEG board members are either civil servants or STEG employees. Indeed, in the boards of the nine of the 10 largest SOEs for which data are available, no fewer than 92 out of 106 directors can be classified as politically exposed persons (i.e. have been entrusted with a prominent public function) and/or are company insiders. This governance structure without independent directors encourages collusion and groupthink and limits the contribution of external competences. Most recent reforms have added layers of formal obligations (on issues such as internal appointments, working

conditions, or investment and procurement decisions), which in turn introduce additional reporting requirements. It would be better to design an improved set of incentives that are consistent with the goal of aligning the behaviours of managers and directors with the interests of the state as shareholder.

Various consequences of this reform blockade are exemplified by the case of air transport. The EU launched the process of creating a wider Common Aviation Area with its eastern and southern neighbours in the 2000s. While Morocco saw the Euro-Mediterranean Aviation Agreement as an opportunity and the flag carrier has managed to restructure and benefit (Box 1.7), Tunisia has repeatedly cited concerns on the ability of its flag carrier (Tunisair, 62% state-owned) to operate in a liberalised environment. As a result, the adjustments ahead of the Open Skies convention with the EU were delayed. The agreement, which was signed in December 2017, has not been ratified yet and remains a simple project, which has generated considerable opposition, in particular by Tunisair trade unions. In the meanwhile, the airline has accumulated debts and losses, had frequent changes in top management, recorded a low punctuality rate (53% in 2020), and remains heavily overstaffed with 280 employees per aircraft, as against an international norm of 80.

Box 1.7. Market liberalisation and SOE turnaround – air transport in Morocco

Royal Air Maroc (RAM) was established in 1957 and from its hub at Casablanca Mohammed V International Airport operates an extensive domestic and regional network within Morocco and Africa, as well as services to Europe, the Middle East, China and the Americas. It is one of only five African airlines to belong to a global alliance (in this case oneworld, which it joined in 2020).

Morocco signed the 2006 Open Skies agreement with the EU to support tourism in the aftermath of the May 2003 Casablanca terrorist attack and the war in Iraq, presented RAM with an almost existential threat. In Casablanca, the capacity share of low-cost carriers (LCCs) more than tripled from about 12% in 2006 to 40% in 2011, much higher than at neighbouring airports like Algiers (0.6%) and Tunis (1.5%).

The Arab Spring, the bombing of a Marrakesh café and the Euro zone debt crisis depressed the tourist market and brought RAM to the brink of collapse. Facing a negative outlook of declining passenger numbers and increase operating costs, primarily fuel, the 2011 RAM contract programme with the Directorate of Public Enterprises and Privatization (DEPP) of the Ministry of Finance helped to drive the company towards profitability by reducing the scope of its activities, while offering compensation for unprofitable yet essential public services. RAM halved staff from 5 352 to 2 737 in 2014 through a voluntary redundancy plan approved by the trade unions, thus cutting wage costs by 34%. It also launched an extensive fleet renewal programme. RAM has recorded a profit since 2013, with rising revenues. In 2012 the government announced that it would sell a 44% stake, although this partial privatisation did not advance.

COVID-19 provoked a major crisis, with revenues falling by 70% (from MAD 16.5 billion to MAD 5 billion) and losses amounting to MAD 3.5 billion. The government granted a MAD 6 billion (USD 600 million) financial assistance package in August 2020, conditional upon a draconian cost-cutting effort.

Source: OECD and World Bank.

The first priority moving forward is to develop a proper ownership strategy accompanied by concrete measurement and management indicators. State ownership has been justified as a means of protecting "strategic" industries and their workforces from competition or predation. Keeping SOEs on life support in sectors as varied and as non-strategic as advertisement, poultry farming, stevedoring, and cement does not contribute to achieving development goals. From the social welfare angle, the best solution for the state should be either to sell or liquidate them, in tandem with restructuring of liabilities with lenders, lessors and other stakeholders. While both options may be difficult in the current environment, muddling through is a worse alternative. Little progress has been made over the past decade in terms of transparency,

performance, governance and sustainability. While non-binding performance criteria (*contrats de performance*) have sometimes been adopted, they are not made public – like they are for instance in Uruguay (OECD, 2021^[26]). The *Unité de surveillance de la productivité des entreprises publiques* lacks technical expertise (World Bank, 2014^[30]). The quality of financial reporting must be improved: currently, many SOEs submit their accounts with considerable delay and qualified opinions by the auditors are far from uncommon (World Bank, 2020^[31]).

For public utilities, the search for international partnerships may advance faster, provided the government commits not to interfere with the new owners and managers. Reserving a minority stake to employees may also assuage fears that a takeover would immediately lead to redundancies. The international experience since the 1980s is also unambiguous in highlighting the benefits from pro-competitive regulation, managed and overseen by independent economic regulators (OECD, 2016^[32]). Outside of the financial system, Tunisia's only such authority is the Instance Nationale des Télécommunications (with a second one for radio and television, Haute autorité indépendante de la communication audiovisuelle, HAICA, that is not an economic regulator). The creation of a sectoral regulator would be a major advance for developing electricity self-production using renewable sources (Rassaa et al., 2020^[33]).

The government's reform plan submitted to the IMF envisages setting up a Public Enterprise Restructuring Fund to recapitalise SOEs, bringing all SOEs under a single public shareholding agency and selling at least some "non-strategic" businesses. While a variety of different ownership structures and governance arrangements co-exist in OECD countries, there is a continuing trend toward vesting the ownership rights and responsibilities with one entity (OECD, 2021^[34]) (Box 1.8), which is consistent with the recommendations of the OECD SOE Guidelines. While it operates under the tutelage of the government, which sets the operational guidelines, it is crucial that the state shareholding agency be autonomous in the portfolio management in order to maximise the financial interests of the state and encourage exemplarity regarding transparency, remunerations, equality and social and environmental responsibility. Indicating the financing sources for the restructuring effort would increase the credibility of the government plan.

Box 1.8. Centralising the exercise of ownership rights can improve SOE governance

The desire to improve SOE performance and efficiency without relinquishing public control of the underlying assets is not unique to Tunisia. Various OECD Member countries have adopted centralised ownership model which is characterised by one central decision-making body carrying out the mission as shareholder in a majority of companies and organisations controlled by the State. Financial targets, technical and operational issues, and the process of monitoring SOE performance are all conducted by the central body. Board members are appointed in different ways but instrumental input comes from central unit.

France: Agence des participations de l'État (APE, Government Shareholding Agency)

APE was formed in 2003 in order to exercise the mission of the government as shareholder separately from the different roles of government as a supervisor and regulator. APE employs 55 people and has an annual budget of EUR 12.4 million.

As a central administration department reporting directly to the Minister of Economy and Finance, it provides shareholder monitoring of 88 state-owned or state-invested companies (the list of enterprises is established by a government decree) as well as their subsidiaries. A number of smaller companies focused on the delivery of public policy objectives are not monitored by the APE, but by the relevant line ministries. APE manages the government budget accounts for all revenue and expenditure relating to State financial participations – except for the dividends from companies in the APE portfolio which are paid directly to the general state budget. As the shareholder, in each SOE APE also appoints one

or more directors. At the third Haut conseil de coopération franco-tunisienne, held in 2021, France agreed to offer technical cooperation on this matter.

Finland: Ownership Steering Department (OSD)

The 2007 Resolution on State Ownership Policy outlines the main principles and operating practices of the State's ownership steering. The corresponding duties are carried out by the Ownership Steering Department (OSD) within Prime Minister's Office (PMO) in accordance with guidelines and recommendations approved by the Cabinet Committee on Economic Policy. The OSD nominates the State's candidates to SOEs' boards, prepares other matters connected with the Annual Shareholders' Meeting and monitors the company during the year.

Costa Rica's Presidential Advisory Unit (PAU)

PAU was established in 2018 to manage and co-ordinate State shareholdings and autonomous institutions. It is tasked to assist the President and the Executive in exercising ownership rights in an active and informed manner and professionalise the appointment process of board members. PAU officially began operation in September 2018 and issued an ownership policy and a first aggregate report on the SOE sector in 2019. It is headed by the Secretary of the Council of Ministers and has an annual budget of approximately USD 100 000, which also includes the Council of Ministers.

Lithuania's Governance Co-ordination Centre (GCC)

GCC performs monitoring and forecasting functions, reports on SOE and municipally-owned enterprises compliance with the requirements of governance, transparency and execution of indicators and provides recommendations and consultations to institutions implementing rights and duties of the State (shareholder ministries). Major roles include board member selection, SOE target setting, strategies and other governance practices.

Chile's Public Enterprises' System (Sistema de Empresas Públicas, SEP)

SEP is a committee of CORFO (Production Development Corporation). It acts as a technical advisory body, with authority to centrally oversee the management of the majority of CORFO-owned SOEs (23 out of 33 SOEs). Some SOEs are profit-seeking entities, for others the mission is at least partly to pursue social goals. SEP over-arching task is to appoint and remove SOE directors, on the basis of the corporate governance code, a specific code of conduct, and the annual assessment of directors' performance. SEP itself is overseen by a nine-member governing council and is managed by an Executive Director recruited from the private sector.

Source: OECD.

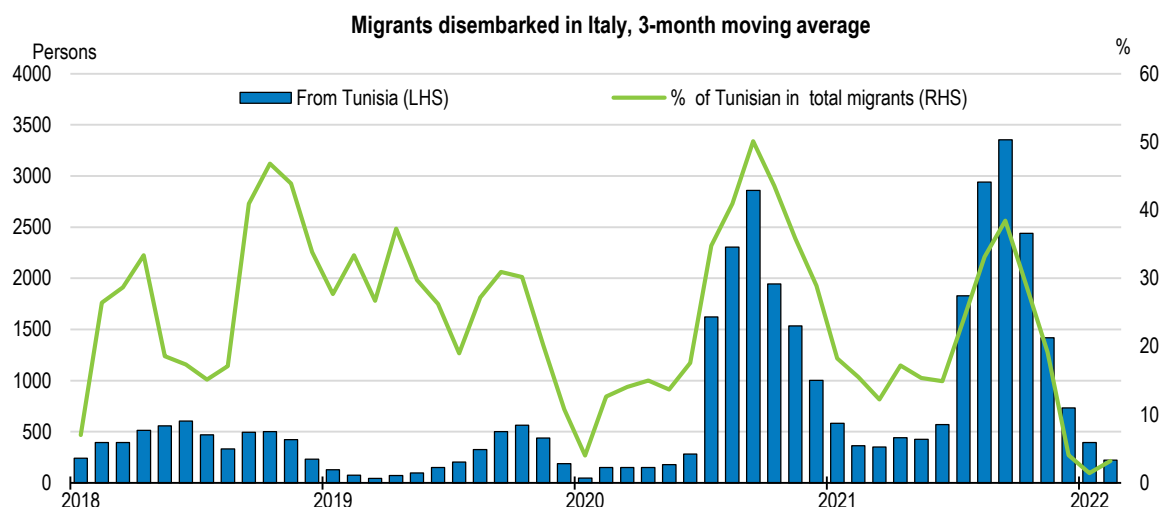
Better protecting the neediest

The pandemic presents the authorities with new challenges since some of the remarkable gains made in reducing poverty in previous decades (OECD, 2018^[25]) are likely to wane. The estimated increase in the percentage of the population that is poor depends on the poverty line, being very small in the case of extreme poverty (expenditure threshold of USD 1.90 per-day), but higher (the increase is 5.4 percentage points) for those "vulnerable" to fall into poverty (i.e. population living with USD 5.50 per-day). The emerging middle class that alimanted consumption in the past two decades (CESAO, 2014^[35]) now faces *déclassement* risks. Fieldwork by the INS and the World Bank has revealed changes in eating habits among poorer households, which have been pushed into reducing quantities consumed or switching consumption towards less preferred foods (Kokas et al., 2020^[36]). Women seem more affected, due to pre-existing wage and income inequalities that worsened during the crisis, a period that also saw women spend more time performing unpaid family chores. A more encouraging diagnostic derives from two synthetic indicators of social progress, the Social Progress Index (Social Progress Imperative, 2021^[37]) and the global multidimensional poverty index (UNPD, 2021^[38]). Tunisia is in relatively good positions in

both rankings, which gauge respectively the ability of countries to fulfil their citizens' social and environment needs and the share of the population that suffers from different forms of deprivations that touch them in their daily life, such as health threats, insufficient education and poverty.

To cope with rising food prices or to make up for jobs losses, households drew on their savings, received help or borrowed money from relatives, in particular those living abroad, and deferred payment of their obligation. Moreover, since mid-2020, the deteriorating economic situation combined with the large role of the informal sector has also been reflected in the increasing number of Tunisians who leave the country crossing the Central Mediterranean route (Figure 1.25).

Figure 1.25. Migration to Europe has risen



Source: Cruscotto statistico giornaliero, Dipartimento Libertà Civili e Immigrazione (interno.gov.it).

StatLink  <https://stat.link/8j3kuw>

Policies should quell the costs of the pandemic for households along different dimensions: labour and non-labour income, consumption and the continuity of services. The contingency plans implemented in 2020 provided in-kind assistance and emergency cash transfers to 1.1 million households, for a total amount of TND 287 million. This aid is differentiated according to the level of poverty and/or vulnerability. Needy families received an additional exceptional assistance of TND 50 in April 2020 and TND 60 the following month. Exceptional monetary assistance of TND 200 was granted in April and May 2020 to low-income families eligible for discounted healthcare cards and to families hosting a person without family support (disabled, elderly or orphaned child). The same amount was paid in May 2020 to vulnerable families not listed in the DSS database. Recipients of low retirement pensions also received an exceptional aid of TND 100 in May 2020. In 2021, in response to the resurgence of the pandemic, new measures were adopted to protect those hit hardest by the pandemic and poor and vulnerable households. The social protection project is supported by a USD 300 million loan from the World Bank.

The 2020 emergency programmes have revealed some issues regarding targeting, with cash transfer going to non-eligible better-off households, as well as failures to reach a significant share of the poorest households (World Bank, 2020^[24]). This underscores the urgency of using a new targeting method (proxy means test) to improve the new AMEN Social cash transfer programme (which has replaced the PNAFN, Programme National d'Aide aux Familles Nécessiteuses) and which could reach up to 900 000 households. The Organic Law on Social Policies revises the method of targeting, which will henceforth be based on the concept of multidimensional poverty which, beyond income, also considers health, education, employment, living conditions and access to public services. This requires the full

implementation of the digital individual identifier to link different data sources. Improved targeting would free resources for growth-enhancing investment.

To shield the purchasing power of the population against world market contingencies and input cost increases, the government directly influences prices of basic food and consumer items, either by setting an official price or by subsidising the products. For decades, the compensation system has served to subsidise staple food (notably bread, pasta, milk, sugar and vegetable oils) and other products and services, such as hydrocarbons, transport and drugs. The budget of the *Caisse générale de compensation* (CGS), which distributes subsidies to the producers of these goods, surged between 2011 and 2019, to reach 4.7% of GDP, reflecting growing energy imports, rising world price of staple food and the currency depreciation (Dhakouani, Znouda and Bouden, 2020^[39]). Food subsidies may mitigate food deprivation for poor households. However, they tend to benefit more the rich as they consume more subsidised products and the impact is regressive (Boughzala et al., 2020^[40]). Smuggling of subsidised goods is estimated to be half as large as official trade with Libya and larger than official trade with Algeria (Ayadi et al., 2014^[41]).

In the 2021 Budget, subsidies are reduced to 2.8% of GDP, of which $\frac{2}{3}$ for basic food. A new automatic price adjustment formula for the three main fuels was applied for the first time in April 2021, resulting in a 1.5% decline in pump prices. In the new formula, the value of imported hydrocarbons and refined oil replace the average barrel price as the reference for the monthly adjustment, that will be within a +/- 1.5% band. The modification, and the associated decision to make the opinion of the technical committee binding for the government, go in the right direction: it should make the process more transparent and less prone to political pressures. The formula should be implemented fully and symmetrically, also when oil prices are rising.

Transitioning to subsidising income, rather than producers and prices, would better align the system with overall distributional and poverty reduction objectives. In the aftermath of the pandemic, this reform would benefit from progress achieved in digitalisation of social policy operations. In particular, it may be possible to use additional tools such as the *identifiant social* (IS) and the chip-card. Indeed, since 2017 each individual receives an IS that helps to better manage the beneficiaries of all social protection programmes by digitising the registration process. By mid-2021, 91% of those insured at the CNSS and CNRPS (7.4 million people) and 853 280 people registered in the AMEN programme had received their IS.

The tax system is in need of reforms

Tax revenues have increased from 25% of GDP in 2000 to 32% in 2018, which is high compared to most EMEs (OCDE/ATAF/CUA, 2020^[42]). The burden falls disproportionally on salaried workers and the tax wedge on labour income is substantial compared to workers' productivity level (OECD, forthcoming^[43]). Both evasion and avoidance of income tax are frequent, although there have been improvements with the creation of a new company register based on a single tax identity number. Value added tax (VAT) receipts equal 7% of GDP: despite the advantage of the paper-trail and self-enforcing properties of the VAT, collection is made difficult by the complexity of the tax code and poor enforcement (OECD, forthcoming^[43]). In this context, the priorities are improving tax administration and phasing out the *régime suspensif*, which allows a VAT-taxable person to receive, tax-free, some of the goods and services necessary for its exploitation.

Corporate taxation represents a small portion of revenue collection, given the substantial share of the informal economy and the large number of businesses that are subject to the flat-rate scheme ("forfait"). The flat-rate scheme simplifies tax filing procedures for self-employed and smaller firms up to an income threshold of TND 100 000. However, under-declaration is rife due to insufficient tax controls, and some features of the scheme could be improved. In particular, reducing the eligibility period would increase the frequency of checks and the flat-rate scheme could make greater use of online services for administrative management.

In addition, there are numerous tax incentives for investment and job creation. Regressive tax deductions (e.g. for owner-occupied housing) also weigh on the ability to raise more revenue from the personal income tax and to make it more progressive. In 2021, Tunisia published for the first time a report on tax expenditures. This is a significant step forward, even if some room for improvement exists (calculation of lost tax revenues for all tax expenditures, details of information on their beneficiaries, carrying out impact assessments, etc.) (OECD, forthcoming^[43]).

The 2021 Budget Law contains encouraging provisions, such as halving the maximum response time for the tax administration to react to a taxpayer objection to 90 days. Some changes in the five codes that regulate the Tunisian tax system are intended to alleviate the burden of the recession (Box 1.9). An increase in tobacco excises was decided in March 2021, resuming the stepwise increase started in 2017 in line with WHO recommendations. This measure may generate additional revenue of at least TND 200 million (or 0.2% of GDP). The 2022 budget foresees that firms may benefit from lower interest rates on investment credits and that criteria for qualifying as an exporting company be eased, with the export-to-turnover threshold lowered from 70% to 50%. LF-22 also provides for an increase of indirect taxes on a range of consumer goods, including higher customs taxes on selected imports.

Box 1.9. Main tax measures in the 2021 Budget Law

The main tax measures in the Budget law for 2021 are as follows:

Corporate sector

- Reduction in the corporate income tax from 25% to 15%, and rate convergence between offshore and onshore firms.
- Transfer price regulations are only applicable to companies with sales equal or higher than TND 200 million (previously TND 20 million) and doing business with other connected foreign companies.
- Reduction in the withholding tax rate from (i) 15% to 10% in the case of income from rental, (ii) from 5% to 3% in the case of income from professional services and (iii) from 1.5% to 1% when the sum is equal or larger than TND 1 000.
- Specific measures to alleviate companies hit by the coronavirus, subject to respecting the preferential terms (e.g. paying 2020 corporate income tax by May 2022).
- Possibility to re-evaluate land and real estate.
- Deduction for reinvestment in the capital of “totally-exporting companies”.
- Incentives for research and development expenditures.

Household sector

- Doubling of the threshold to benefit from the CEA (*compte épargne en actions*, a savings account to invest in shares) from TND 50 000 to TND 100 000 per year.
- Increase of the threshold to benefit from the life insurance and the capitalisation insurance contracts from TND 10 000 to TND 100 000 per year.
- Transformation of the 20% withholding tax on interest income into a definitive payment, not subject to restitution.

A coherent tax reform should contain different elements. There are currently five separate Codes, covering personal and corporate income taxes, VAT, registration and stamp duties, local taxes, and tax rights and procedures. A general tax code should be comprehensive, simple and clear to understand and apply. The

institutional setting would benefit from establishing a state agency for collecting current and outstanding tax dues, staffed with competent specialists and highly digitalised. The scope of special regimes should be reduced, especially in the case of the VAT for which a rationalisation of exemptions is in order, while remaining tax differences between the onshore and offshore sectors should be removed, to allow all companies to operate in a level playing field. Widening the tax base, improving the implementation of the *régime forfaitaire* (flat rate) and controls, notably by more efficient use of tax inspectors, could in the medium run open the space for reducing tax rates. In more general terms, there would be benefits from introducing a reform roadmap and communicate clearly and in a timely fashion in order to reinforce the transparency of the tax system.

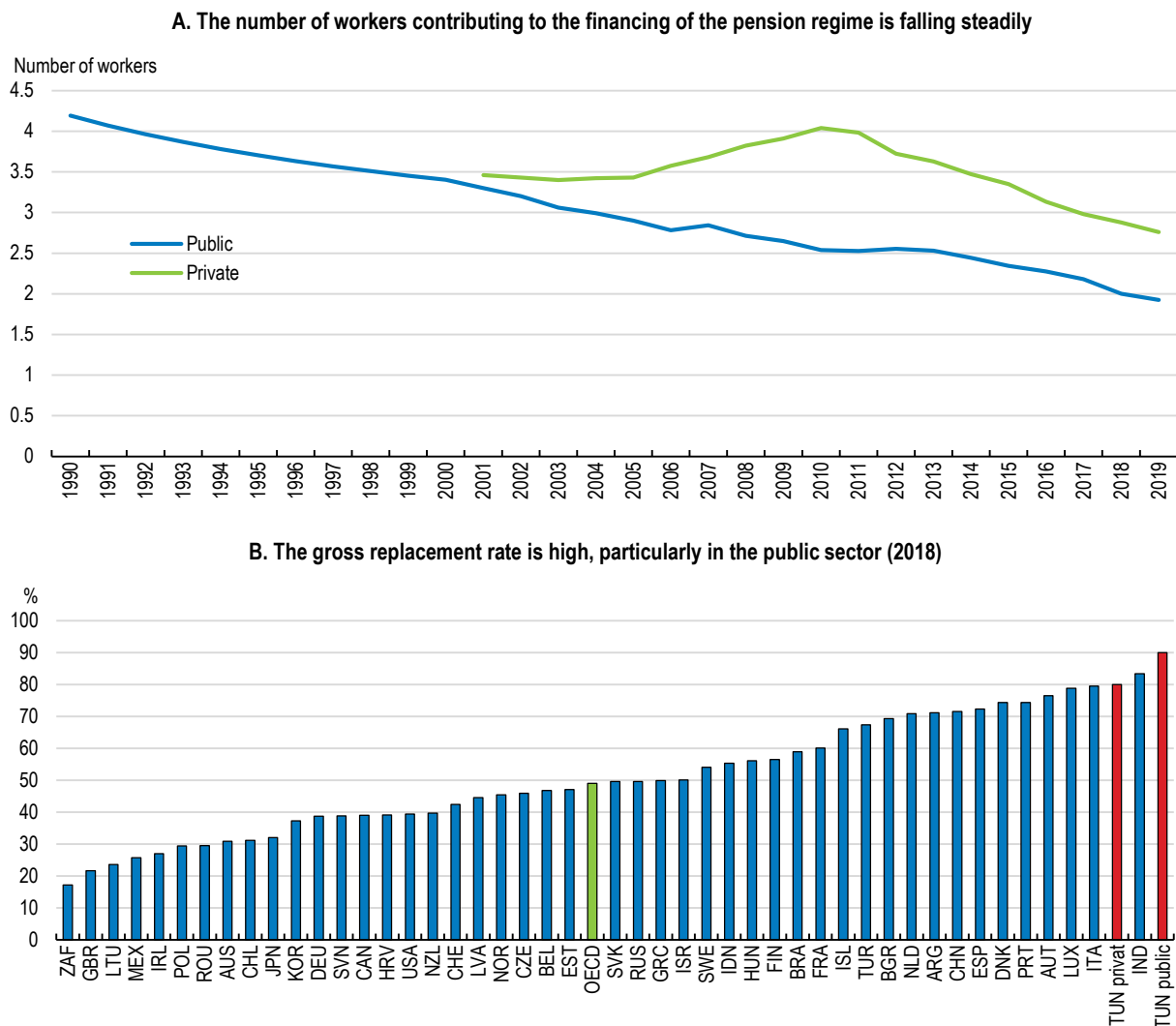
Other sources of government revenues could be mobilised. Privatisation, in the broader context of the reform of state-owned enterprises (see above), could help. In addition, investigations launched since 2011 have failed to confirm the initial estimate of the value of the assets stolen by the former president, his family and associates (USD 13 billion). Identified illicit assets held outside Tunisian territory totalled amounts that were very far from the initial estimate. On the other hand, almost all the financial properties controlled by the former president's clan in Tunisia were confiscated by decree. International procedures for the recovery of illicit assets, launched in particular in various European countries and in the Middle East, despite some notable successes, have suffered from the insufficient cooperation offered by some countries, the difficulty of identifying illicit assets originating from past crimes and the slowness of mutual legal assistance procedures.

The financial situation of the public pension system is poor


Population ageing, rising dependency ratios, generous gross replacement and low growth have weakened the pay-as-you-go system (Figure 1.26) (Ministère de l'économie, des finances et de l'appui à l'investissement, 2021^[26]). The 2019 reform raised the retirement age in the public sector to 62 years, with the possibility of working until 65, and increased employee and employer contributions. It is understood that the same rules will apply to the private sector, but negotiations on this issue are not progressing. Further efforts are required to increase transparency about the fiscal deficit of the pension system, in particular by accounting for large arrears with the public health insurance system (IMF, 2021^[7]).

The structural problems of the pension system, however, remain untackled and a wider reform will be necessary. Replacement rates are much more generous than in the average OECD country, particularly in the public sector system, where benefits are calculated based on the last salary (Figure 1.26). Pensions are indexed to wages, whereas in many OECD countries they are indexed to inflation. The accrual rate should be made linear (i.e. same rate for all years) and the amount of the pension should be calculated on the basis of average earning over the whole career (World Bank, 2020^[31]). In the private sector regime, under-declaration of revenues and salaries is a serious issue for the collection of social security contributions which should be addressed by reinforcing controls and improving the digital infrastructure to detect fraud (CRES, 2017^[44]; OECD, forthcoming^[43]). Early retirement, where possible, is not penalised and is increasingly expensive given longer life expectancy. Moreover, multiple special regimes introduce distortive elements in terms of equity. Financing large contingent liabilities from pensions through general tax revenues is highly regressive in a country where coverage is far from universal and 46% of the workforce is informal. Brazil has recently reformed its pension system, reducing inequalities between the public and private sector regime and making contributions more progressive (OECD, 2020^[45]).

Figure 1.26. The pension system is unsustainable and further reforms are needed



Source: Government of Tunisia; and OECD database on pensions.

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A friendlier and fairer business climate could sustain investment

As other emerging market economies, Tunisia has long been plagued by crony capitalism, i.e. a form of economic governance in which policy decisions are subject to undue influence of a small number of interest groups. Politically connected firms, including those owned by former president Ben Ali and his family, dominated large swathes of the economy and were more likely to evade taxes than non-connected ones (Rijkers et al., 2016^[46]). Despite expectations of tangible improvements in synch with the political transition, a small number of influential vested interests have a grip on the country's politics and economy. They hold significant influence through ownership of media, business monopolies, the financing of political parties or by directly holding a parliamentary or government position. From their position, they can influence the public debate and better defend their interests.

Opportunities for gaining economic rents can be reduced by simplifying the regulatory environment, strengthening the rule-based system and improving policies in areas such as public procurement,

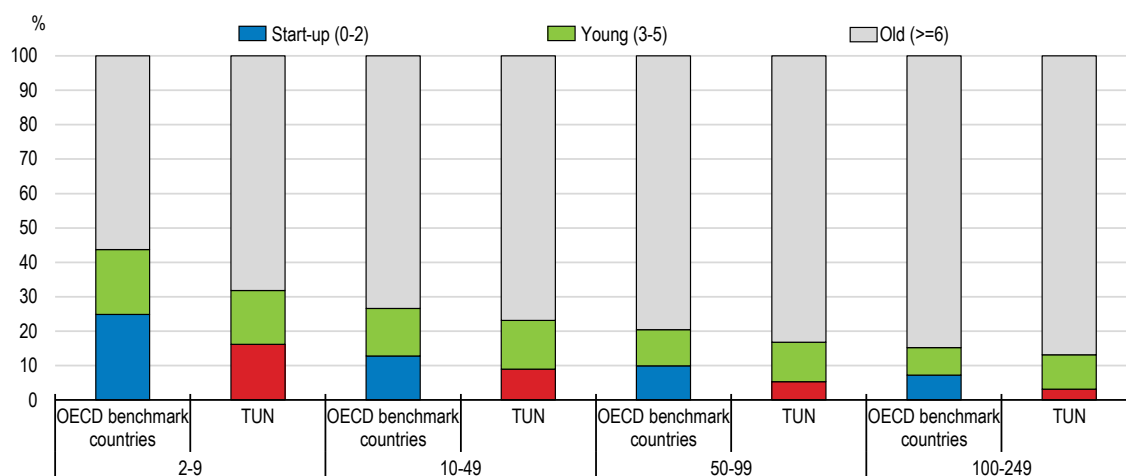
subsidised credit, international trade, privatisations, and beneficial tax regimes and subsidies. The OECD Product Market Regulation (PMR) indices show the pervasiveness of state involvement in the economy and the numerous regulatory obstacles to firm entry and entrepreneurship (OECD, 2018^[25]). Progress since the previous OECD *Survey* has been limited (Table 1.8). Analysis conducted for this *Survey* indicates that job creation is dominated by older firms signalling that business dynamics are weak and that younger firms face difficulties to grow and expand employment (Figure 1.27). Moreover, firm entry rates are much lower in Tunisia than in EME benchmark countries, and they have declined since 2011 (see Chapter 2).

Table 1.8. Past recommendations on the investment climate

PAST OECD RECOMMENDATIONS	ACTION TAKEN
Speed up the process for reducing the number of permissions to operate, and administrative authorisations, licences and permits.	The 2018 implementing legislation for the 2017 Investment Code contains 223 sector-specific licensing regimes. Some administrative procedures have been digitalised, but prior authorisation requirements remain the norm.
Further reduce restrictions on the presence of foreign executives.	No progress since the 2017 Investment Law.
Simplify administrative and customs procedures for goods entering and exiting the country.	Digitalisation of custom procedures is ongoing.
Improve the management of port infrastructures, potentially through public-private partnerships.	The 2019 Law on improving the investment climate has amended sections of the 2015 PPP Law.
Improve the governance of public enterprises, by better enforcing performance contracts and with a level playing field for public and private companies.	Government decree n° 2020-314 (19 May 2020) has fixed the main principles governing appointment, evaluation and removal of independent directors representing the State.
Allow banks to set risk premiums by reconsidering the ceiling on lending rates.	None.
Speed up the adoption and application of the new code for collective investment funds.	None.

Figure 1.27. Employment is concentrated in older firms

Share of employment by size class and age for Tunisian and OECD benchmark countries, 2018 or latest year



Note: This figure reports the share, in percentage, of employment in start-ups (firms aged between 0 and 2 years), young firms (2-5 years) and old firms (older than 6 years), separately for each size group: micro firms (between 2 and 9 persons engaged), small firms (between 10 and 49 persons engaged), and medium size firms (between 50 and 99 persons engaged, and between 100 and 249 persons engaged). The benchmark group includes Costa Rica, Hungary, Latvia and Turkey. The figure is based on data for manufacturing and non-financial market services, and covers the last available year in each country (2018 in Tunisia and 2015 for countries in the benchmark). Data may be preliminary and differ from official data.

Source: OECD DynEmp database (<https://www.oecd.org/sti/dynemp.htm>).

Starting a business requires more procedures than the OECD average and operating a business activity suffers from heavy administrative burden (OECD, 2018^[25]). Complex regulations including related to taxes oblige firms to incur additional expenses, a sort of tax that reduces competitiveness and induces small firms, which are disproportionately affected, to remain informal. In the case of digital infrastructure, for instance, erecting new masts entails multiple paper form filling, inconsistently applied rules and bureaucratic delays that consume up to two years (EBRD, 2020^[47]).

There has been progress in the digitalisation of administrative procedures and delays have been shortened, but, prior authorisation is still required for many procedures related to market entry and investment. There are strong barriers to market entry and contestability, grounded in national legislation and sectoral regulation, in numerous services. Although the 2017 investment code contained a set of general principles to enhance both freedom to invest and investors' protections, the 2018 application decree, the longest-ever in Tunisian legislation (222 pages), lists 243 authorisation and licensing regimes (World Bank, 2020^[48]). Authorisation is required to invest in 49 sectors if foreign ownership exceeds 50%, while in other sectors, such as wholesale trade, a blanket prohibition to FDI applies. Possibly excessive reform zeal in the revamping of the institutional framework for investment promotion and facilitation has led to the creation of several bodies with mandates that are, in some areas, partly overlapping, creating additional administrative complexity (OECD, 2021^[49]).

Introducing automatic authorisation procedures while maintaining transparent ex-post controls to ensure compliance with regulations could significantly reduce administrative burden. Silent-is-consent rules and the centralisation of administrative procedures for start-ups in one-stop shops or single windows have been applied in many countries with remarkable success in reducing administrative burden for firms and facilitating market entry, for example in Portugal (OECD, 2019^[50]; OECD, 2020^[45]). Requiring an ex-ante regulatory impact analysis in cases of new regulations with potential economic impacts, including on competition, would also be useful, especially if such assessments lead to binding recommendations. In addition, ex-post evaluation should be used systematically to assess whether regulations achieve their goals. Ideally, Tunisia should also consider the application of one-in, two-out rules, where further regulations can only be introduced by alleviating the cost of compliance with other regulations (OECD, 2020^[45]). There are various other low-cost measures to improve the investment climate such as reducing the number of acts that require court bailiff transmittal, encouraging alternative dispute resolution, and depenalising certain misdemeanours (World Bank, 2020^[31]).

The 2018 Start-up Act introduces a series of changes to tax, immigration, and regulatory policies to eliminate barriers and to make access to entrepreneurship easier for the entire population, including those living in remote areas. It also includes tax exemptions for up to eight years, the possibility for public and private sector employees to take a one-year leave to set up a new business, a state-funded salary for up to three founders per company during the first year of operations, and the authorisation for prospective entrepreneurs to open a foreign currency account. However, simplifying the tax and subsidy system to reduce administrative burden for start-ups should be preferred over the introduction of new special incentives that may further complicate the system.

The 2015 competition law forbids anti-competitive or discriminatory practices and sets up controls on business concentrations. The law applies across the whole economy, although some sectors are subject to specific norms applied by sectoral regulation bodies (banking, insurance, micro-finance, and the media). The 2015 law covers price controls (on essential, subsidised goods and services provided under state monopolies). An on-going competition assessment by the OECD concludes that enforcement needs to improve in order to reduce market power of incumbents and facilitate market entry and growth of young and innovative firms.

The Competition Council is understaffed by international standards and has mainly concentrated on investigating market power abuses in a narrow set of markets where it currently has expertise (OECD, forthcoming^[51]). Moreover, the Ministry of Commerce exerts considerable influence over the Council, whose budget is included in that of the Ministry, which also appoints the president and the other members and intermediates any cooperation between the Council and other government bodies, thus delaying information exchanges. Strengthening the independence of the Competition Council, improving its organisation and diversifying its resources, notably through a combination of different sources such as general revenues and fees collected for its activities could significantly improve the enforcement of the competition law framework (OECD, forthcoming^[51]). In addition, currently the delays for appeals to the Council's rulings are long and lead to a *de facto* immunity in many cases. The automatic suspension provision should therefore be eliminated when an appeal is filed and resources be devoted to provide training in economics to judges that deal with competition law (OECD, forthcoming^[51]).

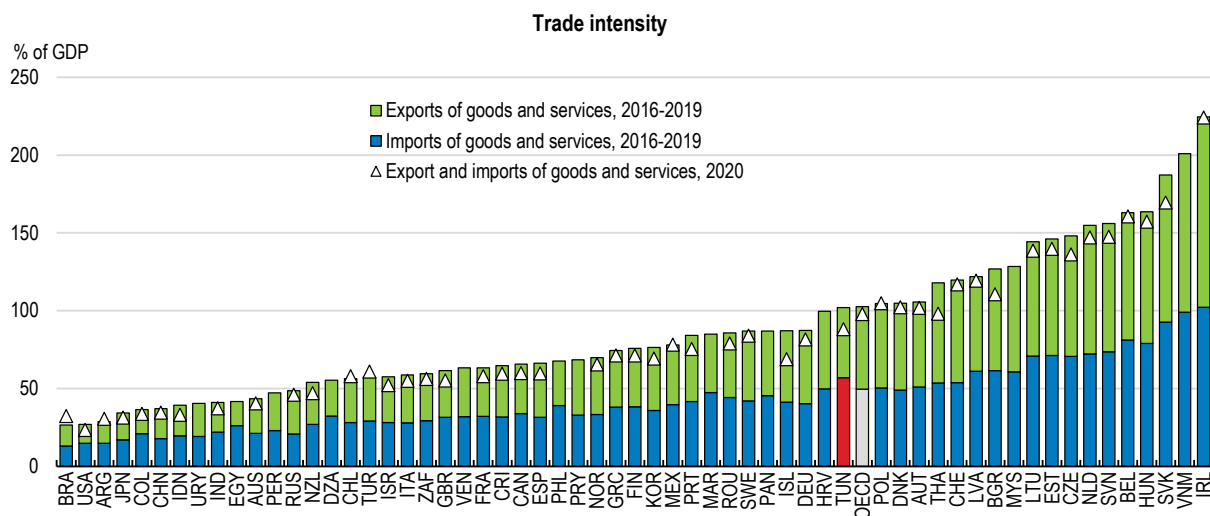
However, some progress has been made, as some sectors and products are being opened to more competition. For example, the price of three hot drinks (*express*, *direct* and *cappuccino*) was liberalised in 2012, but it was only in 2021 that such measure was extended to three additional items (*café filtre*, *café crème* and tea) and this only in shops that do not serve alcoholic drinks. Also in 2021 supermarkets gained the right to sell cigarettes (previously reserved to 14 000 tobacconists). The authorities expect liberalisation to curb smuggling that is estimated to account for up to half of total consumption. It is important to maintain momentum into reform processes and continue opening up markets where strict entry and price controls still prevail. Implementing the 220 specific recommendations made in 2019 to remove potential barriers and increase competition in various sectors, including retail trade, remains a priority (OECD, 2019^[53]).

Fostering the international integration of the domestic economy is key

Tunisia's development since the 1980s has been closely connected with the success of trade policy liberalisation in spurring diversification and sophistication of the product structure of exports and participation in global value chains (Joumard, Dhaoui and Morgavi, 2018^[52]). Trade intensity, measured by the share of exports and imports in GDP, is in line with OECD countries (Figure 1.28). Nonetheless, Tunisia does not fully exploit all its assets. Taking into account other features affecting the extent of economic globalisation – such as the geographical concentration of trade, the prevalence of non-tariff trade barriers and compliance costs, the mean tariff rates and the number of bilateral and multilateral free trade agreements (Gygli et al., 2019^[53]) – Tunisia's global ranking is rather low (95th in 2018). This is due to the rather cautious attitude of the country towards effective trade liberalisation and comprehensive trade negotiations.

Trade flows are mainly with the EU, with the main goods being machinery parts and components (Figure 1.29). This reflects the participation of Tunisia in global value chains through forward linkages (Joumard, Dhaoui and Morgavi, 2018^[52]) and (Sammoud and Dhaoui, 2019^[54]). On the other hand, slow progress in trade and investment liberalisation between Maghreb countries and poor transport and digital infrastructure hamper the development of regional exchanges and the reaping of the associated gains from specialisation. For Tunisian exporters, the political and economic crisis in Libya is particularly damaging, as sales to the neighbouring country fell from USD 832 million in 2009 (5.8% of total exports) to USD 539 million (3.6%).

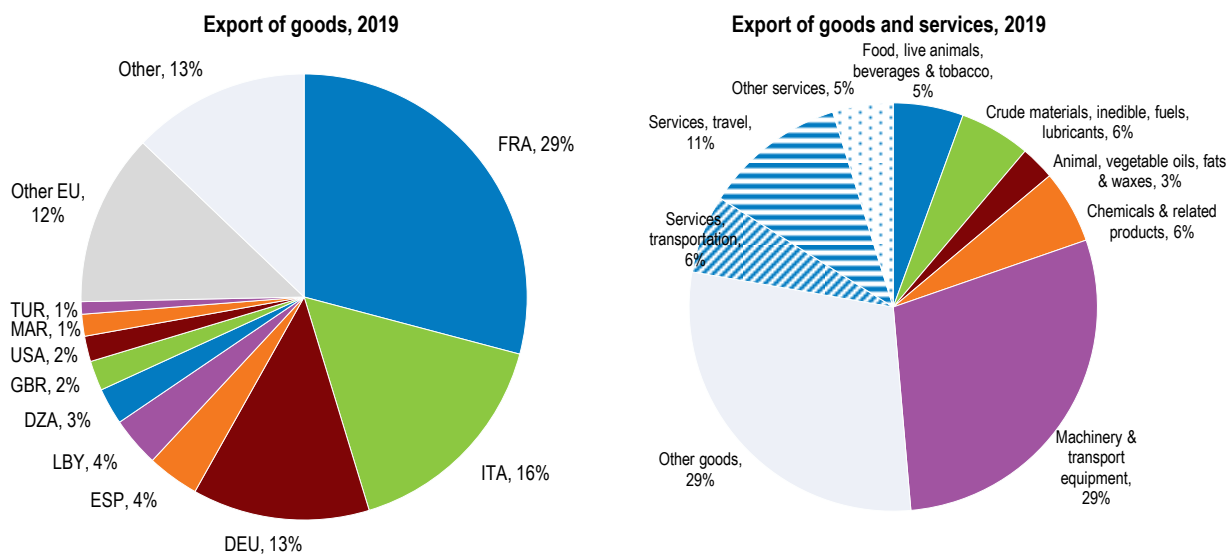
Figure 1.28. Trade openness is roughly similar to the OECD average




Source: World Bank, WDI database.

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Figure 1.29. Exports are predominantly to Europe



Source: COMTRADE; and UNCTAD.

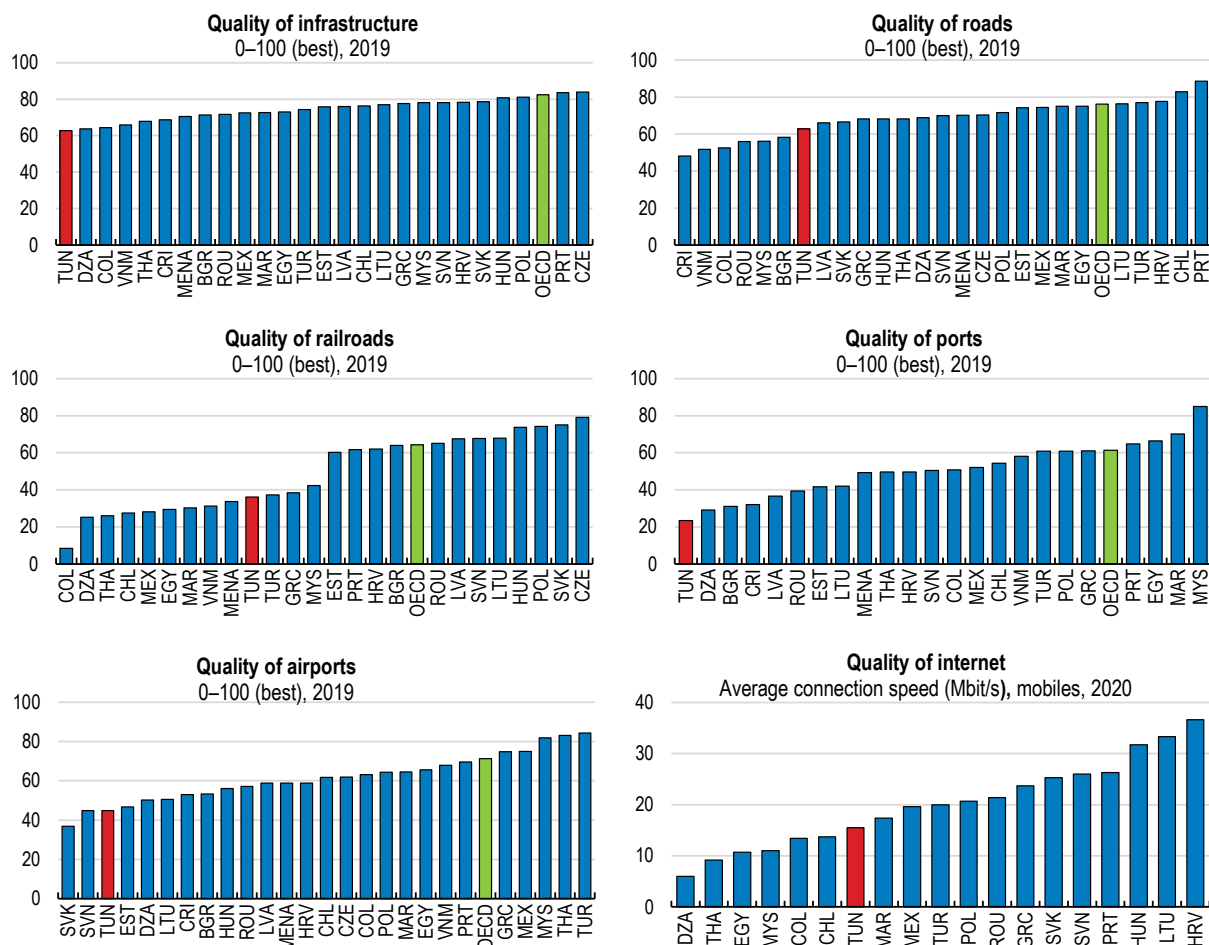
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The composition of Tunisian exports has changed substantially since the 1990s, due to the boom in sales of parts and components for the transport equipment sectors. In parallel, the relative importance of textiles and clothing has diminished. On the other hand, during the past decade, some important traded products have experienced negative developments. Oil production has fallen by -7.4% per annum since 2009 and gas has declined since 2018 (BP, 2021^[55]), as the oldest fields were decommissioned, FDI remained modest and no major discoveries have been recorded in the current century. The number of prospect and exploration licenses have shrunk from 56 in 2010 to 23 in 2020, the energy trade deficit widened by 13.6 percentage points in the first semester 2021 vis-à-vis the same period one year earlier and the energy independence rate (i.e. the share of domestic consumption covered by available domestic primary energy resources) fell from 93% in 2010 to 36% in the first semester of 2021. Overall output of natural and liquefied gas is anticipated to decline through the current decade (Wood Mackenzie, 2021^[56]), despite the recent opening of new fields, notably Nawara. Export volumes of phosphates and derivatives have fallen sharply since 2011 due to ongoing social unrest at production and transport sites. Tunisia's global phosphate rock production ranking has gone from fifth in 2008 to tenth in 2020 (U.S. Geological Survey, 2021^[57]). In the case of tourism, by 2018 arrivals had recovered from the losses caused by the terrorist attacks of 2015, although in 2019 average spending per visitor was below the pre-2015 levels (see chapter 2). Food imports have grown fast, aggravating the trade deficit (ONAGRI, 2021^[58]).

The deteriorating quality of physical infrastructure and of trade facilitation weighs on Tunisia's competitiveness (Figure 1.30). Export-oriented enterprises suffer in particular from the lack of adequate investments in ports, which represent 98% of overseas shipments. According to a recent survey, 70% of firms have lost orders due to delays at ports and more than half have been obliged to switch to more reliable, but also more expensive, air freight (AHK, 2021^[59]). Despite legislation pertaining to the allocation of concessions in the sector, private sector involvement has been limited so far. While the Office de la Marine Marchande et des Ports (the responsible state-owned enterprise) is financially healthy, the other public enterprises responsible for infrastructure incur notable financial losses despite receiving considerable subsidies (World Bank, 2019a). An agreement has been signed with the Millennium Challenge Corporation to improve the management, enlarge and digitalise the port of Radès. The 2020 PPP law has clarified the regulatory framework, broadly in line with the findings of an OECD assessment of the previous law (OECD, 2015^[62]) and streamlined the institutional set up by establishing a new body, the Instance générale de partenariat public-privé. Given the problems that have sometimes characterised PPPs in other countries, such as cost overruns and contract renegotiations, it will be important to carefully select infrastructure projects that are both viable and consistent with this financing modality.

In the aftermath of COVID-19, as digital trade has gained in prominence, another critical issue for exporters is access to, and quality of, digital infrastructure (Figure 1.30). Investment in this industry is made difficult by high tax charges (the standard rate of import taxes plus the special excise taxes applied to telecommunication equipment, as well as the selective corporation tax applied to telecom companies) and the regime's unpredictability (EBRD, 2020^[47]). The approved local loop unbundling and bit stream offer should be enforced and infrastructure-sharing should be promoted, in order to accelerate fixed broadband expansion. Firm-level analysis conducted for this report shows that firms that have access to the necessary digital infrastructure and have their own website have a 2.7% higher productivity than other Tunisian firms (see Chapter 2).

Figure 1.30. Infrastructure quality is low



Source: World Economic Forum, Global Competitiveness Indicator database and Opensignal 2020.

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Offshore firms have played a very important role as an engine of job creation and exports growth. They account for more than three quarters of non-energy exports, although they account for only 4% of all firms. These firms are foreign-owned and enjoy a range of specific advantages, subject to exporting at least 70% of their production. They are exempted from strict foreign exchange regulations, tariffs, and many taxes, and have preferred access to trade infrastructure and custom procedures (Joumard, Dhaoui and Morgavi, 2018^[52]). Linkages with the domestic economy are very weak. In turn, domestic or “onshore” firms face relatively high tariffs and excise taxes as well as non-tariff barriers for acquiring imported inputs and capital goods and are poorly integrated into global value chains.

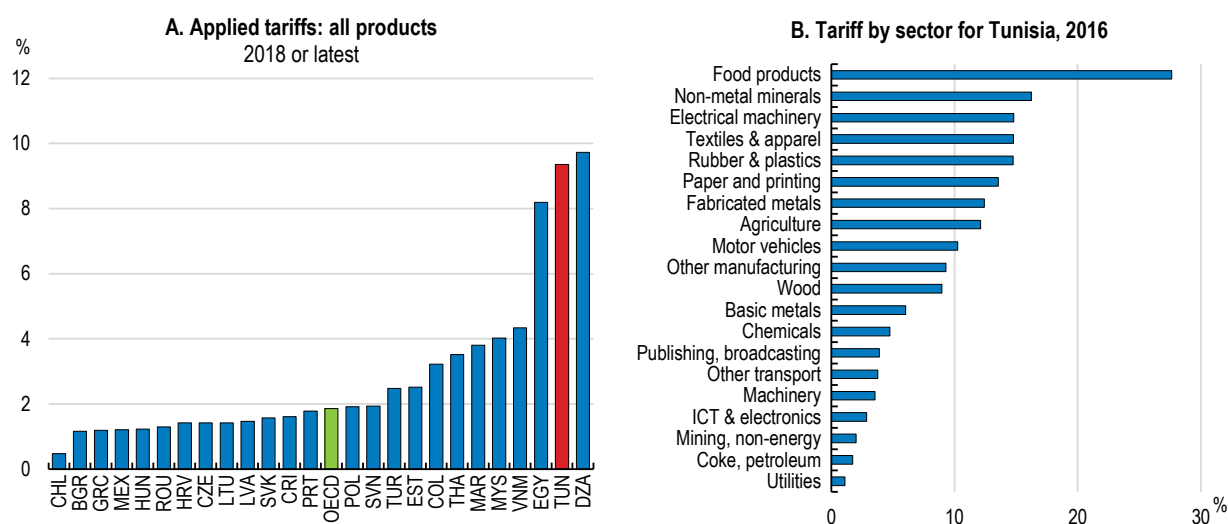
Analysis conducted for this *Survey* shows that access to cheaper and higher quality inputs and capital goods would make onshore firms more productive and export-competitive (see chapter 2) (Cassimon and Grundke, forthcoming^[60]). Facilitating custom procedures and improving trade infrastructure would further raise the export potential of domestic firms, but also benefit offshore firms (World Bank, 2020^[48]). Although differences in the corporate income tax rates between the offshore and onshore sectors were eliminated

in 2021, harmonising other tax rates and creating a level playing field would favour the international integration of the domestic economy.

Tariffs and non-tariff barriers for final goods, such as excise taxes, import quotas and non-automatic import licenses, are also high in international comparison and protect domestic firms from international competition (Figure 1.31). This reduces incentives for efficiency improvements and innovation for companies operating on the domestic market, leading to high prices and low product quality and variety in protected markets (Amiti and Khandelwal, 2013^[61]; De Loecker et al., 2016^[62]). It also hampers the reallocation of production factors to their most productive use reducing labour productivity and wages (Pavcnik, 2002^[63]; Hsieh and Klenow, 2009^[64]).

Analysis for this *Survey* shows that in sectors protected by high import barriers, resources are trapped in low-productivity firms (see Chapter 2) (Cassimon and Grundke, forthcoming^[60]). Using the OECD METRO general equilibrium model to simulate a unilateral reduction of tariffs and NTMs by 50% shows that lowering import barriers would lead to significant increases in GDP, production, private consumption and exports as well as employment (Figure 1.32) (see Chapter 2) (Cassimon, Grundke and Kowalski, forthcoming^[65]). The large increase in employment by 7% emphasises the importance of raising the international integration of the domestic economy in order to create more and better jobs and reduce unemployment (see Chapter 2).

Figure 1.31. Tariffs are high

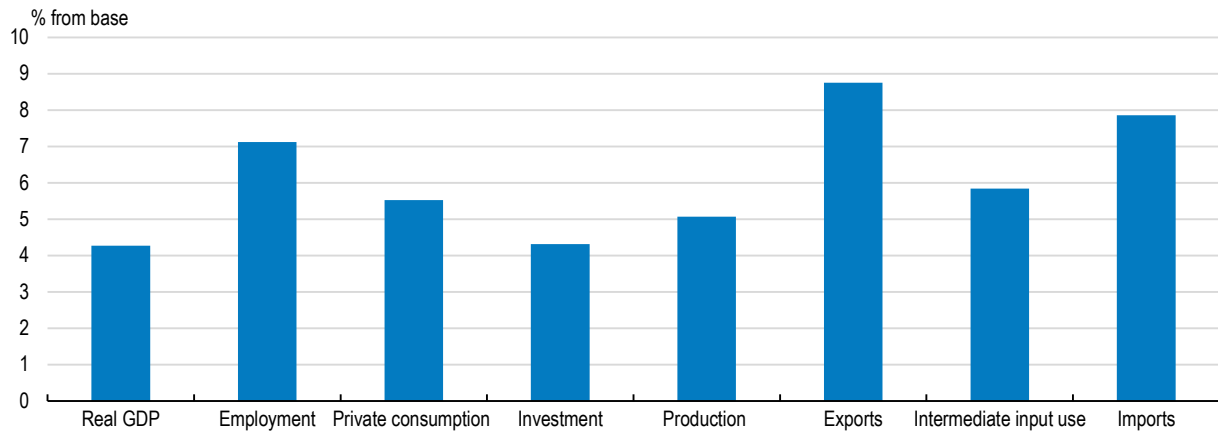


Source: WITS.

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Figure 1.32. Lowering trade barriers would boost employment, production and exports

OECD-METRO model simulation of a decrease in tariffs and non-tariff measures by 50%



Note: Simulations reflect high unemployment in Tunisia and assume that wages are fixed and rising labour demand is satisfied by existing labour supply including the pool of unemployed (Cassimon, Grundke and Kowalski, forthcoming^[65]). Tariffs and non-tariff measures (NTMs) are cut by 50% on a unilateral basis.

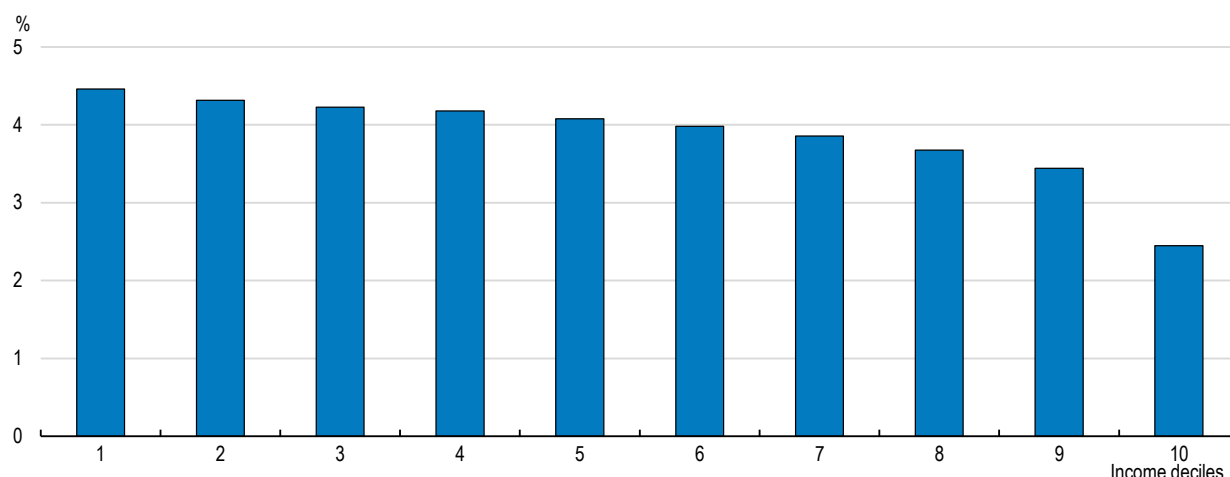
Source: OECD calculations based on the OECD METRO model (Cassimon, Grundke and Kowalski, forthcoming^[65]).

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Moreover, improved access to imported consumer goods complemented by trade-induced productivity gains translate into falling prices for consumers. Estimates suggest that Tunisian consumers could see their purchasing power increase by 4% on average under the scenario of a 50% reduction in tariffs (Figure 1.33) (Cassimon and Grundke, forthcoming^[60]). Moreover, these benefits are progressive as lower income households spend larger shares of their incomes on tradable goods such as food, home appliances, furniture and clothing. A detailed analysis of reducing trade protection, taking into account differences in the consumption basket across households, suggests that the lowest-income decile could gain as much as 4.6% in terms of additional purchasing power, compared to 2.5% for the top decile (Figure 1.33). This is in line with evidence found for other countries (Fajgelbaum and Khandelwal, 2016^[66]). Besides price reductions, a stronger integration would give consumers access to a larger variety and higher quality of products and services (Broda and Weinstein, 2006^[67]).


Figure 1.33. Lower trade barriers would benefit the poorest households the most

Increases in real purchasing power (relative to total expenditures) due to a reduction of tariffs by 50% for each household income decile



Note: The x-axis shows the ten income deciles of the household income distribution, starting with the poorest decile (1-10). Tariff rates at the detailed product level are taken from WITS. The data and the methodology are described in more detail in (Cassimon and Grundke, forthcoming^[60]). The results are not based on relative price changes from OECD-METRO model simulations, but on a simple simulation where the reduction in existing tariff barriers translates directly into lower consumer prices.

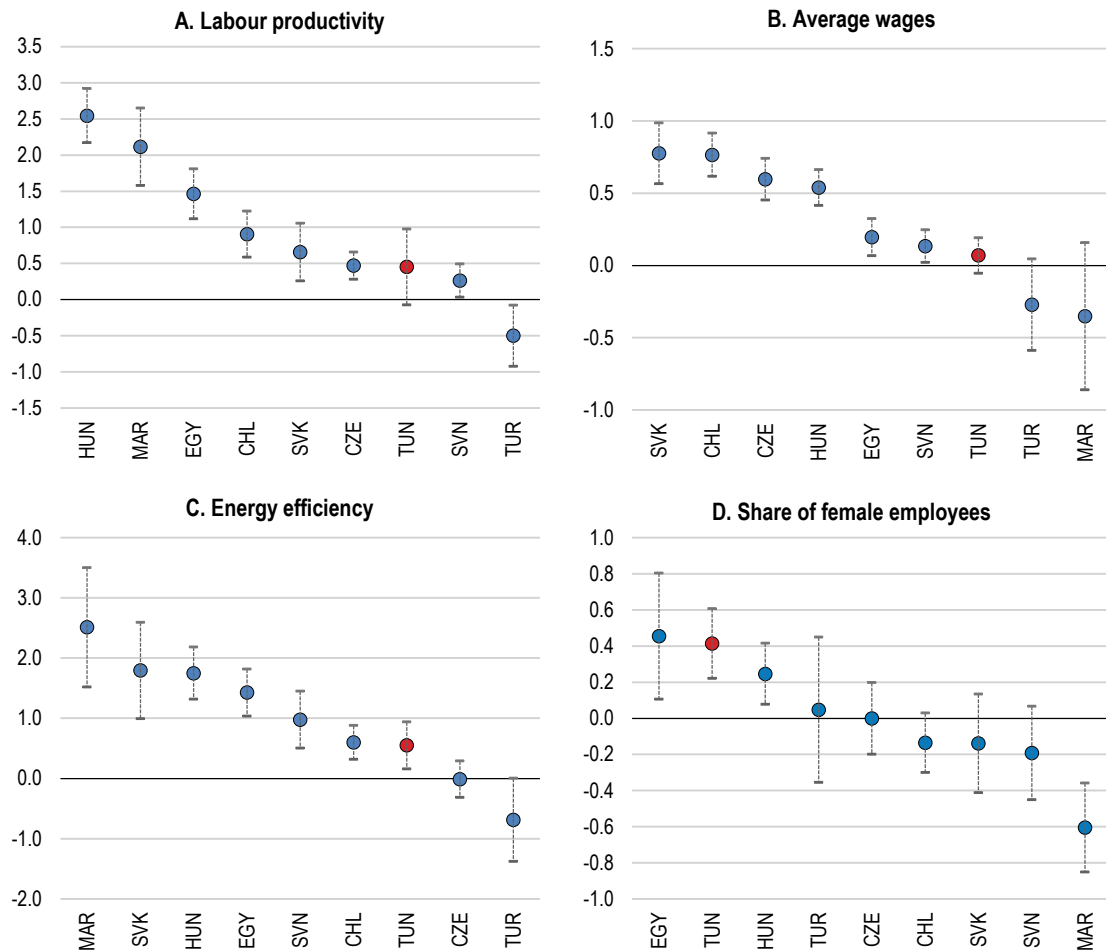
Source: OECD calculations based on the Household Survey of Tunisia, 2015 (INS).

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FDI inflows have been broadly trending downwards in recent years and have not regained the levels prevailing before the global financial crisis. The drop in FDI is alarming as foreign multinationals make an important contribution to sustainable development, productivity and job creation, also for women, in Tunisia (OECD, 2019^[68]). On average, affiliates of foreign multinationals are more productive than domestic firms, pay higher wages, are more energy efficient and employ a higher percentage of women (Figure 1.34). A new investment strategy is being crafted, focusing on providing competitive conditions to global investors that are considering reshoring and near-shoring their production operations. Thereby, it will be important to improve conditions for all investors and avoid the further reinforcing of a dual economy model (see Chapter 2).


Tunisia recently signed several preferential trade agreements, but bolder steps, including unilateral trade reforms, would pay off for domestic consumers and producers. The 2019 UK-Tunisia Association Agreement, which became effective on 1 January 2021, is one of the first signed by the United Kingdom following the decision to leave the EU (FCO, 2019^[69]). In March 2019, Tunisia also acceded to the Common Market for Eastern and Southern Africa (COMESA, a free-trade area with 20 member states). Tunisia and the European Union have been negotiating a Deep and Comprehensive Free Trade Area (DCFTA) since October 2015, to better integrate Tunisia's economy into the EU single market. The negotiations have been put on hold since 2019, after four rounds, due to some disagreements, especially on the DCFTA transparency chapter that covers access to information and documents such as laws, regulations, judicial decisions, administrative procedures and decisions that may affect trade and investment. If all remaining concerns on both sides are addressed, further integration with the EU market would lead to substantial benefits in terms of GDP, employment and wages (Rudloff, 2020^[70]; European Commission, 2021^[71]).

Figure 1.34. Foreign multinationals contribute to sustainable development



Note: Each indicator measures how foreign firms perform relative to domestic firms for a given outcome. It takes positive value if foreign firms have higher outcomes than domestic firms and negative value if foreign firms have lower outcomes, on average. See OECD (2019b) for details of the indicators. Data are for 2019, except Egypt and Tunisia (2020) and Chile (2010).

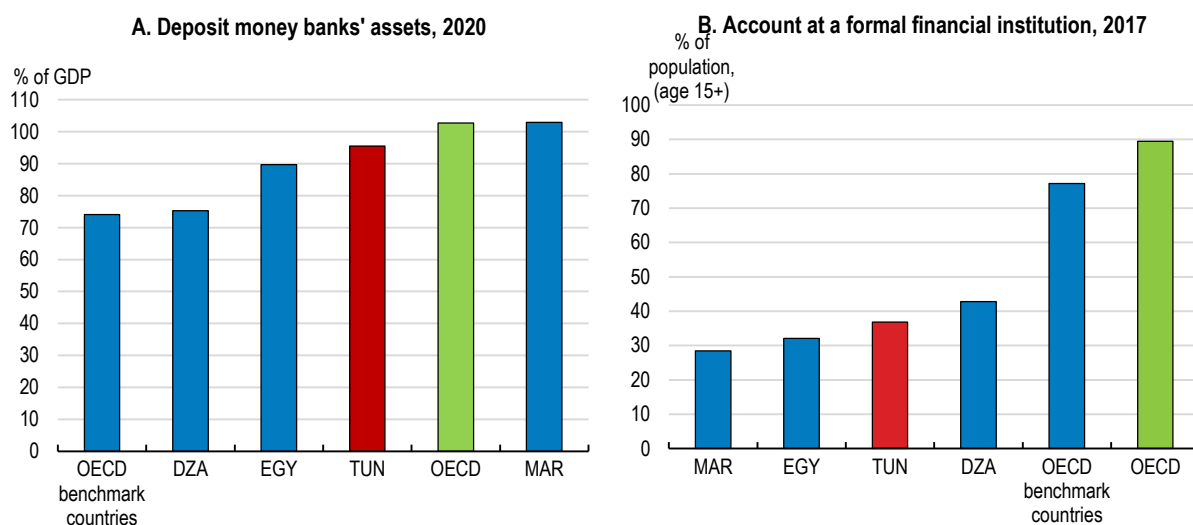
Source: OECD FDI Qualities Indicators based on World Bank Enterprise Surveys.

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Financial development would contribute to accelerating investment


Financial development is critical in reducing poverty and achieving inclusive economic growth. When people can participate in the financial system, they are better able to start and expand businesses, invest in their children's education, and absorb financial shocks. Firm-level analysis shows that firms with access to finance have a 1.9% higher productivity compared to other Tunisian firms (see chapter 2). While the banking sector is relatively well-developed, with assets representing about 90% of GDP, only 37% of the population had a bank account in 2017 (Figure 1.35). 17% fewer women have a bank account than their male counterparts, while the gap between higher-income and lower-income individuals is 26% (Global Findex database). At 2.2%, the ratio of gross insurance premium payments to GDP shows that insurance penetration is also very low (2017 FTUSA data).

Figure 1.35. The banking sector is rather large, but many people still do not have a bank account



Note: Benchmark countries include Chile, Colombia, Costa Rica, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Mexico, Poland, Slovakia, Slovenia and Turkey.

Source: World Bank, Global Financial Development database.

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Firms confront important obstacles to access banking credit and other financing modalities and could benefit from better protection of creditors' rights and minority investors. With respect to insolvency, the 2016 reform has simplified processes, but swifter processing of corporate restructuring and debt restructuring would facilitate resource reallocation to more viable businesses and improve access to finance, an important element of a strong recovery (Adalet McGowan, Andrews and Millot, 2017^[72]). Out-of-court insolvency schemes might safeguard eligible firms against potential abuse by creditors, the establishment of dedicated tribunal chambers would ensure that specialised judiciary is tasked with corporate cases and adjudication delays could be shortened.

The financial inclusion strategy launched in 2018 acknowledges the central role of both the private and the social enterprise sectors in national development and sets objectives in five separate areas, namely digital finance, micro-insurance, refinancing, the social and solidarity economy, and financial education. Microfinance has grown fast since 2011, when a sector-specific framework was adopted. Some obstacles were removed in 2017, such as very constraining regulations (e.g., on the maximum outstanding per client), and there has been progress in the institutional set-up, with the creation of the Financial Inclusion Observatory within the central bank, while the National Committee for Financial Inclusion within the Finance Ministry is not operational yet. Important global financial institutions have invested in the sector.

Nonetheless, there are still some issues that slow down the diffusion of microfinance, and henceforth progress in financial inclusion. MFIs cannot collect savings from their clients which limit their capacity to grow but also the access of their clients to a proper set of financial services. Banks financing microfinance institutions (the sector's main source of financing) may not refinance themselves with the Central Bank. Therefore, they finance microfinance institutions on their own balance sheet which represent an additional risk for banks and limit their capacity to support the sector. Other tools such as a dedicated fund for microfinance (like in Morocco with the Jaida fund) or a guarantee fund for financings to MFIs, would support a better access to financing. Due consideration should also be given to the possible transfer of oversight responsibilities from the Autorité de Contrôle de la Microfinance (under the Ministry of Finance) to the Central Bank.

Since 2020, COVID-19 has accelerated the use of digital payments and around ten requests have been filed with the BCT between 2020 and 2021 to be authorised to offer such services. Allowing mobile network operators to offer financial products would introduce more competition and support the development of FinTech. Since April 2021, a payment institution has been authorised to transfer social assistance using wallets and a network of local agents covering the whole country. Four other payment providers have been pre-authorised.

Moving forward, it will be important to guarantee an even playing field between payment service providers and Tunisia Post, which is currently exempt from some regulatory requirements. The creation of a postal bank would provide clarity in this regard. Granting FinTech start-ups direct and full access to the electronic payments system would increase competition and reduce transactions costs. The BCT, cognizant that synergies with financial innovators are a fundamental lever to improve access to and use of financial services, has launched different mechanisms to closely collaborate with the start-up and FinTech eco-system. Examples include the regulatory Sandbox, BCT-LAB, and the FinTech specialised website (www.fintech.bct.gov.tn). Strengthening the credit registry would improve transparency, while enhancing financial literacy could better inform savers' decisions and better prepare them for retirement.

Financial and business interactions between Tunisians living abroad and their families can also significantly contribute to financial inclusion. Sending money to Tunisia, however, is expensive, with fees (8.7% of the transaction value) almost thrice the 3% Sustainable Development Goal target 10.3 and well above the global average cost (6.5%) (Ratha et al., 2021^[73]). Raising the efficiency of the Tunisian Foreign-Bank, the state-owned bank specialised in serving the diaspora, would contribute to lower remittances costs. Direct instruments such as special bank accounts in foreign currency for diaspora members and digitised investment files, which make it possible to reduce transaction costs, have been introduced to maximise the amount and impact of diaspora investments. Reinforcing competition among different actors and actions to ease the entry of new operators into the market should make it possible to lower intermediation costs.

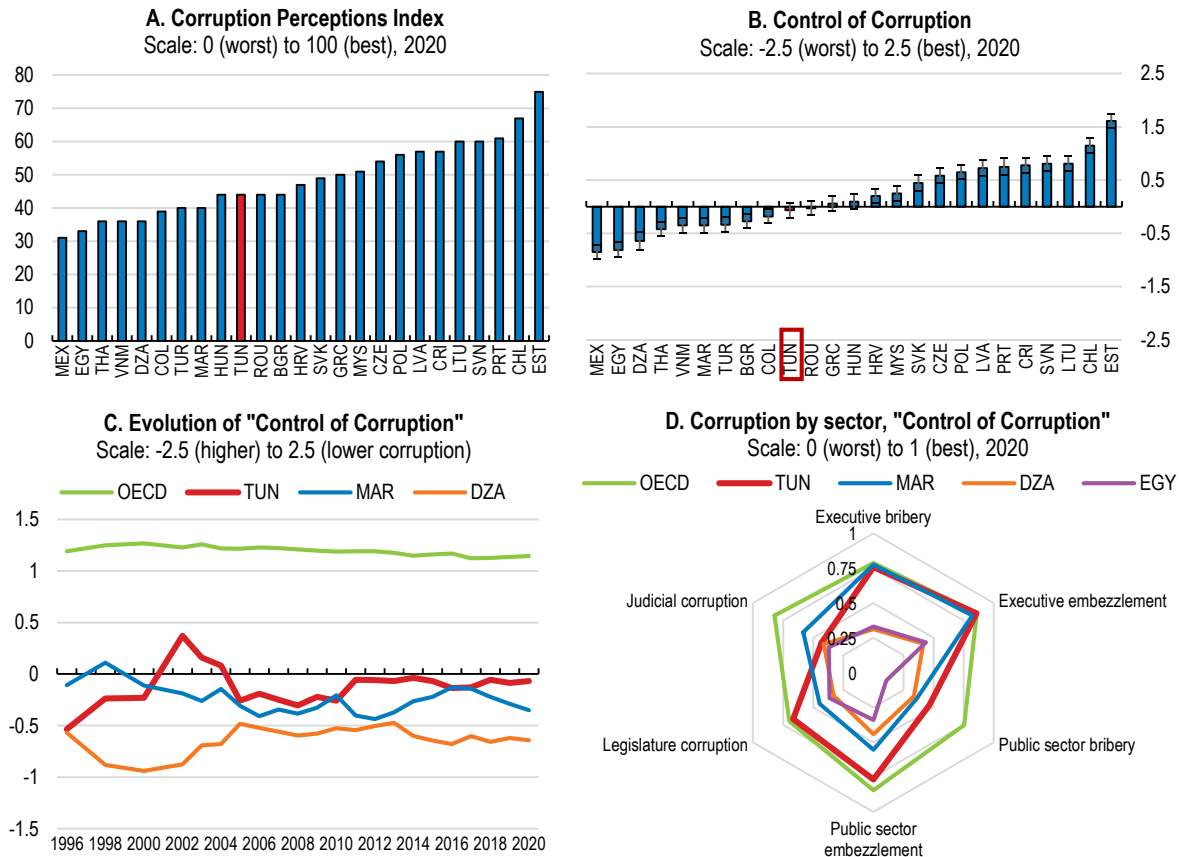
The #UpTunisia programme of FIPA (the FDI promotion agency), launched in April 2021, intends to facilitate diaspora investors in manufacturing, digital, health and agriculture. Issuing diaspora bonds, i.e. long-dated securities issued to a country's diaspora that can only be redeemed upon maturity, would also be beneficial. These instruments leverage the desire that people who have long (or always) been away from their country of origin have to "do good". Moreover, they are typically less skittish than outside investors and may agree to a "patriotic discount". These bonds require reforms in exchange rate policies and governance (e.g. donor guarantees and investors' protection through the involvement of professional fund managers). The BCT, which has recently opened a sandbox and successfully carried out an experiment with central bank digital currency in cooperation with the Banque de France, should pursue financial innovation in the search of alternative channels of cross-border diaspora transfers.

Raising business integrity is a long-standing challenge

Transparency International's 2020 Corruption Perception Index (CPI) ranked Tunisia 69th out of 180 countries, better than its regional peers on most measures of perceived corruption. Despite improvements (Figure 1.36), among which it is important to underscore the ratification in 2020 of the Convention on Preventing and Combating Corruption, the cost of corruption is estimated at 4% of GDP (Conseil de l'Europe, 2017^[74]). Citizens perceive corruption as the third main problem in the country after unemployment and the management of the economy, but a majority of citizens believes they can make a difference in the fight against corruption. However, opacity in the decision- and policy-making processes and excessive delays in managing corruption cases have weakened citizens' trust in government institutions and risks entrenching popular disillusion with democracy. It is urgent to strengthen information collection and devote resources to accelerate procedures. It would also be expeditious to develop a methodology for legal verification of any legislative or regulatory act in view of detecting those provisions


that during implementation may favour corruption and abuse, or make them more likely, and reducing the associated risks.

Figure 1.36. Anti-corruption efforts have been stepped up



Note: Panel B shows the point estimate and the margin of error. Panel D shows sector-based subcomponents of the "Control of Corruption" indicator by the Varieties of Democracy Project.

Source: Panel A: Transparency International; Panels B and C: World Bank, Worldwide Governance Indicators; and Panel D: Varieties of Democracy Project, V-Dem Dataset v11.

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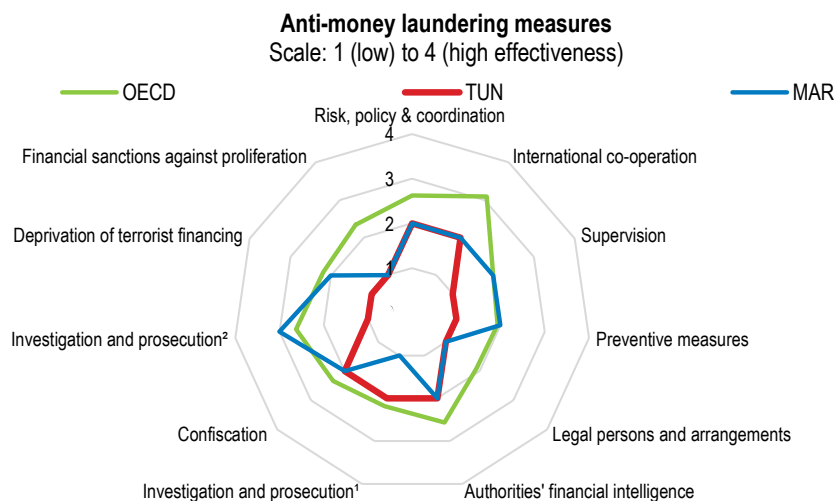
The anti-graft body (Instance nationale de la lutte contre la corruption, INLUCC), established in November 2011, has been moderately successful in raising awareness of the importance of making the fight against corruption a collective effort and in communicating with the general public (notably through a special radio station, Nazaha). Lacking prosecutorial powers, it has been far less effective in investigating suspected cases, a problem that was aggravated by the slow progress in reforming the judiciary (Conseil de l'Europe, 2017^[74]). Two important complements are the Laws on Access to Information and on the denunciation of corruption and protection of whistle-blowers. The adoption of citizen charters – a simple yet powerful accountability tool at the interface between citizens and service providers – is now mandatory for all public authorities in direct contact with the public.

The appointment of the new board members would help INLUCC operate better. Independent anticorruption courts should be the next step to complete the anti-corruption framework as envisaged in the corruption prevention law. For the time being, the slow pace of justice remains an important obstacle to better deal with the phenomenon. Other open issues concern the regulation of conflicts of interest, revolving doors and whistle-blowing, the governance and management of SOEs, as well as a code of

conduct for members of Parliament. The Law on Administrative Reconciliation, insofar as it provides amnesty for civil servants who could argue that they had no choice but to obey their superiors' orders for fear of retribution, may be counter-productive to the anti-corruption effort.

In the fight against money laundering, progress has been moderate, not only with respect to the OECD but also relative to Morocco (Figure 1.37). While Tunisia is doing well on the confiscation score, it trails as far as investigation and prosecution and curtailing of terrorist financing are concerned. Nonetheless, it has been removed from the FATC (Financial Action Task Force) list of countries under surveillance and subsequently from the EU blacklist of third countries showing strategic deficiencies in their anti-money laundering and countering terrorist financing regimes.

Figure 1.37. Further progress can be made in the fight against money laundering



Note: Figure shows ratings from the FATF peer reviews of each member to assess levels of implementation of the FATF Recommendations. The ratings reflect the extent to which a country's measures are effective against 11 immediate outcomes. "Investigation and prosecution" refers to money laundering. "Investigation and prosecution²" refers to terrorist financing.

Source: OECD Secretariat's own calculation based on the materials from the Global Forum on Transparency; and OECD, Financial Action Task Force (FATF).

StatLink  <https://stat.link/fc3g4d>

In Tunisia, public procurement represent at least 14% of GDP, above the OECD average of 12%, and 40% of government spending (HAICOP, 2019^[75]). TUNEPS, a comprehensive e-procurement system overseen by the High Commission for Public Procurement (HAICOP), has operated since 2013, with expected benefits such as increased transparency through traceability, greater spending efficiency and easier SME access to procurement opportunities. However, most small value procurement, accounting for 40% of the goods, services and consulting work and 20% of the construction work purchased by the Ministry of Facilities, remained outside TUNEPS. Since September 2019, e-procurement has been mandatory for all entities, including municipalities. There are remaining challenges in terms of collusion among bidders and insufficient competition. Priorities include monitoring non-competitive (below-threshold) public tenders and participation therein to avoid abuses and reinforce the resources and skills of the relevant government authorities. It will also be opportune to grant access to TUNEPS to foreign companies that are not established in Tunisia, making it possible for them to obtain the digital certificate that is requested to bid.

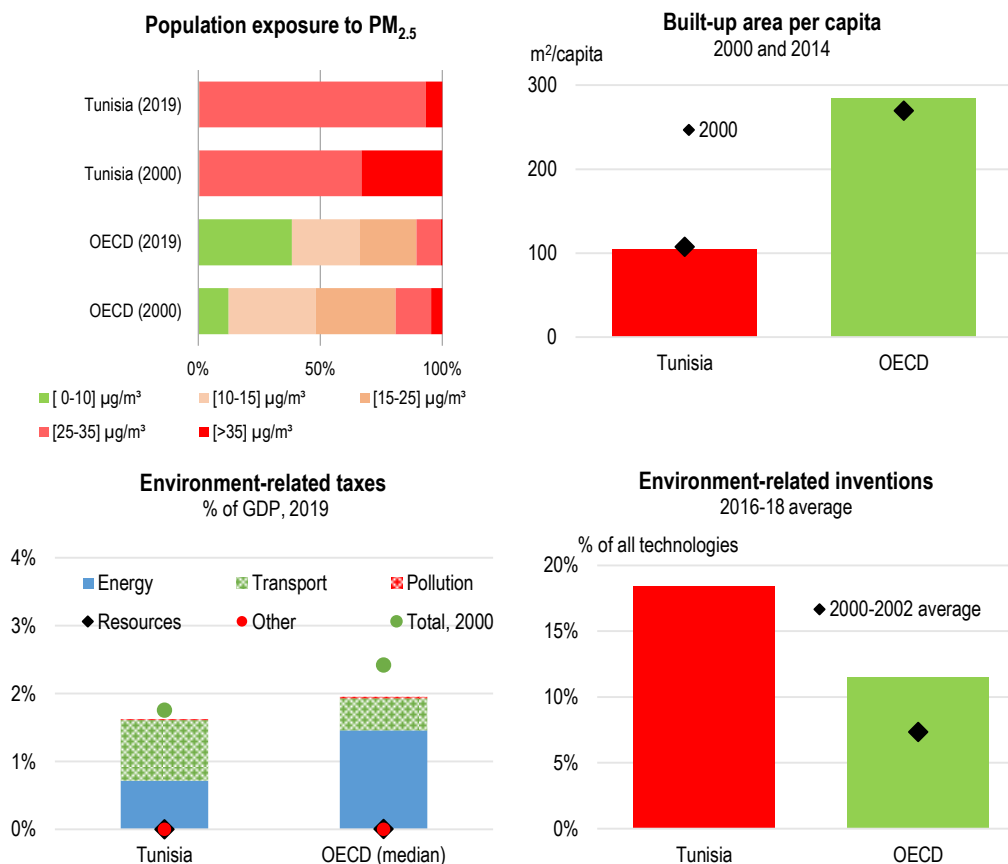
Reversing environmental degradation calls for lower carbon emissions

Economic growth, climate change, over-exploitation of natural resources and poor enforcement of environmental law have caused degradation to the country's 69 natural ecosystems, 12 agro-ecosystems and protected areas extending over 6% of the national territory. In particular, Tunisia suffers from water scarcity: in the year to 1 June 2021, the reservoir level in the country's 36 dams declined by 19% and by 29% in the largest one, Sidi Salem, that accounts for almost a quarter of stocked waters (ONAGRI, 2021^[58]). The coastal zone, hosting the bulk of the population and of economic activities, including tourism and farming, is highly vulnerable to rising sea levels (Strauss, Kulp and Levermann, 2015^[76]).

Future economic growth needs to be decoupled from CO₂ emissions

Confronted with climate variability, such as rising temperatures and varied precipitation levels, as well as potential increased frequency of extreme weather events, Tunisia has enshrined the fight against climate change in the 2014 Constitution – the third country to do it worldwide. Article 45 stipulates the State's obligation to guarantee the right to a healthy and balanced environment and to provide the necessary means to eradicate pollution (Figure 1.38).

Figure 1.38. The population is exposed to substantial pollution

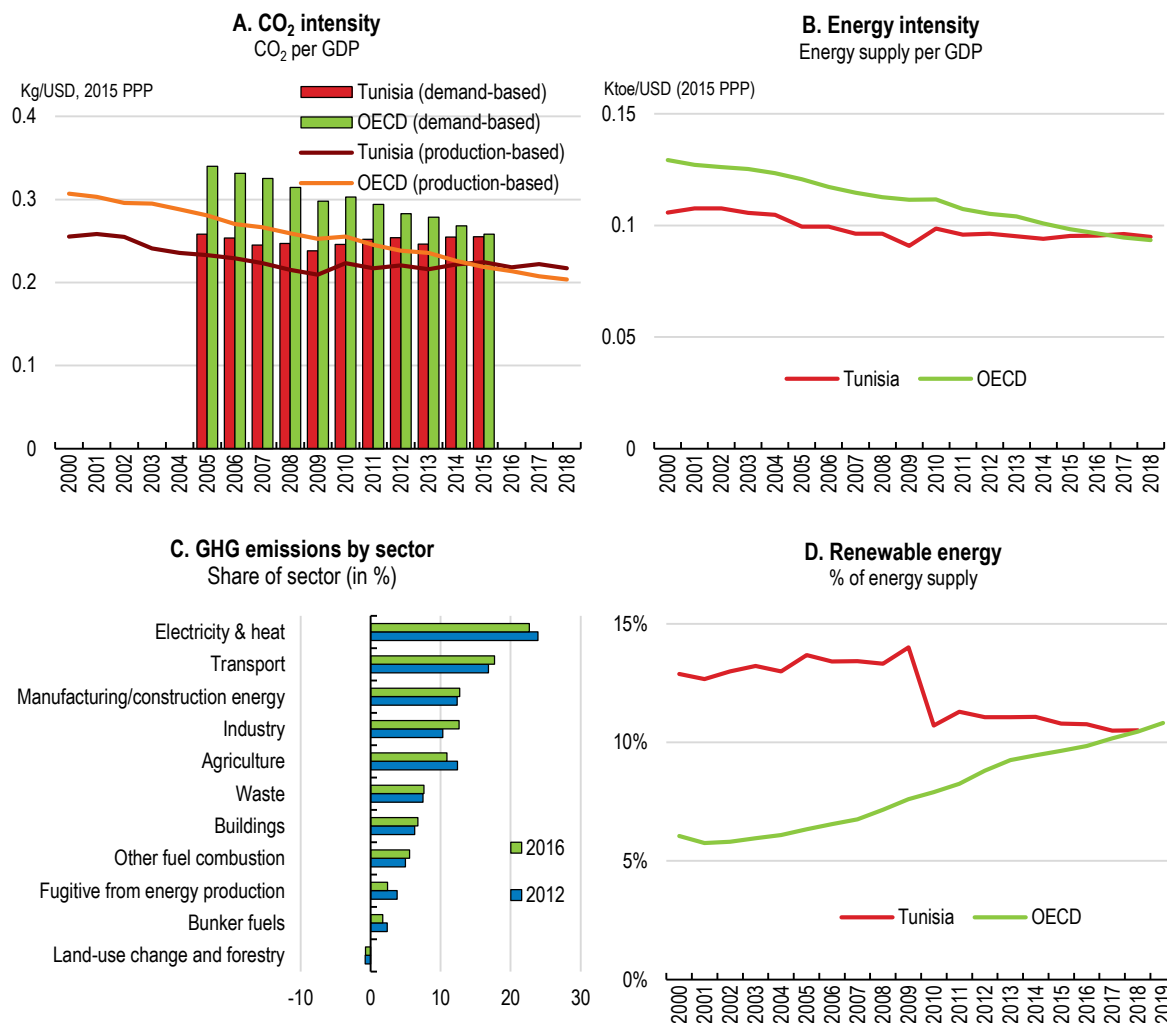


Source: OECD, Environment Database.


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Tunisia ratified the Paris Agreement in February 2017 and one year later a unit especially dedicated to climate action was established within the Ministry of Environment. Its Nationally Determined Contribution (NDC) aims to reduce emission intensity (CO₂ consumption per GDP unit) by 41% by 2030 compared to the 2005 level. Greenhouse gas emissions have doubled since 1995 and improvements in energy efficiency have been slow (Figure 1.39). Therefore, in addition to the continued pursuit of energy efficiency, lowering emissions in electricity and heat production (responsible for 23% of the country's emissions in 2016) is crucial. The target is to reduce consumption by 30% in 2030 through comprehensive mitigation measures, such as strengthening incentives for energy efficiency and developing renewables, as well as prosecuting energy wastage and taxing private transport to favour collective transport.

Figure 1.39. Environment performance is slowly improving



Source: OECD, Environment Database; and Hannah Ritchie and Max Roser (2020) - "CO₂ and Greenhouse Gas Emissions". Published online at OurWorldInData.org. Retrieved from: <https://ourworldindata.org/co2-and-other-greenhouse-gas-emissions>.

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Meeting the goals of sustainable and green growth would have large spillovers effects on productivity and inclusion. Considering its achievement thus far, Tunisia could reach its ambitious national targets faster with a comprehensive package involving market-friendly regulations that promote investment in clean energy, carbon prices adjustment and support to needy households, at least in the early phase while

behaviours adjust. In this respect, the economic policies to be applied to steer the recovery offer an opportunity to accelerate the green transformation.

Renewable energy can be further promoted in tandem with market liberalisation

The government's target is to raise the share of renewable energy in electricity generation from 3% in 2016 to 30% by 2030. Law 2015-12 allows private companies and households utilizing co-generation and renewable energy technologies to produce electricity for their own consumption and sell up to 30% of excess electricity exclusively to STEG at a fixed price. The law's implementing decrees and a Power Purchase Agreement template were published in early 2017 and later in the year the first IPPs in renewable energy were announced. The May 2019 bill to improve the business climate permits businesses to create separate special-purpose vehicles entirely dedicated to power generation. Private companies have been awarded 17 solar projects and four wind projects. Various financing initiatives, such as the Energy Transition Fund (FTE) and the PROSOL-ELEC programme, exist for renewable energy, energy efficiency and fuel substitution (RCREEE, 2019^[77]). By 2019, however, renewables accounted for 6.6% of power generation, well below the target (MEMTE, 2020^[78]).

While Tunisia has experienced some liberalisation, it should move faster to create an independent regulator, which international experience shows is indispensable to secure transparent and fair electricity procurement from generators. Moreover, necessary funding from the public and private sectors should be mobilised for FTE to effectively operate (IRENA, 2021^[79]), the state monopoly in the transmission, distribution and retail of electricity should be at least accompanied by accounting separation and a feed-in tariff should be set ahead of the creation of a wholesale market.

Improving solid waste management is of the utmost urgency to fight air and sea pollution

Solid waste generation has increased alongside economic growth, making the introduction of appropriate policies and its effective application an urgent priority to realise a greener economy. Tunisia enacted a law relating to waste disposal control system in 1996 and established ANGeD (Agence Nationale de Gestion des Déchets). A ban on single-use plastic bags entered into force in March 2020. Nonetheless, improvements are needed. Most organic waste collected is mixed with other residues and then deposited in landfill without any treatment. The eight existing dumps are fully used and the Eco-let recycling system, once a MENA best practice, suffers from the declining number of collection points (from 63 in 2010 to 45 in 2018) and the lack of financing and public awareness (Chaabane, 2021^[80]).

Solid waste mismanagement, combined with poor control of chemicals, is a major source of air and sea pollution. Most cities for which high-quality air pollution data was available had annual mean PM10 levels above the WHO guideline value of 20 µg/m³ (WHO, 2015^[81]). Although waste-to-energy technologies have gained more attention in Tunisia, incinerators are few and none has energy recovery. Responsibility over solid waste management is shared among the different government levels, including local institutions, but the lack of precision and clarity regarding the definition of their respective mandates, as well as the scarcity of financial and technical resources at the local level, have reduced investments. Due to the lack of a national strategy, waste valorisation suffers from similar problems.

Moreover, the introduction of an extended producer responsibility (EPR) scheme would also be a useful policy tool. The extension of a producer's responsibility for a product to the post-consumer stage of a product's life cycle helps to reduce the overall amount of solid waste, through recycling of reusable materials. The EPR scheme is a means to shift some waste management costs from taxpayers to producers and consumers, although there is as of yet limited evidence that it triggers eco-design (OECD, 2021^[82]).

Key policy insights recommendations

MAIN FINDINGS	RECOMMENDATIONS (key recommendations in bold)
Achieving a sustainable recovery through macroeconomic policies	
Despite the summer acceleration, the vaccination rate remains lower than in OECD countries. Access to certain activities is subject to the presentation of a health pass or a negative test.	Consider extending the health pass to most activities and the exercise of some professions. Intensify efforts to better cover rural areas, notably through mobile vaccination centres and the engagement of local actors.
A relapse of the COVID-19 pandemic cannot be ruled out and other considerable risks surround the outlook.	Continue to provide fiscal support to the most vulnerable households and economic sectors until the economic recovery is well underway.
Consumer price inflation is likely to increase in the short term due to high global price for commodities and remaining supply chain bottlenecks.	Maintain moderate inflation by consolidating central bank independence and avoiding monetisation of the fiscal deficit.
Explicit inflation targeting would allow the central bank to maintain price growth at low, stable and predictable levels and favour better coordination between monetary and fiscal policies.	In order to adopt an inflation target policy, follow a roadmap that includes transparent and credible communication, the ability to produce inflation forecasts based on a variety of indicators, including regular inflation expectation surveys, and a forward-looking operational approach for conducting monetary policy.
High debt levels make it a priority to launch a comprehensive package of measures to raise revenue, curb spending and reduce the debt-to-GDP ratio to sustainable levels.	Design, announce and carry out a medium-term fiscal plan that will make it possible to reduce current spending, while building fiscal space to address contingencies and increase public investment in infrastructure.
The tax system is complex, with many special regimes and tax exemptions; the collection rate is low and tax evasion is rife, notably for the <i>régime forfaitaire</i> , which leads to inequalities among taxpayers.	Reduce special regimes and VAT exemptions, better control the <i>régime forfaitaire</i>, enhance tax enforcement and draft a comprehensive general tax code.
Population ageing, rising dependency ratios, generous gross replacement and low growth have weakened the pay-as-you-go system.	Social partners and the government should set up a clear timeline to pass the pending reform of the private sector pension system. Linking benefits more directly to contributions, particularly in the public sector system, and penalising early retirement should be on the agenda.
Public sector employment and the wage bill are very high by international standards.	Limit new hiring and internal promotion in the public sector; facilitate voluntary exit; and make any wage adjustment conditional on the achievement of productivity improvements.
In the public administration, there is room to improve operational performance and reduce administrative costs.	Suspend derogatory, non-competitive hiring and promotions, make it mandatory to publish vacancies, and apply uniformity, equity, fairness and transparency principles to strengthen career-long review processes of civil servants.
Energy subsidies are inefficient, regressive and inconsistent with environmental goals.	Finalise the infrastructure (including database of vulnerable households) to gradually replace energy price subsidies with targeted income support.
Supporting financial development	
The protection of creditors and minority investors is weak due to lengthy insolvency procedures, which reduces access to finance for many firms.	Speed up corporate and debt restructuring procedures through out-of-court insolvency schemes and the establishment of dedicated tribunal chambers tasked with corporate cases.
Banking exposure to the government, through securities and direct lending, and non-performing loans, as well as inadequate capitalisation for some public banks, reduce access to finance for many firms.	Increase transparency in the banking sector through close supervisory scrutiny, stress tests, adherence to sound loan classification standards and effective financial safety nets.
Microfinance has grown fast in the 2010s but there are bottlenecks in their ability to collect savings and enhance their own capital base.	Allow microfinance institutions to collect savings from their clients and banks financing microfinance institutions to refinance themselves with the Central Bank; consider other tools such as a dedicated fund for microfinance or a guarantee fund for financing to MFIs.
Sending money to Tunisia is more expensive than to other MENA countries and the development impact of remittances remains below potential.	Make it easier to transfer money from abroad by mobile phone and mobile-to-mobile cross border transactions and broaden the scope of financial products available, in particular issuing long-term bonds directed at the diaspora.
Competition and equal treatment of all players offering mobile financial services is key for financial inclusion and digital payments.	Place the financial services provided by Tunisia Post under the regulation, supervision and oversight of the BCT.
Opening the economy and strengthening competition	
Rules and regulatory procedures are complex, have potential economic impacts, including on competition, and may contribute to corruption.	Introduce the obligation of carrying out ex ante (and if possible ex post) economic impact evaluation of any new regulation.
High import barriers reduce access to high-quality inputs and capital goods for onshore firms and raise consumer prices.	Reduce tariffs and non-tariff barriers for onshore enterprises, starting with capital goods and intermediate inputs.

Infrastructure gaps remain huge and custom procedures are long and expensive.	Improve the investment framework for infrastructure and accelerate digitalisation and simplification of custom procedures, including through the introduction of automatic import and export licenses combined with risk-based ex-post controls.
Various free trade agreements have either been recently signed or are under discussion. They are comprehensive (i.e. cover non-foreign trade topics) and may benefit Tunisian consumers.	Accelerate negotiations of free trade agreements.
Numerous regulatory barriers to competition in key sectors like wholesale and retail trade and maritime and road freight transport impede entry and weigh on business conduct. Abuses of dominant position are rife. The Competition Council is under administrative tutelage of the Commerce Ministry, has no own resources and is understaffed.	Strengthen enforcement of the competition framework by increasing independence and resources of the Competition Council. Repeal anti-competitive provisions in legal and administrative texts.
Reforming state-owned enterprises (SOEs)	
SOEs generate fiscal and financial risks, the operational and financial performance of many SOEs is poor, the quality of their services is low and prices are high.	Establish a state shareholdings agency, provided with sufficient resources, to evaluate financial performance and restructuring options, including privatisation, and strengthen performance targets.
SOEs operate in many sectors, including some where it is hard to identify a compelling reason to maintain government ownership and control.	Adopt and apply a state ownership strategy, based on the nature of SOEs' activities, their strategic importance and financial viability.
Management turnout in SOEs is high, the overwhelming majority of directors enjoy political exposure rather than possessing appropriate and relevant business skills and corporate governance is poor.	Adopt a merit-based approach for board appointments, increase the minimum number of independent directors and hire specialised head-hunters to propose to the government appropriate directors.
Uphold good governance and the fight against corruption	
The anti-corruption authority (INLUCC) has unearthed cases at all levels but is under-financed and under-staffed.	Preserve independence of the anti-corruption authority and provide it with the necessary resources.
Information collection on corruption cases is insufficient. The delays in dealing with corruption investigations are long.	Strengthen information collection and look after an acceleration of procedures and treatment of cases/
The relationship between the business sector and politics suffers from a lack of information and transparency.	Introduce the obligation for business people to report funding of political parties and contacts with government officials.
Realising the green transition	
The electricity generation mix is dominated by natural gas and the share of renewables is modest.	Promote the ecological transition and renewable sources by encouraging investment and private-public partnerships; adjusting the regulatory framework and carbon taxation; trimming energy subsidies; and increasing direct transfers to needy households.
Tunisia is committed to increase the contribution of variable renewable energy sources such as solar and wind power in electricity production to 30% by 2030, but progress is slow due to the difficult access to the SOE's electricity grid.	Establish an independent electric power regulator to encourage private investment and private-public partnerships in renewables.
Most solid waste is transferred to landfill sites and incinerators are less utilised. A considerable share of sewage is discharged with no treatment.	Increase high-efficiency wastage treatment and incineration capacity, as well as landfill gas collection with energy recovery.

References

- Adalet McGowan, M., D. Andrews and V. Millot (2017), “Insolvency Regimes, Technology Diffusion and Productivity Growth : Evidence from Firms in OECD Countries”, *OECD Economics Department Working Papers*, No. 1425, OECD Publishing, Paris, <https://dx.doi.org/10.1787/36600267-en>. [72]
- Ades, A. and R. Di Tella (1999), “Rents, Competition, and Corruption”, *American Economic Review*, Vol. 89/4, pp. 982-993, <https://www.hbs.edu/faculty/Pages/item.aspx?num=3719> (accessed on 23 December 2021). [27]
- AfDB (2019), *Revising Reforms in the Power Sector in Africa*, African Development Bank, Abidjan, https://www.afdb.org/sites/default/files/documents/publications/power_reforms_report_english.pdf (accessed on 23 December 2021). [28]
- AHK (2021), *World Business Outlook*, <https://www.dihk.de/resource/blob/32524/874596011b1a682731da3817d21f0433/ahk-world-business-outlook-fall-2020-data.pdf>. [59]
- Amiti, M. and A. Khandelwal (2013), “Import Competition and Quality Upgrading”, *The Review of Economics and Statistics*, Vol. 95/2, pp. 476-490, https://www.mitpressjournals.org/doi/pdf/10.1162/REST_a_00271 (accessed on 22 September 2018). [61]
- Ayadi, L. et al. (2014), “An Attempt to Estimating Informal Trade Across Tunisia’s Land Borders”, *Journal of Urban Research*, <https://journals.openedition.org/articulo/2549>. [41]
- Banks, G. (1998), “Committing to Trade Liberalisation in Australia”, *Agenda*, Vol. 5/2, pp. 147-164, <http://press-files.anu.edu.au/downloads/press/p105231/pdf/article02.pdf> (accessed on 23 December 2021). [23]
- Banque centrale de Tunisie (2021), *Note sur l’évolution économiques et monétaires et perspectives à moyen terme*. [3]
- Bouabidi, M. (2020), “The Tunisian exchange rate regime: Is it really floating?”, *International Journal of Finance & Economics*, <https://doi.org/10.1002/IJFE.2394>. [16]
- Boughrara, A. (2007), “Can Tunisia Move to Inflation Targeting?”, *The Developing Economies*, Vol. 45/1, pp. 27-62, <https://doi.org/10.1111/J.1746-1049.2007.00029.X>. [10]
- Boughzala, M. et al. (2020), *Les inégalités en Tunisie*, <https://www.cairn.info/papiers-de-recherche--1000000148925-page-1.htm>. [40]
- BP (2021), *Statistical Review of World Energy | Energy economics | Home*, <https://www.bp.com/en/global/corporate/energy-economics/statistical-review-of-world-energy.html> (accessed on 23 December 2021). [55]
- Broda, C. and D. Weinstein (2006), “Globalization and the Gains From Variety”, *The Quarterly Journal of Economics*, Vol. 121/2, pp. 541-585, <https://doi.org/10.1162/qjec.2006.121.2.541>. [67]
- Cassimon, S. and R. Grundke (forthcoming), “Improving skills and employment opportunities in Tunisia”, *OECD Economics Department Working Papers*. [60]

- Cassimon, S., R. Grundke and P. Kowalski (forthcoming), "The opportunities associated with Tunisia's greater integration with international markets", *OECD Economics Department Working Papers*. [65]
- CESAO (2014), *Arab middle class: measurement and role in driving change*, https://archive.unescwa.org/sites/www.unescwa.org/files/publications/files/e_escwa_edgd_14_2_e.pdf. [35]
- Chaabane, W. (2021), *Gestion des déchets plastiques en Tunisie: vers une responsabilité partagée*, <https://tn.boell.org/fr/2020/03/05/gestion-des-dechets-plastiques-en-tunisie-vers-une-responsabilite-partagee#:~:text=Gestion%20des%20d%C3%A9chets%20plastiques%20en%20Tunisie%3A%20Vers%20une%20responsabilit%C3%A9%20partag%C3%A9e,-Atlas%20du%20Plastique&t>. [80]
- Conseil de l'Europe (2017), *Tunisie : diagnostic du cadre anti-corruption*, <https://rm.coe.int/snac-ii-publication-diagnostic-anti-corruption-programme-sud/1680792c0f>. [74]
- CRES (2017), *Évaluation de la performance des programmes d'assistance sociale en Tunisie*, Centre de recherche des études sociales, <https://socialprotection.org/fr/discover/publications/%C3%A9valuation-de-la-performance-des-programmes-d%E2%80%99assistance-sociale-en-tunisie>. [44]
- De Loecker, J. et al. (2016), "Prices, Markups, and Trade Reform", *Econometrica*, Vol. 84/2, pp. 445-510, <https://doi.org/10.3982/ECTA11042>. [62]
- Derbali, A. and C. Eugène-Rigot (2021), "The misalignment of real effective exchange rate: Evidence from Tunisia", <https://ideas.repec.org/p/gii/giihei/heidwp04-2021.html> (accessed on 23 December 2021). [17]
- Dhakouani, A., E. Znouda and C. Bouden (2020), "Impacts of Electricity Subsidies Policy on Energy Transition", *Lecture Notes in Energy*, Vol. 77, pp. 65-98, https://doi.org/10.1007/978-3-030-43578-3_4. [39]
- EBRD (2020), *Survey of investor perceptions and the broadband sector 2020*, <https://www.ebrd.com/cs/Satellite?c=Content&pagename=EBRD%2FContent%2FContentLayout&cid=1395292756036> (accessed on 23 December 2021). [47]
- El Abassi, M. (2021), *Hearing of the BCT Governor on the economic and monetary situation, in front of the Assemblée des Représentants du Peuple (ARP)*. [18]
- El Hamiani Khatat, M., N. End and R. Kolsi (2020), "Tunisia Monetary Policy Since the Arab Spring: The Fall of the Exchange Rate Anchor and Rise of Inflation Targeting", <https://www.imf.org/en/Publications/WP/Issues/2020/08/21/Tunisia-Monetary-Policy-Since-the-Arab-Spring-The-Fall-of-the-Exchange-Rate-Anchor-and-Rise-49701>. [11]
- European Commission (2021), *Ex-post Evaluation of the impact of trade chapters of the Euro-Mediterranean*, Directorate-General for Trade, European Commission, <https://doi.org/10.2781/984285>. [71]
- Fajgelbaum, P. and A. Khandelwal (2016), "Measuring the Unequal Gains from Trade", *The Quarterly Journal of Economics*, pp. 1113-1181, <https://doi.org/10.1093/qje/qjw013>. [66]

- Fanizza, D. et al. (2002), "Tunisia's experience with real exchange rate targeting and the transition to a flexible exchange rate regime", *document de travail du FMI*, Vol. n° 02/190, <https://www.imf.org/external/pubs/ft/wp/2002/wp02190.pdf>. [15]
- FCO (2019), "Continuing the United Kingdom's Trade Relationship with Tunisia Agreement establishing an association between the United Kingdom of Great Britain and Northern Ireland and the Republic of Tunisia". [69]
- Fitch Rating (2021), *Tunisian Banks' Near-Term Prospects Still Very Challenging*, <https://www.fitchratings.com/research/banks/tunisian-banks-near-term-prospects-still-very-challenging-21-06-2021> (accessed on 23 December 2021). [6]
- Guillemette, Y. and D. Turner (2018), "The Long View: Scenarios for the World Economy to 2060", <https://doi.org/10.1787/2226583X>. [21]
- Gygli, S. et al. (2019), "The KOF Globalisation Index – revisited", *Review of International Organizations*, Vol. 14/3, pp. 543-574, <https://doi.org/10.1007/S11558-019-09344-2/TABLES/7>. [53]
- HAICOP (2019), "Stratégie de Management des Risques dans les Marchés Publics en Tunisie". [75]
- Hsieh, C. and P. Klenow (2009), "Misallocation and Manufacturing TFP in China", *The Quarterly Journal of Economics*, Vol. 124/4, pp. 1403-1448, <https://www.jstor.org/stable/pdf/40506263.pdf> (accessed on 17 January 2019). [64]
- IMF (2021), *Tunisia : 2021 Article IV Consultation*, International Monetary Fund, <https://www.imf.org/en/Publications/CR/Issues/2021/02/26/Tunisia-2020-Article-IV-Consultation-Press-Release-Staff-Report-and-Statement-by-the-50128>. [7]
- INC (2019), *Premiers résultats d'une enquête sur l'endettement des ménages tunisiens*, Institut National de la Consommation. [8]
- INS (2021), *Indicateurs de l'emploi et du chômage*, http://ins.tn/sites/default/files/publication/pdf/Note_ENPE_2021T1.pdf (accessed on 15 July 2021). [5]
- IRENA (2021), *Renewable Readiness Assessment: The Republic of Tunisia*. [79]
- Izquierdo, A., C. Pessino and G. Vuletin (2018), *Better Spending for Better Lives How Latin America and the Caribbean Can Do More with Less*, Interamerican Development Bank, Washington, DC, <http://www.iadb.org/DIA2018spending> (accessed on 25 January 2019). [83]
- Jahan, S. (2012), "Inflation Targeting: Holding the Line", *Finance & Development*, <https://www.imf.org/external/pubs/ft/fandd/basics/pdf/jahpan-inflation-targeting.pdf>. [13]
- Joumard, I., S. Dhaoui and H. Morgavi (2018), *Insertion de la Tunisie dans les chaînes de valeur mondiales et rôle des entreprises offshore | OECD Economics Department Working Papers 1478, OECD Publishing| OECD iLibrary*, https://www.oecd-ilibrary.org/economics/insertion-de-la-tunisie-dans-les-chaines-de-valeur-mondiales-et-role-des-entreprises-offshore_546dbd75-fr (accessed on 23 December 2021). [52]
- Kaufmann, D., A. Kraay and M. Mastruzzi (2010), "The Worldwide Governance Indicators : Methodology and Analytical Issues", <https://openknowledge.worldbank.org/handle/10986/3913>. [22]

- Kokas, D. et al. (2020), "Impacts of COVID-19 on Household Welfare in Tunisia", [36]
<https://doi.org/10.1596/1813-9450-9503>.
- MEMTE (2020), *Conjoncture énergétique*. [78]
- Ministère de l'économie, des finances et de l'appui à l'investissement (2021), *Rapport sur les entreprises publiques*. [26]
- Mouelhi (2020), "L'urgence d'une stratégie de relance", *L'économiste maghrébine*, [20]
<https://www.leconomistemaghrebin.com/2020/05/24/desindustrialisation-lurgence-dune-strategie-de-relance-1/>.
- OCDE/ATAF/CUA (2020), *Revenue Statistics in Africa 2021*, <https://www.oecd.org/tax/tax-policy/revenue-statistics-in-africa-2617653x.htm> (accessed on 23 December 2021). [42]
- OECD (2021), *Middle East and North Africa Investment Policy Perspectives*, https://www.oecd-ilibrary.org/finance-and-investment/middle-east-and-north-africa-investment-policy-perspectives_6d84ee94-en (accessed on 23 December 2021). [49]
- OECD (2021), "Modulated fees for extended producer responsibility schemes (EPR), Working Party on Resource Productivity and Waste", [82]
[https://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=ENV/EPOC/WPRP-W\(2020\)2/FINAL&docLanguage=En](https://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=ENV/EPOC/WPRP-W(2020)2/FINAL&docLanguage=En) (accessed on 23 December 2021).
- OECD (2021), *The Size and Sectoral Distribution of State-Owned Enterprises*, [34]
<https://www.oecd.org/publications/the-size-and-sectoral-distribution-of-state-owned-enterprises-9789264280663-en.htm> (accessed on 23 December 2021).
- OECD (2020), *OECD Economic Surveys: Brazil*, OECD Publishing Paris, https://www.oecd-ilibrary.org/economics/oecd-economic-surveys-brazil-2020_250240ad-en;jsessionid=JkLae8rDjyURrXR0cUhE_bXx.ip-10-240-5-9. [45]
- OECD (2019), *FDI Qualities Indicators: Measuring the sustainable development impacts of investment*, <https://www.oecd.org/fr/investissement/fdi-qualities-indicators.htm> (accessed on 23 December 2021). [68]
- OECD (2019), *OECD Economic Surveys: Portugal*, OECD, https://www.oecd-ilibrary.org/economics/etudes-economiques-de-l-ocde-portugal-2019-version-abregee_8b2deb06-fr (accessed on 17 February 2020). [50]
- OECD (2018), *OECD Economic Surveys: Tunisia 2018: Economic Assessment*, [25]
<https://www.oecd.org/publications/oecd-economic-surveys-tunisia-2018-eco-surveys-tun-2018-en.htm> (accessed on 23 December 2021).
- OECD (2018), *Talents à l'étranger : Une revue des émigrés tunisiens*, OECD Publishing, [4]
https://www.oecd-ilibrary.org/social-issues-migration-health/talents-a-l-etranger_9789264308855-fr (accessed on 23 December 2021).
- OECD (2016), *Being an Independent Regulator*, <https://www.oecd.org/gov/regulatory-policy/being-an-independent-regulator-9789264255401-en.htm> (accessed on 23 December 2021). [32]
- OECD (forthcoming), *Études sectorielles de l'OCDE – Le secteur bancaire en Tunisie*. [9]

- OECD (forthcoming), *Fostering Competition in Tunisia*, OECD Publishing Paris. [51]
- OECD (forthcoming), *Soutenir la Tunisie dans la mise en œuvre de mesures fiscales - Encourager la formalisation des entreprises, des travailleurs indépendants et des salariés*, OECD Publishing Paris. [43]
- ONAGRI (2021), *Le Tableau de Bord*, Observatoire National de l'Agriculture, <http://www.onagri.nat.tn/uploads/dash-board/Tableau-de-bord.pdf>. [58]
- Pavcnik, N. (2002), "Trade Liberalization, Exit, and Productivity Improvements: Evidence from Chilean Plants", *The Review of Economic Studies*, Vol. 69/1, pp. 245-276, <https://doi.org/10.1111/1467-937X.00205>. [63]
- Przystupa, J. and E. Wróbel (2016), *Modelling monetary transmission in less developed emerging markets: the case of Tunisia*, <https://ideas.repec.org/a/nbp/nbpbik/v47y2016i5p395-434.html> (accessed on 23 December 2021). [12]
- Rassaa, B. et al. (2020), "Le régime de l'autoproduction d'électricité à partir des énergies renouvelables en Tunisie : situation et perspectives de développement Auteurs (par ordre alphabétique)", https://www.leaders.com.tn/uploads/FCK_files/PP_Le%20re%CC%81gime%20de%20l%27a%20production%20ER%20en%20Tunisie%20-%20Situation%20et%20perspectives.pdf (consulté le (accessed on 23 December 2021)). [33]
- Ratha, D. et al. (2021), *Resilience COVID-19 Crisis Through a Migration Lens Migration and Development Brief 34*, <https://openknowledge.worldbank.org/handle/10986/33634#:~:text=The%20economic%20crisis%20induced%20by,when%20viewed%20through%20amigration%20lens.&text=Migrant%20remittances%20provide%20an%20economic,to%20much%E2%80%90needed%20health%20services>. (accessed on 23 December 2021). [73]
- RCREEE (2019), "Energy Efficiency and Renewable Energy Strategies and Policies", <https://www.rcreee.org/fr/node/4344> (accessed on 23 December 2021). [77]
- Redissi, H. (2020), *La Tunisie à l'épreuve du COVID-19*, FES and Observatoire Tunisien de la Transition Démocratique. [2]
- Rijkers, B. et al. (2016), "Are Politically Connected Firms More Likely to Evade Taxes? Evidence from Tunisia", *The World Bank Economic Review*, Vol. 30, pp. 166-175, <https://doi.org/10.1093/wber/lhw018>. [46]
- Rodrik, D. (2016), "Premature Deindustrialization", *Journal of Economic Growth*, vol. 21,, [http://Rodrik, D. \(2016\), « Premature Deindustrialization », Journal of Economic Growth, vol. 21, https://drodrik.scholar.harvard.edu/files/dani-rodrik/files/premature_deindustrialization.pdf](http://Rodrik, D. (2016), « Premature Deindustrialization », Journal of Economic Growth, vol. 21, https://drodrik.scholar.harvard.edu/files/dani-rodrik/files/premature_deindustrialization.pdf). [19]
- Romelli, D. (2022), "The Political Economy of Reforms in Central Bank Design: Evidence from a New Dataset", *Economic Policy*. [14]
- Rudloff, B. (2020), "A Stable Countryside for a Stable Country? The Effects of a DCFTA with the EU on Tunisian Agriculture", *Stiftung Wissenschaft Politik Research Paper*, Vol. 2, <https://doi.org/10.18449/2020RP02>. [70]

- Sammoud, I. and S. Dhaoui (2019), "The Tunisian Integration into Global Value Chains The role of offshore regime & FDI", <https://www.euneighbours.eu/en/south/stay-informed/publications/emnes-working-paper-21-tunisian-integration-global-value-chains> (accessed on 23 December 2021). [54]
- Social Progress Imperative (2021), *Social Progress Index*, <https://www.socialprogress.org/global-index-2021>. [37]
- Strauss, B., S. Kulp and A. Levermann (2015), *Mapping Choices: Carbon, Climate, and Rising Seas, Our Global Legacy*, <https://sealevel.climatecentral.org/research/reports/mapping-choices-carbon-climate-and-rising-seas-our-global-legacy>. [76]
- U.S. Geological Survey (2021), *Phosphate Rock Statistics and Information* |, <https://www.usgs.gov/centers/national-minerals-information-center/phosphate-rock-statistics-and-information> (accessed on 23 December 2021). [57]
- UNPD (2021), *2021 Global Multidimensional Poverty Index Report*, http://hdr.undp.org/sites/default/files/2021_mpi_report_fr.pdf. [38]
- UNWOMEN (2017), *La Tunisie adopte une loi historique pour mettre fin à la violence envers les femmes*, <https://www.unwomen.org/fr/news/stories/2017/8/news-tunisia-law-on-ending-violence-against-women> (accessed on 23 December 2021). [1]
- WHO (2015), *Climate and Health Country Profile – Tunisia 2015*, <https://apps.who.int/iris/handle/10665/246121>. [81]
- Wood Mackenzie (2021), "Tunisia Upstream", <https://www.woodmac.com/reports/upstream-oil-and-gas-tunisia-upstream-summary-954735/>. [56]
- World Bank (2020), *Rebuilding the Potential of Tunisian Firms*, World Bank, Washington DC, <https://documents1.worldbank.org/curated/en/194331608565600726/pdf/Tunisia-Economic-Monitor-Rebuilding-the-Potential-of-Tunisian-Firms-Fall-2020.pdf> (accessed on 17 June 2021). [48]
- World Bank (2020), *Tunisia Public Expenditure Review A New Pact for the Transition Modernizing the State for Better and Fairer Public Spending Overview Report*, <https://openknowledge.worldbank.org/handle/10986/33854> (accessed on 23 December 2021). [24]
- World Bank (2020), "Tunisia Resilience and Recovery Emergency Policy Financing (P173324)", <https://projects.worldbank.org/en/projects-operations/project-detail/P173324> (accessed on 23 December 2021). [31]
- World Bank (2019), "Tunisia Infrastructure Diagnostic", <http://www.worldbank.org> (accessed on 23 December 2021). [29]
- World Bank (2014), *Pour une meilleure gouvernance des entreprises publiques en Tunisie*. [30]

2 Improving skills and employment opportunities in Tunisia

Robert Grundke, OECD

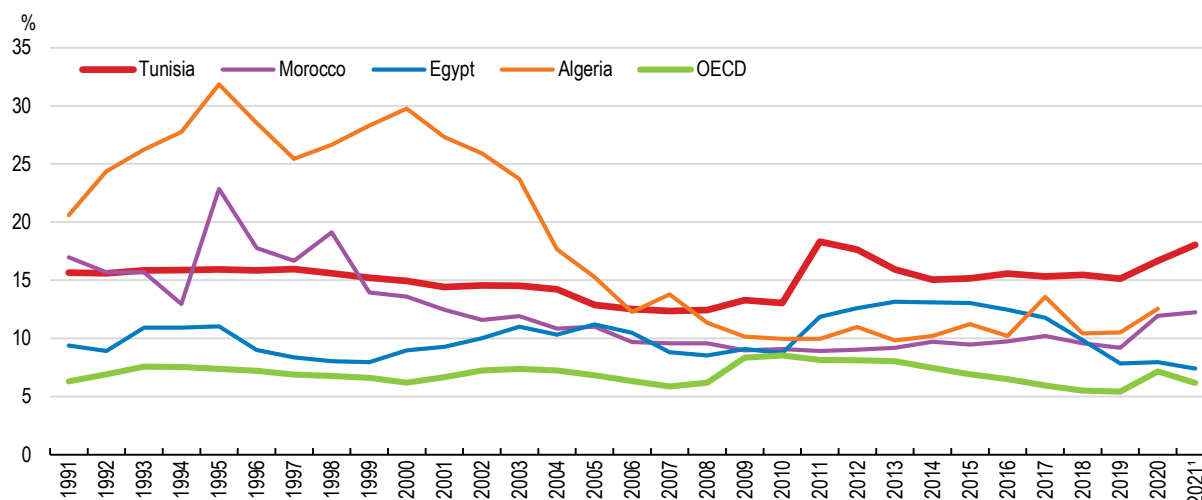
Steven Cassimon, OECD

Unemployment rates have been persistently high, particularly for young labour market entrants. Rising access to education has increased the supply of high-skilled labour, but the private sector has mainly created jobs in low-skill intensive and low-productivity activities, leading to high unemployment rates among tertiary graduates and particularly for women. Moreover, education and professional training systems operate in isolation from labour market needs and do not equip workers with the skills demanded by firms. Labour market policies and regulations discourage formal job creation and complicate the matching process in the labour market. To foster business dynamism and innovation and create more and better jobs, it is crucial to lower regulatory barriers to market entry and entrepreneurship, raise the international integration of domestic firms and adjust labour taxes. The quality of education and professional training needs to improve, and more cooperation with the private sector is necessary to better prepare youth and young adults for the labour market. Better targeting of active labour market policies and reducing barriers to labour mobility are key to improve labour market matching.

The different dimensions of labour market mismatch in Tunisia

For decades, high unemployment has been a characteristic of the Tunisian economy, with unemployment rates hovering above 12% since the 1990s (Figure 2.1). A broad range of structural factors complicates the adjustment of labour demand and labour supply and prevents the clearing of the labour market. These include institutional factors hampering business dynamics, investment and job creation, education and professional training systems that do not equip workers with the skills demanded by firms, and labour market policies and regulations that complicate the matching process in the labour market.


Figure 2.1. Unemployment has been persistently high



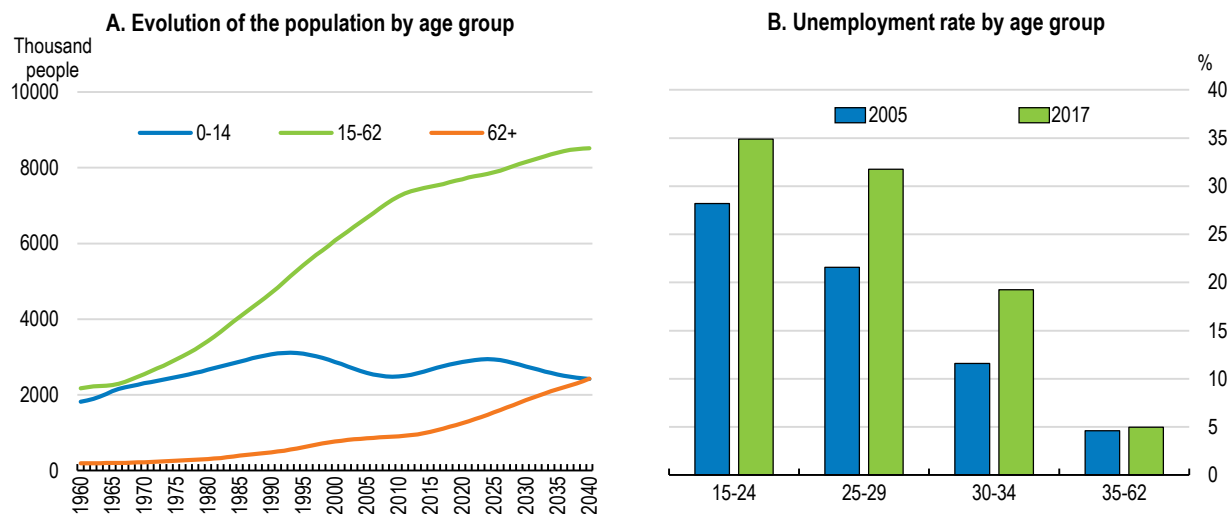
Note: The unemployment rate is calculated as the share of the unemployed in the labour force. National estimates were not available for Algeria past 2017 and ILO estimates were used.

1. The unemployment rate for 2021 in Tunisia is calculated as the average over the first three quarters.


Source: WB; ILO; INS; CEIC; and OECD Economic Outlook database.

StatLink  <https://stat.link/nrkvch>

The rise in the working age population has not been matched with sufficient increases in labour demand leading to particularly high unemployment rates among youth (Figure 2.2) (Boughzala, 2019^[1]). The youth unemployment rate rose from 25% in the 1990s to 35% in the early 2010s (ONEQ, 2013^[2]). In 2018, more than 85% of the unemployed were younger than 35 years, and more than two thirds younger than 30 years. After entering the labour market, it takes on average around 26.5 months for the young labour market entrants to transition to their first job (Boughzala, 2019^[1]). This transition period to the first job has lengthened since 2011, signalling that the insertion of labour market entrants is becoming increasingly difficult (OECD calculations based on ANETI data). The pandemic has led to a strong drop in labour demand, which has exacerbated existing structural fault lines and led to rising unemployment, particularly among youth (see chapter 1).

Figure 2.2. New labour market entrants have difficulties to find a job

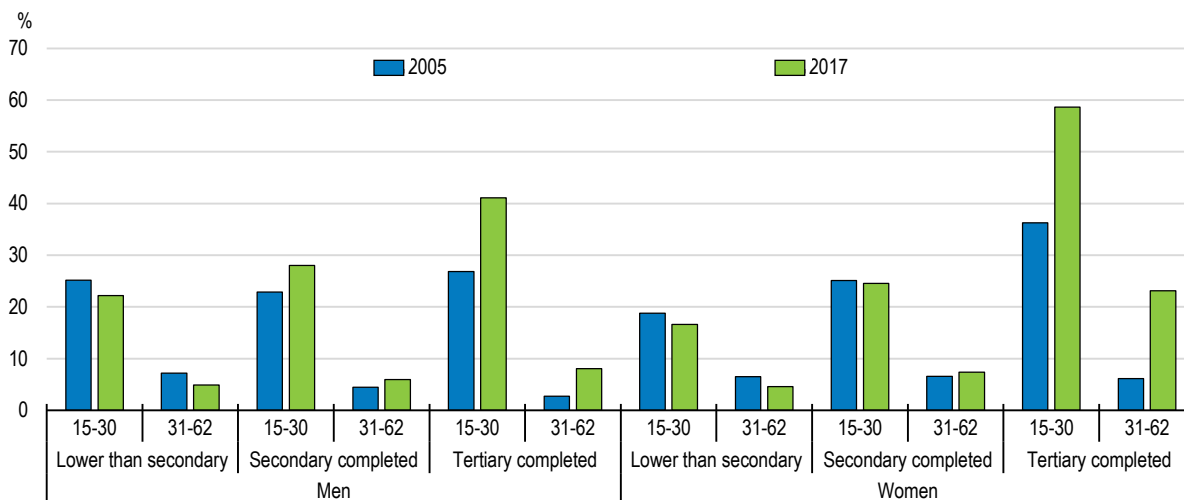
Source: UN Population Statistics; OECD calculations based on the Labour Force Survey, INS.

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As access to secondary and tertiary education has significantly improved, the education level of labour market entrants has steadily increased (UNICEF and INS, 2019^[3]). The share of the working age population with a tertiary degree has almost quadrupled since the 1990s and reached 28% in 2017. However, as the private sector has mainly created jobs in low-skill intensive and low-productivity activities, the rising supply of high-skilled labour has led to particularly high unemployment rates among tertiary graduates (Figure 2.3) (Angel-Urdinola, Nucifora and Robalino, 2015^[4]). Highly educated women are particularly affected, as they account for more than two thirds of tertiary graduates. Cultural norms, leading to relatively low interregional mobility of single women, as well as job offers with particularly low wages due to labour market discrimination, also contribute to high unemployment of tertiary educated women (Boughzala, 2019^[1]).

Figure 2.3. Unemployment among tertiary graduates is high, especially for women

Unemployment rate by gender, skill level and age category, 2005 and 2017 (in %)



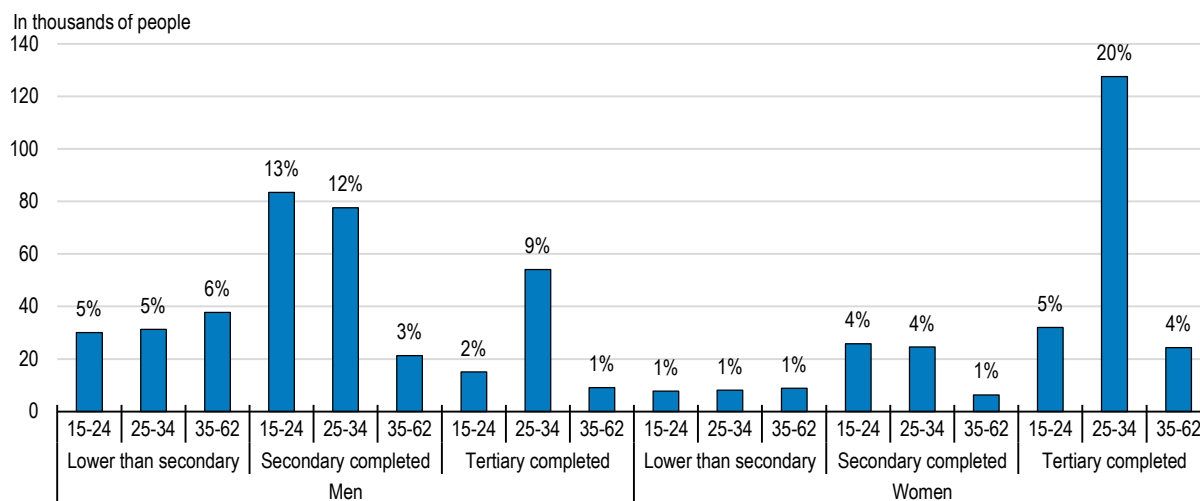
Source: OECD calculations based on the Labour Force Survey, INS.

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Although unemployment rates for tertiary graduates are much higher than for other groups, around 60% of the unemployed have not obtained a tertiary education degree (Figure 2.4). This concerns particularly young men who have dropped out of secondary education or finished it with relatively weak results (Boughzala, 2019^[11]). Due to their low level of technical and soft skills, including communication and language skills, they face strong difficulties in finding formal employment and typically end up in low-paid jobs in the informal sector, are long-term unemployed or participate in public work programmes (UNICEF, 2020^[5]; Boughzala, 2019^[11]). Informality is particularly high among young low-skilled men (see below). This group, despite being particularly vulnerable, has so far not been in the focus of active labour market and training policies and more attention is necessary to facilitate integration into formal employment (Angel-Urdinola, Nucifora and Robalino, 2015^[4]).

Figure 2.4. Many young and low-skilled men are unemployed

Number of unemployed by age, skill level and gender, 2017 (in absolute numbers and shares of total in %)



Source: OECD calculations based on the Labour Force Survey, INS.

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In addition to the large group of unemployed youth, another group suffers from the structural weaknesses of the labour market: the large share of young women and men that have been discouraged in their job search and have left the labour market (Figure 2.5). Although cultural reasons related to family and household work play an important role in the case of women, difficulties to find a job are the predominant reason for leaving the labour force (Boughzala, 2019^[11]). For young women without a tertiary education degree, the labour force participation rate is below 25%, whereas it is around 50% for women with tertiary degree and above 70% on average for men (Figure 2.5). More than half a million of young women are not in education, employment or training (NEET) and do not search for a job (Boughzala, 2019^[11]). Together with more than 400 000 young men who are unemployed, this means that more than one third of the young working age population aged between 15 and 29 years are not in education, employment or training (OECD, 2015^[6]). This has serious consequences for their human capital, social cohesion and the growth potential of the economy.

Figure 2.5. Many women without a tertiary education are out of the labour force

Labour force participation rate (in %) and number of people out of the labour force by gender, education and age, 2017



Note: The labour force participation rate is calculated as the share of workers and unemployed in the working age population by age groups.

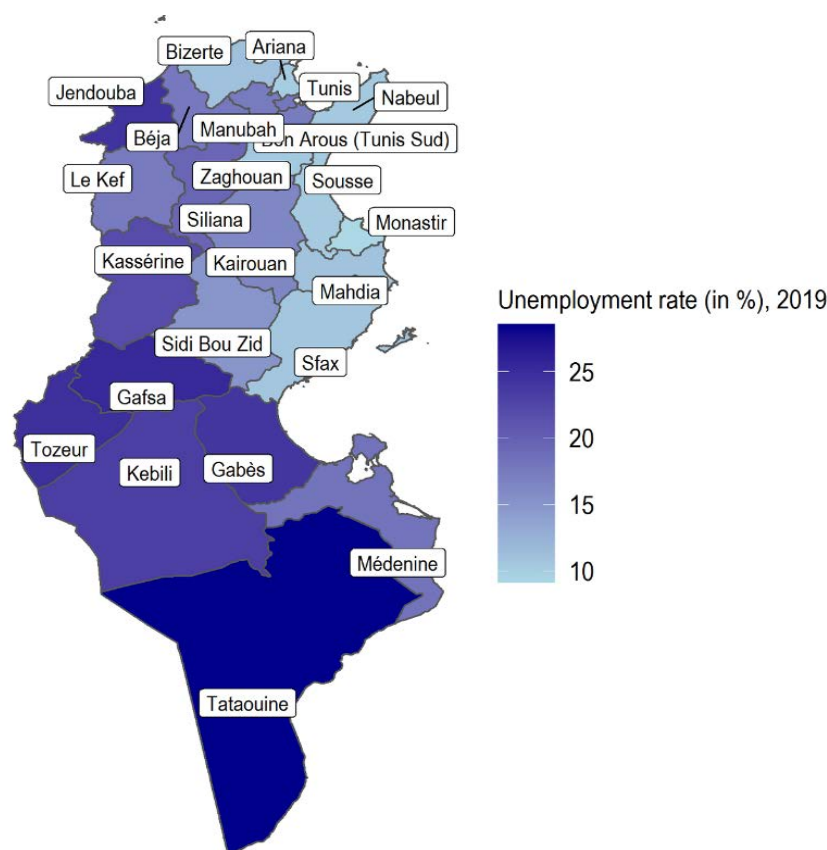
Source: OECD calculations based on the Labour Force Survey, INS.

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The regional dimension is key to understand the labour market mismatch in Tunisia. Unemployment rates range from below 10% in some coastal governorates to almost 30% in some southern ones (Figure 2.6). This is mainly due to a strong concentration of economic activity and job creation in coastal regions, which dates far back in history and is mainly related to access to maritime trade and favourable conditions for agriculture (Angel-Urdinola, Nucifora and Robalino, 2015^[4]). Past economic policies have reinforced regional disparities through the development of industrial clusters and special exporting (“offshore”) zones close to the coast (OECD, 2015^[7]). Infrastructure, industrial and innovation policies have favoured coastal regions and few economic linkages between firms in coastal regions and firms in interior provinces exist (OECD, 2018^[8]; Angel-Urdinola, Nucifora and Robalino, 2015^[4]). The strong centralisation of the state and public administration and the weak adaptation of economic and social policies to regional contexts have contributed to these inequalities (OECD, 2018^[8]).

Persisting regional disparities in unemployment rates indicate a relatively low internal mobility of labour (Figure 2.6). Although migration from interior to coastal regions and in particular to the Tunis metropolitan area took place during the last decades, significant obstacles to labour mobility remain. Due to weak income support to the unemployed, many of them rely on support from the family for housing and food, which reduces their geographic action space in the labour market (Angel-Urdinola, Nucifora and Robalino, 2015^[4]). Moreover, cultural norms amplify these barriers for single women, who may face difficulties to travel and live alone far away from the family (Bouchoucha, 2018^[9]). This is not only a problem for lower skilled young women, but also for tertiary graduates, who have to return to their family after finishing their studies, if they do not find a job directly after graduation (OECD, 2015^[6]). Rising house and rental prices complicate migration from interior regions to urban centres (see first chapter). Weak road and public transport infrastructure make commuting difficult, particularly for low-skilled and poorer workers, who cannot afford a car or motorcycle. High tariffs and excise taxes as well as restrictive import and distribution licenses raise prices for these products, contributing to low labour mobility (WTO, 2016^[10]).

Figure 2.6. Unemployment rates differ strongly across governorates



Source: Institut National de la Statistique de Tunisie (INS).

StatLink  <https://stat.link/9zh5nv>

Although unemployment rates are high, many firms in low-skill intensive sectors, such as textile, construction, tourism, and agriculture, report that they do not find workers with the skills they need (Boughzala, 2019^[1]; IACE, 2019^[11]). This is related to many idiosyncratic factors, but some common factors contribute to these mismatches between labour demand and supply. First, the regional concentration of economic activities combined with low interregional labour mobility reduces the potential labour supply for these sectors. For example, the textile industry is highly concentrated in the province of Monastir and tourism activities are mainly located in coastal areas, particularly in the bay of Hammamet. A second important explanation are skill and qualification mismatches resulting from the low quality of basic education, initial VET and tertiary education, which fail to internalise the skill needs of the private sector (see third section of this chapter).

Third, low wages, difficult working conditions and weak human resource (HR) practices in low-skill intensive sectors make job offers unattractive (Angel-Urdinola, Nucifora and Robalino, 2015^[4]). In particular, reservation wages of unemployed tertiary graduates are relatively high due to the negative cultural connotation of blue-collar work and the high attraction of public employment, which has strongly increased since 2011. Moreover, active labour market policies are mostly focused on tertiary graduates and coastal regions, failing to better prepare the lower skilled as well young tertiary graduates from interior regions and insert them into the formal labour market. Public employment services are weak and existing labour market institutions reduce labour mobility. These issues are discussed in more detail in the fourth

section of this chapter. In what follows, the report sheds some light on the current and future structure of labour demand and policies to create better job opportunities.

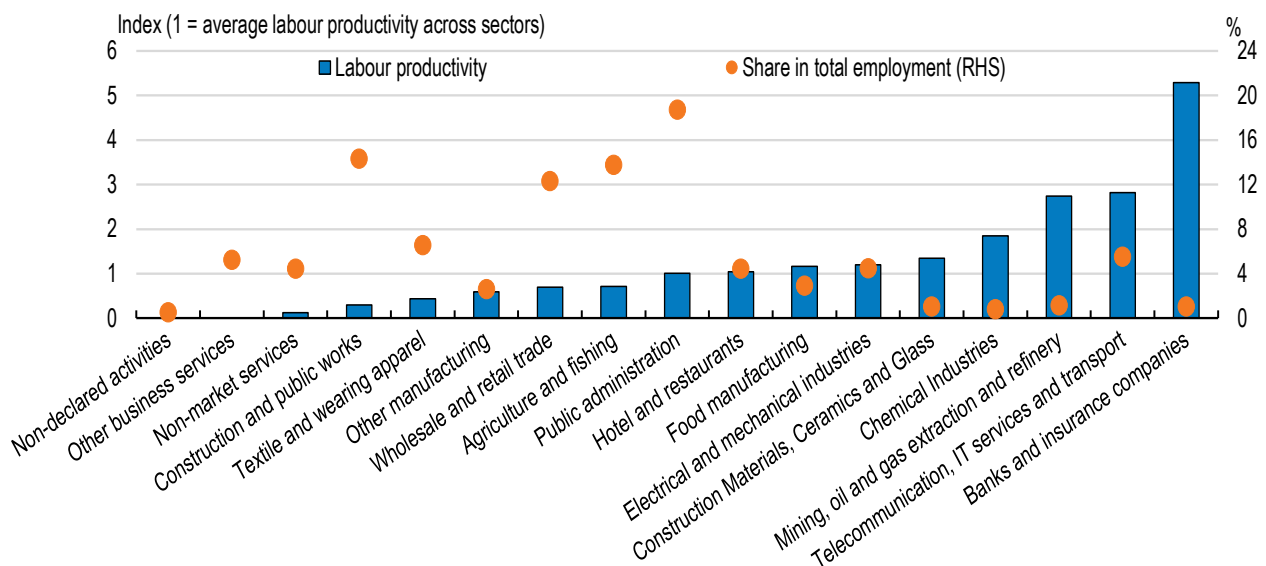
Creating more and better jobs to reduce unemployment

Job creation has been concentrated in low-productivity activities

Not only has net job creation been too weak in absolute values to absorb young labour market entrants and lower unemployment, but it has also been concentrated in low-productivity activities and skewed towards low-skilled employment (Figure 2.7) (Boughzala, 2019^[1]). Compared to other Emerging Market Economies (EMEs), the share of workers in low-productivity sectors is high in Tunisia reflecting past economic policies that have focused on attracting low-value added activities (Angel-Urdinola, Nucifora and Robalino, 2015^[4]). Although textile and wearing apparel industries have slightly decreased employment, other low-skill intensive sectors such as retail and construction have been the main drivers of employment growth since 2007 (Figure 2.8, Figure 2.9) (Boughzala, 2019^[1]).

Figure 2.7. Employment is concentrated in low-productivity activities

Employment by activity as a share in total employment (in %), labour productivity by activity normalised by average labour productivity, 2019



Note: Employment data from the labour force survey includes formal and informal employment. Labour productivity is measured as GDP at factor cost (in 2010 prices) divided by the total number of employees working in each sector. Labour productivity has been normalised by dividing labour productivity of each sector by the average labour productivity across sectors. Thus, an index higher than 1 implies that employees in that sector are more productive than on average across all sectors. As sectoral classifications for real estate, repair and business services could not be mapped between the GDP and the employment data, no estimate for labour productivity could be derived.

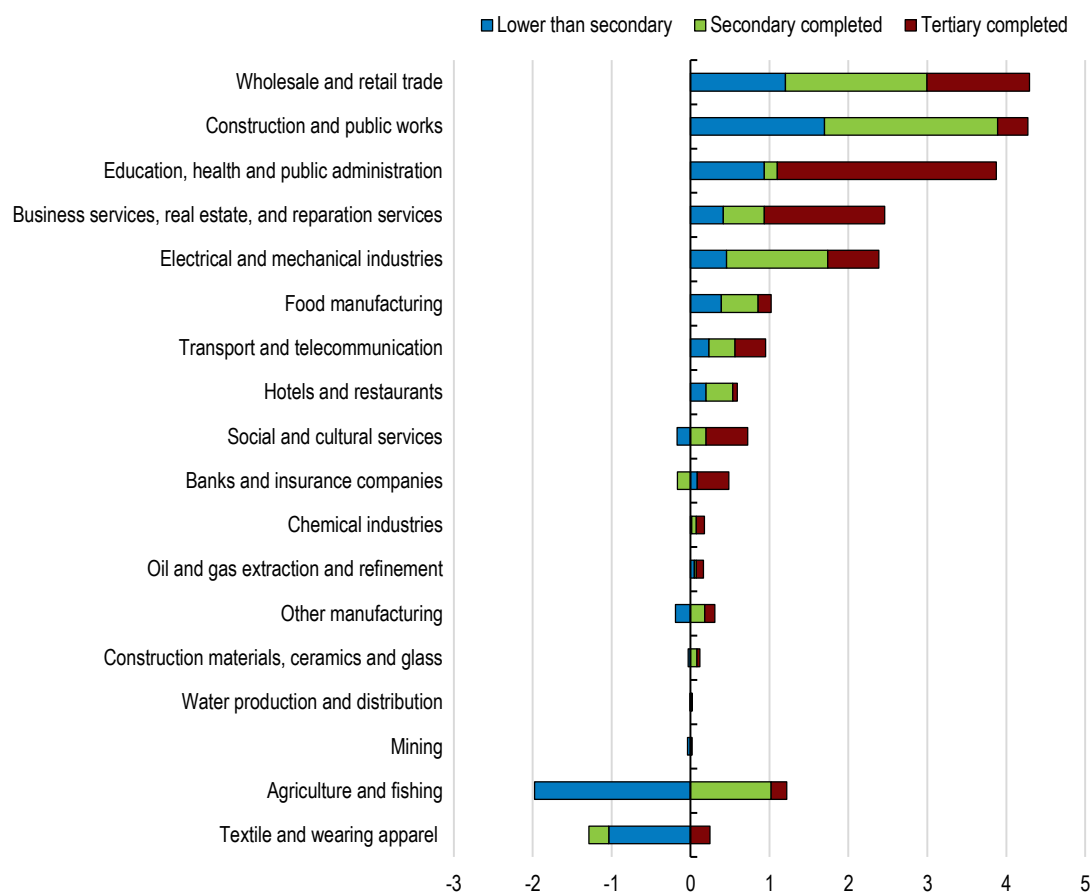
Source: OECD calculations based on data from CEIC and INS.

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However, employment has also grown in some high-skill intensive sectors, particularly in the public sector (including public administration, education and health as well as state-owned enterprises), which has absorbed the largest share of tertiary graduates since 2007 (Figure 2.8). Other activities that have generated jobs for a significant amount of tertiary graduates are Information and Communication Technology (ICT) and business services, and retail. Although some manufacturing sectors such as mechanical and electrical industries have increased employment of tertiary graduates, 52% of jobs in mechanical and electrical industries are low-skilled blue collar and 28% are high skilled-blue collar (Figure 2.9). This indicates that many tertiary graduates might be overqualified for these jobs and that the absorption capacity for tertiary graduates in these industries is limited (Cassimon and Grundke, forthcoming^[12]). As the precarious fiscal situation will not allow to further increase public employment, increasing demand for high-skilled labour needs to come from a more dynamic private sector that expands into higher value-added activities (Boughzala, 2019^[1]; Angel-Urdinola, Nucifora and Robalino, 2015^[4]).

Figure 2.8. Some high-skill intensive activities have increased employment

Contributions to total employment growth by activity and education level, 2007-2019 (in percentage points)

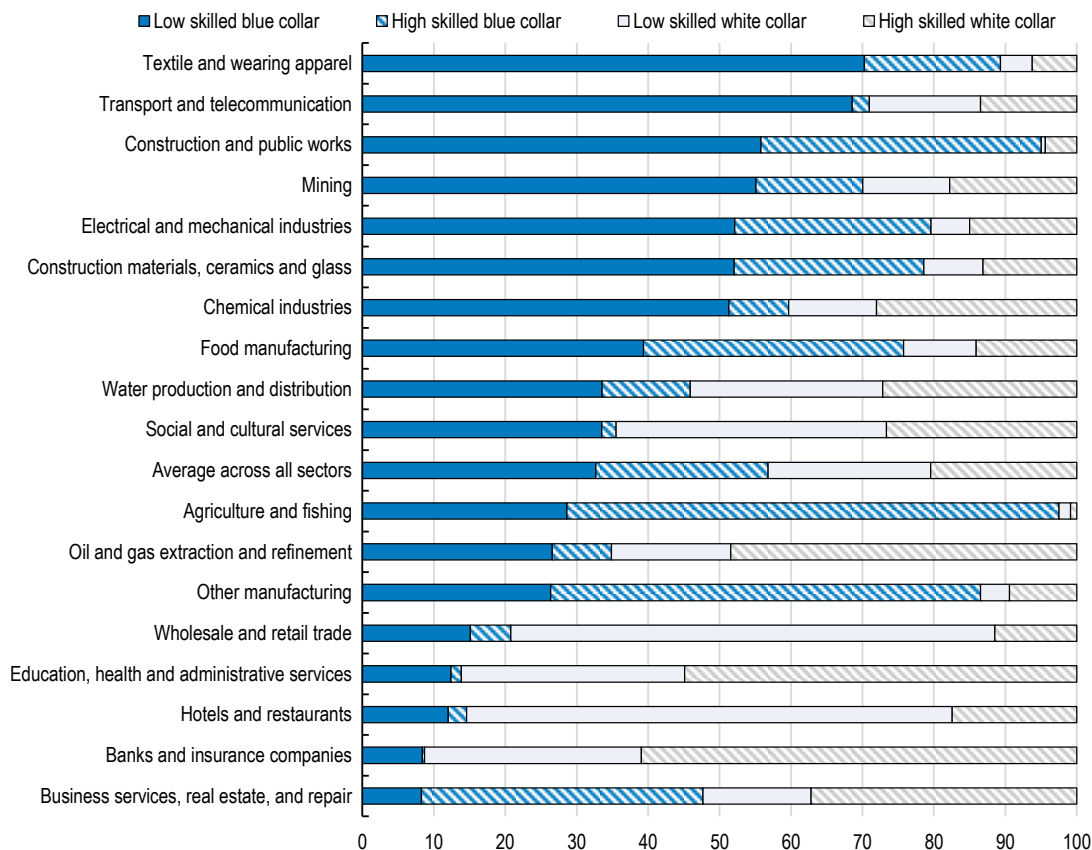


Source: OECD calculations based on data from the Labour Force Survey of the National Institute of Statistics.

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Figure 2.9. Many manufacturing industries predominantly create low-skilled blue collar jobs

Share of workers by occupation category and by activity, 2017 (in %)



Note: According to the International Standard Classification of Occupations (ISCO 08) low-skilled blue collar workers comprise plant and machine operators and assemblers and elementary occupations. High-skilled blue collar workers include skilled agricultural and fishery workers and craft and related trades workers, whereas low-skilled white collar workers include clerks and service workers and shop and market sales workers. High-skilled white collar workers include legislators, senior officials and managers, professionals as well as technicians and associate professionals.

Source: OECD calculations based on data from the Labour Force Survey of the National Institute of Statistics.

StatLink  <https://stat.link/qyvi4c>

Formal job creation in the private sector has been dominated by offshore firms, which are predominantly export-oriented and enjoy preferential conditions in terms of taxes, tariffs, administrative procedures, and access to customs and trade infrastructure (Joumard, Dhaoui and Morgavi, 2018^[13]; World Bank, 2020^[14]). Offshore firms account for 47% of formal sector jobs created by the private sector from 2005 until 2019, although they represent only 4% of registered firms (OECD calculations based on RNE firm level data). Employment in offshore firms has grown by 60% from 2005 until 2019 and they increased their share in total formal private sector employment to 35%. In contrast, employment in onshore firms, which primarily serve the domestic market and are shielded from international and domestic competition by significant tariff and non-tariff barriers, administrative barriers to firm entry and weak competition enforcement, has only grown by 28% since 2005 (World Bank, 2020^[14]). Formal job creation in onshore firms has been driven by wholesale and retail trade, food manufacturing, and private education and health services (Figure 2.10).

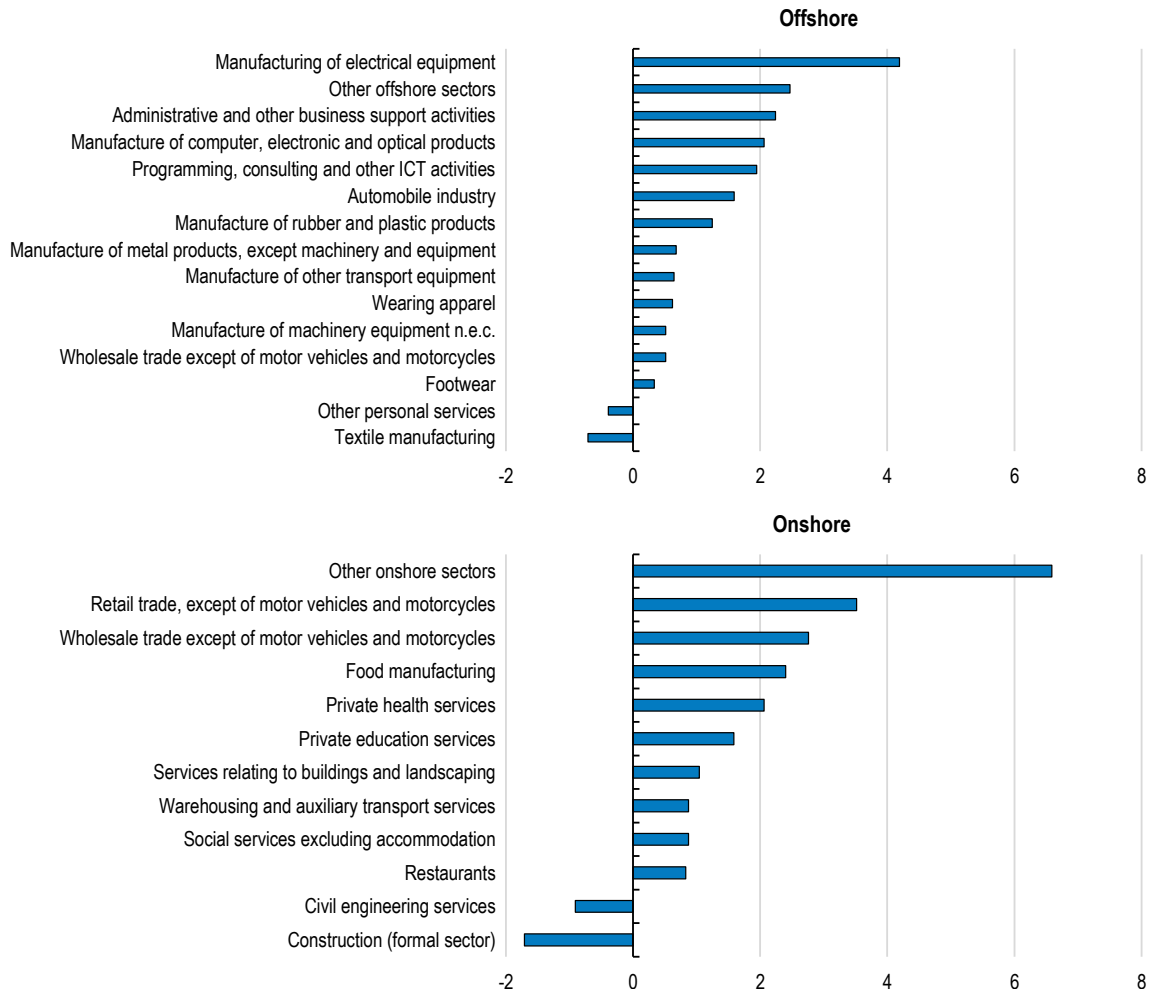
The offshore sector is shifting towards more skill-intensive and higher value-added activities, such as manufacturing of electrical and ICT equipment, as well as ICT and business services, which have strongly increased employment since 2005 (Figure 2.10). The 1998 association agreement with the European Union has improved access to better quality inputs and capital goods for manufacturing firms and opened

up potential markets for higher value-added products (European Commission, 2021^[15]). This has particularly benefitted the mechanical and electrical industries, which have increased their share in GDP from 3% in 2002 to 5.4% in 2019, and their share in total merchandise exports from 19% to 47%.

Textile and wearing apparel industries, which are intensive in low-skilled labour and are characterised by low labour productivity, have traditionally dominated the offshore sector, and still account for 44% of total offshore employment in 2019 (Figure 2.7, OECD calculations based on RNE firm level data). Due to the phasing-out of the Multi-fibre Arrangement and increasing competition from China, their share in GDP has declined from 5.4% in 2002 to 2.5% in 2019, and their share in total merchandise exports from 49% to 21%, respectively (OECD calculations based on data from INS). However, these industries are also undergoing structural change towards higher value added activities, as employment in wearing apparel and footwear has increased, whereas employment in the production of textile fibres has strongly decreased (Figure 2.10). The unit value of Tunisian textile exports to the EU is among the highest across EU importers (Plank and Staritz, 2014^[16]).

Figure 2.10. Formal job creation in offshore vs. onshore firms

Contribution to total formal employment growth in offshore and onshore firms by activity (in percentage points), 2005-2019



Note: Formal employment in the private sector grew by 38% from 2005 until 2019. Offshore firms accounted for 47% of these jobs, and onshore firms for 53%.

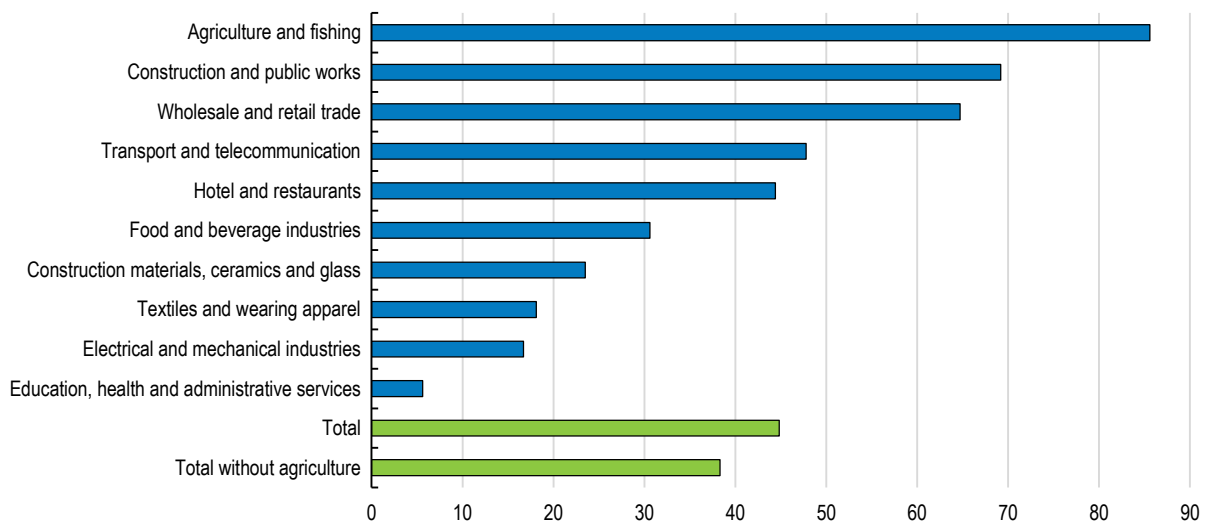
Source: OECD calculations based on firm level data from the Répertoire National des Entreprises (RNE).

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Informality, which is defined as working without social security card or at firms not registered with the tax administration, has increased, particularly in the onshore sector. When comparing sectoral employment growth from firm level data, which include only formal private sector employment, with data from the labour force survey, which includes formal and informal employment, it becomes clear that a significant share of job creation in the onshore sector has been informal. In particular, construction, retail, and hotels and restaurants have increased informal employment (Figure 2.8, Figure 2.10). Since the mid-2000s, the share of informal employment in the economy has increased to 45% in 2019 (INS, 2020^[17]; CRES, 2016^[18]). The informality rate is highest in agriculture with 86%, followed by construction and public works with 69% and retail with 65% (Figure 2.11). Even in manufacturing industries dominated by offshore firms, such as textile and wearing apparel and mechanical and electrical industries, informality rates are higher than 15%. Jobs in the public sector are mostly formal, contributing to their high attractiveness for young tertiary graduates (Boughzala, 2019^[1]).

Figure 2.11. Informality is high in many sectors

Share of informal employment in total employment by activity, 2019 (in %)



Note: Informal employment is defined as working without social security card or at firms not registered with the tax administration.

Source: (INS, 2020^[17]).

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Informal employment is particularly concentrated among men below 30 who have not completed secondary education (INS, 2020^[17]). They mostly work in small informal firms, receive low wages, have no access to social security, and suffer from difficult working conditions due to non-compliance with health and safety standards (Boughzala, 2019^[1]). Although in many EMEs, informal work might help young people to transition to the formal labour market, transition rates from informal to formal jobs have been relatively low in Tunisia (Angel-Urdinola, Nucifora and Robalino, 2015^[4]). The share of informal employment is very high in border regions, where smuggling activities and illicit retail trade are widespread (Ayadi et al., 2013^[19]; CRES, 2016^[18]). Incentives for illicit cross-border trade are high as price differentials for many goods are large due to significant differences in subsidy and tax systems and high tariff and non-tariff barriers in Tunisia (Ayadi et al., 2013^[19]). Moreover, weak enforcement capacities encourage smuggling activities and informal employment.

Even in the formal sector, employment conditions are often precarious. More than 40% of young women and men work in low-skilled blue collar jobs, with women predominantly working in assembly activities in textile and mechanical and electrical industries, and young men as non-qualified labourers (Boughzala, 2019^[1]). More than 55% of the young are employed on the basis of oral work contracts, which are of short duration (Boughzala, 2019^[1]). The share of open-ended contracts is low, as many firms in low-skill intensive sectors avoid high firing costs and tap a large pool of unemployed or inactive youth (Angel-Urdinola, Nucifora and Robalino, 2015^[4]). Employed tertiary graduates have generally better working conditions and earn higher wages than lower-skilled workers, but often have to accept jobs different from their field of study and for which they are overqualified. This concerns particularly graduates from technical tertiary education and humanities (Boughzala, 2019^[1]).

Improving the business environment to raise productivity and create better job opportunities

To reap the potential that the increasing number of secondary and tertiary education graduates could have for economic growth, structural reforms are needed to allow for a more dynamic domestic business sector and the development of higher-value added activities. Real wages and living standards can only rise in the long-run, if productivity increases. This requires more and better investment in physical and human capital, but also a more efficient allocation of labour and capital to more productive firms and sectors (Haltiwanger et al., 2013^[20]; Hsieh and Klenow, 2009^[21]).

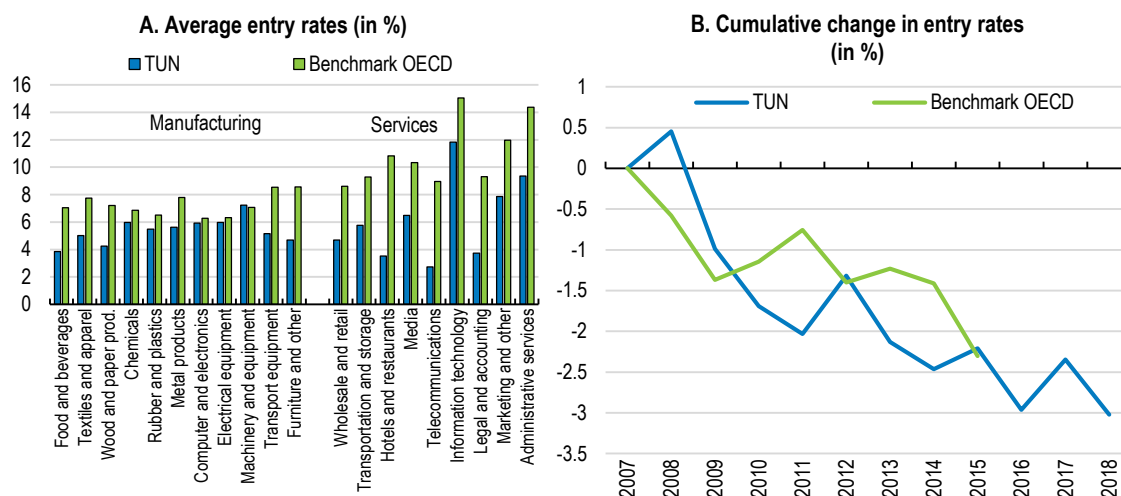
Barriers to firm entry and anti-competitive regulation reduce competition and weaken incentives for innovation and improvements in production processes among incumbent firms (Morsy, Bassem and Selim, 2018^[22]). Authorisation regimes for entering a new market or offering a new product or service are numerous and involve opaque and lengthy procedures, discouraging entrepreneurship and investment (World Bank, 2020^[14]). The tax system is over-complex due to many different subsidy and tax-incentive regimes, leading to high administrative burden and discouraging market entry and formalisation, particularly for smaller firms (OECD, 2018^[8]). The competition framework and enforcement capacities of the Competition Council are weak, making it more difficult to fight anti-competitive practices of incumbent firms (Morsy, Bassem and Selim, 2018^[22]). In addition, SOE prevalence extends to non-strategic sectors and price controls and producer subsidies distort the functioning of markets hindering market entry and competition (see chapter 1).

Analysis conducted for this survey finds that firm entry rates in Tunisia are low compared to benchmark countries and have decreased over the last decade, particularly in protected sectors dominated by onshore firms (Figure 2.12). This has coincided with a decreasing share of firms innovating new products or production processes and investing in physical and human capital or research and development (Figure 2.13). Labour productivity of firms has decreased across all sectors. High entry barriers and administrative burden also contribute to informality, as smaller and less productive firms cannot afford employing the necessary personnel to comply with costly administrative procedures and choose to operate in the informal sector.

To foster competition and innovation and to raise productivity and formal job creation, it is crucial to lower entry barriers and administrative burden related to authorisation requirements and complex tax incentive and subsidy regimes (World Bank, 2020^[14]). The ongoing digitalisation of many administrative procedures is a step in the right direction, but needs to be accompanied by a reduction of prior-authorisation and licensing requirements and the introduction of “silent is consent” rules whenever possible (see chapter 1). Moreover, centralising administrative procedures for opening a business through one-stop shops or single windows has successfully reduced administrative burden for firms and facilitated market entry in many countries, for example in Portugal (OECD, 2019^[23]; OECD, 2020^[24]). This needs to be complemented by a simplification of the tax system, as numerous tax incentive and subsidy regimes create heavy administrative burden particularly for small firms (see chapter 1). In addition, strengthening competition

enforcement, mainly through ensuring independence and sufficient staffing of the Competition Council, would help reducing anti-competitive behaviour of incumbents (see chapter 1) (OECD, forthcoming^[25]).

Figure 2.12. Firm entry rates are low and declining



Note: Panel A plots average entry rates by SNA A38 industries. Entry rates are computed as the ratio of entering firms in year t divided by the average number of firms in years t and $t-1$. Averages are computed over the period 2007-2018 for Tunisia and 2007-2015 for the benchmark country group (Costa Rica, Hungary, Latvia and Turkey). This figure is based on data for manufacturing and non-financial market services. Panel B reports the cumulative change in average entry rates, whereby the average refers to the average within-sector changes of entry rates by country. Each point represents cumulative change in percentage points since 2007. Data may be preliminary and differ from official data. Source: OECD DynEmp database (<https://www.oecd.org/sti/dynemp.htm>).

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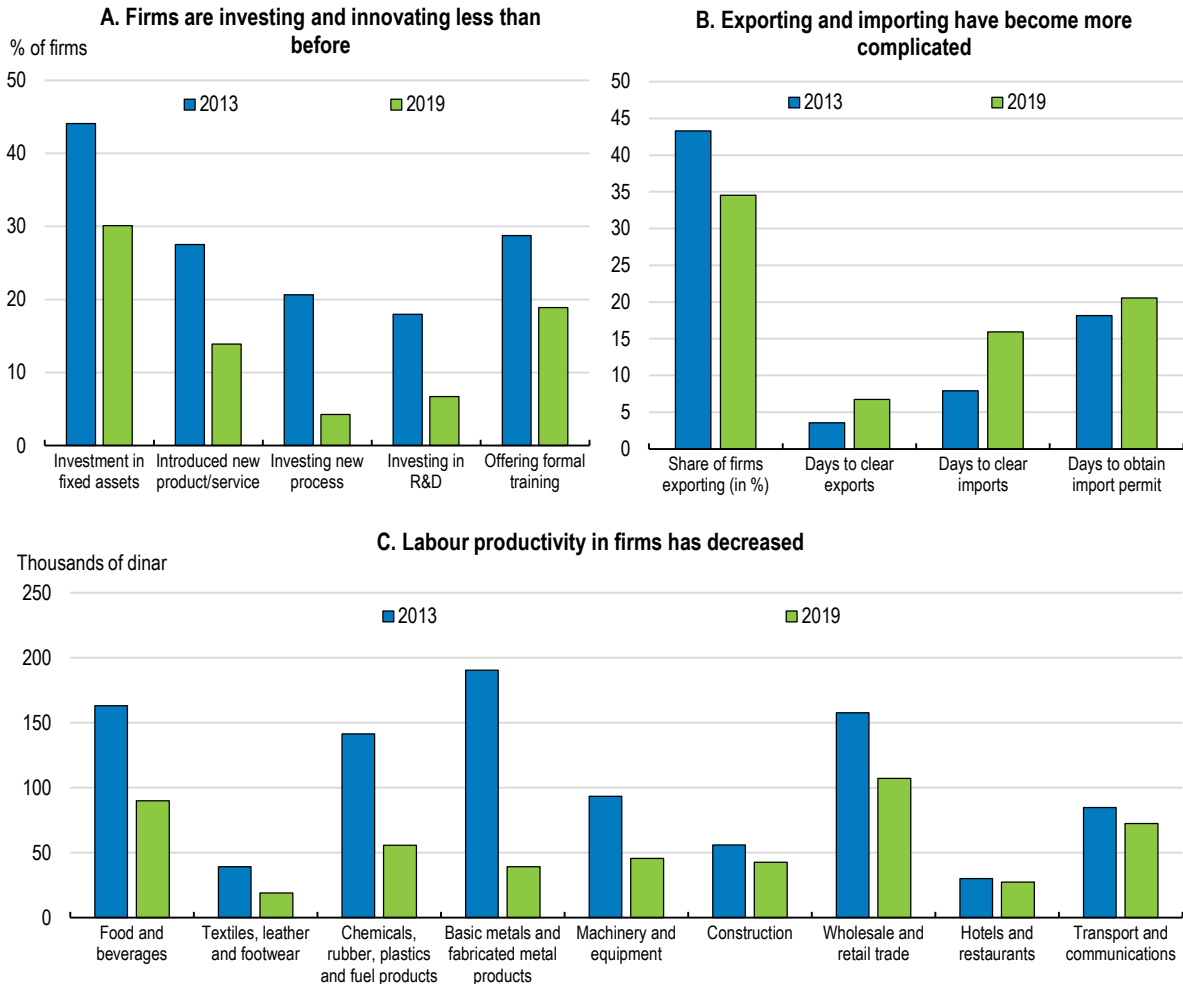
Exporting and importing have become more complicated for firms in Tunisia (Figure 2.13). Weak transport and digital infrastructure hinder the domestic and international integration of the economy, which is complemented by high tariffs and non-tariff barriers protecting domestic firms (see chapter 1). In addition to raising production costs for all firms, these import barriers also reduce competitive pressures on incumbent firms, lower innovation incentives and hinder the reallocation of workers and capital to more productive firms and activities (Morsy, Bassem and Selim, 2018^[22]; Bloom, Draca and Van Reenen, 2016^[26]).

In particular, lengthy and complex administrative procedures for non-automatic import licences and custom clearance significantly raise import costs and create opportunities for political interferences and corruption (Figure 2.13) (World Bank, 2020^[14]). Although the ongoing digitalisation and simplification of custom and licensing procedures is a significant step forward, automatic licensing combined with ex-post controls should be introduced for all products. Non-automatic import licensing procedures and related controls are meant to ensure the health and safety of Tunisian consumers, but the selection of products subject to these requirements is open to discretion and does not follow clear criteria based on risk-assessment procedures, which can open the door for protectionist motives (Grundke and Moser, 2019^[27]). Moreover, foreign conformity assessment and product quality certificates are not recognised and many imported products are required to receive a domestic conformity assessment certificate or authorisation, entailing lengthy and complex administrative procedures (European Commission, 2019^[28]). Introducing automatic import licenses for all products combined with transparent ex-post controls based on risk-assessment procedures can significantly reduce import costs and ensure the health and safety of consumers (Grundke and Moser, 2019^[27]; OECD, 2019^[29]).

Similarly, complex and discretionary export licensing procedures pose a major obstacle for many agricultural and food producers (World Bank, 2020^[14]). Automatic export licensing procedures, which are


the norm for offshore firms, have been introduced recently for onshore firms, which have a recognised product quality testing facility or quality label. However, many small firms cannot meet these requirements, which complicates their access to export markets. Improving the domestic product quality testing and certification system and its international recognition, as well as risk-control systems, and introducing automatic export licensing procedures combined with ex-post controls for all firms, could significantly contribute to raising agricultural and food exports and creating jobs in rural areas (Rudloff, 2020^[30]). Improving mutual recognition of conformity assessment procedures and certificates with important trade partners, for example in the context of comprehensive trade agreements, could be an important step to facilitate exporting and importing for onshore firms (Rudloff, 2020^[30]).

Figure 2.13. Business dynamism and firm productivity have decreased



Note: Labour productivity at the firm level is measured as revenues divided by employment, whereby nominal revenues are adjusted for inflation using the consumer price index.

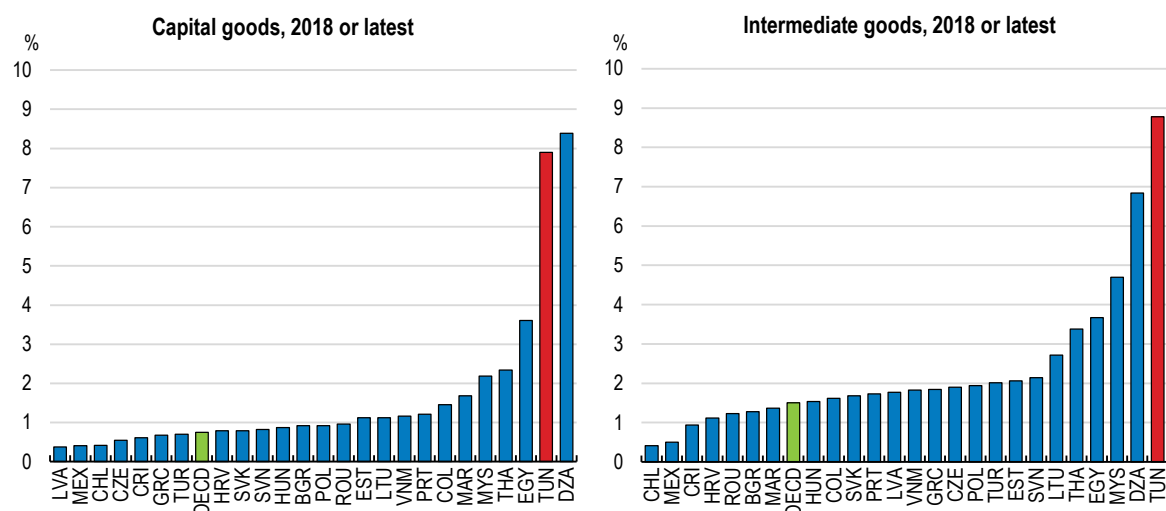
Source: World Bank enterprise surveys for Tunisia.

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Average tariffs on intermediate inputs and capital goods are high, raising input prices and reducing access to high-quality inputs and capital goods (Figure 2.14). This is mainly driven by high tariffs on imports from China, as tariffs for manufacturing imports from the EU have been reduced since 1998 in the context of the EU association agreement (European Commission, 2021^[15]). However, some imports from the EU, such as motor vehicles and parts, are still subject to high excise taxes, import quotas, and non-automatic import or distribution licenses (OECD, 2019^[31]; European Commission, 2019^[28]). Improving sourcing

options for intermediate inputs and capital goods would lower production costs and allow domestic firms to upgrade their production processes through technology embedded in new machinery (Goldberg et al., 2009^[32]; Amiti and Konings, 2007^[33]). Firm-level analysis conducted for this report finds a significant positive relationship between the use of imported intermediate inputs and total factor productivity of Tunisian firms (Box 2.1) (Cassimon and Grundke, forthcoming^[12]). Moreover, firms that use technology licensed by a foreign company have a 5.6% higher total factor productivity, an outcome that emphasises the importance of reducing import barriers for facilitating technology diffusion.

Figure 2.14. Tariffs on capital and intermediate goods are high



Note: Average tariffs of capital goods and intermediate goods for Tunisia refer to the year 2016.

Source: WITS database.

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Box 2.1. A brief description of the firm-level analysis

Firm-level data for Tunisia and the years 2013 and 2019 from the World Bank Enterprise Survey is used to estimate the total factor productivity (TFP) of firms. Sector-specific production functions are estimated using information on revenue, employment, capital and intermediate input use (Cassimon and Grundke, forthcoming^[12]). The residuals of the estimated production functions are taken as a measure for TFP and to make the TFP estimates comparable across industries, they are standardised by the industry mean. The TFP estimation was only possible for five aggregated industries, as the sample does not include sufficient information on firms in other industries.

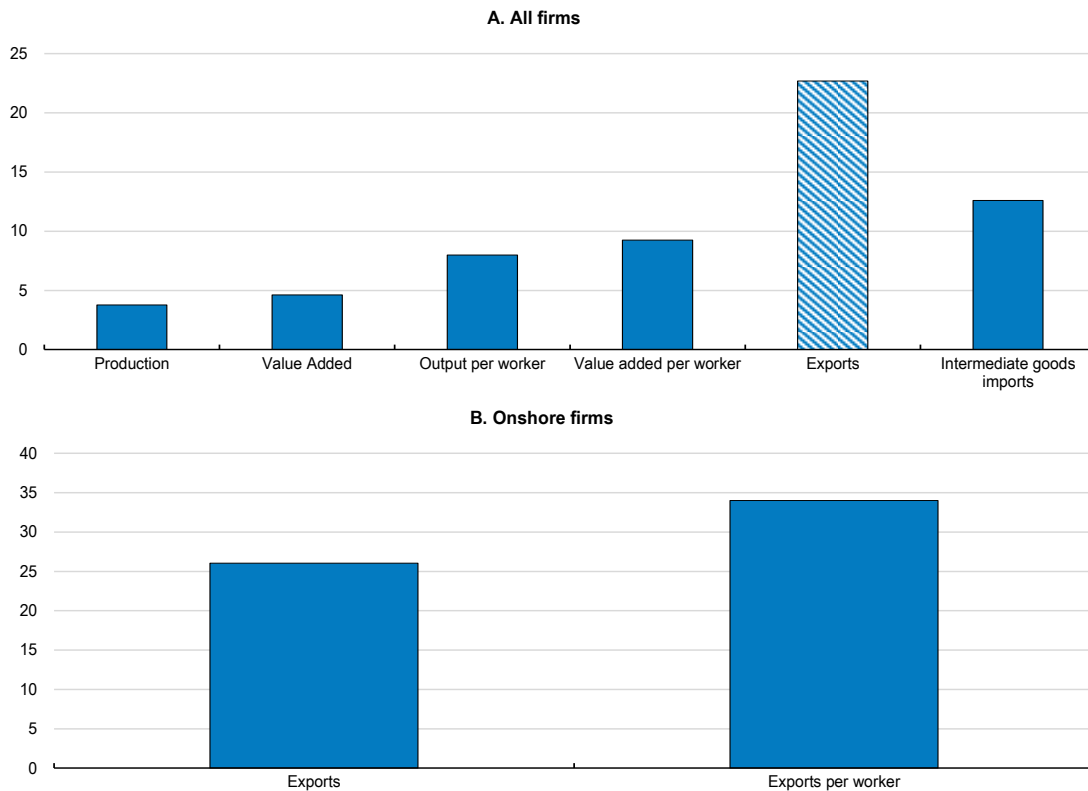
To investigate how much the allocation of resources across firms contributes to aggregate sectoral productivity, this study uses the decomposition suggested by Olley and Pakes (1996) (Cassimon and Grundke, forthcoming^[12]). To analyse the determinants of firm-level productivity in Tunisia, OLS regressions for the dependant variable log of TFP are estimated for the pooled sample of firms. Besides the different variables of interest, these regressions control for a range of independent variables such as age and size of the firm, foreign ownership, public ownership, population size of the firm location, as well as fixed effects for the sector of activity and the year of the observation (Cassimon and Grundke, forthcoming^[12]). As capital stock is not observable for some firms, the same regressions are estimated using labour productivity as the dependent variable and results for this larger sample of firms are very similar.

Further analysis using Tunisian sectoral panel data shows that a reduction in input tariffs by 50% would raise labour productivity (measured as value added per worker) by around 10% (Figure 2.15). Achieving these productivity gains would boost exports, particularly in onshore firms, where exports would increase by more than 25% (Figure 2.15). Offshore firms are exempted from tariffs which is why input tariff changes do not significantly affect their exports (Cassimon and Grundke, forthcoming^[12]; Joumard, Dhaoui and Morgavi, 2018^[13]).

For onshore firms, the access to cheaper and higher quality inputs and capital goods would lead to significant productivity gains and stronger competitiveness, which is the basis for improvements in real wages. Many domestic producers of intermediate goods would react to the stronger foreign competition by upgrading their production processes and improving their products, and only the least productive ones would lose market share (Amiti and Khandelwal, 2013^[34]; Topalova and Khandelwal, 2011^[35]; Pavcnik, 2002^[36]). Stronger international competition in services sectors could also reduce prices and improve quality increasing the productivity of manufacturing sectors using these services as inputs (Hoekman and Mattoo, 2008^[37]; Arnold et al., 2015^[38]; Eppinger, 2019^[39]). Moreover, there is evidence that increased importing activities of firms can help building foreign networks and acquiring knowledge about foreign markets, which is crucial for increasing export activities (Blalock and Veloso, 2007^[40]; He and Dai, 2017^[41]).

Figure 2.15. Reducing input tariffs would increase productivity and exports, particularly in onshore firms

Increase of economic activity and exports (in %) when average input tariffs are cut by 50%



Note: The simulations are based on econometric analysis conducted for this survey (Cassimon and Grundke, forthcoming^[12]). Using sectoral panel data from 2005 until 2015, the log of outcome variables is regressed on average input tariffs as well as sector and year fixed effects. Using these coefficients, a partial equilibrium exercise was conducted, whereby a 50% input tariff cut is simulated at the sample average of input tariffs for the latest available year in the sample (2016). Shaded bars indicate that the coefficient that underlies the simulations is not significant at the 5% level. Data on production and value added are not available for onshore vs. offshore firms, which is why regressions for these dependent variables in Panel A could not be estimated separately for onshore vs. offshore firms.

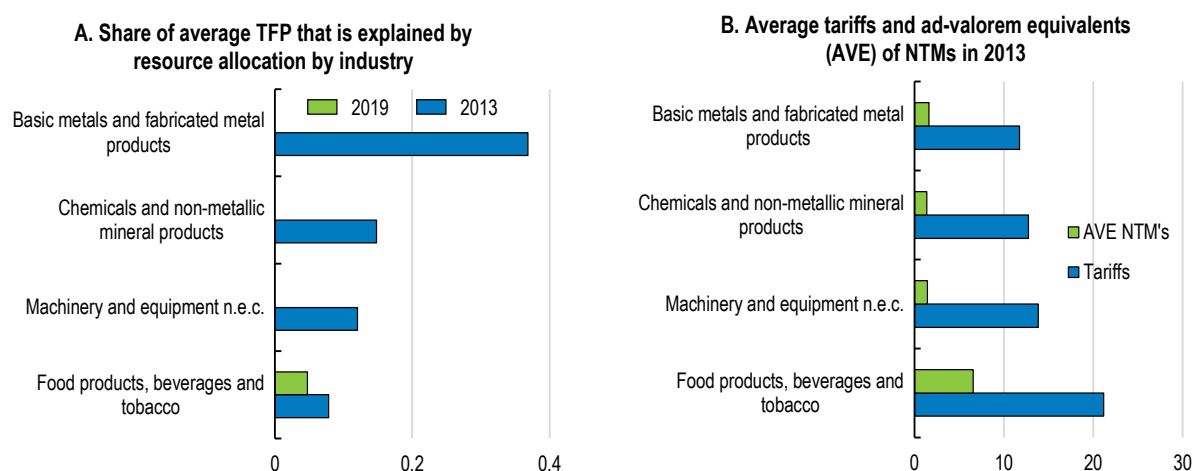
Source: OECD calculations based on OECD TiVA, INS and RNE database.

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Opening up to trade will bring long-term productivity, employment and wage gains, but is likely to trigger structural changes in the economy. These are a crucial element of the productivity benefits, but can raise challenges in the transition. Firms need to increase product quality and reduce high prices that result from low domestic competition (Amiti and Khandelwal, 2013^[34]; De Loecker et al., 2016^[42]). While this leads to a revitalising effect on the more productive domestic firms, which seize newly arising export opportunities, expand, invest in new technologies and hire new workers, some low-productivity firms leave the market, freeing resources for the more productive firms and sectors to grow (Melitz, 2003^[43]; Pavcnik, 2002^[36]; Criscuolo, Gal and Menon, 2014^[44]; Araújo and Paz, 2014^[45]). It is precisely this reallocation process that will allow capital and labour to flow to more productive sectors or firms where new and better-paying jobs can be created (Brandt, Van Biesebroeck and Zhang, 2012^[46]; Criscuolo, Gal and Menon, 2014^[44]). A significant share of productivity growth in advanced economies can be attributed to these reallocation effects (Hsieh and Klenow, 2009^[21]).

Analysis conducted for this survey using firm-level data for Tunisia is also consistent with the international evidence that shielding domestic producers from foreign competition tends to cement existing industry structures and hampers the reallocation of resources towards their most productive use (Figure 2.16, Box 2.1). In food manufacturing, where tariffs and non-tariff measures (NTMs) are relatively high, the allocation of resources across firms only explains 5% of average sectoral productivity, which is much lower than in metal manufacturing, which is characterised by lower import protection. This indicates that in food manufacturing resources are trapped in low-productivity firms, while they should move to more productive usage in higher productivity firms.

Figure 2.16. Allocative efficiency is low in highly-protected activities



Note: A quantitative measure of how much the allocation of resources across firms contributes to aggregate total factor productivity (TFP) is the decomposition suggested by Olley and Pakes (1996). In this decomposition, the covariance term measures allocative efficiency, or the extent to which firms with greater efficiency have a greater market share (Olley and Pakes, 1996^[47]). Due to low sample size, the estimations could not be conducted for metal, chemical, and machinery and equipment industries for the year 2019 (Cassimon and Grundke, forthcoming^[12]). Panel B shows average tariffs for the year 2013 as well as ad-valorem equivalents (AVE) of non-tariff measures (NTMs) estimated for the year 2015 following (Cadot, Gourdon and van Tongeren, 2018^[48]).

Source: OECD calculations based on the World Bank Enterprise survey; WITS database; and (Cadot, Gourdon and van Tongeren, 2018^[48]).

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Exposing protected sectors to more domestic and international competition would not affect all firms in the same way. Stronger competition would likely drive some low-productivity firms out of the market, but at the same time, the high productivity dispersion in food manufacturing suggests that there are also firms in the sector that could probably withstand foreign competition (Cassimon and Grundke, forthcoming^[12]). External

competition would lead these to upgrade their production processes through more advanced technologies, increase product quality and create new job opportunities (Pavcnik, 2002^[36]; Criscuolo, Gal and Menon, 2014^[44]). The most productive food manufacturing firms could start exporting to niche markets in advanced economies or to regional peers. As high informality and low skills of agricultural workers in the upper segment of the supply chain have so far complicated the establishment of a modern supply chain management, increasing external pressure to introduce quality control and certification systems could be key to open new export markets (Maertens and Swinnen, 2009^[49]). This could end up providing new employment opportunities within the sector, as recent pilot projects in the dairy supply chain have shown.

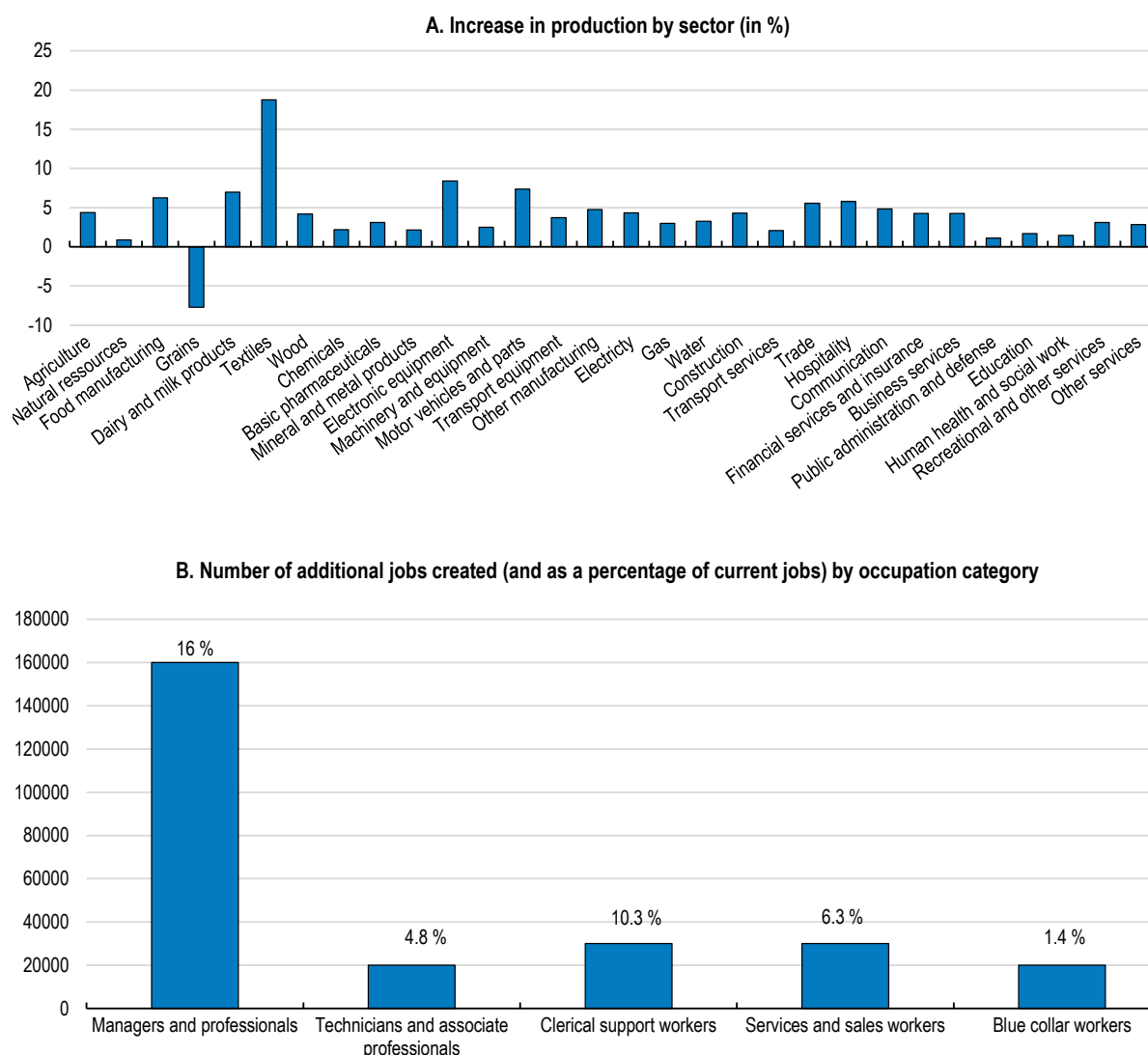
The reallocation processes triggered by more domestic and international competition would require some workers to move from less to more productive firms within the same sector. As producing the same type of products usually requires a similar set of skills, the need for training to help displaced workers move to other firms in the same sector is likely to be smaller than for moves to firms on other sectors (OECD, 2019^[50]; Bechichi et al., 2018^[51]). Nevertheless, firms within the same sector differ in their production processes and the type of technology they use (Andrews, Criscuolo and Gal, 2015^[52]). Increasing technology adoption among highly productive frontier firms will change the task-content of occupations and require workers who move to more productive firms to update their skills (Bechichi et al., 2019^[53]; Hummels et al., 2012^[54]; Hummels, Munch and Xiang, 2018^[55]). Workers that stay in their jobs also need to update their skills, as the rising digitalisation of production processes changes the task-content of jobs and the skills required to perform them (Spitz-Oener, 2006^[56]; OECD, 2019^[50]). The digitalisation and globalisation of production processes increasingly requires a good mix of cognitive and social-interactive skills (Grundke et al., 2018^[57]; Hummels, Munch and Xiang, 2018^[55]).

As the current structure of import protection varies considerably across different sectors of the economy, opening up to trade would have heterogeneous effects across sectors (Cassimon, Grundke and Kowalski, forthcoming^[58]). Simulations for this survey using the OECD METRO general equilibrium model show that a unilateral cut in tariffs and NTMs by 50% would lead to an expansion of production and employment in electronic equipment, automobile industries, textile, agriculture and food manufacturing as well as ICT and business services and tourism (Figure 2.17). Better access to inputs and capital goods would raise productivity and export competitiveness (Cassimon, Grundke and Kowalski, forthcoming^[58]). The production of grains would decrease, as this sector is currently strongly protected and Tunisia has no comparative advantage in grains production. However, other agricultural activities as well as food manufacturing would significantly expand and absorb displaced workers from grain production.

Trade opening would strongly raise labour demand and reduce unemployment (see chapter 1) (Figure 2.17). In particular, demand for high skilled labour will increase, as 160 000 additional jobs are created for managers and professionals, an increase in employment in these occupations by 16%. The number of jobs for clerical support workers and services and sales workers will increase by 30 000 each, and for technicians and associate professionals as well as blue-collar workers by 20 000 each. Many currently unemployed workers would have to move to newly created jobs in sectors and occupations, where they have not worked before (Cassimon, Grundke and Kowalski, forthcoming^[58]). This necessary reallocation of labour to expanding sectors will require substantial investments into re-training of workers, as skill-requirements and task-content differ substantially between sectors and occupations (Bechichi et al., 2019^[53]). Identifying sectors and occupations with large expected training needs can help to target training and education policies effectively. At the same time, identifying those sectors and occupations with particularly strong future employment potential may help to guide the choice of training content.

Figure 2.17. Opening up to trade would have heterogeneous effects across sectors and reduce unemployment

OECD-METRO model simulation of a decrease in tariffs and non-tariff measures by 50%



Note: Simulations reflect high unemployment in Tunisia and assume that wages are fixed and rising labour demand is satisfied by existing labour supply including the pool of unemployed. Tariffs and non-tariff measures (NTMs) are cut by 50% on a unilateral basis.

Source: OECD calculations based on the OECD METRO model (Cassimon, Grundke and Kowalski, forthcoming^[58]).

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In particular, ICT and business services, which are high-value added activities, have the potential to create good quality jobs for a large number of tertiary graduates (Box 2.2). Lowering restrictions on services trade through bilateral or regional trade agreements, particularly with African partners, but also with the EU, could be one important policy lever to further raise services exports and demand for high-skilled labour. Moreover, formal job creation in offshore firms has almost exclusively taken place in coastal regions in the past, as industrial policies and lower trade costs have attracted foreign direct investment to these regions (OECD, 2015^[7]; World Bank, 2020^[14]). Investing in digital infrastructure in interior regions and attracting ICT and business services activities could be one solution to lower high unemployment of tertiary graduates in interior regions.

Box 2.2. ICT services have a large potential to create good quality jobs in Tunisia

Information and communication technology (ICT) services have made a significant contribution to job creation since the early 2000s, in particular for tertiary graduates (Figure 2.8, Figure 2.10). The number of formal jobs in IT services has risen from 2 400 in 2007 to 24 000 in 2019 (OECD calculations based on RNE data). The large majority of jobs has been created in offshore firms (78%), which mainly export to the European market. Labour productivity is high compared to other sectors (Figure 2.7) and exports have strongly increased representing around 10% of total services exports in 2018 (according to BCT balance of payments data).

The comparative advantage of Tunisia lies in proximity to the European market and the abundant supply of highly-educated youth. Moreover, the digital infrastructure has significantly improved in recent years, raising the penetration rate for fixed and mobile internet access to 71% and 78%, respectively, in 2019 (UNESCO, 2021^[59]). However, access to fast internet is still problematic in many interior regions, where unemployment of young tertiary graduates is high (Figure 2.3, Figure 2.6). Improving the digital infrastructure and reducing access costs through more competition in telecommunication markets is crucial to unlock the job creation potential of ICT services in interior regions (Figure 2.12).

In addition to digital infrastructure, other framework conditions need to improve. For onshore firms, which do not benefit from tariff and tax exemptions, nor from simplified customs procedures provided to offshore firms, importing ICT equipment is still relatively costly (Figure 2.14). Improving access to intermediate inputs and capital goods by halving tariffs and non-tariff measures would raise production and value added in ICT services by around 5%, and employment by around 7% (Figure 2.17). Job opportunities would mostly arise in high-skill intensive white-collar jobs, such as managers, professionals, technicians and associate professionals, but also clerks and service workers (Cassimon, Grundke and Kowalski, forthcoming^[58]).

Moreover, lowering market entry barriers through reducing prior-authorisation requirements and administrative burden and simplifying the tax and subsidy system is crucial to foster competition, innovation and job creation. Raising competition is particularly important in the telecommunication sector, as better and cheaper access to the internet is a precondition for the development of ICT services (Figure 2.12). The 2018 start-up act improves the framework conditions for ICT services start ups, as it simplifies administrative burden, facilitates operations in foreign currency and provides income support for founders during the first year of operations. However, it also introduces new special tax incentives, which risk further complicating the tax system. Improving access to finance for young and innovative firms is another key issue, which is shared by young firms in other sectors and discussed in the first chapter of this report.

Many firms in ICT services are also regularly complaining that they have difficulties finding employees with the right skills set, although unemployment among graduates in the corresponding fields of studies is high (UNESCO, 2021^[59]; IFC and UTICA, 2017^[60]). This is hindering the development of the sector and is due to the migration of better-qualified graduates to Europe as well as structural weaknesses in the education and training system, which are discussed in the third section of this chapter.

Agriculture and food manufacturing could also play a crucial role for creating more and better jobs in rural areas. Thereby, comprehensive trade agreements are key to open up new export markets for agricultural products, but need to be accompanied by domestic improvements in supply chain management and quality assurance through tracing, testing and certification procedures (Box 2.3, see also above) (European Commission, 2019^[28]; European Commission, 2021^[15]; Rudloff, 2020^[30]). High informality and low skills of agricultural workers in the upper segment of supply chains have so far complicated quality assurance and many firms face difficulties to enter foreign markets due to a lack of recognised conformity assessment certificates (Rudloff, 2020^[30]). Firm-level analysis conducted for this report shows that Tunisian firms with an internationally recognised quality certification for their products have on average a 2.2% higher total

factor productivity compared to firms without such a certification (Box 2.1) (Cassimon and Grundke, forthcoming^[12]). Improving supply chain management and domestic quality testing and certification procedures requires strong coordination and cooperation among different stakeholders (Box 2.3).

To realise the potential of agriculture in Tunisia, it is also crucial to reduce existing market distortions, such as price controls, subsidies and distribution and export licensing regimes, to set the right incentives for agricultural and food producers (OECD, 2019^[31]; Rudloff, 2020^[30]). Improving the functioning of land markets and reducing the share of unutilised arable land are also key to incentivise firm entry and create more and better jobs in rural areas.

Box 2.3. Upgrading agricultural value chains in Tunisia – the case of olive oil

Olive and olive oil production, which is widespread throughout the Mediterranean region, plays an important social, economic and environmental role in Tunisia. Olive area accounts for one-third of the country's total arable land, growers exceed 300 000 and an estimated one million people depend on the sector. Long a major exporter of olive oil in bulk, Tunisia has recently emerged as exporter of branded extra virgin oil and of certified organic oil and won top prizes in prestigious competitions such as BIOL.

Coordination across the whole value chain has been fundamental for this upgrading in terms of quality, efficiency and competitiveness. Freshly-picked olives have to be processed within a maximum of 24 hours and even minor damage to olives at the time of harvest, or preventing them from “breathing” during transport, can trigger enzymatic reactions, that reduce antioxidants and generate negative aromas. Farmers who do not possess their own mills need to organise logistics and transport to meet the tight schedule. Other technical challenges have been improving orchard management, irrigation and harvesting techniques, as well as organising mills and extraction systems to ensure traceability and implement quality certification systems to satisfy the requirements of international buyers and large retailers. Innovation such as underground drip irrigation systems are producing very good results, both in terms of yields and quality, while significantly reducing the stress on water.

The EBRD and FAO have facilitated a public-private dialogue to build a shared vision and roadmap among industry stakeholders. A quality consortium has been created and promotion and marketing campaigns held in new markets in Asia and the Americas. EBRD and FAO are helping a group of SMEs gain high-level food safety certifications like the British Retail Consortium (BRC). These efforts must be consolidated through further support geared towards the many SMEs that still are far from meeting BRC standards.

The 2019/20 campaign broke records, with Tunisia producing an estimated 350 000 tonnes of olive oil – a 2.5 times annual increase. Even before the pandemic, which coincided with a fall in production to 140 000 tonnes due to the trees' cycle, there were serious market imbalances, with excess supply, drops in both domestic and export prices and difficult access to finance. The crisis has exacerbated these vulnerabilities. Financial instruments like factoring would allow to improve cash flow support, while enhanced financial inclusion would allow smaller companies to access credit. Tunisia is by far the main supplier of the EU market, with a 86% volume share in October 2020-March 2021. Imports under the zero-duty quota, negotiated in the 1995 ALECA, are fully allocated and Tunisia requested a revaluation from 56 700 tonne to 100 000 tonne (European Commission, 2019^[28]). In 2020, exports to the US jumped seven-fold as result of the retaliatory trade sanctions on Spanish olive oil.

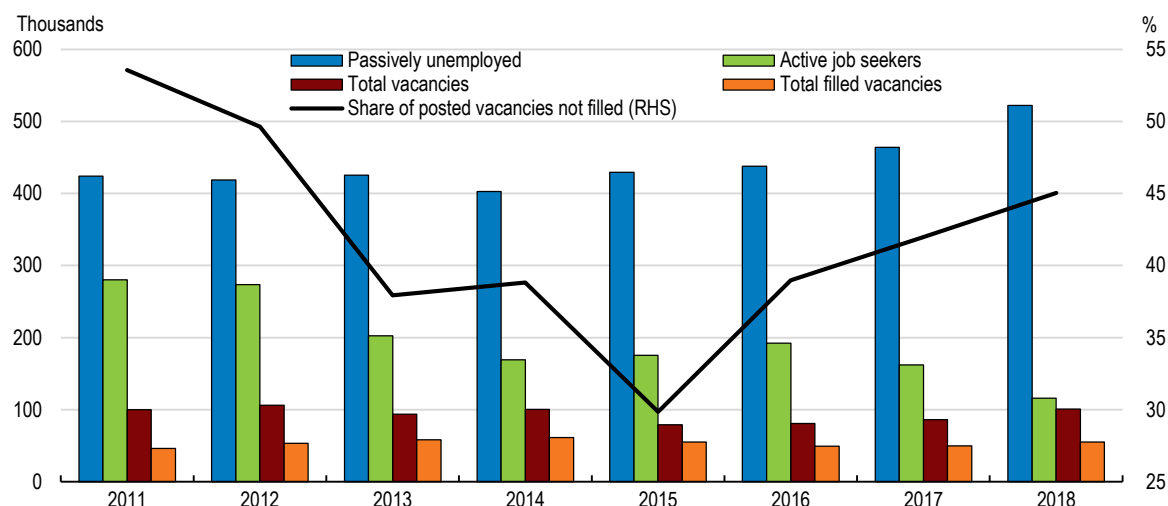
In sum, the significant progress made in past decade to upgrade the Tunisian olive oil sector shows the importance of helping actors engage and coordinate along the value chain. In the long run, the transition from low value-added bulk to higher-quality exports calls for extra efforts in food safety and quality certification, which would strongly benefit from more comprehensive trade agreements with key export markets, as well as the adoption of sustainable milling and production practices (Rudloff, 2020^[30]).

Source: EBRD, EC, FAO, FranceAgriMer, OECD and Onagri.

Reducing skill mismatch and improving labour supply


Although unemployment rates are high, a large and increasing share of job vacancies posted by the public employment service cannot be filled (Figure 2.18). Many firms in low-skill intensive sectors such as textile and wearing apparel, construction, tourism, retail and agriculture complain that they do not find workers with the skills they need (Boughzala, 2019^[1]; IACE, 2019^[11]). This is even more surprising as the number of unemployed graduates in initial vocational education and training (VET) programmes related to these sectors is higher than for other VET programmes (ONEQ, 2017^[61]). The same phenomenon exists for higher-skilled workers. Many firms, particularly in ICT and business services as well as manufacturing, complain that they do not find sufficiently qualified tertiary graduates in the field of science, technology, engineering and mathematics (STEM). However, in 2018, 65% of unemployed tertiary graduates held at least a three-year STEM degree and 30% even held a STEM master degree (Boughzala, 2019^[1]; IACE, 2019^[11]). It is also hard for firms to recruit candidates with the required set of skills to fill vacancies related to business administration and other white-collar jobs.

Figure 2.18. In spite of high unemployment, many vacancies cannot be filled



Note: Data on active job seekers and vacancies comes from the information system of the public employment agency (ANETI) and does not include unemployed persons that do not actively search through ANETI. If job seekers have not visited the public employment office for more than 2 months, they are automatically excluded from the database. Passively unemployed persons refers to the difference between the total number of unemployed as indicated by the labour force survey and the number of active job seekers registered at ANETI.

Source: ANETI; and Labour Force Survey Tunisia.

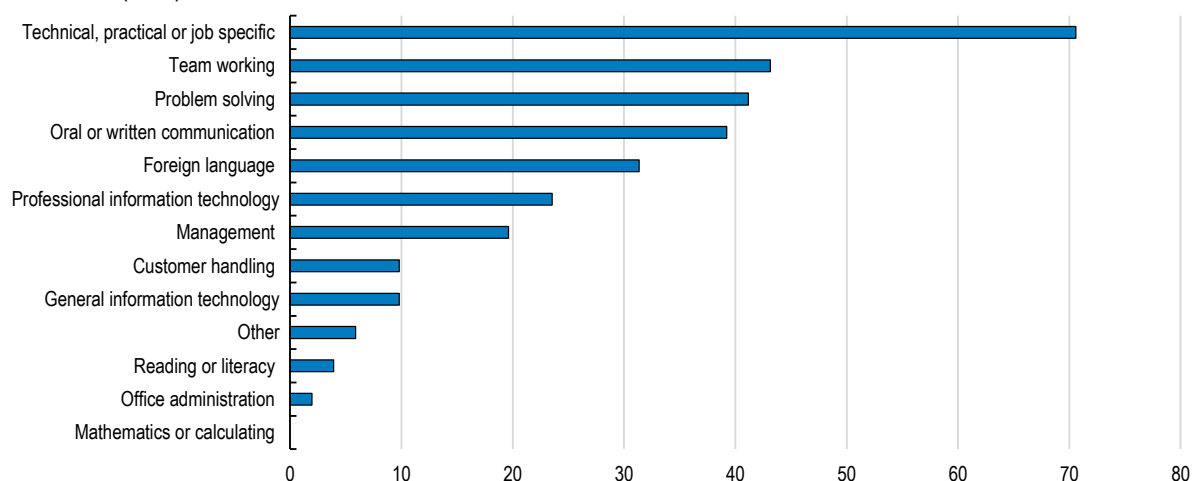
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Difficulties to recruit workers with the right skill sets are related to the low quality and outcomes of the basic education and initial VET system. Dropout rates in secondary education are high and only the weakest students and those dropping out select into the initial VET system (UNICEF and INS, 2019^[3]). As a result, many VET graduates do not possess basic technical and soft skills and are not able to properly read, write and communicate (UNICEF, 2020^[5]). The skill and qualification mismatch in the labour market is also explained by the low ability of the vocational education and training (VET) as well as the tertiary education system to internalise the specific skill needs of the private sector. Many curricula are outdated and education institutions do not prepare students with the technical knowledge, tools and soft skills required by firms, which is particularly an issue for STEM graduates (Angel-Urdinola, Nucifora and Robalino, 2015^[4]). Moreover, the failure to properly inform lower secondary school students about labour market trends and guide their educational choices leads to misallocation of students to VET and tertiary education subjects facing relatively low labour demand (Boughzala, 2019^[1]).

Besides technical and job-specific skills, many job applicants are missing fundamental soft skills, as confirmed by an online survey conducted for this report among larger domestic and foreign firms in Tunisia (Figure 2.19, Box 2.4). Many firms have difficulties to find candidates with a sufficient level of oral and written communication skills, team-working skills as well as problem solving and conflict resolution skills. Foreign language skills are also difficult to find among applicants, which is a particular issue for firms that are more integrated into global value chains and need to communicate with suppliers and clients in foreign markets (Grundke et al., 2017^[62]). These types of soft skills are also the ones that many current employees lack, which is why continuing VET activities of larger firms are focused on improving these type of skills (Cassimon and Grundke, forthcoming^[12]). In addition, firms dedicate a significant amount of training hours to improve management and IT skills of their employees.

Figure 2.19. Firms have difficulties to find candidates with a sufficient level of technical and soft skills

Percentage of firms indicating the respective skill as one of three skills that are most difficult to find with job candidates (in %), 2019



Source: Firm survey on skill needs conducted by the OECD for this report (Box 2.4).

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Box 2.4. Online survey on skill needs of firms in Tunisia

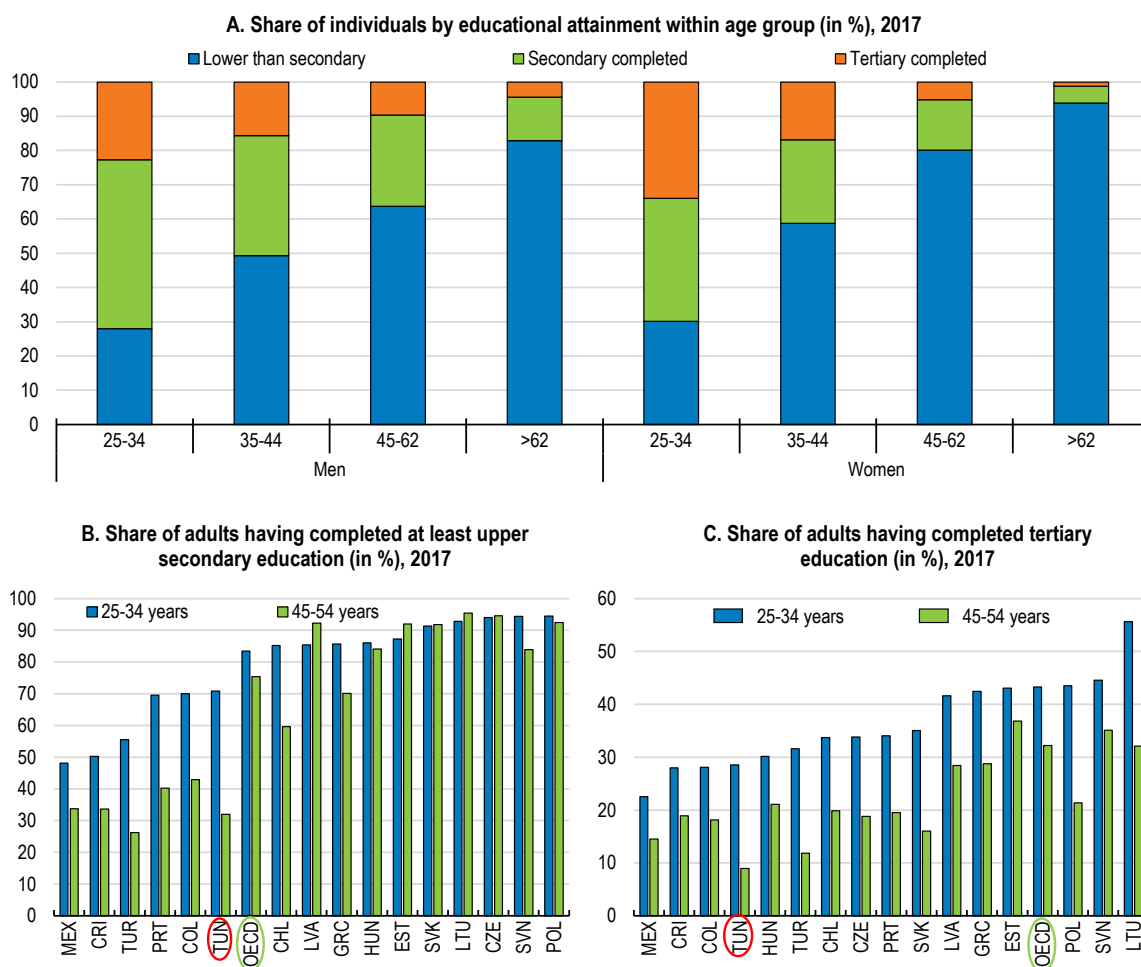
To gather information on skill needs as well as training and recruitment activities of firms, an online survey among 86 firms active in Tunisia has been conducted for this survey in spring 2021 (Cassimon and Grundke, forthcoming^[12]). The questionnaire has been developed in close cooperation with the Employment, Labour and Social Affairs (ELS) Directorate of the OECD, which has created an additional module on skill gaps for the EU Continuing Vocational Training Survey (CVTS). The questionnaire has been adapted to the Tunisian context supported by a pilot study among Tunisian firms and experts. All questions refer to the year 2019. The business chambers of France, Germany and Italy as well as the German Corporation for International Cooperation (GIZ) provided access to their firm networks to distribute the online survey. The sample of firms covers 12 economic sectors and includes firms from all six regions in Tunisia (Cassimon and Grundke, forthcoming^[12]).

The online survey was complemented by a series of 12 qualitative interviews with firms in four focus sectors: ICT services, automotive industries, tourism and agriculture. The interviews took about an hour on average and focused on questions related to skill needs, training and recruitment practices, but also on the business climate as well as labour market policies and institutions.


Raising the quality of basic education

To prepare labour market entrants with a sufficient level of basic cognitive and soft skills, the broad access to basic education needs to be complemented with significant improvements in the quality of education. Tunisia has strongly increased access to education since the 1980s, supported by high education spending to hire new teachers and expand school infrastructure (Angel-Urdinola, Nucifora and Robalino, 2015^[4]). Gross enrolment rates in secondary education increased from 45% in the early 1990s to 92% in 2018, and for tertiary education from 8% to 32% (UNICEF, 2020^[5]; World Bank, 2021^[63]). Educational attainment of the younger generation has significantly improved, in particular for women (Figure 2.20). The share of 25-34 year olds that have completed upper secondary or tertiary education is not far below the respective OECD average, and the rise in educational attainment compared to the older generation has been the most pronounced among countries in the sample (Figure 2.20).

Figure 2.20. Educational attainment has significantly improved, especially for women



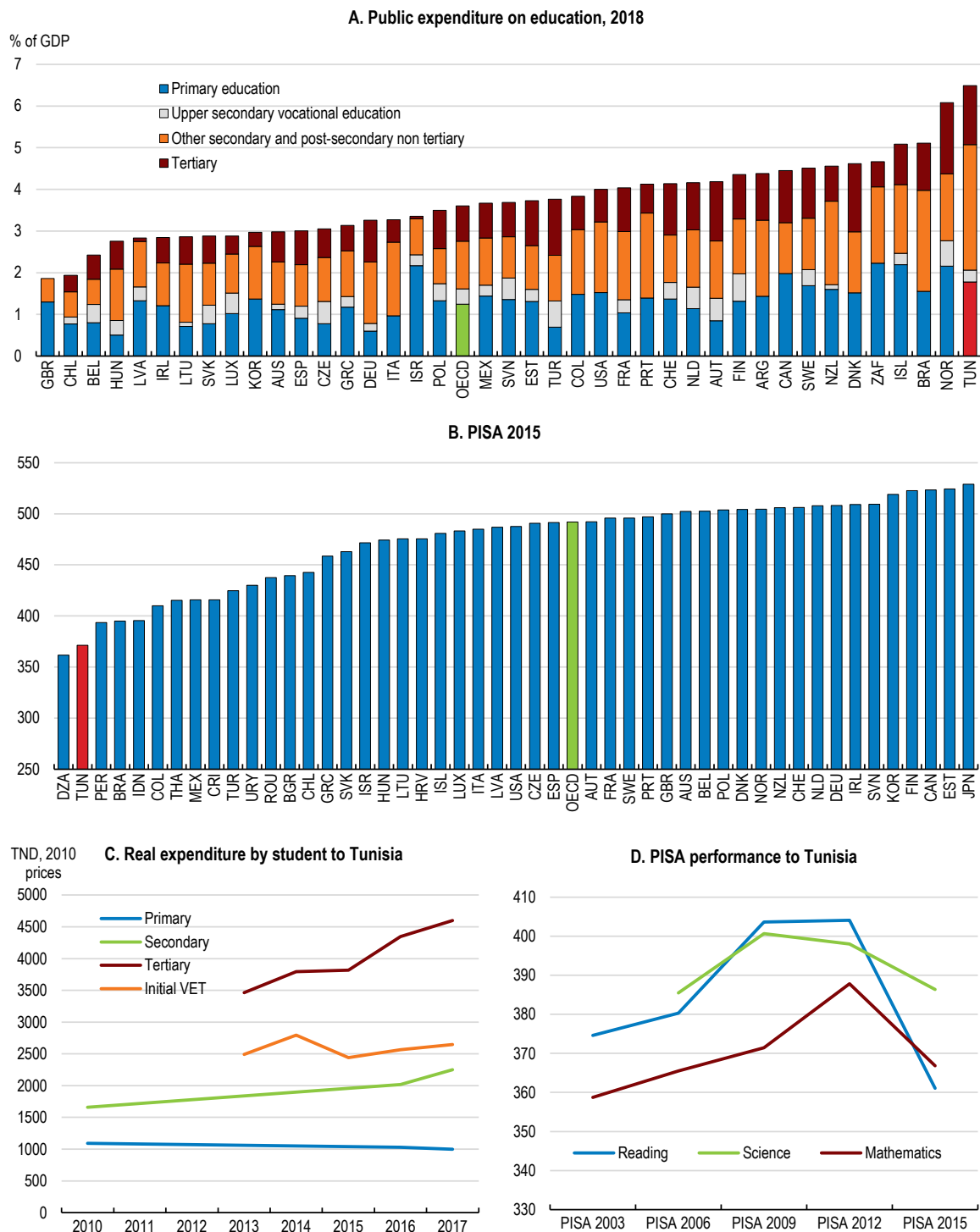
Source: OECD calculations based on data from the Labour Force Survey of the National Institute of Statistics; and OECD Education at a Glance 2020.

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However, although public spending for education is relatively high in international comparison, educational outcomes have been weak and even deteriorated (Figure 2.21). Average performance of Tunisia's students in the OECD Programme of international student assessment (PISA) has been one of the lowest among participating countries and has deteriorated since 2012. The difference in student performance between the OECD average and Tunisia is equivalent to around 3 years of schooling (UNICEF, 2020^[5]).

Performance has been particularly weak in literacy and communication skills, with more than 70% of students not being able to correctly understand short texts with simple syntax (UNICEF, 2020^[5]). In addition, average results in numeracy and science-related knowledge and skills are also weak (OECD, 2016^[64]).

Figure 2.21. Education spending is high, but educational outcomes are weak



Note: In Panel A, data for Tunisia refers to 2017.

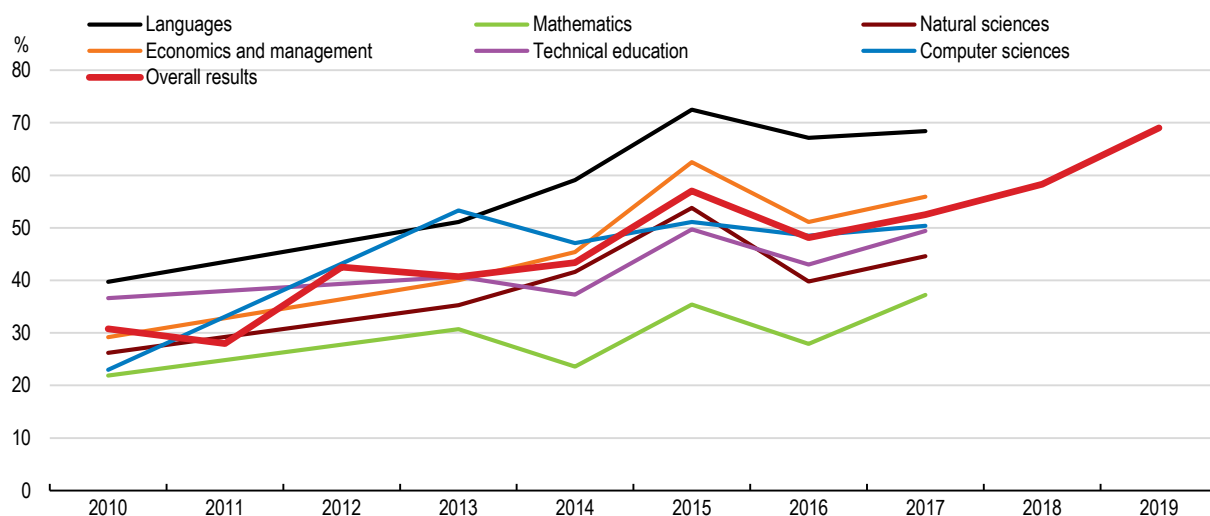
Source: OECD Education at a Glance 2020; OECD PISA 2015; and Ministry of education, Tunisia.

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Another indicator for the weak quality of basic education is the high number of students that fail the final exam of secondary education each year. From 2010 until 2019, the share of students failing the final exam has increased from 30% to 70%, whereby performance has deteriorated across all education tracks in secondary education (Figure 2.22). Taking into account students repeating the exam, around 51% of enrolled students did not complete upper secondary education, and 26% of enrolled students did not even complete lower secondary education (UNICEF and INS, 2019^[3]). More than 10% of students drop out from secondary education each year and around 20% have to repeat a class, and this concerns young men more than women (data from the Ministry of Education).

Figure 2.22. The share of students failing the final secondary school exam has increased

Share of students failing the final secondary school exam by secondary education track (in %)



Note: Results by education track were missing for 2011, 2012, 2018 and 2019, and linear interpolation has been used for the graph for the years 2011 and 2012. Overall results for the high school exam were available for all years from 2010 until 2019 (UNICEF, 2020^[5]).

Source: Évolution des résultats du baccalauréat, Ministère de l'Éducation; and (UNICEF, 2020^[5]).

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The weak performance of students is strongly related to the misallocation of resources and the low quality of teaching. The significant increase of the young population since the 1990s in combination with rising enrolment rates have put enormous pressures on the education system, which have not been managed well (UNICEF, 2020^[5]). Although many new teachers have been hired since 2011, recruitment has not been concentrated in subjects or regions with the highest shortage of teachers. Average student to teacher ratios are relatively low in international comparison, but they vary widely across regions and many schools in remote areas face difficulties in providing classes for all secondary education tracks due to teacher shortages (UNICEF, 2020^[5]; OECD, 2016^[64]).

Many newly employed teachers lack a formal pedagogical education, as recruitment policies have been relaxed since 2011 and many graduates from related subjects and with a one year master's degree could access the teacher career in the public sector (UNICEF and INS, 2019^[3]; UNICEF, 2020^[5]). The lack of pedagogical skills among young teachers is also related to the deterioration in the quality of initial and continuing teacher training caused by a lack of teacher instructors and outdated curriculums. From the 2007 until 2016, the institutionalised education of teacher instructors was suspended (UNICEF, 2020^[5]). As many older and better qualified teachers will retire during the next years, it should be a priority to properly train the younger already employed teachers, including on pedagogical methods, besides improving initial teacher training and selection of new recruits.

The system of teacher evaluation does not set the right performance incentives (UNICEF, 2020^[5]). Linking teacher evaluation and existing bonus systems to improvements in yearly nation-wide exams for students of primary, lower and upper secondary education could raise incentives for teachers to participate in additional training and to improve pedagogical methods (OECD, 2020^[24]). Wage and bonus systems could also be used to improve the allocation of high performing teachers to the more challenging schools in disadvantaged regions, where dropout rates are higher and student performance is lower. This should be combined with an improved recruitment, evaluation and allocation system that classifies candidates according to several performance criteria to improve the matching of teachers to open positions with differing skill requirements. Skill needs for teacher positions vary widely across school types, and according to the socio-economical background of children. Selecting more students from disadvantaged areas for teacher careers could also facilitate their allocation to challenging schools after their graduation.

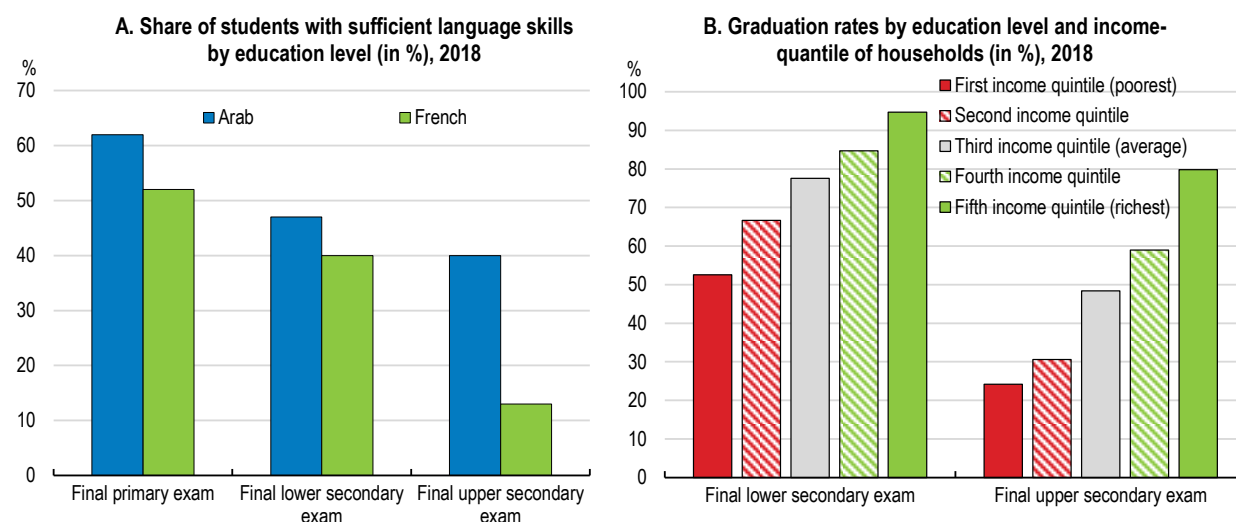
A decaying school infrastructure has deteriorated the learning atmosphere, reduced the choice of education tracks in secondary schools and contributed to high dropout rates (UNICEF, 2020^[5]). Public investment into school infrastructure has dwindled during the last decade. Strong wage increases and additional hiring have put pressure on the education budget, raising the share of wage payments to over 95% in 2019 (UNICEF, 2020^[5]). Around 70% of schools have no proper access to the sanitation system (Benstead, 2021^[66]). Many schools lack functioning laboratories and equipment for technical subjects, natural sciences and informatics, which forces many students to choose the language or business administration track and reduces their motivation and performance (UNICEF and INS, 2019^[3]). This partly explains the particularly low performance of students of these tracks in the national secondary education exam (Figure 2.22). Moreover, many low-income households do not have sufficient access to internet, and E-learning opportunities in many schools are limited (Benstead, 2021^[65]). As ICT technologies and the skills to use them will play an increasing role throughout life, it is crucial to improve the ICT infrastructure in schools and increase access for all children (OECD, 2019^[50]).

As fiscal space is very limited and education spending already very high (Figure 2.21), improvements in education infrastructure are only possible by raising spending efficiency and reducing the high public wage bill. Low average student to teacher ratios indicate room for adjustments, which should be accompanied by a better allocation of teachers across schools and subjects. However, the national dialogue on education reform is currently blocked due to a standoff between teacher unions and the government. This conflict has caused significant collateral damage for children, as schools remained closed for several months in 2018 due to strikes (UNICEF and INS, 2019^[3]). It is a priority to restart the national dialogue and find solutions to improve education infrastructure and teaching quality and to finalise the pending education reform. Parent associations should participate more actively in this process to represent the interests of their children (UNICEF, 2020^[5]).

Changing the instruction language from lower to upper secondary education leads to a strong drop in performance, particularly for poor children. Until the 9th grade all subjects are taught in Arabic, which is the language spoken in families and communities. However, after the 9th grade, the teaching language switches to French for all subjects, which leads to confusion and a strong drop in performance for many students, not only in languages, but also in mathematics and sciences (Figure 2.23) (UNICEF, 2020^[5]). In particular, students from low-income households suffer from this change, as their French language skills are worse due to fewer opportunities for speaking it within their families and lower financial resources to pay for private lessons (Figure 2.24). Whereas around 53% of students from the lowest income quantile of households completed lower secondary education, this share shrinks to 24% for upper secondary education (Figure 2.23). Providing more continuity through a single teaching language in primary and secondary education would particularly benefit children from lower-income households, but risks to lower French language skills of secondary graduates, with negative effects on future labour market outcomes (Angrist and Lavy, 1997^[66]). A better policy option to lower barriers to advancement between primary and

secondary education is to ensure the provision of high quality language teaching from an early age, in particular for children from low-income households.

Figure 2.23. Changing the instruction language leads to a strong drop in performance, particularly for poor children

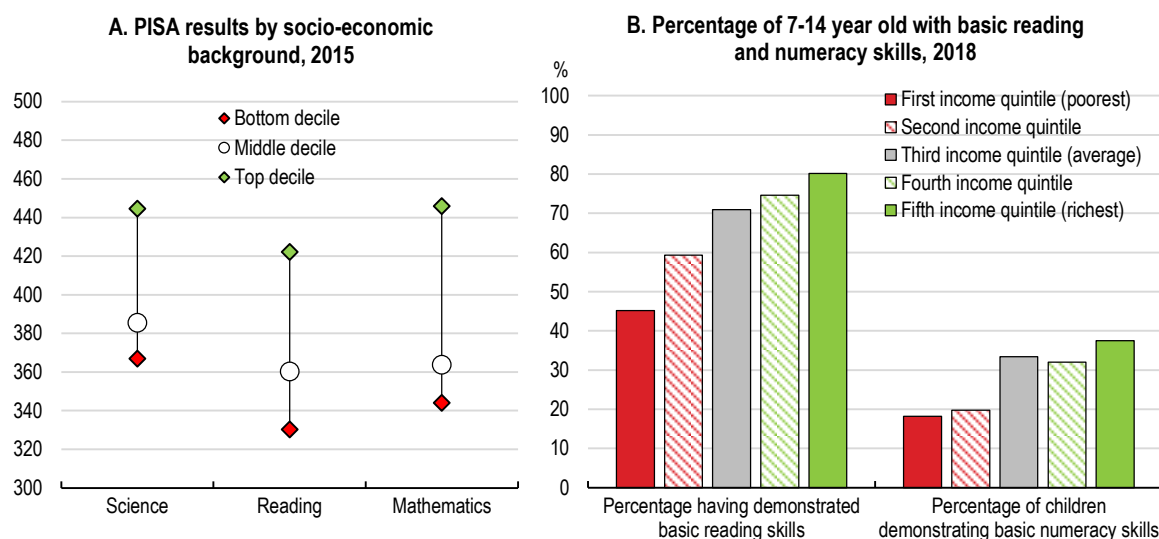


Source: UNICEF (2020); UNICEF; and INS (2019).

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Learning standards, curricula and related teaching methods for primary and secondary education are outdated and should be revised (UNICEF, 2020^[5]). Existing learning standards and curricula are biased towards academic content and mainly prepare students for university studies. They lack a focus on teamwork, communication and presentation skills, as well as other soft-skills that become more important with globalisation and digitalisation (Grundke et al., 2018^[57]; OECD, 2019^[50]). Brazil has recently revised its learning standards and curricula for early-childhood, primary and secondary education and adapted them to include the 21st century skills, comprising a rich set of cognitive and socio-emotional skills according to international best practices (OECD, 2020^[24]). Combining modern and less-academic learning standards and curricula with new teaching methods to foster group-work and self-initiative would not only favour children from lower income households, who could benefit from more engagement and cooperation with other classmates, but would also help developing entrepreneurial skills which many graduates are currently lacking (UNICEF, 2020^[5]; IACE, 2019^[11]). Fostering entrepreneurship among young Tunisians is key to improve business dynamics and create more and better jobs, but the development of the necessary mind-set needs to start early in basic education, as basic cognitive and soft skills are formed early in life (Heckman and Mosso, 2014^[67]; Heckman, Pinto and Savelyev, 2013^[68]).

Figure 2.24. Student performance is strongly related to socio-economic background



Source: OECD, PISA 2015; UNICEF; and INS (2019).

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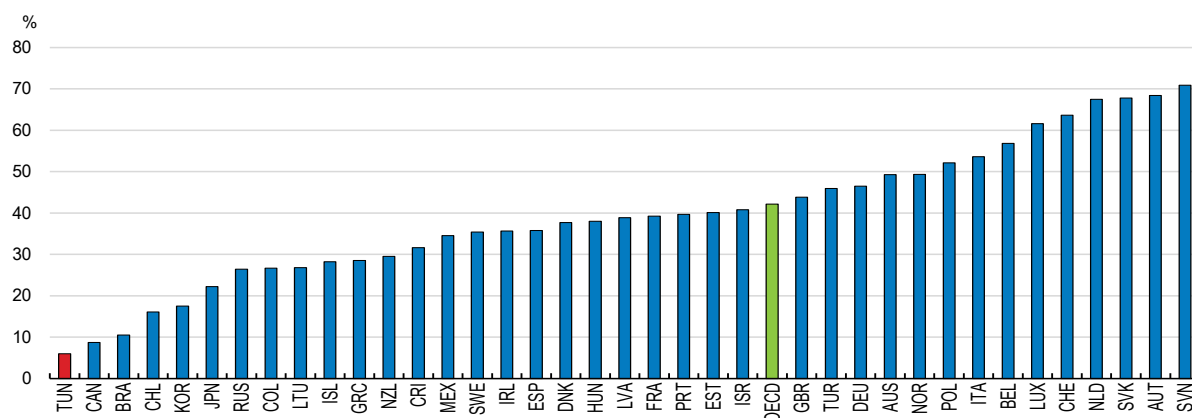
Besides teaching quality, socio-economic background and good early-childhood education are key determinants for educational outcomes across countries (Figure 2.24) (OECD, 2019^[69]; Heckman and Mosso, 2014^[67]). Although in Tunisia access to early-childhood education increased from 16% in 2000 to 44% in 2018, it is still low in comparison to other countries, particularly for children from low-income households (Figure 2.25). Only 17% of poor families with children between 3 and 5 years have access to early-childhood education, compared to 71% of the more affluent families (UNICEF, 2020^[5]). Enrolment rates also differ strongly across provinces. As spending for secondary and tertiary education is relatively high compared to other countries, improving spending efficiency and reallocating resources to early-childhood education to expand access for children from low-income households could have significant social returns (Figure 2.21). This would also help to raise female labour market participation, as low access to early-childhood education and childcare reinforces cultural factors that hinder women with small children to participate in the labour market.

Access to food, clean drinking water and good health services from an early age is crucial for the development of cognitive and social skills (Heckman, Pinto and Savelyev, 2013^[68]; Heckman et al., 2010^[70]). Thus, improving access to early childhood education for children from low-income households should be complemented with continued efforts to eradicate extreme poverty, raise access to universal health care and improve water and sanitation services in schools and communities (UNICEF, 2020^[5]; Benstead, 2021^[65]). Shifting more resources to the newly introduced electronic cash-transfer program would be one way to improve access to food and health care for many poor children. Food could also be directly provided in schools to ensure nutrition quality, but this would require improving school infrastructure. Eventually, the cash transfer programme could also be partly linked to enrolment in early childhood education or home visits of teachers consulting parents on education practices. When allocating scarce spaces in early childhood education, preference should be given to low-income households and single-parent families.

education tracks, insufficient information about labour market trends, vacancies and skill needs of firms, and a culture that values white-collar jobs much more than blue-collar jobs. Obtaining a tertiary diploma has guaranteed a secure and well-paid job for many decades in Tunisia, particularly in the public sector, which is why many parents still advise their children not to choose the VET path or take up a blue collar job (Boughzala, 2019^[1]; OECD, 2015^[6]).

Figure 2.26. The share of upper secondary students in initial VET is low

Share of upper secondary students in initial VET (in %), 2018



Source: OECD, Education at a Glance 2020; and (Boughzala, 2019^[1]).

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It is crucial to better inform students and their parents, but also workers and unemployed adults, about employment and wage prospects, the skill needs of firms as well as available VET programs and their content and quality (OECD, 2016^[73]) (ONEQ, 2017^[61]). Introducing an IT system that provides region-specific information on vacancies and skill needs of firms according to a detailed classification of occupations and maps this information to the number of unemployed in corresponding education levels and fields of study or occupations would be one-step into this direction (OECD, 2021^[74]). This should also include information about the content and quality of existing VET and university programmes as well as labour market outcomes of former graduates (Fouarge et al., 2020^[75]). This IT system should be complemented with personalised counselling services to students in lower-secondary education, but also to workers and the unemployed, to better support their educational choices, training and career development (OECD, 2021^[74]; OECD, 2016^[73]). The national employment agency is visiting schools from time to time to give short presentations on labour-market trends. However, these efforts are insufficient due to a significant under-staffing of the agency and the lack of a publicly available IT system on labour market trends and evaluations of existing VET and university programs (World Bank, 2021^[76]).

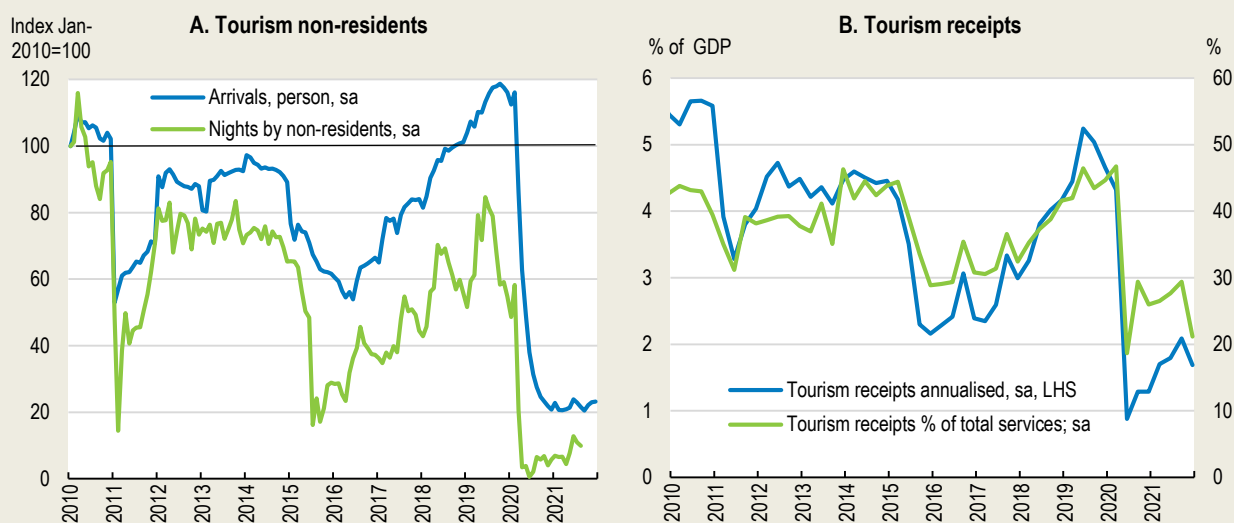
Firms need to play a larger role in promoting and raising the attractiveness of blue-collar and low-skilled white-collar jobs. Difficult working conditions, low wages and weak human resource (HR) practices contribute to explain why firms in textile and wearing apparel, construction, tourism and agriculture have issues to fill vacancies for blue-collar and low-skilled white collar jobs (Box 2.5) (Angel-Urdinola, Nucifora and Robalino, 2015^[4]; Boughzala, 2019^[1]). Many HR departments in firms are exclusively dealing with administrative matters and lack comprehensive strategies for training and professional development of employees. For many blue-collar workers, the sole training opportunities are related to health and safety standards. Due to rigid wage schedules and career paths strongly linked to diplomas that mirror the public sector system, blue-collar workers have little perspectives for professional development in many firms. This strongly reduces the attractiveness of initial VET and blue-collar jobs (Angel-Urdinola, Nucifora and Robalino, 2015^[4]).

Box 2.5. Unlocking the potential of the tourism sector


Tunisia has a strong comparative advantage in tourism, with its long sandy beaches, a rich cultural heritage and diverse landscapes. It is close to Europe with a mild climate that allows a longer tourism season than in Southern European countries. Tourism is an important sector for the Tunisian economy. In 2019, it represented 45% of services exports (or 13% of total exports), generating important foreign currency inflows (Figure 2.27). It directly creates around 130 000 jobs, and more than four times as many when accounting for indirect job creation through suppliers and complementary services (Boughzala, 2019^[1]).

Before the COVID-19 pandemic, tourism activity had just recovered from the terrorist attacks in 2015, with arrivals breaking new records in 2018 (8 million) and 2019 (9 million), significantly above the previous peak of 7 million tourist arrivals in 2010 (Figure 2.27). However, total tourism revenues and the number of nights spent by non-residents have not reached pre-2015 levels, which signals a structural shift towards less value added activities. Moreover, the origin of tourist arrivals has shifted from Europe towards neighbouring North African countries as well as Russia. The occupancy rate and revenue per hotel bed stayed well below 2010 levels.

Figure 2.27. Before the pandemic, tourist arrivals had recovered, but revenues had not



Source: CEIC; BCT; and INS.

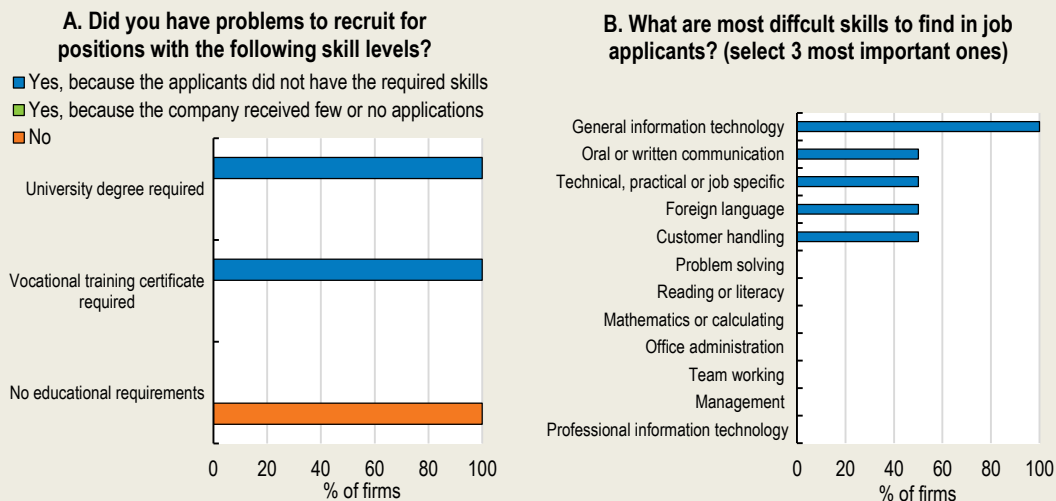
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A range of structural factors is holding back the potential of the Tunisian tourism sector. The share of non-performing loans (NPL) is particularly high, which complicates access to finance for investments in new innovative projects and the renewal of the decaying infrastructure (Boughzala, 2019^[1]). Over the years, public sector banks have given preferential conditions and extended repayment periods to incumbent (and often well-connected) tourism firms postponing their necessary restructuring (OECD, 2018^[8]). Access to finance and market entry is difficult for young and innovative firms, which also suffer from complex authorisation regimes and administrative burden (Figure 2.12).


Weak competitive pressures have hindered innovation among incumbents. In particular, outdated HR practices reduce the attractiveness of the sector for young labour market entrants and partly explain why many firms report having difficulties to recruit workers with the right skills (Figure 2.28). Decreasing value added and labour productivity keep wages low and many firms do not invest enough in training, nor do they provide sufficient opportunities for professional development or an attractive working environment

(Boughzala, 2019^[1]). Moreover, tourism activities are highly concentrated in coastal regions, where unemployment rates are lower, and recruiting staff from distant governorates is more complicated due to low labour mobility and high rental prices. Another important factor explaining the recruitment difficulties of tourism firms is the lack of ICT and soft skills among VET graduates, in particular concerning communication, languages and client interaction (Figure 2.28) (OECD, 2021^[77]). As in other sectors, cooperation between public initial VET institutes and the private sector is weak and many curricula are outdated (Boughzala, 2019^[1]). Moreover, VET curricula are not adapted to the seasonality of tourism activity and integrated internship periods are too short, which reduces on-the-job training opportunities for students.

Figure 2.28. Many VET graduates in tourism-related fields lack ICT and soft skills



Source: Firm survey on skill needs conducted by the OECD for this report; data refers to the year 2019 (Box 2.4).

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In addition to difficulties in sourcing production factors (capital and labour), high tariffs and restrictive non-tariff measures complicate access to important inputs for hotels and restaurants. These are mainly food and agricultural products, but also construction materials and equipment. Improving access to intermediate inputs and capital goods through a 50% reduction in tariffs and non-tariff measures would raise production, employment and value added in hospitality services by around 6% (Figure 2.17). Most job opportunities would arise for low-to-medium skilled white-collar workers, such as clerks and service workers, but also for waiters, cleaning professions and others (Cassimon, Grundke and Kowalski, forthcoming^[58]).

Realising this potential and focusing on the development of alternative and higher value added forms of tourism, such as adventure, sustainable or wellness tourism, in so far underdeveloped regions, should be a policy priority, as it could create a large number of job opportunities for unemployed youth. However, to unlock this great potential it is crucial to reduce market entry barriers, increase competition and spur innovation. Moreover, this does not only require better coordination between firms and education and training institutions to improve the skills of the workforce, but also a better coordination among firms to improve the governance of the sector and develop a common vision and international branding strategy focusing on higher value added activities (Boughzala, 2019^[1]; OECD, 2020^[78]).

Positive examples exist, where firms have introduced incentive systems and career development strategies. In the automotive industry, some firms open white-collar jobs and sometimes even management positions to experienced blue-collar workers, with no requirement to possess formal diploma. Such an approach can make initial VET and blue-collar jobs more attractive for lower-secondary students. Positive experiences need to be shared among firms and business associations. Moreover, firms should support

their promising blue-collar workers to continue formal education in their field of interest, by financing part of the necessary investments. This should be facilitated by improving access to technical and other tertiary degrees for initial VET graduates and the recognition of prior learning to reduce study time and costs (Boughzala, 2019^[1]; Arfa et al., 2018^[79]). Creating a positive corporate culture can also contribute to raise the attractiveness of initial VET and blue-collar jobs (OECD, 2018^[80]; OECD, 2010^[81]).

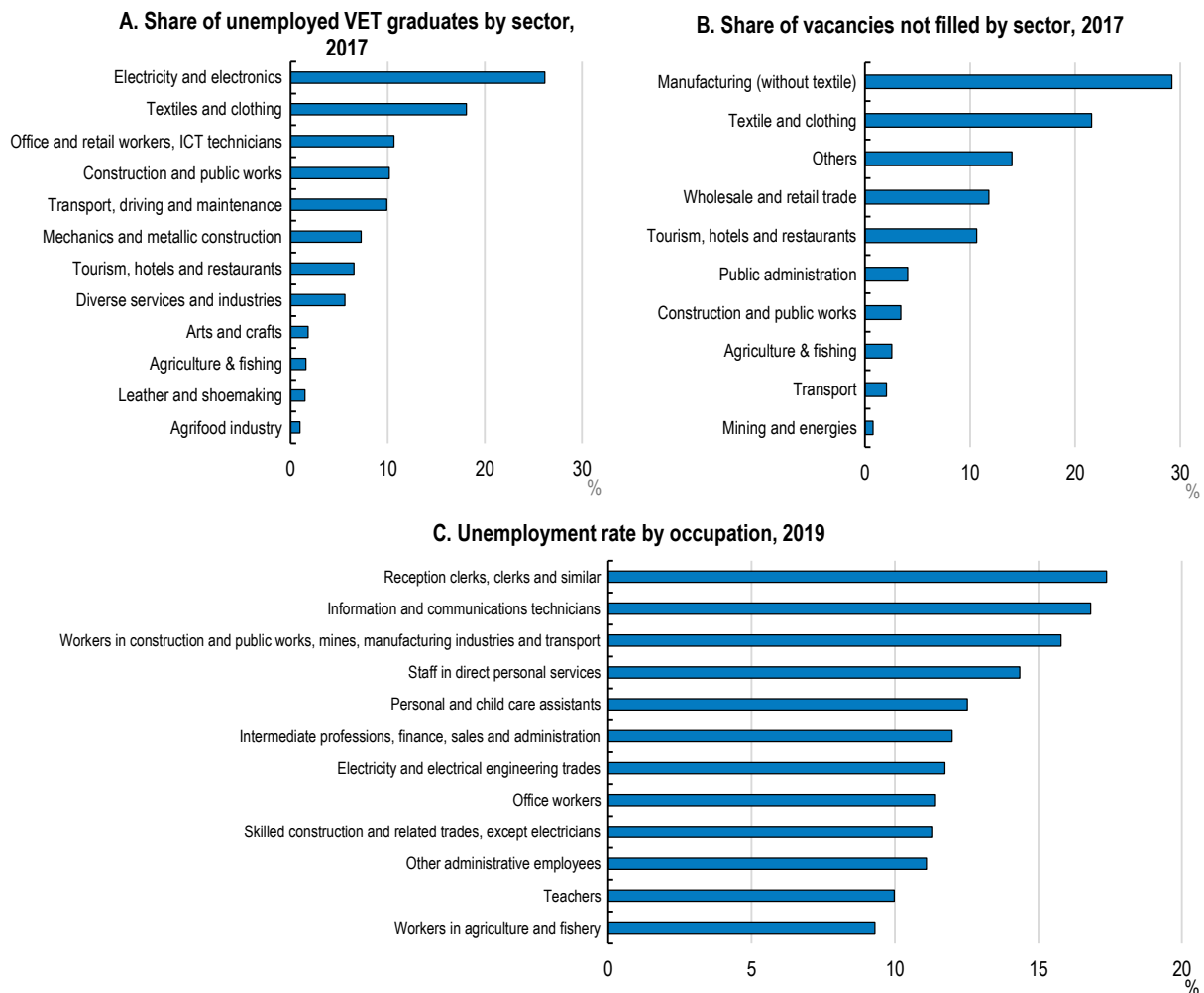
The weak quality of many initial VET programmes contributes to reducing their attractiveness for lower-secondary students (Arfa et al., 2018^[79]). Although comprehensive evaluations of existing initial VET programs do not exist, many firms complain that VET programs do not prepare graduates with the technical and soft skills as well as specific tools required for the job (IACE, 2019^[11]). This is further corroborated by the fact that many graduates with a 2-year technical degree are unemployed whereas firms have difficulties to fill vacancies for the respective occupations (Figure 2.29) (Boughzala, 2019^[1]). This is particularly the case in areas like electrical equipment and mechatronics, informatics, office administration, but also in textile and wearing apparel, construction, and tourism (ONEQ, 2017^[61]; Boughzala, 2019^[1]). In addition, initial VET programmes do not exist for some occupations such as blue-collar workers in the cable industry, which employs more than 80 000 workers and is present in Tunisia since decades (Arfa et al., 2018^[79]).

Initial VET is mainly conducted by public training institutes, where it is free of charge. The large majority of public training institutes is managed by the public professional training agency (ATFP), which employs more than 10 000 instructors and administrative staff. It covers initial VET for almost all sectors, except agriculture, tourism and health, which are managed by specific bodies. The lack of cooperation between the public training system and firms is mainly due to the weak organisational structure of the ATFP, including a lack of cooperation and coordination with other agencies, insufficient IT systems observing labour market trends and skill needs of firms, and a missing culture of impact evaluation and stakeholder involvement (Arfa et al., 2018^[79]; World Bank, 2021^[76]). Better targeting of IT systems and communication to sector-specific business associations would help improving coordination to better adapt initial VET programs and curricula to the skill needs of firms.

Improving the matching of study places in initial VET by subject to local skill needs of firms can significantly raise employment chances of VET graduates, as regional heterogeneity in production structures is large and labour mobility is low (OECD, 2020^[24]). Information on the regional supply of initial VET places by subject as well as an evaluation of these programmes and skill needs of local firms is missing (Arfa et al., 2018^[79]). The offer of different fields of study in regional training institutes is mainly driven by the capacity of the system and does not sufficiently reflect the needs of the local economy (OECD, 2015^[7]). Intensifying cooperation and coordination between the ATFP and local private sector representatives would be a first step into the right direction. Combining this with IT systems that link firm's skill needs with the supply of initial VET places on a regional basis can significantly raise the effectiveness and attractiveness of the public initial VET system (OECD, 2020^[24]).

More competition from private initial VET institutes could improve the adaptation of initial VET programmes and curricula to private sector skill needs. Only 19% of students in initial VET are registered in private institutes, which mostly offer initial VET for services occupations such as office and sales workers and jobs in the tourism industry, but very little careers in manufacturing or IT and business services (ONEQ, 2019^[82]). The Ministry of professional training supervises private VET institutes and decides together with other public agencies about the official recognition of initial VET diploma. This administrative process is complicated and time-consuming: recognition of degrees and related curricula takes up to 3 years, which creates the risk that curricula related to technology-intensive subjects are out-dated when they receive approval. Only about 56% of students in private VET institutes receive a degree officially recognised by the Ministry (UNICEF, 2020^[5]). Facilitating changes to existing curricula and the recognition of new programs in public and private VET institutes is crucial to better adapt initial VET to constantly evolving skill needs of firms and increase the employability of graduates.

Figure 2.29. Unemployment of VET graduates and in corresponding occupations is high, although firms have difficulties to fill related vacancies



Source: (ONEQ, 2017^[61]); Système d'informations ANETI; and INS.

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A more active participation of firms and business associations is required to better link existing workplace training to the content of formal VET courses. Although more than 80% of initial VET students currently study in programs including workplace training in firms, communication and coordination between instructors in training institutes and supervisors in firms is insufficient (Arfa et al., 2018^[79]). This is due to a weak legal framework regulating the employment of apprentices and coordination with VET institutes, but also due to insufficient pedagogical training and engagement of supervisors of apprentices in firms. Many apprentices do not follow formal VET courses, are informally employed and do not receive a formal degree at the end of their apprenticeship (Arfa et al., 2018^[79]; Boughzala, 2019^[11]). Many firms do not see initial VET as an opportunity to train their future employees, mainly because they fear that training investments will be lost when graduates leave to work in other firms. Thus, efforts to improve the attractiveness of initial VET also need to change the mind-set of business associations and firms to solve the public goods issue related to training investments into young workers (OECD, 2015^[7]; OECD, 2010^[81]).

Although only a small share of lower secondary students chooses initial VET, dropout rates in initial VET are high reaching around 30% in 2017 (Arfa et al., 2018^[79]). This is related to negative selection of the

weakest students into technical VET tracks of lower secondary education (“colleges techniques”), which is reinforced by the institutional design that automatically allocates dropouts from the general education track to the VET track of lower-secondary schools. Many students that arrive in initial VET at the upper-secondary level have very low levels of basic cognitive and soft skills, which makes it hard for them to follow VET courses (UNICEF, 2020^[5]). Dropout rates are particularly high in the first year of upper secondary VET (Arfa et al., 2018^[79]). Integrating technical tracks into the general track in lower-secondary education and avoiding a too early separation of school forms would reduce the negative selection and has the chance to improve the attractiveness of upper-secondary VET for average students.

The low quality of teaching and a decaying infrastructure reduce the quality of VET and contribute to high dropout rates (Arfa et al., 2018^[79]). Many VET teachers do not have a background in technical education and have not worked in the private sector, as the allocation of teachers to initial VET was mainly driven by the large supply of unemployed tertiary graduates with a background in humanities, waiting for a public sector job (Arfa et al., 2018^[79]; Angel-Urdinola, Nucifora and Robalino, 2015^[4]). Thus, many of them have internalised the negative connotation of VET and blue-collar work, which does not help to motivate young students in initial VET. Moreover, as in basic education, many of these teachers have weak pedagogical skills due to weak criteria for teacher selection and the low quality of initial teacher training. A comprehensive system of teacher evaluation and targeted continuous teacher training are lacking, while existing bonus systems are not linked to student performance and do not incentivise teachers to improve teaching quality (Arfa et al., 2018^[79]). Many curricula are outdated and lack sufficient soft-skill training, particularly related to communication and presentation skills as well as teamwork, which strongly reduces the employability of VET graduates (OECD, 2015^[7]).

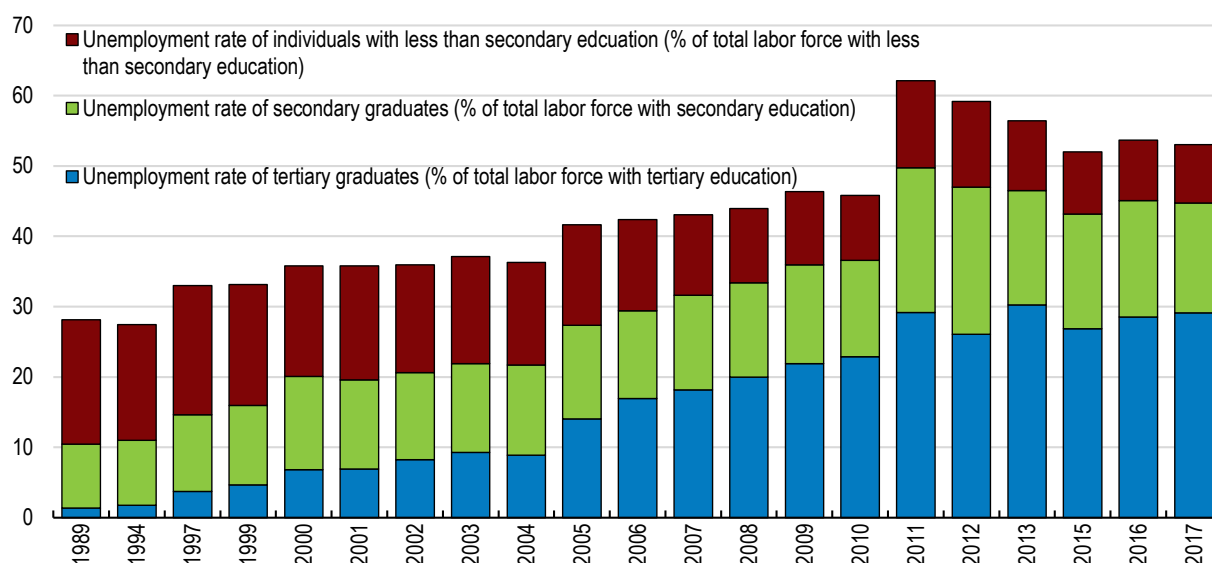
Due to relatively low spending for VET compared to other education levels and the rising wage bill (Figure 2.21), public investment has strongly decreased and infrastructure in many training centres is very poor (Arfa et al., 2018^[79]). Outdated training machines and equipment add to the weak adaptation of curricula to skill needs of firms, as students cannot train and learn on machines and technology used by firms. Moreover, housing conditions for VET students are problematic, particularly in the second year as not all students can access subsidised housing (Arfa et al., 2018^[79]). This is an important reason for dropping out, as many students from interior provinces cannot afford paying high rents in cities where many VET institutes are located (Arfa et al., 2018^[79]). Increasing spending efficiency in tertiary education and reallocating resources to initial VET could improve the quality and attractiveness of VET, reduce dropout rates and provide firms with a larger pool of graduates with the right skills (Figure 2.21) (OECD, 2015^[6]).

Age limits for apprenticeships prevent students that have dropped out from secondary education, as well as other low-skilled adults who want to up-skill or change occupations, to enter parts of the initial VET system (ILO, 2013^[83]; Arfa et al., 2018^[79]). The current system only allows entry of students that are younger than 20 years, whereas apprenticeship systems in many other countries have much higher age limits (OECD, 2019^[84]; OECD, 2015^[6]). As basic education for adults is non-existent, this leaves many young men and women that have dropped out from school without any alternative to upgrade their basic and technical skills. Moreover, high administrative burden and poor recognition of prior-learning hinder students dropping out from tertiary education, who have realised that a more practical education would suit them better, to enter initial VET and pursue a blue-collar career (Angel-Urdinola, Nucifora and Robalino, 2015^[4]). This is particularly detrimental as these students generally have higher average cognitive and social skills, as they have successfully finished general secondary education, and could contribute to a better learning atmosphere in initial VET classes. In addition, these candidates would be ideal for firms, as they have more experience and higher motivation to benefit from VET courses to improve their employability.

Strengthening tertiary education


The success in raising access to education since the 1990s has been most pronounced in tertiary education (Figure 2.20). Gross enrolment rates rose from 8% in the early 1990s to 32% 2018, and are around 50% higher for women than for men (Boughzala, 2019^[1]). The number of students in public universities has more than tripled since the 1990s, from around 100 000 in the early 1990s to over 300 000 in the 2010s, which was enabled by large public investments into education infrastructure and hiring of teaching staff (Angel-Urdinola, Nucifora and Robalino, 2015^[4]). However, the increase in the number of tertiary graduates has led to rising unemployment, as job creation has been concentrated in low-skill intensive activities with little demand for tertiary graduates (Figure 2.30, Figure 2.7, Figure 2.8).

Figure 2.30. Unemployment of tertiary graduates has strongly increased since the 1990s



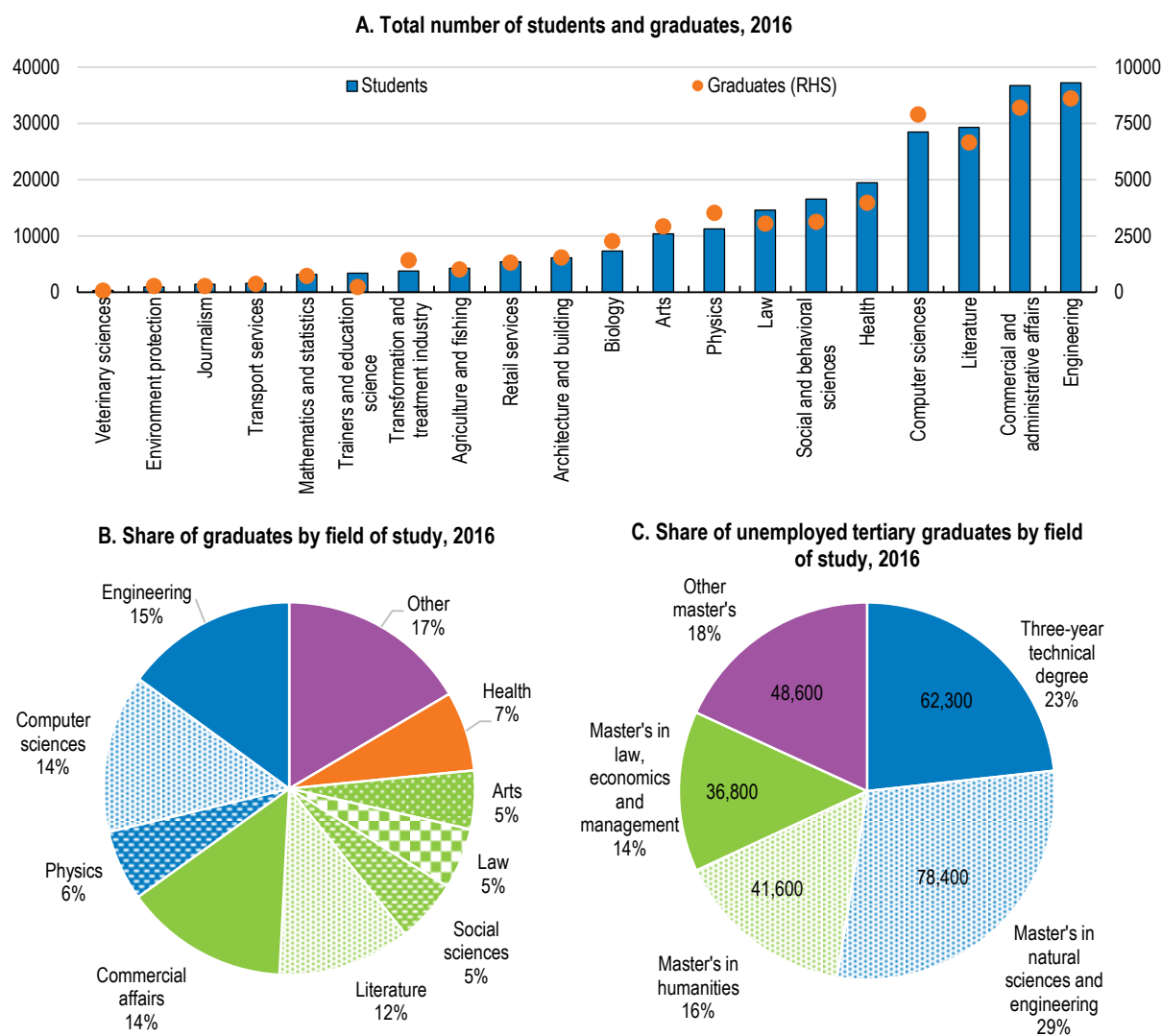
Note: Data for the years 1990-1993, 1995, 1996, 1998 and 2014 is missing.

Source: CEIC.


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At the same time, many firms in higher value added activities such as ICT and business services, pharmaceuticals or other technology intensive manufacturing activities complain that they do not find enough tertiary graduates with the skills they need (IACE, 2019^[11]; Boughzala, 2019^[1]). This is even more surprising as the majority of tertiary students graduates in STEM subjects and unemployment among them is high (Figure 2.31). Around 30% of unemployed tertiary graduates hold a master's degree in STEM subjects and more than 20% hold a three-year technical tertiary degree (BTS). The unemployment rate among ICT technicians is with 17% one of the highest across all occupations (Figure 2.29). Although some of the graduates with STEM master's degrees register as unemployed to obtain necessary documents for migration to Europe, the major part does not possess the skills required for high-skilled white-collar jobs in the private sector (Boughzala, 2019^[1]).

Figure 2.31. Many youth study tertiary degrees in STEM, and unemployment among them is high

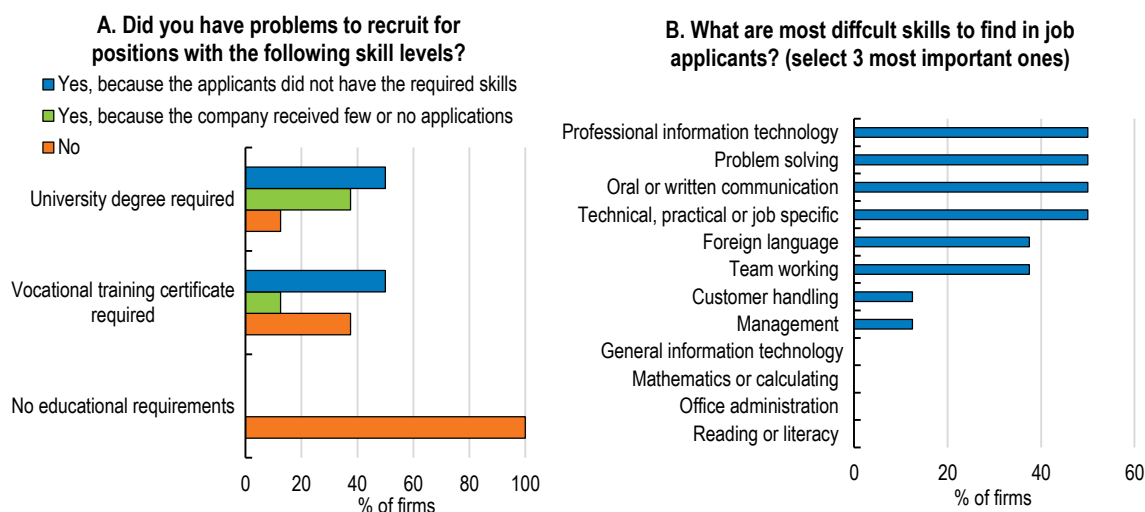


Source: (Boughzala, 2019^[1]).


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Significant mismatches exist between the skills that graduates obtain at university and the skills required for high-skilled white-collar jobs in the private sector. Half of firms in ICT services indicate that they have difficulties filling vacancies for white-collar jobs requiring a tertiary degree, because candidates do not possess the skills needed for the job (Figure 2.32) (UNESCO, 2021^[59]). In particular, candidates lack specific technical and ICT skills, which indicates that university curricula do not include frontier technologies and tools used in ICT services firms. Many firms need to provide costly additional technical training to new employees to integrate them into production processes (IFC and UTICA, 2017^[60]). Moreover, many candidates also lack key soft skills such as communication and language skills, team-working skills and problem solving and conflict resolution skills (Figure 2.32). This is also the case in many manufacturing firms, which have difficulties to find the right candidates for vacancies of medium to high-skilled white-collar jobs (Box 2.6).

Figure 2.32. Many ICT graduates lack the technical and soft skills required by firms



Source: Firm survey on skill needs conducted by the OECD for this report; data refers to the year 2019 (Box 2.4).

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This signals that the public education system does not equip graduates with a sufficient level of key soft skills, which are crucial for increasing the globalisation and digitalisation of production processes (Figure 2.19, Figure 2.32) (Grundke et al., 2017^[62]; OECD, 2019^[50]). Compared to other countries, 15-year old students show particularly weak performance in literacy skills (Figure 2.24). At the root of the weak performance in soft-skills are structural issues of the basic education system (see above). As the digital revolution and a further integration into the world economy have large potential to foster the creation of good jobs and raise the living standards, it is a priority to reform the basic education system to provide all students with a sufficient level of cognitive and soft skills. In particular, for ICT services, which have the potential to create many high-skill intensive jobs in interior regions of Tunisia, a rising supply of graduates with the right skill-set could attract more foreign firms and stimulate the entry of domestic start-ups (Box 2.2).

Box 2.6. The automotive industry has strong potential for innovation and job creation

Since the early 2000s, the automotive industry has become an important driver of exports and employment growth in Tunisia. It employs more than 90 000 workers in more than 260 national and international firms (as of 2019), and production and exports have grown by around 12% per year from 2007-2017 (TAA, 2020^[85]). The automotive cluster is mainly located in four agglomerations in the North-East and comprises a wide range of different activities along the whole value chain, including electrical and electronic components, cables, engines and engine components, other mechanical components, plastics and rubber, textile and leather, assembly of cars as well as software and design development. These activities related to the automotive industry contributed around 4% of GDP in 2019 (TIA, 2020^[86]).

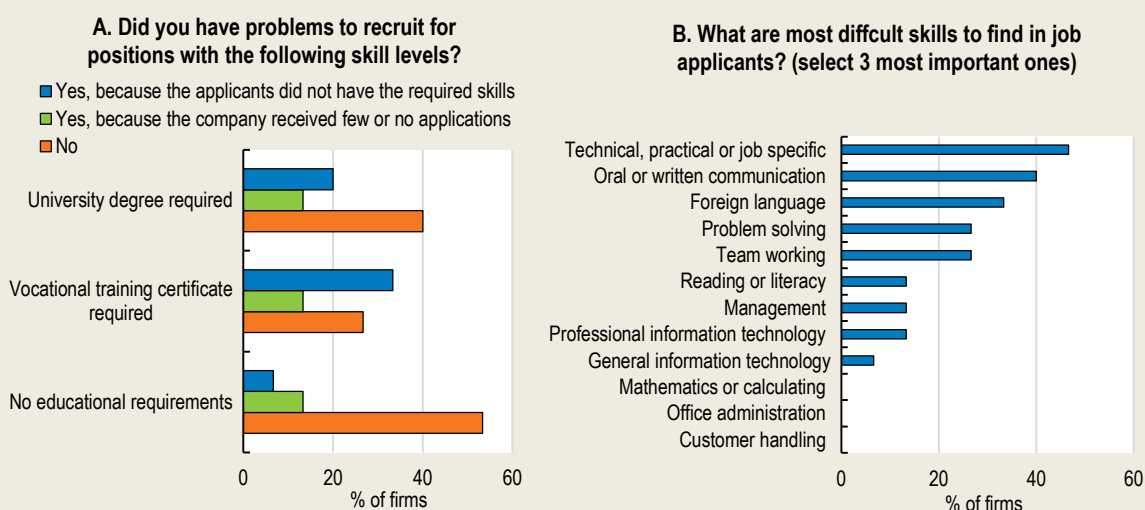
This success story has been enabled by the 1998 association agreement with the European Union, which has strongly improved access to better-quality inputs and capital goods for manufacturing firms and opened up potential markets for higher value-added products (European Commission, 2021^[15]). More than 65% of automotive-related companies are offshore firms, mostly subsidiaries of French, German and Italian firms and exporting to the European Union. However, 35% of firms are Tunisian onshore firms, which have increased their exports almost fivefold from 2003 until 2019, above the

growth rate for offshore firms (OECD calculations based on RNE data). This shows the great potential that an increasing international integration can have for domestic firms.

Tariffs for intermediate inputs and capital goods from non-EU countries are still high, and non-tariff measures are hampering access to imports from all sources (WTO, 2016^[10]; European Commission, 2019^[28]). Reducing tariffs and non-tariff measures by 50% would raise production, employment and value added in the automotive industry by more than 8% (Figure 2.17). Job opportunities would particularly arise for medium and high-skilled workers, such as technicians and associate professionals and middle management occupations (Cassimon, Grundke and Kowalski, forthcoming^[58]).

However, the increasing international integration of the domestic economy needs to be accompanied by improvements in the VET and tertiary education systems. Many firms in the automotive sector have difficulties to find workers with the right skills, especially for vacancies in medium- and high-skill intensive jobs (Figure 2.33) (TAA, 2020^[85]). Many applicants do not have a sufficient level in technical and soft skills, such as communication and languages, team working and problem solving skills. As in other economic sectors (and described elsewhere in the chapter), this is related to structural issues in basic education and missing coordination and cooperation between VET institutes and universities and firms. Critical issues concern the adaptation of curricula and teaching methods to private sector skills needs and on-the-job training arrangements. However, in the automotive industry the share of firms that indicates that available VET courses do not correspond to skill needs of workers is more than 50% and much higher than in other sectors (OECD calculations based on firm level data, see Box 2.4). Thus, the need for better cooperation between public VET institutes and private firms is particularly high in the automotive sector.

Figure 2.33. Firms in automotive have difficulties finding workers with the right skills



Source: Firm survey on skill needs conducted by the OECD for this report; data refers to the year 2019 (Box 2.4).

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In spite of these issues, there are very encouraging examples that show the potential of the Tunisian tertiary education and innovation system and its cooperation with the private sector. Telnnet, which is a Tunisian multinational technology company and a central player in the automotive cluster, has recently launched a satellite, which was developed and constructed by local engineers and is part of a bigger project to develop the internet-of-things in Tunisia. Engineering graduates from the best Tunisian universities are highly qualified, but often decide to migrate to the EU to earn better salaries, which

intensifies domestic skill shortages (Boughzala, 2019^[1]; UNESCO, 2021^[59]). The main solution for the existing skill shortages is to raise the quality of education for students in the non-elite part of the education system and to improve the cooperation with the private sector. Several bigger firms in the automotive cluster have recently started co-operations with universities to introduce study programmes for engineers and other high-skilled white-collar occupations, which include extensive on-the-job training periods and adapt curricula content to skill needs of firms.

The COVID-19 pandemic and the ensuing disruptions in global supply chains have led European firms and policy makers to reevaluate the advantages of re- and near-shoring key activities closer to the EU, including automotive and micro-electronics among others (Eurofound, 2021^[87]). This is a great opportunity for Tunisia to further increase its integration into global value chains and upgrade and diversify its export activities. However, this requires bold and rapid policy action to reduce existing trade barriers and administrative burden, improve customs procedures and infrastructures, and ease access to finance for domestic firms. The accelerating green and digital transformation, however, pose significant challenges to the Tunisian automotive cluster, as firms need to adapt to new production trends concerning electromobility and industry 4.0. Improving the skills of the workforce and strengthening innovation, e.g. by lowering market entry barriers and raising competition complemented by improved coordination between firms, universities and research institutes, is key for taking advantage of the opportunities ahead.

The public tertiary education system operates in isolation from the private sector and labour market needs, similar to the initial VET system (Angel-Urdinola, Nucifora and Robalino, 2015^[4]). Cooperation between universities, the Ministry of Higher Education and the private sector are weak due to a missing culture of impact evaluation and stakeholder involvement (Arfa et al., 2018^[79]; Angel-Urdinola, Nucifora and Robalino, 2015^[4]). Many firms complain that in addition to weak adaptation of university curricula to skill needs of firms, certain profiles do not exist at all, such as a specific track for purchasing managers in business schools or specialised engineers in rubber manufacturing. Thus, intensifying information exchange, coordination and cooperation with the private sector is key to make the tertiary education system more responsive to labour market needs. Systematic evaluations of existing study-programmes and the resulting employability of graduates are missing. If alumni-surveys exist, they are not systematically used to inform universities and potential students about existing skill mismatches and the labour market success of past graduates.

A more active participation of firms is necessary to make skills development in tertiary education more demand driven (Angel-Urdinola, Nucifora and Robalino, 2015^[4]). This concerns a more active cooperation and coordination in the design of new programs and curricula, but also in research and development and the combination of formal education programmes with workplace training. Firm-level analysis conducted for this report finds that firms which invest into research and development have a 3% higher total-factor productivity compared to other firms (Box 2.1) (Cassimon and Grundke, forthcoming^[12]). Intensifying the cooperation between public research institutions and the private sector holds large potential to improve innovation capacities, better prepare graduates with the skills needed by firms and raise productivity of Tunisian firms.

Administrative burden for adapting course content to new technologies, adding additional courses into curricula or introducing new programs and degrees is high. These procedures can take up to 3 years, which is too long especially for technical subjects, as some technologies can already be outdated again after 3 years. To make existing programs and curricula more responsive to skill needs of firms, these procedures should be streamlined and curricula should be made more flexible by reducing the number of hours for obligatory core subjects. However, as inflation of new degrees and certificates can also distort signals in the labour market and increase skill mismatch, the introduction of new programs and degrees should be limited and complemented with a comprehensive quality evaluation and certification system for

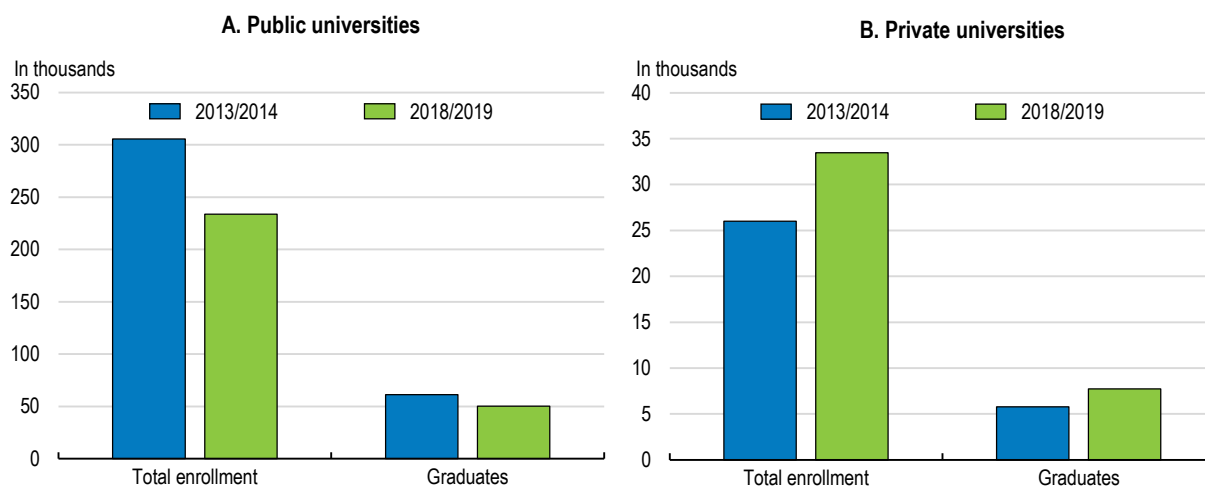
tertiary degrees in public and private universities. This would support secondary graduates in their career choices and set the right incentives for public universities to improve their programmes.

Introducing workplace-training into tertiary education can help reducing skill-mismatch, as it allows students to get familiar with frontier technologies and methods used in firms. However, the legal framework for integrating workplace training into tertiary education programs is weak. Firms are not allowed to employ students with longer-term work contracts, leaving them with short-term internship contracts as the sole option. This prevents them from undertaking training investments, as they fear that their investments will have no return when graduates leave to work for other firms. Allowing for more flexibility in work-contracts for tertiary students, however, needs to be complemented with stronger engagement from sectoral business associations to solve the coordination issues regarding training investments of single firms into young workers (OECD, 2015^[7]; OECD, 2010^[81]).

The quality of tertiary education can also make a difference in reducing skill mismatches related to soft-skills, and partly make-up for structural weaknesses in basic education. Many firms report that graduates from private universities have better communication and presentation as well as team-working skills, although the best students according to high-school exams select into public universities (IACE, 2019^[11]). This is due to a stronger focus of curricula and performance assessment on soft-skills, including more curricula hours dedicated to specific soft-skill courses using modern pedagogical methods. Moreover, private universities are also more responsive to technical skill needs of firms. Recently, many private universities have started to cooperate with firms to develop three- to five-year study programs with workplace-training elements, allowing students to get familiar with frontier technologies and methods used in firms. This higher responsiveness of private universities to the skill needs of firms might partly explain the increasing attractiveness of private universities, as indicated by rising student and graduate numbers (Figure 2.34).

Figure 2.34. The attractiveness of public tertiary education has decreased

Number of enrolled students and graduates for public and private universities



Source: Ministry of Education, Tunisia.

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The skill mismatch in the labour market is also related to the misallocation of students to fields of study. Over 40% of students study and graduate in humanities, law or business administration and economics, and around 30% of unemployed tertiary graduates hold a master's degree in these fields (Figure 2.31). Since 2011, many of them have been hired by the public sector, particularly in the public administration and the education system, and many unemployed and current students still hope for future employment in the public sector (Angel-Urdinola, Nucifora and Robalino, 2015^[4]; Boughzala, 2019^[1]). This is mainly due to high wages and social security benefits as well as long-term contracts. However, due to the difficult fiscal situation, the pace of public sector hiring and wage increases are unlikely to continue. Although private education services are expanding, they can only partly absorb these tertiary graduates, and unemployment among teachers and graduates in humanities will remain high (Figure 2.34, Figure 2.10, Figure 2.29).

Better informing secondary school students about the content and quality of tertiary education programmes and labour market outcomes of graduates is crucial to improve the allocation of students to fields of study. It would also set the right incentives for universities to improve the quality of their programmes and better adapt them to the skill needs of firms. Comprehensive information about labour market outcomes of former graduates does not exist. Some universities have introduced personal counselling services, but these need to be extended and complemented with a comprehensive and publicly available IT system providing information on the quality of study programmes (World Bank, 2021^[76]). Moreover, reducing the large gap between public and private sector wages for labour market entrants, which including jobs in SOEs reached 35% in 2018, is also key to encourage entrepreneurship and promote fields of study that prepare for a career in the private sector (Angel-Urdinola, Nucifora and Robalino, 2015^[4]; World Bank, 2021^[76]).

Although spending for tertiary education is high and spending per student has increased since 2013, supply constraints in tertiary education exist that lead many students to choose humanities, law or business administration and economics (Figure 2.21). Many regional universities do not offer the full range of tertiary programs due to a lack of equipment and specialised university teachers. Secondary students that cannot afford to pay the high rents in bigger cities choose to study closer to the family, restricting their study choices. Moreover, the lack of entry requirements for humanities, law and business administration and economics contributes to the high number of students. Better allocating resources across different fields of studies to reflect existing and future labour market needs and adapting entry requirements accordingly could raise spending efficiency (World Bank, 2021^[76]). Supporting poorer qualified students from interior regions to raise their mobility should also be considered.

Improving continuing vocational education and training policies

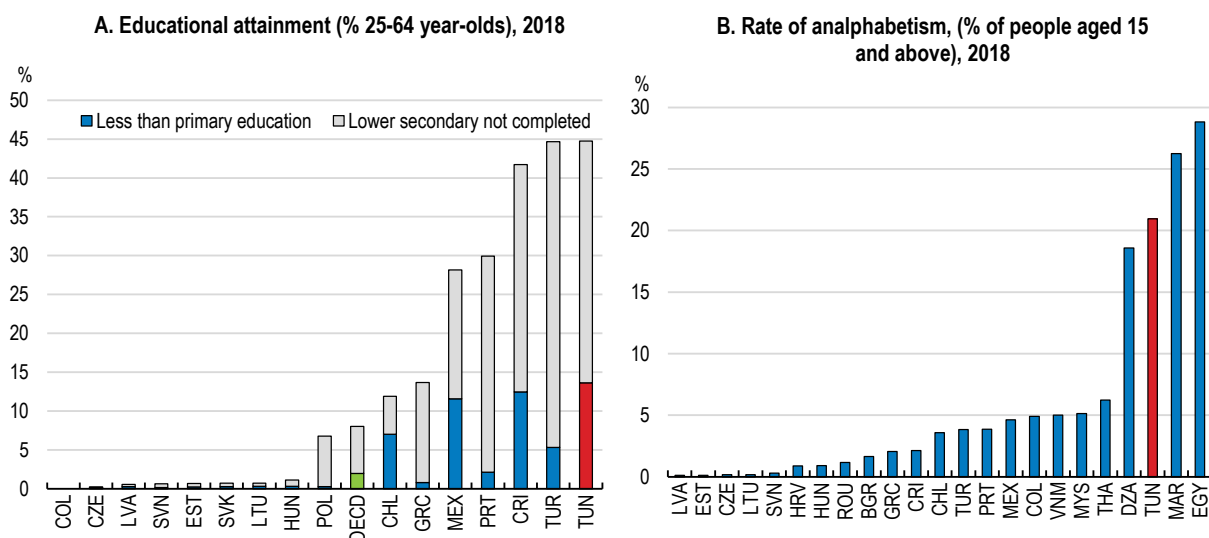
Public spending for continuing VET policies, at 0.1% of GDP, is slightly below the OECD average, and is financed through a training levy designed as a payroll tax for firms (OECD, 2015^[6]). To finance their continuous VET activities, firms can recover up to 60% of their training levy payments through an online platform. The administrative procedures to register and approve training activities and related tax refunds have considerably improved in recent years raising incentives for training investments into workers. Since firms have been granted freedom to choose training providers, competition and supply have increased, particularly from private providers. The remaining revenues from the training levy are used to finance initial VET and support training activities of smaller firms through specific subsidies.

These tax incentives are exclusively targeted at firms, which decide about the training content and the workers to train. This ensures that training content is aligned with skill needs of firms. However, firms choose the workers with the highest marginal return from the training, but not necessarily the low-skilled workers that would need training the most to prepare for the structural changes that digitalisation and globalisation of production processes will bring about (OECD, 2019^[84]; OECD, 2019^[50]). In addition, informal workers, the unemployed and the inactive population are excluded from these training subsidies. Although the public employment agency is providing training linked to wage subsidies for registered unemployed workers, in case they find a new employer, only about 17% of all the unemployed are

registered and it takes on average around 26 months for them to find a new employer to benefit from training subsidies (Boughzala, 2019^[1]).

The social and economic benefits of expanding continuous VET and adult learning policies to make more space for low-skilled and informal workers could be substantial. The share of adults that has not finished primary education is larger than in OECD countries (Figure 2.35). Although Tunisia is doing better than some of its regional peers, more than 20% of Tunisia's adult population cannot read or write. This is not only a serious social issue, but also partly explains the low productivity in many firms. Adoption of new technologies and production processes or compliance with product quality standards, often necessary for accessing export markets, is very difficult, if a large part of the blue-collar workforce has an insufficient level of basic skills to follow continuous VET courses. Thus, establishing a system of basic education for adults, which provides the opportunity to finish lower-secondary education, is crucial to prepare the population for the increasing digitalisation and globalisation of production processes. Raising spending efficiency in other parts of the education system could free financial resources and teachers to support this endeavour, in addition to key fiscal reforms discussed in the first chapter (Figure 2.21).

Figure 2.35. The share of adults without basic skills is high



Note: Data refers to 2018 or latest year available.

Source: OECD, Education at a Glance 2021; INS, Labour force survey; and World Bank, World Development Indicators.

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Training opportunities for low-skilled, unemployed, informal or inactive adults with sufficient basic skills to follow training courses need to be expanded. The capacity of the existing public training infrastructure directly serving workers is small, with only 9 000 inscriptions in 2016 (ONEQ, 2019^[82]). Direct allocation of training vouchers has been a successful strategy in many countries to raise access to training for disadvantaged individuals (Box 2.7). The allocation could be based on administrative data, such as the register of poor households used to administer the cash transfer programme (AMEN), which would reduce registration and information costs. If combined with a transparent quality certification system for training institutions, vouchers would improve competition between training providers (OECD, 2018^[88]). The vouchers could be used to select courses from a region-specific training catalogue that is closely linked to local private sector skill demands and should be combined with high-quality career counselling (Grundke et al., 2021^[89]). Another option could be to allocate a certain share of places in courses requested by firms in the current training levy system to disadvantaged workers, following a successful experience in Singapore (Box 2.7).

Box 2.7. Targeting vocational training to vulnerable workers: experience from several countries

Allocating vouchers for subsidised training courses to disadvantaged individuals has been a successful strategy to enhance employability of low-skilled, older and low-income individuals in many countries (OECD, 2019^[84]). An important feature of successful programmes has been to steer the use of vouchers to training content that is linked to labour market skill needs. Effective information and career guidance infrastructure have helped to increase take-up, and some countries even link the delivery of vouchers to the outcomes of career counselling.

In Korea, unemployed individuals are required to attend career counselling before they can access the Vocational Competency Development Account (OECD, 2019^[90]). In Belgium, adults with tertiary qualification can only access training vouchers if career counsellors agree that training is necessary. Some countries restrict the use of vouchers to a list of pre-approved training courses. In Estonia, for instance, vouchers can only be used by individuals who enrol in training that is related to ICT skills or has been identified to develop skills that are in shortage in the labour market (OECD, 2019^[84]). In Austria and Greece, vouchers are available for both the employed and the unemployed to develop digital skills while in Israel vouchers must be used to develop skills such as Real-Time, Java, or Application Development.

To reduce the administrative costs of targeting training to labour market demand, some countries have allocated vouchers directly to firms that could decide on training content and select workers for which the training would be most effective (OECD, 2019^[50]). Singapore has made these vouchers conditional on the inclusion of low-skilled, informal or unemployed workers in these courses so that they could benefit from training directly mapping with firms' skill demands. However, the experience of Italy and Malaysia with their training funds shows that employers are not necessarily perfectly forward looking in their assessment of future skill demands, as a major part of the funding is used for safety and health related training and very little for training related to ICT skills (OECD, 2019^[91]).

By linking the allocation of training vouchers to career counselling and job placement services, the cost effectiveness of training courses could be improved (Box 2.7). Access to courses could be made conditional on career counselling and an evaluation of the necessary prior-knowledge to better match trainees' skills and experience with training content (Box 2.7). Counselling services could provide better information on training opportunities and help to direct those interested in training to the right course. Incentivising the supply of evening, part-time or distance learning courses and providing a worker-specific subsidy linked to income or living area would facilitate the participation of disadvantaged workers living in remote areas. During the pandemic, the supply of online training courses has increased, but this needs to be combined with better internet access, particularly for disadvantaged individuals.

Social or development impact bonds could be one option to finance training provision to disadvantaged individuals (OECD, 2020^[24]; CGD, 2021^[92]). In this type of public-private partnership arrangements, providers would get significant autonomy in designing training courses and content, but their remuneration would be made contingent on specific outcome targets, such as the future employment rate of training participants. The success of such arrangements depends on how contracts are designed (OECD, 2016^[93]). In particular, the definition and measurement of social outcomes and the selection of target and control groups to evaluate whether objectives have been met are complex tasks that entail significant transaction costs and risks for the public sector. So far, the empirical evidence on the effectiveness of social impact bonds has been mixed and governments should be careful in providing specific social services completely through these types of arrangements (OECD, 2016^[93]). However, as a complement to traditional forms of public social service provision, social impact bonds have the potential to nurture a culture of monitoring and evaluation in social service delivery, which is currently missing in Tunisia.

Similar to the initial VET and the tertiary education system, the public training institutes providing continuous VET courses operate in isolation from the private sector and labour market needs (World Bank, 2021^[76]). The content of many courses is outdated and the supply is not well adapted to course demand, particularly in interior regions. Improving impact evaluation and quality control of courses through better coordination with firms and former trainees are crucial. Collecting training requests from local firms through an electronic platform could be combined with a skill anticipation assessment system focusing on skill needs in local labour markets to better guide course supply. This could build on experiences from firms in Tunisia, which have introduced such a platform to inform public and private training providers about their plant-specific training needs, monitor training needs of employees and evaluate the impact of training courses. In Brazil, the para-statal training provider SENAI has introduced a region-specific skill anticipation system in the state of São Paulo, which is combined with a comprehensive impact evaluation and content update of training courses that follow international best practices (OECD, 2018^[88]; Grundke et al., 2021^[89]).

As administrative procedures to approve subsidies for training courses have been improved and firms can freely choose providers, the supply of private training providers has strongly increased (World Bank, 2021^[76]). So far, neither a comprehensive registry nor an evaluation of private providers for continuous VET exist, which increases information costs for firms and workers searching for training. A comprehensive evaluation of existing training providers and programmes combined with a credible certification system would reduce asymmetric information and set the right incentives for training providers to improve the quality of their programmes. This would also increase training incentives for workers (Angel-Urdinola, Nucifora and Robalino, 2015^[4]).

Improving management and organisational skills in small and medium sized firms can be very effective to increase human capital investments and on the job training for workers (Angel-Urdinola, Nucifora and Robalino, 2015^[4]; Bloom and Reenen, 2010^[94]). It also has potential to significantly raise the productivity of firms in Tunisia and contribute to the reduction of informality. Many small and medium size firms in Tunisia suffer from weak management practices and underinvestment in human capital of their staff (Angel-Urdinola, Nucifora and Robalino, 2015^[4]). Since 2013, the share of firms providing formal training has significantly decreased (Figure 2.13). Firm-level analysis conducted for this report finds that in Tunisia the provision of formal training programmes for workers is associated with a 3% higher total factor productivity (Box 2.1) (Cassimon and Grundke, forthcoming^[12]). Subsidising targeted training for managers of small firms can be a suitable policy tool to improve human resource management and prepare low-productivity firms for rising domestic and international competition (Dutz, 2018^[95]).

Improving labour market policies and the matching of labour demand and supply

Enhancing the effectiveness of active labour market policies

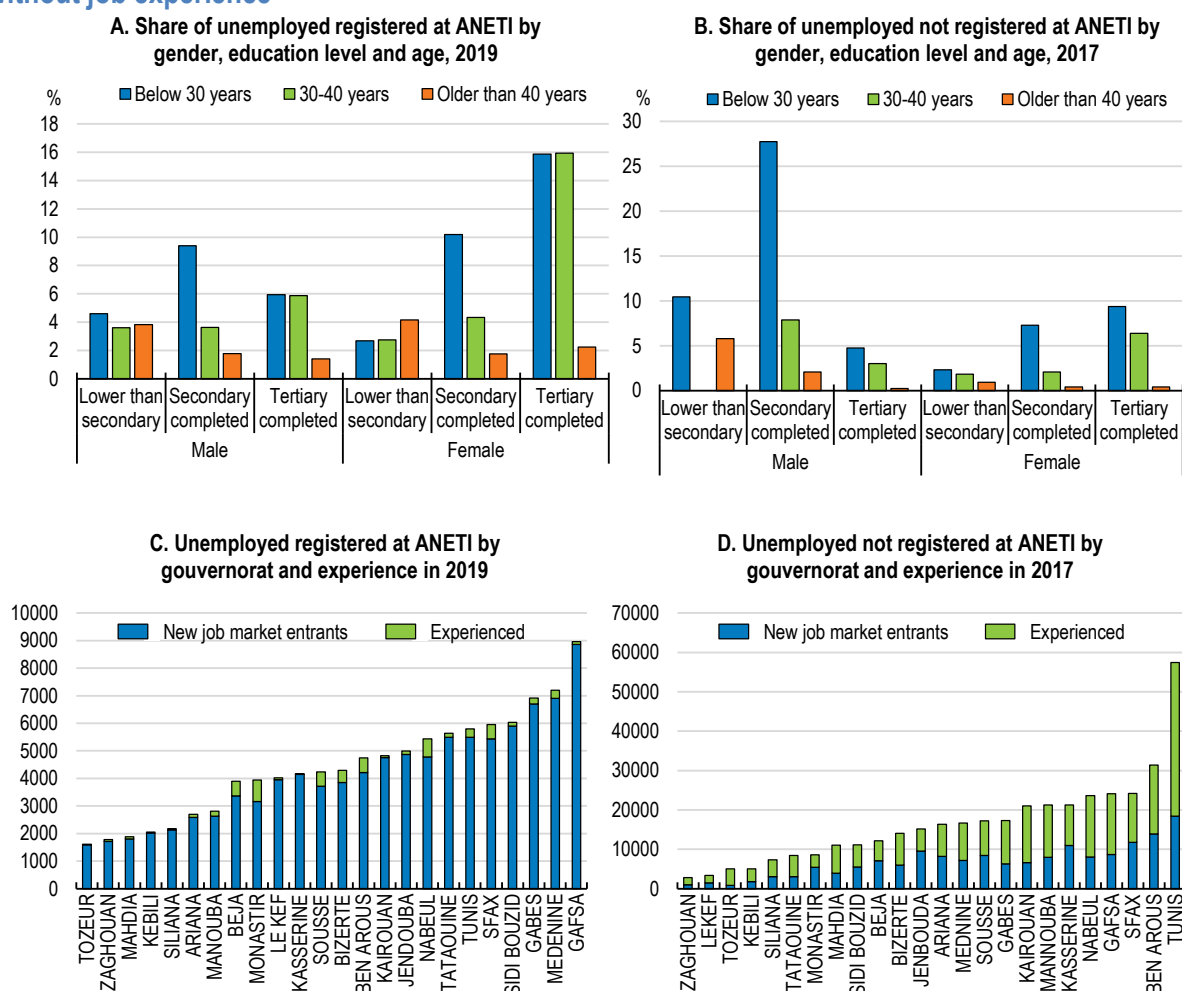
Although spending for active labour market policies, at 0.9% of GDP in 2017, is significantly above the OECD average of 0.5% of GDP, the design and implementation of these policies is weak due to a lack of coordination and impact evaluation (World Bank, 2021^[76]). The governance structure is highly fragmented with several ministries, agencies and a public bank responsible for different types of programs, and a comprehensive review of all programmes and their impacts does not exist.

The public employment agency (ANETI) manages wage and training subsidies for the unemployed, job placement services as well as some programs to promote entrepreneurship and self-employment, with total spending of about 0.5% of GDP (World Bank, 2021^[76]). Public works programmes, including construction works, but also a broad range of community services such as cleaning of public spaces, are managed by the Ministry of Regional Development, local communities as well as state-owned enterprises (SOEs) with an estimated cost of about 0.2% of GDP. The promotion of entrepreneurship and distribution of micro-credits is mainly managed by a public bank with a budget of around 0.2% of GDP, but programmes

targeting women in remote areas or youth are administered by other ministries. Moreover, the 2016 investment law has introduced additional wage and training subsidies that are independent from the ANETI programmes and administered by the investment agency and the Ministry of Industry. Consolidation of programmes and better coordination would allow for consistent monitoring and impact evaluation and improve resource allocation, effectiveness and spending efficiency of active labour market programmes.

Only around 17% of all unemployed individuals are registered at the public employment agency ANETI, and most of them are young tertiary graduates that have never worked before (Figure 2.36). Many unemployed are not registered, particularly young men without a tertiary degree and the unemployed with work experience, since the main incentive to register at ANETI is to receive wage and training subsidies (World Bank, 2021^[76]). These are mainly focused on unemployed tertiary graduates to provide them with a first professional experience and facilitate their transition to the formal labour market (World Bank, 2021^[76]; Angel-Urdinola, Nucifora and Robalino, 2015^[4]). To be eligible for these subsidies, unemployed persons need to register and regularly visit the offices of the public employment agency ANETI.

Figure 2.36. Wage subsidies and employment services mainly target young tertiary graduates without job experience



Note: Data for the unemployed registered at ANETI comes from the public employment agency ANETI, which collects information on the socio-economic background of registered unemployed persons. Data for the unemployed not registered at ANETI comes from the micro data of the labour force survey, which is only available up to 2017. The statistics are based on individual answers to the question whether the unemployed are registered at ANETI or not.

Source: ANETI, Indicateurs DEFM; and INS, Labour force survey.

The fact that so many unemployed workers do not register at ANETI indicates that public job placement services are not working well (Figure 2.36) (World Bank, 2021^[76]). The large majority of the unemployed is searching for a job through their personal network and the family or by randomly sending out applications or passing by employers close to their community (IACE, 2019^[11]). This leads to many inefficient job matches and contributes to low productivity of firms. Moreover, it generates high frustration among qualified job seekers, who do not find jobs due to a lack of the right personal contacts (IACE, 2019^[11]; OECD, 2015^[6]).

Improving job placement services is crucial to reduce structural unemployment and raise productivity through better job matches. Job placement services of ANETI suffer from significant understaffing and high administrative burden, with many job counsellors lacking the necessary skills and spending most of their time on administering wage and training subsidy contracts (World Bank, 2021^[76]; OECD, 2015^[6]). Moreover, the IT system fails to properly match skill requirements of vacancies with competences and abilities of job seekers, because detailed evaluations of occupational skill requirements and the quality and content of education certificates are missing (World Bank, 2021^[76]). Improving coordination and data exchange across ministries and agencies is key to build the necessary statistical infrastructure to monitor labour market trends and better inform stakeholders, such as firms, students, and workers as well as education and training institutes, about skill supply and skill needs in the labour market. This requires the introduction of a unique individual identifier which would allow to connect different databases and monitor and evaluate the effects of active labour market policies and education and training programmes on individual labour market outcomes.

To improve public job placement services, resources should be increased and reallocated from costly and ineffective wage subsidy programmes to employment services and the provision of training and adult education, expanding services to unemployed with work-experience and low-skilled labour market entrants. Job counsellors should have full access to individual training records and employment histories to better match job seekers with skill demands of firms and tailor training supply to individual needs (Box 2.7). This also requires better training and incentives for job counsellors, whose performance should be measured by longer-term labour market outcomes of clients, and the reallocation of administrative tasks to office clerks (OECD, 2015^[6]). Improving and expanding the certification system for work competences and prior-learning, in particular for informal workers, would help raising employability of low-skilled workers and encourage training investments (Dutz, 2018^[95]). Moreover, sharing databases and engaging private providers in job placement and counselling services with performance-based remuneration could complement improvements at ANETI (OECD, 2020^[24]). Allowing for more competition through the entry of private providers could also improve labour market matching, as currently private job placement services are forbidden and only selected firms are allowed to operate through discretionary authorisations (World Bank, 2021^[76]; OECD, 2015^[6]).

Wage and training subsidies have not been very effective in raising employability of the unemployed, as the selection of candidates is not based on their individual needs and conditionality of contracts has not been monitored and enforced well (Angel-Urdinola, Nucifora and Robalino, 2015^[4]). Although most contracts require firms to provide training or keep subsidised workers for a certain period, the information for monitoring and enforcing these conditions is not available. IT systems collecting this information do not exist and capacity constraints hinder job counsellors to follow up with labour market entrants and firms (OECD, 2015^[6]). In addition, administrative burden to recover costs for firm specific training is high, which prevents many firms from providing training to young labour market entrants. Insertion rates of participants in most programmes are low, and a high share of contracts is terminated ahead of schedule (World Bank, 2021^[76]). The number of wage and training subsidy programmes has been reduced since 2019, and more programmes now allow participation of low-skilled labour market entrants, which is an important step to improve their chances to enter the formal labour market. However, workers that got unemployed later in life are still not eligible for many of these activation policies, and selection of candidates remains

independent of the length of the unemployment spell. Moreover, a comprehensive and continuous monitoring and impact evaluation of existing programs is still missing.

The low effectiveness of wage subsidies is also related to low training incentives for firms, who use wage subsidies to lower unit labour costs, do not provide training and often fire workers when subsidy payments end (Angel-Urdinola, Nucifora and Robalino, 2015^[4]). Most vacancies posted at ANETI are from firms in low-productivity activities which offer low-paid and low-skill intensive blue-collar jobs, which are not attractive enough for many tertiary graduates registered at ANETI (Figure 2.29) (Boughzala, 2019^[1]). Most vacancies for high-skill white collar jobs are not posted at ANETI, but in social media, university networks or the few online job placement services that were allowed to enter the market (Boughzala, 2019^[1]). To raise the effectiveness of wage subsidy programmes, the matching of worker profiles with skill requirements and task-content of subsidised vacancies needs to improve. This also requires more engagement with the private sector to convince firms to post more vacancies for skill-intensive white-collar jobs at ANETI, or at least inform ANETI about the nature of their vacancies and skill needs to allow for better counselling job seekers (OECD, 2015^[6]).

High reservation wages contribute to explain why more than three out of four tertiary graduates registered at ANETI have been unemployed for longer than 24 months, although 45% of posted vacancies could not be filled (Figure 2.18). High reservation wages are due to negative cultural connotations of blue-collar work and the high attractiveness of public sector employment (World Bank, 2021^[76]). Wages in the public sector and state-owned enterprises (SOEs) are more than 35% higher than in the private sector, complemented by generous social security benefits (OECD, 2018^[8]). Recruitment in some parts of the public administration and SOE's has given priority to unemployed tertiary graduates registered at ANETI as labour market entrants, mainly due to pressure from the union of unemployed tertiary graduates (OECD, 2015^[7]; Marzouk, 2020^[96]; Marzouk, 2021^[97]). This has led to a phenomenon of queuing, whereby many tertiary graduates particularly from humanities, law and economics register as unemployed to wait for a public sector job, and receive support from their family or work in the informal sector (Angel-Urdinola, Nucifora and Robalino, 2015^[4]; Boughzala, 2019^[1]). This phenomenon is particularly pronounced in southern provinces home to large SOEs, where unemployment, ANETI registrations and informality are high, but at the same time daily wages for simple private sector jobs are more than double the wages in provinces with very low unemployment rates, such as Monastir (Figure 2.36) (Angel-Urdinola, Nucifora and Robalino, 2015^[4]). Moreover, being registered at ANETI is often an administrative requirement for unemployed tertiary graduates to receive a visa for labour migration (Boughzala, 2019^[1]).

It is key to change the cultural mind-set that underlies the phenomenon of queuing for public sector employment towards a culture of entrepreneurship. This requires reducing the gap between public and private sector wages, clear signals that being an unemployed labour market entrant is not a valid criterion for public recruitment and that public hiring will have to significantly slow down over the next years due to low fiscal space (OECD, 2015^[7]; Marzouk, 2020^[96]; Marzouk, 2021^[97]). Public recruitment processes should be open to all applicants including experienced workers from the private sector, which is currently hindered by strict maximum age limits of 35 and 40 years depending on the position, and recruitment should be exclusively based on performance in standardised tests and interviews.

Moreover, a culture of entrepreneurship needs to be developed, which requires a reform of basic education to improve teaching quality and emphasise entrepreneurial and soft skills in learning standards and curricula. However, above all, significant improvements in the business environment are necessary to facilitate the market entry of young start-ups and allow the development of innovative products and services (see above). Programs for the unemployed to stimulate entrepreneurship and provide access to credit can support this process, but should be better targeted to improve spending efficiency (World Bank, 2021^[76]). Succeeding as an entrepreneur requires implicit knowledge and experience about markets and production processes, which many unemployed labour market entrants do not have (World Bank, 2020^[14]; Morsy, Bassem and Selim, 2018^[22]; Boughzala, 2019^[1]).

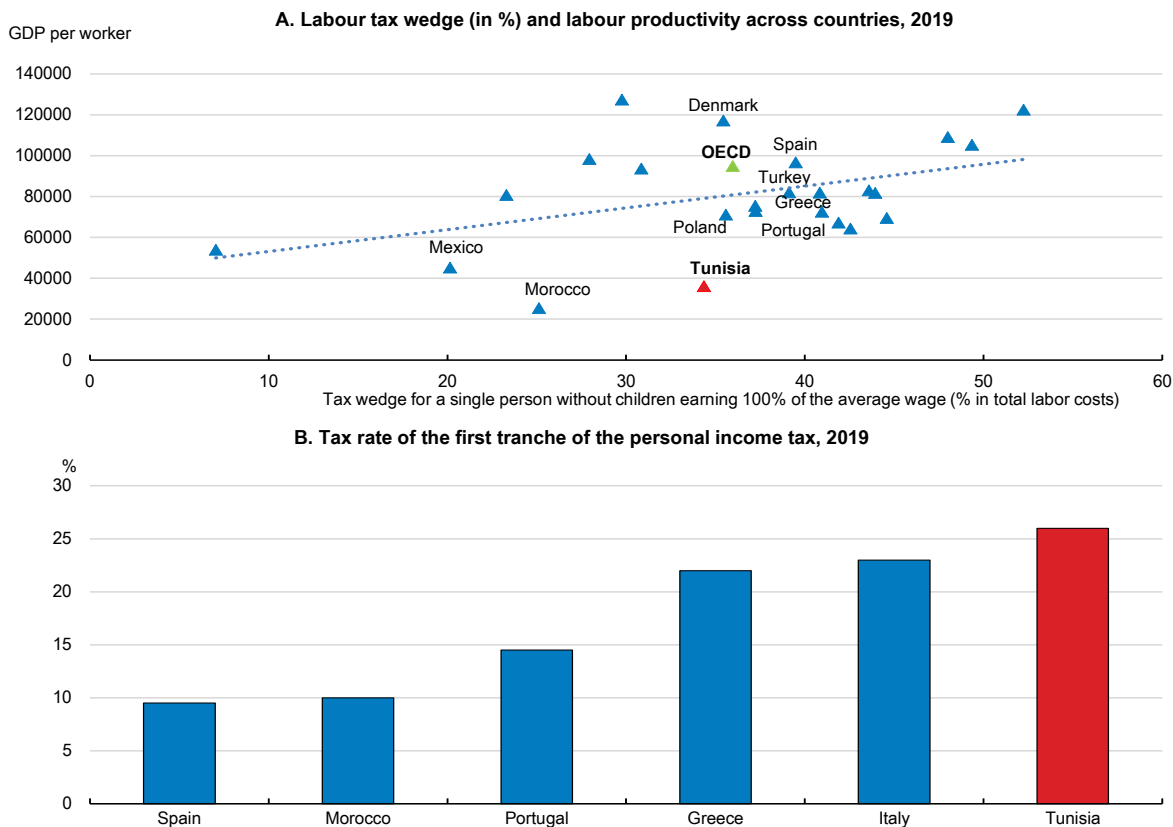
The lack of comprehensive unemployment insurance and assistance programmes hinders regional mobility and partly explains the large heterogeneity of unemployment rates across provinces (Angel-Urdinola, Nucifora and Robalino, 2015^[4]). For many unemployed youth, and especially women, the family is the only support for housing and food, which strongly reduces their geographic action space for searching a job. Moreover, many wage subsidy programs have effectively functioned as implicit passive labour market support in the past, as monitoring and enforcement of activation and training components were weak and many unemployed just subscribed to receive a monthly transfer (ILO, 2019^[98]; World Bank, 2021^[76]). The same is true for public work schemes, which comprise very low-skill intensive activities often missing any activation component. As these programs are place-based, they impede the registered unemployed to move to other regions for finding a job. Reallocating resources from these ineffective activation policies to create a general income support scheme for the unemployed, which is conditional on job-search efforts and acceptance of job offers, would help increasing regional labour mobility (OECD, 2011^[99]; ILO, 2019^[98]; OECD, 2015^[7]). However, this needs to be accompanied by more effective job placement and counselling services that operate nation-wide and provide mobility support and housing subsidies to facilitate reallocation (OECD, 2005^[100]). Improving transport infrastructure and access to affordable housing are also crucial to improve regional labour mobility (OECD, 2018^[8]).

Adjusting labour taxation and regulations to raise formal job creation and productivity

The labour tax wedge is slightly below the average of OECD countries, but relatively high when compared to low labour productivity in Tunisia (Figure 2.37). Particularly for low-skilled workers, a relatively steep income tax schedule reduces incentives for formalisation (Figure 2.37) (OECD, forthcoming^[101]). Lowering the tax rate for the first income bracket and raising the allowable deduction would raise incentives for formal job creation and formalisation and could be financed by better tax enforcement (Rocha, Ulyssea and Rachter, 2018^[102]; OECD, forthcoming^[101]).

Social security contribution rates are similar to peers, but comprise additional payroll taxes that could be shifted to general tax revenues to extend the existing unemployment assistance scheme (OECD, forthcoming^[101]). Social security contributions include contributions to the health and pension system, family allowances, housing allowances, a training tax as well as contributions to a rudimentary unemployment assistance programme. Unemployment assistance is financed by a 0.9% tax on wages, but only 6% of dismissed formal workers receive such benefits (Angel-Urdinola, Nucifora and Robalino, 2015^[4]). Extending the coverage of the existing unemployment assistance scheme would not only raise labour mobility, but would also make formal employment more attractive. This could be financed by marginal increases in the contribution rates, in combination with shifting the financing of family allowances and housing to general tax revenues, enhancing tax enforcement and reducing regressive deductions for personal income and capital gains taxes as well as VAT (IMF, 2021^[103]; OECD, forthcoming^[101]; ILO, 2019^[98]). Raising spending efficiency in the health system and better linking pension benefits to contributions would help to prevent future rises in contribution rates (OECD, 2018^[8]).

Figure 2.37. A relatively high labour tax wedge for low-skilled workers reduces incentives for formalisation



Note: Panel A, GDP per worker is gross domestic product (GDP), expressed in constant 2017 international dollars (purchasing power parity), divided by total workers, which includes people of working age who have been in employment recently and those who work part-time (ILO 2020). The tax wedge includes personal income taxes, employee and employer contributions, and other labour taxes from which social benefits are deducted. In Panel B, data for Morocco is for 2017.

Source: (OECD, forthcoming^[101]) based on OECD (2020), Tax on payroll database; and ILO (2020): Output per worker.

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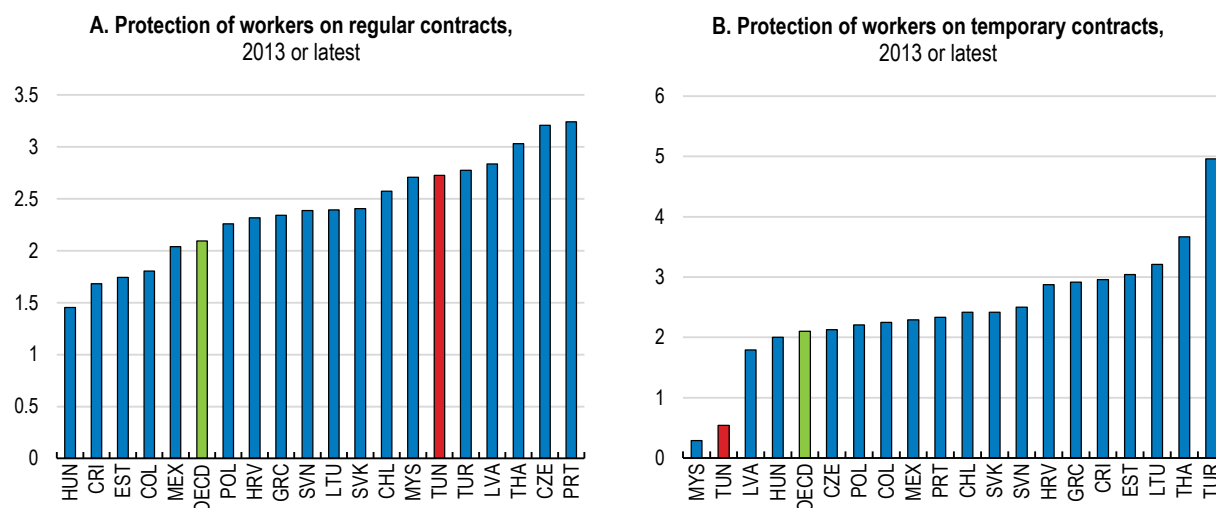
The high fragmentation of the social security system reduces labour mobility across sectors and firms as well as out of unemployment. Separate regimes exist by sector and employment status, e.g. for civil servants, agricultural workers, professional services, non-salaried workers, and low-wage workers, among others, with very different rules and contribution rates. Portability arrangements between the different regimes do not exist, which significantly reduces incentives to change jobs (Angel-Urdinola, Nucifora and Robalino, 2015^[4]). Many well-paid services professions such as architects, lawyers and other professional services are included in the regime for non-salaried workers and face very low contribution rates. Introducing a universal system with progressive contribution rates could improve labour mobility and raise social security revenues, while providing incentives for low-wage workers to join the formal sector.

Collective wage bargaining agreements, which establish wage floors by occupation, educational attainment and seniority of workers in around 70 sectors, hinder formal job creation and reduce incentives for productivity improvements. The complex wage floors are fixed at the national-level, although the cost of living can be much lower in remote regions. Larger firms dominate these wage negotiations, which leads to wage floors that many smaller and less productive competitors cannot afford, raising informality and reducing competition (Angel-Urdinola, Nucifora and Robalino, 2015^[4]). Entry wages for tertiary graduates are around 40% above the sector-specific minimum wage, and often above average wages, which reduces demand for tertiary graduates without work experience, as their average productivity is still low. Moreover,

for many smaller firms the complex collective wage schedule becomes binding, as they cannot afford to top up wages above negotiated wage floors. This prevents them from rewarding employees who are more productive compared to peers with the same occupation, seniority and education level. It also reduces incentives for workers to take training courses that do not lead to a formal education degree recognised in the collective wage schedule. Allowing for more flexibility in wage setting for smaller firms and adapting collective wage agreements to economic conditions is crucial to raise formal job creation and incentives for productivity improvements.

Large differences in employment protection between permanent and temporary contracts raise worker turnover and create a dual labour market (Figure 2.38) (OECD, 2015^[7]). Firms are reluctant to hire on permanent contracts as dismissals for economic reasons are forbidden and even dismissals due redundancy or misconduct are complicated and involve high litigation costs (Angel-Urdinola, Nucifora and Robalino, 2015^[4]). In contrast, temporary contracts, which can be extended up to four years, entail almost no firing costs for employers, who can dismiss workers without any notice or compensation. This regulatory discrepancy strongly increases worker turnover, as many firms hire workers on temporary contracts and fire them after four years (Figure 2.39) (Stampini and Verdier-Chouchane, 2011^[104]). Although legal provisions exist to incentivise permanent contracts by preventing firms to re-fill the position of a fired temporary worker after four years, enforcement is very weak due to missing labour inspections. More than 55% of young workers are employed on temporary contracts, which are in many cases even oral contracts (Boughzala, 2019^[1]). Temporary contracts do not entail any social security benefits and wages are on average 25% lower than in permanent contracts, controlling for education, gender, sector and experience of workers (Angel-Urdinola, Nucifora and Robalino, 2015^[4]). Transition rates from temporary to permanent contracts are low.

Figure 2.38. Employment protection is high for formal workers, but not on temporary contracts



Note: The index ranges from 0 (low regulation protection) to 6 (high regulation protection).

Source: OECD Employment protection database.

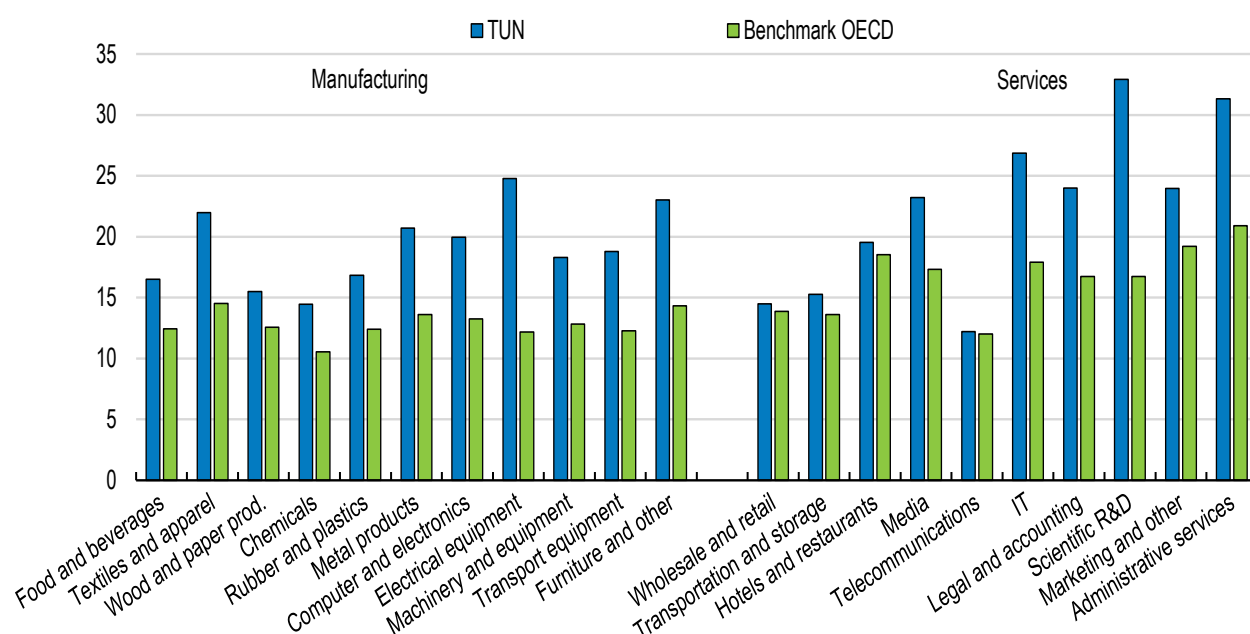
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High turnover among workers with temporary contracts reduces training incentives and contributes to low productivity (Figure 2.39). The return on investments in firm-specific human capital is low for workers, and firms have no incentives to provide general training as they cannot appropriate the returns (OECD, 2015^[7]). In addition, high firing costs for permanent workers can also reduce incentives for productivity

improvements and the realisation of more productive worker-firm matches. Thus, the large gap in employment protection between permanent and temporary contracts should be reduced to lower worker turnover and increase incentives for training and productivity improvements. Permanent contracts should allow for dismissals due to economic or technological reasons, while reinforcing controls and penalties for wrongful dismissal. Providing clear legal definitions for wrongful dismissals is crucial to reduce the scope for ambiguity and related litigation costs, as for example recent reforms of the labour code in Italy and France have shown (Silva, Almeida and Strokova, 2015^[105]; OECD, 2020^[24]; Bellan, 2018^[106]). Notice periods and compensations for dismissals on temporary contracts should be introduced, and social security benefits should be aligned to permanent contracts. Moreover, these changes in employment protection legislation need to be accompanied with a comprehensive income support for the unemployed irrespective of whether they are dismissed from a permanent or a temporary contract (ILO, 2019^[98]).

Figure 2.39. Job turn-over is high in many sectors

Job reallocation rate (in %) for Tunisia and OECD countries



Note: Data for Tunisia refers to an average across years for 2007-2018, and data for OECD benchmark countries refers to an average from 2007 until 2015. Benchmark OECD countries include Austria, Belgium, Canada, Spain, Finland, France, Hungary, Italy, Japan, Latvia, Netherlands, Norway, New Zealand, Portugal, Sweden, and Turkey.

Source: OECD DynEmp database (<https://www.oecd.org/sti/dynemp.htm>).

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MAIN FINDINGS	RECOMMENDATIONS
Promote the creation of more and better jobs	
In the onshore sector, authorisation regimes for entering a new market or offering a new product or service are numerous and involve opaque and lengthy procedures, discouraging entrepreneurship and investment.	Reduce prior authorisation for market entry and investment, while maintaining transparent ex-post controls to ensure regulatory compliance. Apply silence-is-consent rules and introduce one-stop shops whenever possible.
Overly complex tax incentive and subsidy regimes increase administrative burden, particularly for small firms, and hinder market entry and formalisation.	Conduct a comprehensive review and impact evaluation of existing subsidies and tax incentives and simplify the tax system.
A high income tax rate for low-skilled workers reduces incentives for formal job creation and formalisation of informal workers.	Reduce the income tax rate for the first income bracket and raise the allowable deduction, complemented by raising tax enforcement.
Collective wage bargaining agreements at the sectoral level establish complex wage floors by occupation, educational attainment and seniority of workers in around 70 sectors. Insofar as negotiations are dominated by large firms, wage floors are set at levels that are high compared to productivity levels at many smaller firms. This raises informality, hinders smaller firms to introduce performance-based remuneration and lowers training incentives of workers.	Grant SMEs more flexibility in wage setting and adapt collective wage agreements to economic conditions, including sector-specific ones.
Large differences in employment protection between permanent and temporary contracts raise worker turnover and reduce training incentives, contributing to low productivity.	Raise employment protection and social security benefits for temporary contracts and reinforce labour inspections, while allowing for dismissals due to economic reasons for permanent contracts.
Improve educational and vocational training outcomes for all	
Access to early-childhood education and childcare is low, particularly for low-income households and in interior regions, which hinders skills development and reduces labour market participation of women.	Raise spending efficiency in other parts of the education system to finance the expansion of early-childhood education, prioritising access for low-income and single-parent families.
Many newly-employed teachers lack a formal pedagogical education. The quality of initial and continuous teacher training is low due to a lack of teacher instructors and outdated curricula.	Improve selection as well as initial and continuous teacher training in basic education and VET, with a special focus on pedagogical skills.
The system of teacher evaluation and wage bonuses does not set the right incentives to improve teaching quality.	Link teacher evaluation and existing bonus systems to student improvements at yearly nation-wide exams and raise incentives for teachers to participate in additional training.
Changing the instruction language from lower to upper secondary education leads to a strong drop in performance, particularly for poor children.	Reduce barriers to advancement from primary to secondary education, in particular by providing high-quality teaching of languages from an early age, especially for children from low-income households.
Learning standards, curricula and related teaching methods for primary and secondary education are outdated, biased towards academic content and lack a focus on soft- and entrepreneurial skills.	Combine modern and less-academic learning standards and curricula with new teaching methods to foster group-work and self-initiative and improve soft and entrepreneurial skills of students.
Strong wage increases and additional hiring have put pressure on the education budget and reduced investment into a decaying school infrastructure, contributing to high dropout rates, particularly in rural areas.	Raise spending efficiency in the public education system to free resources for improving physical and ICT infrastructure in schools and vocational training institutes.
The share of adults that has not finished primary or lower secondary education and has difficulties to read or write is large.	Introduce basic education for adults providing the opportunity to finish lower-secondary education.
Many curricula of initial vocational education and training (VET) and tertiary education programmes are outdated and not adapted to the skill needs in the labour market.	Establish comprehensive impact evaluation and quality certification of VET and tertiary education programmes and better align curricula to labour market needs.
Secondary students do not receive sufficient information about labour market trends, skill needs of firms and the content and quality of VET and higher education programmes, which distorts their education decision.	Better inform secondary students and adults of employment and wage prospects for each of the higher education and VET paths.
The initial VET system and universities do not internalise skill needs in local labour markets due to a missing culture of impact evaluation and stakeholder involvement.	Improve cooperation between firms, VET institutes and universities, including at the regional level.
Age limits for apprenticeships prevent students that have dropped out from secondary education and low-skilled adults to re-enter parts of the initial VET system and upgrade their basic and technical skills.	Extend age limits for all initial VET programmes.
Although many initial VET programmes include workplace training, coordination between teachers and supervisors in firms is insufficient due to a weak legal framework and insufficient pedagogical training and	Better link formal VET and university curricula with workplace training by improving the legal framework and encourage a more active participation of firms, for example through information campaigns and stimulating intra-sectoral coordination on skills development among firms.

engagement of supervisors in firms. Very few university programmes include workplace training.	
Training subsidies do not target individuals most in need and impact evaluation of existing training subsidies to the registered unemployed does not exist.	Introduce training vouchers for low-skilled, unemployed and informal workers, linking subsidies for training providers to employment outcomes.
Recognition of non-formal and formal prior learning is weak, which creates barriers to enter initial and continuing VET and to find employment, particularly for informal workers.	Reinforce and operationalise the system for recognition and certification of prior learning and adapt course requirements in initial VET to individual needs.
Improve labour market policies and raise labour mobility	
Although spending on active labour market programmes is relatively high, their governance is highly fragmented, targeting is weak and results are modest.	Centralise the governance of active labour market programmes, including public works and entrepreneurship support, increase spending efficiency by better targeting towards individuals most in need and improve impact evaluation.
Job placement services of the ANETI suffer from significant understaffing and high administrative burden of job counsellors. Coordination among regional employment agencies is weak.	Improve public employment services by allocating more resources to personal counselling services, reducing administrative burden, strengthening training of counsellors, combining counselling with training support and increase inter-regional coordination.
Matching of skill requirements of vacancies with skills of job seekers is weak, because detailed evaluations of occupational skill requirements and of the quality and content of education and training activities are missing.	Introduce the individual identifier to foster data exchange across ministries and improve the IT system to evaluate labour market outcomes of training and education programmes and better match skill requirements of vacancies with abilities of job seekers.
More than 80% of the unemployed are not registered at the public employment agency, due to severe capacity constraints, and mainly use personal contacts for searching a job. However, private job placement services face legal difficulties to operate.	Allow for more competition from private employment service providers and consider outsourcing certain tasks to private providers using performance-based incentive contracts.
The social security system is highly fragmented and portability arrangements do not exist across regimes. This reduces labour mobility across sectors and firms.	Consolidate the fragmented social security system and introduce a universal system with progressive contribution rates.
The lack of unemployment assistance leads many unemployed, and particularly women, to rely on the family or place-based wage subsidy and public works programmes, which reduces labour mobility.	Extend the coverage of the existing unemployment assistance scheme and reinforce incentives for job search and training.
Many tertiary graduates are unemployed while they wait for public sector jobs due to attractive wages and social security benefits and hiring criteria that favour long-term unemployed and discriminate against experienced private sector workers.	Reduce incentives for labour market entrants to wait for public sector jobs by opening public recruitment processes to all applicants including experienced workers from the private sector and base recruitment exclusively on standardised performance tests. Redesign wage schedules in the public sector and SOEs to narrow the gap with the private sector.

References

- Amiti, M. and A. Khandelwal (2013), "Import Competition and Quality Upgrading", *The Review of Economics and Statistics*, Vol. 95/2, pp. 476-490, https://www.mitpressjournals.org/doi/pdf/10.1162/REST_a_00271 (accessed on 22 September 2018). [34]
- Amiti, M. and J. Konings (2007), "Trade Liberalization, Intermediate Inputs, and Productivity: Evidence from Indonesia", *American Economic Review*, Vol. 97/5, pp. 1611-1638, <https://doi.org/10.1257/aer.97.5.1611>. [33]
- Andrews, D., C. Criscuolo and P. Gal (2015), "Frontier firms, technology diffusion and public policy: Micro evidence from OECD countries". [52]
- Angel-Urdinola, D., A. Nucifora and D. Robalino (2015), *Labor Policy to Promote Good Jobs in Tunisia: Revisiting Labor Regulation, Social Security, and Active Labor Market Programs*, The World Bank, <https://doi.org/10.1596/978-1-4648-0271-3>. [4]
- Angrist, J. and V. Lavy (1997), "The Effect of a Change in Language of Instruction on the Returns to Schooling in Morocco", *Journal of Labor Economics*, Vol. 15/1, pp. 48-76. [66]
- Araújo, B. and L. Paz (2014), "The effects of exporting on wages: An evaluation using the 1999 Brazilian exchange rate devaluation", *Journal of Development Economics*, Vol. 111, pp. 1-16, <https://doi.org/10.1016/j.jdeveco.2014.07.005>. [45]
- Arfa, A. et al. (2018), *La réforme de la formation professionnelle en quête d'une concrétisation*, Institut Tunisien de la Compétitivité et des Études Quantitatives (ITCEQ), Tunis, <http://www.itceq.tn/files/emploi/reforme-de-la-formation-professionnelle.pdf> (accessed on 27 June 2021). [79]
- Arnold, J. et al. (2015), "Services Reform and Manufacturing Performance: Evidence from India", *The Economic Journal*, Vol. 126/590, pp. 1-39, <https://doi.org/10.1111/econj.12206>. [38]
- Ayadi, L. et al. (2013), *Estimating Informal Trade across Tunisia's Land Borders*, World Bank, Washington DC, <http://econ.worldbank.org>. (accessed on 18 June 2021). [19]
- Bechichi, N. et al. (2018), "MOVING BETWEEN JOBS AN ANALYSIS OF OCCUPATION DISTANCES AND SKILL NEEDS", *OECD SCIENCE, TECHNOLOGY AND INNOVATION POLICY PAPERS*, No. 52, OECD, Paris, <http://www.oecd.org/going-digital> (accessed on 27 September 2018). [51]
- Bechichi, N. et al. (2019), "Occupational mobility, skills and training needs", <http://www.oecd.org/going-digital>. (accessed on 26 January 2020). [53]
- Bellan, M. (2018), "Pourquoi les recours aux prud'hommes chutent", *Les Echos*, <https://www.lesechos.fr/economie-france/social/pourquoi-les-recours-aux-prudhommes-chutent-138568>. [106]
- Benstead, L. (2021), "6. The Impact of Poverty and Corruption on Educational Quality in Tunisia", in *The Political Economy of Education in the Arab World*, Lynne Rienner Publishers, <https://doi.org/10.1515/9781626379442-008>. [65]

- Bernard, A. et al. (2007), “Firms in International Trade”, *Journal of Economic Perspectives*, Vol. 21/3, pp. 105-130, <https://doi.org/10.1257/jep.21.3.105>. [114]
- Blalock, G. and F. Veloso (2007), “Imports, Productivity Growth, and Supply Chain Learning”, *World Development*, Vol. 35/7, pp. 1134–1151, <https://doi.org/10.1016/j.worlddev.2006.10.009>. [40]
- Bloom, N., M. Draca and J. Van Reenen (2016), “Trade induced technical change? The impact of chinese imports on innovation, IT and productivity”, *Review of Economic Studies*, Vol. 83/1, pp. 87-117, <https://doi.org/10.1093/restud/rdv039>. [26]
- Bloom, N. and J. Reenen (2010), “Why do management practices differ across firms and countries?”, *Journal of Economic Perspectives*, Vol. 24/1, pp. 203-224, <https://doi.org/10.1257/jep.24.1.203>. [94]
- Bosch, M. and R. Campos-Vazquez (2014), “The Trade-Offs of Welfare Policies in Labor Markets with Informal Jobs: The Case of the “Seguro Popular” Program in Mexico”, *American Economic Journal: Economic Policy*, Vol. 6/4, pp. 71-99, <https://doi.org/10.1257/pol.6.4.71>. [112]
- Bouchoucha, I. (2018), “The Migration of Women in Tunisia: Between Tradition and Modernity”, in *Gender and Mobility in Africa*, Springer International Publishing, Cham, https://doi.org/10.1007/978-3-319-65783-7_3. [9]
- Boughzala, M. (2019), *MARCHÉ DU TRAVAIL, DYNAMIQUE DES COMPÉTENCES ET POLITIQUES D’EMPLOI EN TUNISIE*, European Training Foundation, https://www.etf.europa.eu/sites/default/files/2019-08/labour_market_tunisia_fr.pdf (accessed on 14 June 2021). [1]
- Brandt, L., J. Van Biesebroeck and Y. Zhang (2012), “Creative accounting or creative destruction? Firm-level productivity growth in Chinese manufacturing”, *Journal of Development Economics*, Vol. 97/2, pp. 339-351, <https://doi.org/10.1016/J.JDEVECO.2011.02.002>. [46]
- Burke, M. and T. Sass (2013), “Classroom Peer Effects and Student Achievement”, *Journal of Labor Economics*, Vol. 31/1, pp. 51-82, <https://doi.org/10.1086/666653>. [71]
- Bustos, P. (2011), “Trade Liberalization, Exports, and Technology Upgrading: Evidence on the Impact of MERCOSUR on Argentinian Firms”, *American Economic Review*, Vol. 101, pp. 304-340, <https://doi.org/10.1257/aer.101.1.304>. [113]
- Cadot, O., J. Gourdon and F. van Tongeren (2018), “Estimating Ad Valorem Equivalents of Non-Tariff Measures: Combining Price-Based and Quantity-Based Approaches”, *OECD Trade Policy Papers*, No. 215, OECD Publishing, Paris, <https://dx.doi.org/10.1787/f3cd5bdc-en>. [48]
- Cassimon, S. and R. Grundke (forthcoming), “Improving skills and employment opportunities in Tunisia”, *OECD Economics Department Working Papers*. [12]
- Cassimon, S., R. Grundke and P. Kowalski (forthcoming), “The opportunities associated with Tunisia’s greater integration with international markets”, *OECD Economics Department Working Papers*. [58]
- CGD (2021), *Investing in Social Outcomes: Development Impact Bonds*, Centre for Global Development, <https://www.cgdev.org/page/investing-social-outcomes-development-impact-bonds-0>. [92]

- CRES (2016), *Protection sociale et économie informelle en Tunisie - Défis de la transition vers l'économie formelle*, Centre des Recherches et d'Etudes Sociales, http://www.cres.tn/uploads/tx_wdbiblio/Secteur_informel_Tunisie.pdf. [18]
- Criscuolo, C., P. Gal and C. Menon (2014), "The Dynamics of Employment Growth: New Evidence from 18 Countries", *OECD Science, Technology and Industry Policy Papers*, No. 14, OECD Publishing, Paris, <https://dx.doi.org/10.1787/5jz417hj6hg6-en>. [44]
- De Loecker, J. et al. (2016), "Prices, Markups, and Trade Reform", *Econometrica*, Vol. 84/2, pp. 445-510, <https://doi.org/10.3982/ECTA11042>. [42]
- Dutz, M. (2018), *Jobs and Growth: Brazil's Productivity Agenda*, The World Bank, <https://doi.org/10.1596/978-1-4648-1320-7>. [95]
- Eppinger, P. (2019), "Service offshoring and firm employment", *Journal of International Economics*, Vol. 117, pp. 209-228, <https://doi.org/10.1016/j.jinteco.2019.01.007>. [39]
- Eurofound (2021), *European Reshoring Monitor*, <https://reshoring.eurofound.europa.eu/>. [87]
- European Commission (2021), *Ex-post Evaluation of the impact of trade chapters of the Euro-Mediterranean Association Agreements with six partners: Algeria, Egypt, Jordan, Lebanon, Morocco and Tunisia*, European Commission - Directorate General for Trade, <https://op.europa.eu/en/publication-detail/-/publication/fab9bddd-9106-11eb-b85c-01aa75ed71a1>. [15]
- European Commission (2019), *Rapport du sous-comité UE-TUNISIE "Commerce, industrie et service" et du sous-comité UE-TUNISIE "Marché interieur"*, https://trade.ec.europa.eu/doclib/docs/2019/october/tradoc_158410.pdf. [28]
- Fouarge, D. et al. (2020), "Do labour market opportunities affect VET students' educational choice? Evidence from stated choice and field experiments", <https://www.oecd.org/els/emp/OECD-ELS-Seminars-Fouarge.pdf>. [75]
- Garcia-Marin, A. and N. Voigtländer (2019), "Exporting and Plant-Level Efficiency Gains: It's in the Measure", *Journal of Political Economy*, Vol. 127/4, pp. 1777-1825, <https://doi.org/10.1086/701607>. [115]
- Goldberg, P. et al. (2009), "Trade Liberalization and New Imported Inputs", *American Economic Review*, Vol. 99/2, pp. 494-500, <https://doi.org/10.1257/aer.99.2.494>. [32]
- Grundke, R. et al. (2021), "Improving skills to harness the benefits of a more open economy in Brazil", *OECD Economics Department Working Papers*, No. 1661, OECD Publishing, Paris, <https://dx.doi.org/10.1787/222c1741-en>. [89]
- Grundke, R. et al. (2017), "Skills and global value chains: A characterisation", *OECD Science, Technology and Industry Working Papers*, No. 2017/05, <https://dx.doi.org/10.1787/cdb5de9b-en>. [62]
- Grundke, R. et al. (2018), "Which skills for the digital era?: Returns to skills analysis", *OECD Science, Technology and Industry Working Papers*, No. 2018/09, OECD Publishing, Paris, <https://dx.doi.org/10.1787/9a9479b5-en>. [57]

- Grundke, R. and C. Moser (2019), "Hidden protectionism? Evidence from non-tariff barriers to trade in the United States", *Journal of International Economics*, Vol. 117, pp. 143-157, <https://doi.org/10.1016/j.jinteco.2018.12.007>. [27]
- Haltiwanger, J. et al. (2013), "Cross-Country Differences in Productivity: The Role of Allocation and Selection", *American Economic Review*, Vol. 103/1, pp. 305-334, <https://doi.org/10.1257/aer.103.1.305>. [20]
- Heckman, J. et al. (2010), "The Rate of Return to the High/Scope Perry Preschool Program", *Journal of Political Economy*, Vol. 94/1-2, pp. 114-128. [70]
- Heckman, J. and S. Mosso (2014), "The Economics of Human Development and Social Mobility", *Annual Review of Economics*, Vol. 6, pp. 689-733, <https://doi.org/10.1146/annurev-economics-080213-040753>. [67]
- Heckman, J., R. Pinto and P. Savelyev (2013), "Understanding the mechanisms through which an influential early childhood program boosted adult outcomes", *American Economic Review*, Vol. 103/6, pp. 2052-2086, <https://doi.org/10.1257/aer.103.6.2052>. [68]
- He, Z. and M. Dai (2017), "Learning by Importing", Columbia University, <http://www.columbia.edu/~zh2178/Learning%20by%20Importing.pdf> (accessed on 22 September 2018). [41]
- Hoekman, B. and A. Mattoo (2008), *Services Trade And Growth*, The World Bank, <https://doi.org/10.1596/1813-9450-4461>. [37]
- Hsieh, C. and P. Klenow (2009), "Misallocation and Manufacturing TFP in China", *The Quarterly Journal of Economics*, Vol. 124/4, pp. 1403-1448, <https://www.jstor.org/stable/pdf/40506263.pdf> (accessed on 17 January 2019). [21]
- Hummels, D. et al. (2012), "Offshoring, Transition, and Training: Evidence from Danish Matched Worker-Firm Data", *American Economic Review*, Vol. 103/2, pp. 424-428, <https://doi.org/10.1257/aer.102.3.424>. [54]
- Hummels, D., J. Munch and C. Xiang (2018), *Offshoring and labor markets*, American Economic Association, <https://doi.org/10.1257/jel.20161150>. [55]
- IACE (2019), *Rapport National de l'Emploi*, Institute Arabe des Chefs d'entreprise, <https://iace.tn/docs/?limit=15&q=emploi&catid=0&theme=default>. [11]
- IBGE (2016), *Pesquisa nacional de saúde do escolar 2015*, Instituto Brasileiro de Geografia e Estadísticas. [109]
- IFC and UTICA (2017), *Evaluation des écarts de compétences dans le secteur des TIC en Tunisie*, http://www.digitaltalent.tn/u_p_l_d/etudes/evaluation-des-ecarts-de-competences-dans-le-secteur-des-tic-en-tunisie_sommaire_1_025668900150488704659b2c1063eb78.pdf. [60]
- ILO (2019), *Tunisie Étude de faisabilité d'un fonds perte d'emploi (options et coûts)*, International Labour Organisation, <https://www.social-protection.org/gimi/gess/RessourcePDF.action;jsessionid=67Hr7bj8uHfcK1NIhZ-K1t-atlfCulFmZN30KBmqcr0h7cxceFP9I539423187?id=56782> (accessed on 6 July 2021). [98]

- ILO (2013), *L'amélioration de l'apprentissage informel en Tunisie*, International Labour Organisation, https://www.ilo.org/wcmsp5/groups/public/---ed_emp/---ifp_skills/documents/presentation/wcms_218821.pdf. [83]
- IMF (2021), *Tunisia : 2021 Article IV Consultation*, International Monetary Fund, <https://www.imf.org/en/Publications/CR/Issues/2021/02/26/Tunisia-2020-Article-IV-Consultation-Press-Release-Staff-Report-and-Statement-by-the-50128>. [103]
- INS (2020), *Indicateurs sur l'emploi informel 2019*, Institute National de Statistiques Tunisie, <http://ins.tn/publication/indicateurs-sur-lemploi-informel-2019>. [17]
- Journard, I., S. Dhaoui and H. Morgavi (2018), "Insertion de la Tunisie dans les chaines de valeur mondiales et role des entreprises offshore", *Documents de travail du Département des Affaires économiques de l'OCDE*, No. 1478, Éditions OCDE, Paris, <https://dx.doi.org/10.1787/546dbd75-fr>. [13]
- Maertens, M. and J. Swinnen (2009), "Trade, Standards, and Poverty: Evidence from Senegal", *World Development*, Vol. 37/1, pp. 161-178, <https://doi.org/10.1016/j.worlddev.2008.04.006>. [49]
- Marzouk, H. (2021), "Enseignement supérieur : vers le recrutement de 1130 enseignants-chercheurs", *L'Economiste Maghrébin*, <https://www.leconomistemaghrebin.com/2021/09/23/enseignement-superieur-recrutement-1130-docteurs/>. [97]
- Marzouk, H. (2020), "ARP : Initiative législative pour embaucher les anciens chômeurs", *Economiste Maghrebin*, <https://www.leconomistemaghrebin.com/2020/06/18/arp-initiative-legislative-embaucher-anciens-chomeurs/>. [96]
- Melitz, M. (2003), *The Impact of Trade on Intra-Industry Reallocations and Aggregate Industry Productivity*, <https://www.jstor.org/stable/pdf/1555536.pdf?refreqid=excelsior%3Ae3382ca8aee44f583882d975e0cdb85e> (accessed on 22 September 2018). [43]
- Morsy, H., K. Bassem and R. Selim (2018), *Tunisia Diagnostic paper: Assessing Progress and Challenges in Unlocking the Private Sector's Potential and Developing a Sustainable Market Economy*, European Bank for Reconstruction and Development, <https://www.ebrd.com/documents/strategy-and-policy-coordination/tunisia.pdf?blobnocache=true>. [22]
- OECD (2021), *Career Guidance for Adults in a Changing World of Work*, Getting Skills Right, OECD Publishing, Paris, <https://dx.doi.org/10.1787/9a94bfad-en>. [74]
- OECD (2021), *OECD Tourism Trends and Policies 2020*, OECD Publishing Paris, <https://www.oecd.org/cfe/tourism/2020-Tourism-Brochure.pdf>. [77]
- OECD (2020), *Education at a Glance 2020: OECD Indicators*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/69096873-en>. [107]
- OECD (2020), "Mitigating the impact of COVID-19 on tourism and supporting recovery", *OECD Tourism Papers*, No. 2020/03, OECD Publishing, Paris, <https://dx.doi.org/10.1787/47045bae-en>. [78]
- OECD (2020), *OECD Economic Surveys: Brazil 2020*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/250240ad-en>. [24]

- OECD (2019), *Financial Incentives to Promote Adult Learning in Australia*, Getting Skills Right, OECD Publishing, Paris, <https://dx.doi.org/10.1787/c79badcc-en>. [90]
- OECD (2019), *Getting Skills Right: Future-Ready Adult Learning Systems*, Getting Skills Right, OECD Publishing, Paris, <https://dx.doi.org/10.1787/9789264311756-en>. [84]
- OECD (2019), *OECD Competition Assessment Reviews: Tunisia*, OECD Publishing Paris, <https://www.oecd.org/daf/competition/ca-tunisia-review-2019-en.pdf>. [31]
- OECD (2019), *OECD Economic Surveys: PORTUGAL*, OECD. [23]
- OECD (2019), *OECD Economic Surveys: Argentina 2019*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/0c7f002c-en>. [29]
- OECD (2019), *OECD Economic Surveys: Malaysia 2019*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/eaaa4190-en>. [91]
- OECD (2019), *OECD Skills Outlook 2019 : Thriving in a Digital World*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/df80bc12-en>. [50]
- OECD (2019), *PISA 2018 Results (Vol II): Where all students can succeed.*, OECD Publishing Paris, <https://doi.org/10.1787/b5fd1b8f-en>. [69]
- OECD (2018), *Études économiques de l'OCDE : Tunisie 2018: Évaluation économique*, Éditions OCDE, Paris, https://dx.doi.org/10.1787/eco_surveys-tun-2018-fr. [8]
- OECD (2018), *Getting Skills Right: Brazil*, Getting Skills Right, OECD Publishing, Paris, <https://dx.doi.org/10.1787/9789264309838-en>. [88]
- OECD (2018), *OECD Economic Surveys BRAZIL*. [108]
- OECD (2018), *Seven Questions about Apprenticeships: Answers from International Experience*, OECD Reviews of Vocational Education and Training, OECD Publishing, Paris, <https://dx.doi.org/10.1787/9789264306486-en>. [80]
- OECD (2017), *OECD Skills Outlook 2017: Skills and Global Value Chains*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/9789264273351-en>. [111]
- OECD (2016), *Getting Skills Right: Assessing and Anticipating Changing Skill Needs*, Getting Skills Right, OECD Publishing, Paris, <https://dx.doi.org/10.1787/9789264252073-en>. [73]
- OECD (2016), *Low-Performing Students: Why They Fall Behind and How To Help Them Succeed*, PISA, OECD Publishing, Paris, <https://dx.doi.org/10.1787/9789264250246-en>. [72]
- OECD (2016), *PISA 2015 Results (Volume I): Excellence and Equity in Education*, PISA, OECD Publishing, Paris, <https://dx.doi.org/10.1787/9789264266490-en>. [64]
- OECD (2016), *Understanding social impact bonds*, OECD, Paris, <http://www.oecd.org/cfe/leed/UnderstandingSIBsLux-WorkingPaper.pdf> (accessed on 19 February 2020). [93]
- OECD (2015), *Investing in Youth: Tunisia: Strengthening the Employability of Youth during the Transition to a Green Economy*, Investing in Youth, OECD Publishing, Paris, <https://dx.doi.org/10.1787/9789264226470-en>. [6]

- OECD (2015), *Tunisia: A reform agenda to support competitiveness and inclusive growth*, OECD Publishing, Paris, <https://www.oecd.org/countries/tunisia/Tunisia-a-reform-agenda-to-support-competitiveness-and-inclusive-growth.pdf> (accessed on 28 June 2021). [7]
- OECD (2011), *OECD Employment Outlook 2011*, OECD Publishing, Paris, https://dx.doi.org/10.1787/empl_outlook-2011-en. [99]
- OECD (2010), *Learning for Jobs*, OECD Reviews of Vocational Education and Training, OECD Publishing, Paris, <https://dx.doi.org/10.1787/9789264087460-en>. [81]
- OECD (2005), *Trade and Structural Adjustment: Embracing Globalisation*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/9789264010970-en>. [100]
- OECD (forthcoming), *Competition Assessment Tunisia*, OECD Publishing Paris. [25]
- OECD (forthcoming), *Soutenir la Tunisie dans la mise en œuvre de mesures fiscales*, OECD Publishing Paris. [101]
- Olley, G. and A. Pakes (1996), "The Dynamics of Productivity in the Telecommunications Equipment Industry", *Econometric*, Vol. 64/6, pp. 1263-1297, <https://www.jstor.org/stable/pdf/2171831.pdf?refreqid=excelsior%3A0e474c9384e818e114e409d9172a6487> (accessed on 17 January 2019). [47]
- ONEQ (2019), *La formation professionnelle en chiffres 2017*, Observatoire National de l'Emploi et des Qualifications, http://www.emploi.tn/uploads/pdf/ONEQ/FP2017_VF.pdf (accessed on 27 June 2021). [82]
- ONEQ (2017), *Etude sur l'insertion professionnelle des diplômés du dispositif national de la formation professionnelle*, Observatoire Nationale de l'Emploi et des Qualifications, http://www.emploi.nat.tn/ckeditor/ckfinder/userfiles/files/Rapport_dip_fp.pdf. [61]
- ONEQ (2013), *Le marché du Travail en Tunisie*, Observatoire National de l'Emploi et des Qualifications, http://www.emploi.tn/uploads/pdf/ONEQ/2013_Rapport_sur_le_marche_du_travail.pdf (accessed on 11 June 2021). [2]
- Pavcnik, N. (2002), "Trade Liberalization, Exit, and Productivity Improvements: Evidence from Chilean Plants", *The Review of Economic Studies*, Vol. 69/1, pp. 245-276, <https://doi.org/10.1111/1467-937X.00205>. [36]
- Plank, L. and C. Staritz (2014), "Global Competition, Institutional Context, and Regional Production Networks: Up-and Downgrading Experiences in Romania's Apparel Industry", *ÖFSE Working Paper*, Vol. 50, <https://www.econstor.eu/bitstream/10419/104631/1/805462295.pdf> (accessed on 9 July 2021). [16]
- Rocha, R., G. Ulyssea and L. Rachter (2018), "Do lower taxes reduce informality? Evidence from Brazil", *Journal of Development Economics*, Vol. 134, pp. 28-49, <https://doi.org/10.1016/j.jdeveco.2018.04.003>. [102]
- Rudloff, B. (2020), "A Stable Countryside for a Stable Country? The Effects of a DCFTA with the EU on Tunisian Agriculture", *Stiftung Wissenschaft Politik Research Papers*, Vol. 2, <https://doi.org/10.18449/2020RP02>. [30]

- Silva, J., R. Almeida and V. Strokova (2015), *Sustaining Employment and Wage Gains in Brazil: A Skills and Jobs Agenda*, The World Bank, <https://doi.org/10.1596/978-1-4648-0644-5>. [105]
- Spitz-Oener, A. (2006), "Technical Change, Job Tasks, and Rising Educational Demands: Looking outside the Wage Structure", *Journal of Labor Economics*, Vol. 24/2, pp. 235-270, <https://doi.org/10.1086/499972>. [56]
- Stampini, M. and A. Verdier-Chouchane (2011), "Labor Market Dynamics in Tunisia: The Issue of Youth Unemployment", *Review of Middle East Economics and Finance*, Vol. 7/2, pp. 1-35, <https://doi.org/10.2202/1475-3693.1394>. [104]
- TAA (2020), *Présentation du Pacte pour l'Industrie Automobile en Tunisie et des résultats de l'enquête impact COVID-19*, <https://taa.tn/wp-content/uploads/2020/12/20200723-TAA-Pr%C3%A9sentation-AG-TAA-Jeudi-23-Juillet.pdf>. [85]
- TIA (2020), *Automotive Sector Representation*, Tunisian Investment Authority, <https://tia.gov.tn/storage/app/media/TUNISIA%20VALUE%20PROPOSITION/TIA%20TUNISIA%20AUTOMOTIVE%20SECTOR.pdf>. [86]
- Topalova, P. and A. Khandelwal (2011), "Trade Liberalization and firm productivity: The case of India", *The Review of Economics and Statistics*, Vol. 93/3, pp. 995-1009, https://doi.org/10.1162/REST_a_00095. [35]
- UNESCO (2021), *Talents TIC en Tunisie - l'adéquation entre l'offre et la demande*, <https://en.ichei.org/Uploads/Download/2021-10-13/61667cfbd9c78.pdf>. [59]
- UNICEF (2020), *Analyse de la situation des enfants en Tunisie 2020*, UNICEF, <https://www.unicef.org/tunisia/media/2986/file/SITAN-11-2020.pdf> (accessed on 15 June 2021). [5]
- UNICEF and INS (2019), *Tunisie: Enquête par grappes à indicateurs multiples (MICS)*, le Ministère du Développement de l'Investissement et de la Coopération Internationale (MDICI), <https://washdata.org/report/tunisia-2018-mics-report>. [3]
- World Bank (2021), *World Development Indicators*, <https://databank.worldbank.org/source/world-development-indicators>. [63]
- World Bank (2021), *Youth Employment In Tunisia : Concept Note for Activities Under the New Window, Better Employment Policies*, World Bank, <https://documents.worldbank.org/pt/publication/documents-reports/documentdetail/368251622210279606/youth-employment-in-tunisia-concept-note-for-activities-under-the-new-window-better-employment-policies>. [76]
- World Bank (2020), *TUNISIA ECONOMIC MONITOR Rebuilding the Potential of Tunisian Firms*, World Bank, Washington DC, <https://documents1.worldbank.org/curated/en/194331608565600726/pdf/Tunisia-Economic-Monitor-Rebuilding-the-Potential-of-Tunisian-Firms-Fall-2020.pdf> (accessed on 17 June 2021). [14]
- World Bank (2016), *Brazil Systematic Country Diagnostic: Retaking the path to Inclusion, Growth and Sustainability*, The World Bank Group. [110]
- WTO (2016), *Trade policy review - Tunisia*, World Trade Organisation, https://www.wto.org/english/tratop_e/tpr_e/s341_e.pdf. [10]

TUNISIA

Tunisians are facing the worst crisis in a generation, as COVID-19 hit an economy that was already slowing down. Macroeconomic policy through fiscal stimulus and monetary easing limited the depth and severity of the recession, but the pandemic has exacerbated structural weaknesses, in particular low investment and job creation, high unemployment and informality, mismatch between skills demand and supply, and outward migration of high-skilled professionals. Children who have been deprived of school for a long period will face severe challenges in resuming normal life. The second OECD Economic Survey takes stock of progress made since 2018 and makes recommendations in key policy areas such as public spending, state-owned enterprises, employment, education, vocational training, trade, taxation and the business environment. Implementing such reforms would produce a large growth dividend and put public debt on a more sustainable path. But unless bold action is taken soon, the crisis will have a lasting effect on the potential of Tunisia to resume its income convergence process.

SPECIAL FEATURES: EMPLOYMENT AND SKILLS

