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COMMISSION STAFF WORKING DOCUMENT

Country Report Cyprus 2020

Accompanying the document

COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE EUROPEAN COUNCIL, THE COUNCIL, THE EUROPEAN CENTRAL BANK AND THE EUROGROUP

**2020 European Semester: Assessment of progress on structural reforms, prevention and
correction of macroeconomic imbalances, and results of in-depth reviews under
Regulation (EU) No 1176/2011**

{COM(2020) 150 final}

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EXECUTIVE SUMMARY

Cyprus' economy is still characterised by large economic imbalances, which, unless addressed, may impede its medium-term economic prospects. Cyprus' large imbalances are a legacy of the 2013 crisis and include high stocks of private, public and external debt and non-performing loans. In this context, there is also a need to step up reforms in key areas to attract productivity-enhancing investments, diversify the economy and help foster inclusive and environmentally sustainable growth in the long term. ⁽¹⁾

Economic growth has remained resilient so far, but is expected to slow down in the coming years. GDP growth, projected to be 3.2%% in 2019, has remained strong, supported by resilient domestic demand. Meanwhile, net exports had a negative impact, reflecting a less supportive external environment. The economy is expected to continue growing — albeit at a slower pace — by around 2.8%% in 2020 and 2.5% in 2021, in view of the anticipated weakness of the global economy. The current account deficit is significantly negative, and is set to worsen to around 10%% of GDP in 2019-2021 due to lower exports and increased imports in the context of strong domestic demand. Unemployment fell to 7.5%% in 2019, the lowest level since 2011, and is expected to fall further. Inflation remained low, and this trend is projected to continue over the next couple of years.

Cyprus is expected to record a significant budget surplus in 2019. The headline budget balance is set to return to surplus in 2019 (above 3.5%% of GDP) and to remain in surplus in 2020 and 2021, which would enable considerable debt reduction. To safeguard fiscal sustainability going forward expenditure developments should be carefully monitored, especially in the light of possible future risks to the robustness of revenues.

⁽¹⁾ This report assesses Cyprus's economy in the light of the European Commission's Annual Sustainable Growth Strategy, published on 17 December 2019. In this document, the Commission sets out a new strategy on how to address not only the short-term economic challenges but also the economy's longer-term challenges. This new economic agenda of competitive sustainability has on four dimensions: environmental sustainability, productivity gains, fairness and macroeconomic stability. At the same time, the Commission published the Alert Mechanism Report that initiated the eighth round of the macroeconomic imbalance procedure. The Alert Mechanism Report found that Cyprus warranted an in-depth review, which is presented in this report.

The long-term sustainability of the growth model of Cyprus is put at risk by rising external uncertainties and pending structural reforms.

Growth relies heavily on specific sectors, such as tourism, foreign-funded residential construction and services linked to foreign companies, which are vulnerable to potential negative external developments. There is a need to improve the environmental sustainability of tourism and to diversify the sector further. More generally, investment lags behind in areas that could strengthen Cyprus' economic structure and increase its potential growth, such as digital transformation, R&D, renewable sources of energy, sustainable transport and the circular economy. At the same time, to ensure that growth benefits all groups of the population, more investment is needed in vocational education and training, adult learning, early childhood education and care, and health.

Overall, Cyprus has made limited ⁽²⁾ progress in addressing the 2019 country-specific recommendations.

There has been some progress:

- in improving the governance of state-owned enterprises;
- in facilitating the reduction of non-performing loans;
- in strengthening the effectiveness of the public employment services and getting more young people into jobs and training;
- on the National Health Insurance System;
- on energy efficiency and renewable energy;
- in improving R&D; and
- in improving access to finance for small and medium-sized enterprises.

Cyprus has made limited progress:

⁽²⁾ Information on the level of progress and actions taken to address the policy advice in each respective subpart of a country-specific recommendation is presented in the overview table in Annex A.

- in improving the efficiency of the public administration and local governments;
- in tackling aggressive tax planning;
- in reforming the education system; and in increasing employers' engagement and learners' participation in vocational education and training;
- in improving the affordability of childhood education and care;
- in focusing investment-related economic policy on sustainable transport, waste and water management, digitalisation and digital skills;
- in improving the effectiveness of the justice system and payment discipline;
- in setting up a reliable system to issue and transfer immovable property rights; and
- in accelerating anti-corruption reforms and safeguarding the independence of the prosecution.

Cyprus has made no progress:

- on privatisations.

Cyprus faces a few challenges according to the indicators of the Social Scoreboard supporting the European Pillar of Social Rights. Youth unemployment and the number of young people not in employment, education or training remain at significantly high levels. Moreover, the gender employment gap remains wide. The real gross disposable household income (GDHI) per capita is still below the 2008 levels and significantly lower than the EU average in 2018. The guaranteed minimum income scheme helped to reduce income inequalities. Further efforts should be made in developing digital skills and encouraging upskilling and reskilling.

Cyprus has made some progress in reaching its national targets under the Europe 2020 strategy. It met its targets for R&D spending and the share of renewable energy in the total energy mix. Cyprus exceeded its targets on higher education attainment and on reducing the school

drop-out rate ('early school leaving'). However, the energy consumption remained unchanged, and in the absence of additional measures, this affects Cyprus' capacity to achieve its targets for greenhouse gas emissions. The employment rate increased, and poverty and social exclusion decreased, but the target seems to be unattainable.

Cyprus performs relatively poorly in achieving the Sustainable Development Goals. More specifically, Cyprus underperforms with regard to the environment (SDG 2, 6, 7, 12, 13, 15), gender equality (SDG 5), and education (SDG 4) except for tertiary education attainment. Cyprus performs relatively well when it comes to good health and well-being (SDG 3) ⁽³⁾. The main findings of the in-depth review contained in this report and the related policy challenges are as follows:

- **Despite the considerable progress made over the last two years, the stock of non-performing loans remains high.** In mid-2019, The share of non-performing loans accounted for 33.5% of the total loans in the banking sector, which is still one of the highest proportions in the EU. The effective use of the legal framework, including for foreclosures and insolvency, is essential to reducing non-performing loans further, enhancing the payment discipline and addressing strategic defaulters. Non-performing loans, including the growing proportion held outside of the banking sector, need to be resolved. This is, in particular, the case for the loans held by the state-owned asset management company (KEDIPES) where delays and organisational set-up challenges need to be addressed to ensure a successful performance. Strengthening the supervision of credit-acquiring companies is also important.
- **The banking sector's profitability remains under significant pressure.** While sales of non-performing loans are expected to reduce the proportion of bad loans held by the banks in

⁽³⁾ Within the scope of its legal basis, the European Semester can help drive national economic and employment policies towards the achievement of the United Nations Sustainable Development Goals by monitoring progress and ensuring closer coordination of national efforts. The present report contains reinforced analysis and monitoring on the SDGs. A new annex (ANNEX E) presents a statistical assessment of trends in relation to SDGs in Cyprus during the past five years, based on Eurostat's EU SDG indicator set.

2020, low interest margins, excess liquidity and high operating costs still dampen banks' profitability.

- **Private sector debt remains high, although it is decreasing.** Both households' and non-financial corporations' debt ratios are decreasing. The reduction is helped by nominal GDP growth, write-offs of bad loans, cash repayments, and debt-to-asset swaps. The legal frameworks for insolvency and foreclosure, and the ESTIA scheme should help reduce the private sector debt. The introduction of e-auctions in 2019 should facilitate the foreclosure process. The housing market recovery could help reduce private debt, but the existing inefficiencies in the system of issuing and transferring title deeds complicates foreclosure procedures and hinders the sale of properties held as collateral.
- **Government debt is projected to steadily decline steadily from 2019 onwards.** After increasing in 2018 because of the measures to support the sale and orderly winding down of the Cyprus Cooperative Bank, the debt-to-GDP ratio is set to decrease to 82%% of GDP by 2021, mainly due to expected sizeable headlines surpluses and solid economic growth. However, the Commission's fiscal sustainability analysis shows that risks remain. In particular, the still high level of public debt and the combination of a large current account deficit and high private debt make Cyprus vulnerable to potential financial and economic shocks. However, relatively modest medium-term financing needs mitigate the risks somewhat.
- **Despite some improvement, the net international investment position (NIIP) remains a key vulnerability, in particular as the current account deficit is widening considerably.** The position remains very negative and a widening current account deficit hampers further improvement. The position is even more negative when one excludes its components that could be affected by large negative valuation effects in the case of a global downturn (net foreign direct investments and net portfolio equity).
- **Potential growth is expected to increase over the medium term.** The projected increase of the labour force and increased investment are set to be the main drivers of higher growth potential. Technological progress is also expected to make a small positive contribution after performing negatively for a long period. However, the continued focus on residential investment, small and medium sized enterprises' ongoing difficulties in accessing finance, the high level of private sector's debt, and the shortcomings in the business environment could hamper growth and productivity in the longer term.

A number of other key economic issues analysed in this report point to particular challenges to the Cypriot economy, namely:

- **Key challenges remain in relation to environmental sustainability.** The country's weak environmental performance is a major concern. Waste and water management is inefficient and the transition towards a circular economy has barely begun. Despite some action, Cyprus remains vulnerable to climate change due to droughts and water scarcity. At the same time, Cyprus is among the Member States with the highest green-house gas emissions per person. Sustainable mobility is key for Cyprus owing to the large and growing share of transport emissions. Despite the country's vast potential in renewable sources of energy, notably solar energy, investment in this area is considerably lagging way behind, and the economy heavily relies heavily on fossil fuels. Decisive efforts to transition to a more climate-friendly growth model are essential to improving the competitiveness and the long-term potential of the economy. The Commission's proposal for a Just Transition Mechanism under the next multi-annual financial framework for 2021-2027, includes a Just Transition Fund, a dedicated just transition scheme under InvestEU, and a new public sector loan facility with the European Investment Bank. It is designed to ensure that the transition towards EU climate neutrality is fair by helping Cyprus to address the social and economic consequences. Key priorities for support from the Just Transition Fund are identified in Annex D, building on the analysis

of the transition challenges outlined in this report.

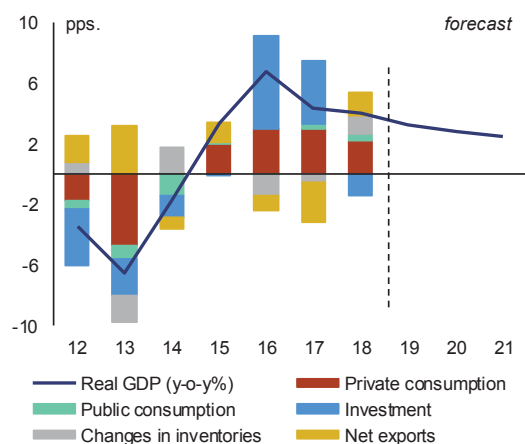
- **The justice system continues to face serious inefficiencies that undermine the enforcement of contracts.** Lengthy court proceedings and weak enforcement of judgements harm the business environment and hinder banks from using the available legal tools to reduce non-performing loans. Addressing these inefficiencies would also help to strengthen the payment discipline in the country. Preparations for the justice system reform are advancing but there are still no tangible results.
 - **The housing market as a whole has seen a recovery, but the sector is segmented.** The housing market has been recovering, supported by buoyant foreign demand for new luxury residences stemming mainly from the residence and citizenship by investment schemes. In contrast, domestic demand for housing and demand for existing properties remain low. This is also reflected in differences in housing price trends developments between new and existing residences and between regions.
 - **The labour market is still facing challenges.** Despite measures undertaken in this area, there is still scope for bringing the public employment services into line with best EU practices. Furthermore, the public employment services' effectiveness is at risk as additional recruitments are only on short-term contracts. Further progress to reduce undeclared work is hindered by a lack of resources and the fact that legislation is still pending.
 - **Reforms of the education and training systems face considerable challenges.** The relatively high public spending on education is not reflected in observed outcomes, as highlighted by the recent results from the Programme for International Student Assessment. The weak support for early childhood education and care undermines potentially high long-term benefits of quality childcare, and hinders people from working or looking for a job. Improving educational achievements and skills, as well as increasing participation in adult learning and vocational
- education and training are essential for fostering sustainable growth in the future.
 - **The health sector is undergoing a fundamental reform.** The new National Health Insurance System is expected to make the health sector more efficient and affordable, but some operational challenges remain. It provides a pivotal opportunity for targeted investments to improve public healthcare and develop e-health, among other things. The reform needs to be carefully implemented to reduce the fiscal risks.
 - **Economic evidence suggests that Cyprus' tax rules are used for aggressive tax planning purposes.** The absence of withholding taxes, the design of the Cypriot corporate tax residence rules, and the residence and citizenship by investment schemes, are a cause for concern. In addition to the implementation of European and internationally agreed initiatives, Cyprus has announced some unilateral measures. These include the introduction of withholding taxes on dividend, interest and royalty payments to countries on the EU list of non-cooperative jurisdictions on tax matters, the introduction of a tax residency test based on incorporation, and the reviewing of the transfer pricing framework to take into account the transfer pricing recommendations from the OECD base erosion and profit shifting project.
 - **Inefficiencies in the public sector are harming the business environment.** Key reforms to improve the efficiency of the public administration and the local government are still pending. The impact of the efforts made to improve the governance and financial monitoring of state-owned enterprises remains to be seen. Private investment, including in key utilities, could be facilitated through privatisations and simplifying procedures. Corruption is perceived as a problem by businesses, and adopting pending key anti-corruption legislation, as well as stepping up the implementation of the adopted action plan are essential for improving the business environment.

1. ECONOMIC SITUATION AND OUTLOOK

Economic growth

Economic growth remains strong, although it is slowing down amid an increasingly challenging international environment. After a solid expansion of 4.1%% in 2018, real GDP slowed in the first three quarters of 2019 to 3.3%% (seasonally adjusted), reflecting a weakened international environment, while domestic demand remained solid. According to the Commission's 2019 Winter Forecast (European Commission, 2020a), economic growth is estimated to moderate further in the fourth quarter of 2019, due to external headwinds and a full-year growth is projected to reach %3.2% (see Graph 1.1.).

Graph 1.1: Real GDP growth and contributions



Source: European Commission

Private and public consumption support growth. Household consumption continued to rise on the back of strong employment growth and moderately increasing wages. Low inflation also supported households' real purchasing power. Private consumption is expected to continue supporting growth in the medium term. Public consumption is also set to increasingly boost growth over the forecast period. This is driven by the gradual reinstatement of the public wages' cuts implemented during the crisis and the government expenditure in relation to the newly established National Health Insurance System (NHIS).

Investment remains robust, albeit skewed towards residential construction. Since 2015, the investor citizenship scheme (Cyprus investment programme) has been boosting residential

construction activity. According to estimates of the Ministry of Finance, the proportion of real estate / construction investment through the scheme in total investment in these sectors increased significantly from 19.5%% in 2015 to 37.7%% in 2018 (Ministry of Finance, 2019a). Based on the same study, the direct impact of the scheme on GDP is estimated to be relatively small, while being quite substantial in terms of added value and employment in the construction sector. ⁽⁴⁾%%The revision of the scheme in May 2019 ⁽⁵⁾, which makes the conditions more stringent and the investment potentially less attractive, may lead to a slowdown of demand for new high-end residences in the coming years. Other construction investment has also been buoyant, especially in relation to tourism. This sector is also mainly foreign-funded, but is not linked to the investor citizenship scheme. Investment in machinery and equipment is recovering after the crisis, pointing to some increase in productivity-enhancing investments. Investment in transport equipment is very volatile and difficult to predict due to the activities of special purpose entities related to registration/deregistration of ships. ⁽⁶⁾ Domestic banks so far seem to have limited links with the buoyant activity in the construction sector as mortgage lending remains low compared to the pre-crisis level (see Graph 1.3). Nevertheless, the developments in construction investment warrant close monitoring, in particular for a potential

⁽⁴⁾ The study does not take into account the indirect impact of the scheme due to spill-over effects and other sectors of the economy, including consumption, professional services and tax revenue.

⁽⁵⁾ Since July 2019 applicants are required to make donations (minimum €75,000 to the Research and Innovation Foundation (RIF) or to certified innovative or social enterprises and minimum €75,000 to the Cyprus Land Development Agency for affordable or other housing measures) in addition to the minimum investment of €2 million. The mandatory period to hold real estate projects increased from 3 to 5 years. A cap of 700 citizenships per year was also introduced. For additional amendments see (Section 4.4.3)

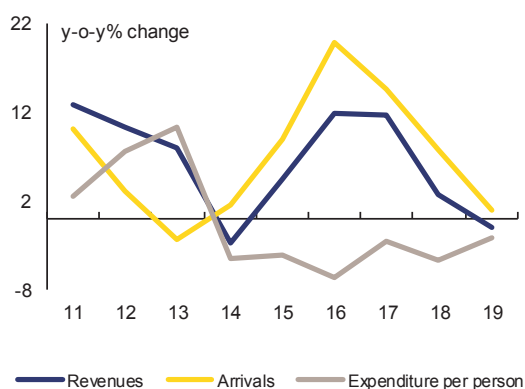
⁽⁶⁾ Legal entities registered and resident for tax purposes in Cyprus with few employees and/or no production, which are controlled by non-resident entities. These are widely used to register ships in Cyprus. Shipping-related transactions introduce bias in Cyprus' economic statistics by significantly affecting investment, imports and exports statistics. They have, however, only limited impact on the GDP through the leasing services provided by ship-owning entities whose economic owners are residents of Cyprus. For more information on special purpose entities and their impact on statistics and the real economy see (European Commission, 2018a).

slowdown in foreign demand and increasing domestic lending.

Net exports have become a drag on the economy, as tourism momentum moderates.

Exports of services notably tourism — a key component of total exports — are estimated to considerably slowed down in 2019. The sector has recently experienced several setbacks. After record increases in previous years, tourist arrivals moderated and revenues declined in 2019 (see Graph 1.2), as a result of the subdued external environment, the bankruptcy of airlines and travel companies ⁽⁷⁾ and increasing competition from neighbouring countries. Given the uncertainty surrounding the future trade relations between the EU and the UK — Cyprus' largest tourist market —, as well as the expected subdued economic prospects in the EU, the downward path is expected to continue in the near term, while a slight recovery is projected in 2021. Imports are expected to continue increasing in line with solid domestic demand.

Graph 1.2: Tourism arrivals and revenues



(1) Revenues data available for the first 11 months in 2019

(2) Expenditures data available for the first 11 months in 2019

Source: Statistical Service of Cyprus

Diversifying the tourism sector and ensuring its environmental sustainability is crucial. So far, the expansion of tourism-related services in Cyprus has come at a price to the island's natural environment. Despite some efforts to increase the share of eco-friendly tourism services, such as

agro-tourism, the bulk of the investment flowed into accommodation and infrastructure that put the environment at risk. If decisive efforts are not made urgently to ensure that the tourism sector is environmentally sustainable in the long term, then the sector risks losing its appeal and, ultimately, its profitability. It is therefore also essential to address challenges related to the green energy transition, effective waste and water management and the protection of nature and biodiversity (see Section 4.5). Furthermore, the reliance of the sector on a limited number of markets makes - UK, Russia and Israel account for more than 60%% of tourist arrivals —makes the sector vulnerable to potential adverse economic developments. Increased market diversification would help mitigate these risks. In this respect, addressing bottlenecks in air travel connections is key.

Downside risks cloud the economic outlook.

These risks are primarily external, notably the slowing global demand coupled with increased competition in the tourism sector. In this context, the real GDP is expected to edge down further to 2.8%% in 2020 and 2.5%% in 2021 (European Commission, 2020a). This path reflects a gradual move towards the estimated potential growth of around 2.5%% in the medium term.

Diversification of Cyprus' growth model remains a key challenge.

Growth is heavily resilient on sectors vulnerable to external developments notably tourism, foreign-funded construction activity, in particular residential construction, and services in connection with the setting up and providing services to foreign companies under the special purpose entities' regime. To a certain extent, this is to be anticipated for a small, open, service-oriented economy. However, to increase the country's potential growth and to improve its resilience to economic developments, diversifying the economy to mitigate these risks is essential. Moreover, Cyprus is vulnerable to potential changes in the international corporate tax framework, which could jeopardise its role as a business service hub. There are new emerging sectors, such as tertiary education, ICT and energy, but so far their impact on growth has been limited. It would be important to support the development of these sectors, which also have the potential to raise the country's future productivity.

(7) The bankruptcy of Germania led to arrivals from Germany decreasing by one fifth of. The share of the global air travel company Thomas Cook, which went into liquidation in September 2019, was around 6% of the tourist market of Cyprus.

At the same time, it is important to ensure that growth benefits all of society. Despite solid economic growth since 2015, many young people still stay out of employment, education or training and a high number of women remain out of the labour market due to care responsibilities. Furthermore, the proportion of involuntary part-time workers, though decreasing, remains one of the highest in the EU. Addressing care facilities' gaps, skills mismatches, and upskilling and re-skilling needs, in particular in digital and green transformation, would help to ensure that all groups of the population are benefitting from growth (see Sections 4.3.3 and 4.5).

It is essential that the new long-term growth strategy takes diversification, social and environmental considerations duly into account. The new long-term strategy for the sustainable growth of Cyprus economy is currently under preparation and provides good opportunity to re-orient the country's economic development. While tourism is expected also in the future to be the pillar of the economy, it is key for Cyprus' economy to become more diversified by focussing on more innovative sectors that would increase productivity, ensuring, at the same time, environmental sustainability and social inclusion.

Inflation

Inflationary pressures remain subdued. In 2019, HICP inflation was 0.5%, lower than 2018, 0.8%. This development was attributed to the decline in energy prices, owing to the reduction of excise duties on the main fuels (as from December 2018) and the lower price of oil in 2019 compared to 2018. The continuous decline in prices of non-energy industrial goods also contributed to low inflation in 2019. More specifically, global competition has been affecting the price of imports, while increasing competition among supermarkets in Cyprus, more internet sales and the liberalisation of shop opening hours and periods for sales have also been pushing prices down further. Energy prices are expected to decrease further in 2020 and 2021 reflecting declining oil prices. Inflation is expected to average at 0.8% and 1.2% in 2020 and 2021 respectively (European Commission, 2020a).

Housing market

Foreign demand for high-end new residences has been the key driver of the housing market's recovery in the aftermath of the crisis. From 2014 to 2017, sales of properties rose in double digits. In 2019 and 2018, sales of properties increased by 12.2% and 5.8%, respectively. Foreigners, predominately non-EU nationals, accounted for almost 50% of the total properties sold since 2014. The sales were concentrated in the coastal areas and concern mainly luxury apartments and villas. In the first half of 2019, a spike of sales was observed reflecting the surge of applications to the investor citizenship scheme following the announcement in May 2019 of revisions to the scheme. The compulsory purchase by a resident of a property worth at least €500,000 under the scheme coupled with the traditional foreign demand for second homes in a holiday destination are the main drivers of the housing market's recovery after the crisis.

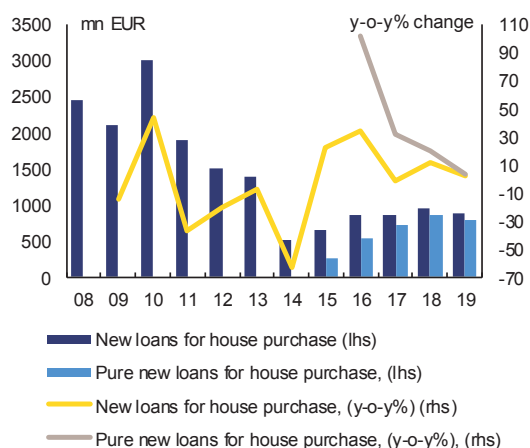
In contrast, domestic demand for housing and demand for existing properties remains low. Domestic demand is still hindered by the housing debt overhang and the limited demand for existing properties, which is also reflected in the moderate price increases in this segment of the market (see Graph 1.4). This weighs on the ability of over-indebted borrowers to sell their properties (used as collateral against their loans) to repay their debt and on the ability of banks to offload real estate from their balance sheets (see Section 4.2.1). Although new mortgage lending has been increasing, it is still well below pre crisis level (see Graph 1.3).

Real estate activity is set to slowdown in the medium term. The registration of contracts for property sales considerably decelerated during the second half of 2019, 0.7% year-on-year, compared to 24.4% in the first half, possibly reflecting the slowdown of applications for the investor citizenship scheme. This points to a modest expansion of the sector in the near term as there is only a slight upturn in domestic demand.

Residential property prices are picking up, but so far remain contained. Housing prices increased for a fourth year in a row (see Graph 1.4), but remain below the pre-crisis levels. The rise is greater for new residences, with foreign

demand leading to substantial price differences among regions. In terms of valuation, European Commission house price valuation methods do not point to significant undervaluation (the overall valuation gap is estimated to be -4.6 percentage points), but the analysis does not take into account the market segmentation. ⁽⁸⁾ A possible slowdown in foreign demand and re-sale of properties acquired through the investor citizenship scheme after the compulsory holding period, as well as rising sales of collaterals by banks and by credit-acquiring companies (see Section 4.2.1) should also curb housing prices rises in the medium term.

Graph 1.3: New and pure new loans for house purchase



(1) New loans include restructured loans

(2) Data available until November 2019

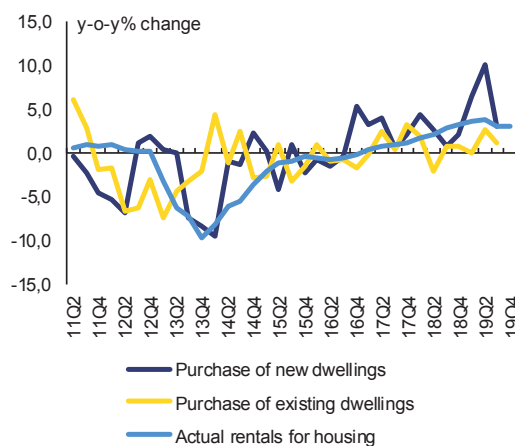
Source: Central Bank of Cyprus

Rental prices are increasing and the market is highly segmented. Rental prices increased by 3.4% in 2019. The rental market consists of two categories of properties and two sets of rules. Properties that were built before 2000 are subject to a rental control law that cap rental increases. Initially, the law allowed for a rental increase of up to 14% every two years, but since the crisis, any increase in rent is prohibited. For properties built from 2000 onwards, rental conditions are defined

⁽⁸⁾ The analysis of price valuations is based on an average of three metrics: (i) affordability gap (price-to-income deviation with respect to its long-term average); (ii) dividend gap (price-to-rent deviation from its long-term average); and (iii) estimates of deviations of house prices from equilibrium values justified by housing demand and supply fundamentals. See Philipponnet and Turrini, 2017. In the case of Cyprus, besides the fact that a small sample was taken, the analysis has the caveat that it does not take into account foreign demand.

by the market, i.e. the terms of the rental contract are not subject to any restrictions. The increasing housing cost, mainly in coastal areas stemming from the investor citizenship scheme has put pressure on the government to announce policies for affordable housing and to increase rent allowances for vulnerable groups of the population (see Section 4.3.2).

Graph 1.4: Housing price developments



Source: Eurostat

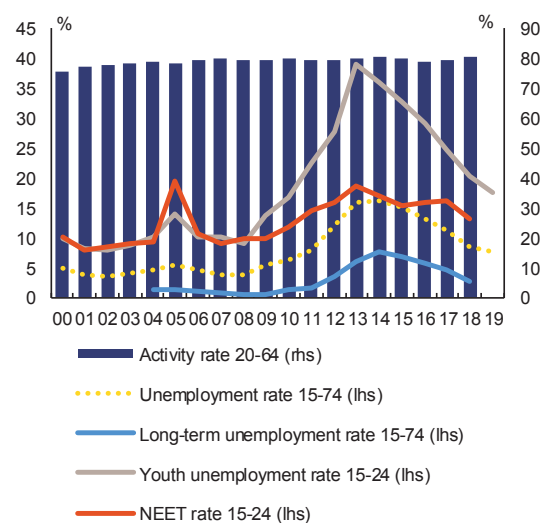
Labour market

Strong economic growth has been reflected in positive labour market developments. In 2018, employment rose by 4.1% increasing the employment rate to 73.9% and above the EU average of 73.2%, as reflected positively in the Social Scoreboard and the SDG 8. Employment is expected to rise further during the forecast period (2019-2021) albeit at a slower pace. The unemployment rate continued its downward path falling to 7.5% in 2019 and is expected to fall gradually to 5.7% in 2021, thus approaching its pre-crisis level. Long-term unemployment also fell to 2.7% in 2018 and is now below the EU average of 2.9%. However, youth unemployment and the proportion of young people not in education, employment or training (NEETs), although decreasing, remain high and are above the EU average, at 20.2% and 13.2%, respectively in 2018, compared to 15.2% and 10.5% in the EU. This may weigh on current and future equality of opportunities (see Graph 1.5 and Section 4.3.1).

Wages have gradually increased, while disposable income remains below pre-crisis

levels. Even though GDP has been back at the pre-crisis level since 2017, the real gross disposable income per head is still well below 2008 levels. The moderate increase in wages in the private sector is explained by several factors such as remaining unemployment, a decline in unionisation and a relatively high number of workers in low skilled and low-paying sectors, such as, trade, tourism and construction. Productivity is still stagnant, which also points to moderate wage increases. Wage renegotiations between employers and trade unions in several key sectors (banking, construction and hotels) in 2019 are expected to result in wage increases in the coming years. Wage increases are greater in the public sector, because in addition to the annual wage increases owing to inflation indexation and seniority increments, the government will gradually phase out the wage cuts made during the crisis period by 2023.

Graph 1.5: **Key labour market developments**



Source: Eurostat

Social developments

Poverty and income inequality are improving, but for certain vulnerable groups the risk of poverty is still high. The at-risk-of-poverty or social inclusion (AROPE) indicator and its sub-components⁽⁹⁾ keep decreasing (see Section 4.3.2) as a result of strong economic growth and the social protection reforms introduced since 2014.

⁽⁹⁾ The at-risk of poverty, the severe material deprivation and the proportion of households in very low work intensity.

Currently, Cyprus is one of the best performers in the EU in terms of the net income of minimum income recipients and of low wage earners as a percentage of the at-risk-of-poverty threshold. For minimum income recipients the proportion is 86.7% compared to 59.1% in the EU and for low wage earners, 72.7% compared to 42.6% in the EU. Income inequality returned to the pre-crisis level. However, the share of poorest people is increasing and the risk of poverty or social exclusion is higher for children, people with disabilities and non-EU born people (see Section 4.3.2).

External position

The net international investment position improved, but remains very negative. The position decreased gradually from -127% of GDP in 2017 to around -115% in the third quarter of 2019, supported mostly by increasing nominal GDP (denominator effect) and valuation changes. The position remains well below the prudential and fundamental levels.

Cyprus' current account deficit is widening, exceeding the prudential thresholds. The current account deficit widened considerably in the third quarter of 2019 to 7.4% (around 4% in cyclically adjusted terms) from 4.4% in 2018 (or -1% cyclically adjusted). The deterioration reflects the worsening of the international environment with an adverse impact on revenues from tourism (see Graph 1.2). This coupled with solid demand for imports point to a further deterioration of the current account during the period 2019-2021. For more analysis, including information on adjusted statistics for special purpose entities see Sections 3 and 4.2.4.

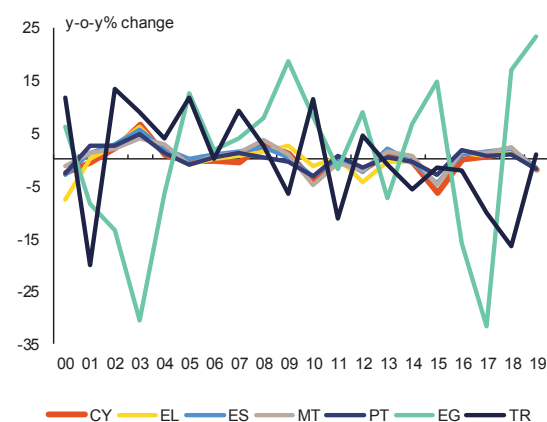
Competitiveness

Cyprus is set to maintain cost-competitiveness from 2019 onwards, but market shares are decreasing. After a significant depreciation during the crisis, the real effective exchange rate increased in 2018, while from 2019 onwards it is estimated to continue depreciating (see Graph 1.6). Despite that, in 2019, the market shares are estimated to have fallen reflecting intensified cost-competition by neighbouring countries, such as the significant depreciation of the Turkish lira over the last years. This trend is expected to continue in the

coming years. Furthermore, fluctuations in the Russian rouble and the UK pound also influence the Cypriot economy due to the strong trade and investments links.

Increased social contributions elevate labour costs. While in 2018, the unit labour costs remained broadly constant and below the euro area average, they increased in 2019 owing to the higher social security contributions coupled with the introduction of contributions to the National Health Insurance System (NHIS). This is set to continue in 2020 and 2021 partly due to the additional increases of NHIS contributions in 2020 and expected moderate increases in wages in the coming years. The introduction of universal health coverage could have a positive impact on labour force participation and productivity leading to higher GDP per capita (OECD, 2019a), however it may initially deteriorate the competitiveness of labour costs.

Graph 1.6: Real effective exchange rates



Source: Eurostat, Bruegel

Financial sector

The banking sector continues to be profitable, but profits are weaker than in the previous year and asset quality remains a challenge. Following losses in 2017, the banking sector returned to profitability in 2018 and remained profitable in the first half of 2019. Overall, banks are still finding it difficult to generate profits owing to low interest margins, excess liquidity, high operating costs and large stocks of non-performing loans. Throughout 2019, progress in reducing non-performing loans slowed down. Future asset disposals are expected to materialise in 2020, significantly reducing the

stocks of bad loans in the banking sector (see Section 4.2.3). In turn, the stocks of non-performing loans held by the credit-acquiring companies are expected to increase. Enhancing payment discipline, including improving financial literacy⁽¹⁰⁾ would help underpin a sustainable workout of bad loans and sustain deleveraging.

New lending to domestic residents increased in 2019 compared to the previous year. The private sector continues to rely on internal resources and foreign funding, as new lending from domestic banks is contained by large proportions of non-performing loans, elevated debt and tighter credit standards. Nevertheless, in the first half of 2019 new lending increased by 6% year-on-year (the gross volume of new loans reached €1.53 billion in 2019, up from €1.44 billion in 2018). Just as in the previous year, the bulk of the new lending went to non-financial corporations, whereas the housing loans constituted slightly more than 25% of the total new loans.

Public finances

After a temporary general government deficit in 2018 owing to one-off support measures for the sale of the Cyprus Cooperative Bank, Cyprus is expected to record a significant budgetary surplus in 2019. The Commission 2019 autumn forecast projects that the headline budget balance will return to surplus in 2019, at 3.7% of GDP (see Graph 1.7). The deficit of 4.4% of GDP recorded in 2018 was caused exclusively by one-off operations to support the banking sector. Public finance performance in Cyprus has improved significantly since 2014, when it recorded a deficit of 8.7% of GDP, reflecting the budgetary consolidation measures implemented during the crisis, notably to limit expenditure growth, combined with buoyant tax revenue.

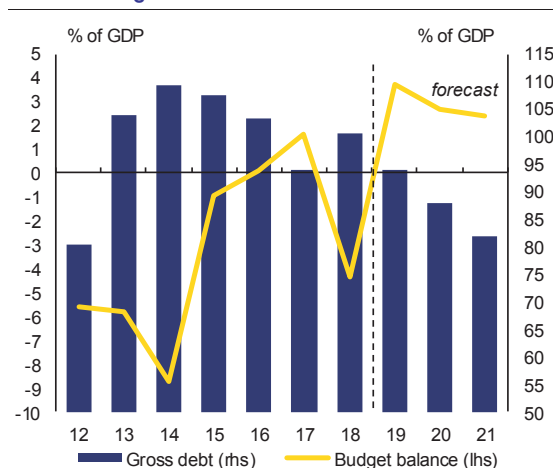
The budgetary performance is expected to remain strong but the structural balance is set to deteriorate. The headline balance is forecast to record a surplus of over 2.5% of GDP in 2020 and slightly below 2.5% in 2021 as increasing current expenditure will outpace revenue growth (see

⁽¹⁰⁾ Gross inadequacies in financial literacy make borrowers prone to mistakes, even defaults (Agarwal et al., 2010). In the case of Cyprus, there are indications that financial literacy is at low levels (see Panayiotis and Anyfantaki, 2019).

Section 4.1.2). The structural balance is expected to remain positive but is set to decline from above 1% in 2019 to below 1% in 2020 and 0.4% in 2021 driven by a large output gap and increasing expenditure. The declining structural balance emphasises the need to carefully monitor expenditure developments, especially in light of possible future risks to the robustness of revenues, as described in Section 4.1.

The public debt-to-GDP ratio is projected to decline substantially in the coming years. After increasing in 2018 owing to the banking support measures, the debt-to-GDP ratio is expected to decrease substantially, from 101% of GDP in 2018 to 94% of GDP in 2019, and to 82% in 2021 (see Section 4.1.1 and the debt sustainability analysis presented in Annex B).

Graph 1.7: **General government budget balance and gross debt**



Source: European Commission

Downside risks to the fiscal outlook remain. Key risks include: (i) expenditure pressures related to the wage bill, (ii) the financial sustainability of the new National Health Insurance System (NHIS), (iii) the potential realisation of contingent liabilities from the banking sector, and (iv) uncertainty concerning the sustainability of strong tax revenue performance. Positive cash balances from the Asset Management Company (KEDIPES), dealing with the residual entity of the CCB are an upside risk.

Progress on sustainable development goals

Cyprus performs relatively poorly in achieving the Sustainable Development Goals, especially regarding the environmental goals.

According to Eurostat's Sustainable Development Goals (SDGs) indicators (see Annex E), over the past 5 years Cyprus has been making rather uneven progress. Cyprus performs well with regard to good health and well-being (SDG 3) despite the fact that most of the health determinants indicators are below the EU average. Cyprus is performing below EU average when it comes to environmental impact of agriculture (SDG 2), clean water and sanitation (SDG 6), affordable and clean energy (SDG 7), responsible consumption and production (SDG 12), climate action (SDG 13) and life on land (SDG 15). Many of the indicators in those areas are further deteriorating from already sub-par levels and this is particularly the case for nitrate in groundwater and soil sealing index, which seems consistent with the fact that Cyprus scores below the EU average and has further deteriorated when it comes to generation and recycling rate of waste. Cyprus has also further deteriorated when it comes to final energy consumption, resource productivity, and climate mitigation, which does not bode well for its environmental outcomes in the future. Apart from environment, Cyprus is also underperforming when it comes to gender equality (SDG 5) and the situation is further deteriorating when it comes to gender gap for tertiary educational attainment, gender gap for employment rate of recent graduates and gender gap in inactive population due to caring responsibilities. On the other hand, some improvement is observed when it comes to gender pay gap and the number of leadership positions held by women. Finally, Cyprus is also underperforming in quality education (SDG 4) despite the fact that it scores above EU average when it comes to tertiary educational attainment. The situation is further deteriorating with respect to underachievement in reading and adult participation in learning.

Table 1.1: Key economic and financial indicators – Cyprus

	2004-07	2008-12	2013-16	2017	2018	forecast		
						2019	2020	2021
Real GDP (y-o-y)	4,9	0,1	0,3	4,4	4,1	3,2	2,8	2,5
Potential growth (y-o-y)	3,8	2,2	-0,8	2,2	2,0	2,3	2,5	2,6
Private consumption (y-o-y)	6,2	0,4	0,0	4,5	3,3	.	.	.
Public consumption (y-o-y)	2,7	2,4	-3,2	2,1	3,5	.	.	.
Gross fixed capital formation (y-o-y)	10,0	-8,1	2,8	24,1	-6,6	.	.	.
Exports of goods and services (y-o-y)	3,5	1,4	6,1	8,7	4,6	.	.	.
Imports of goods and services (y-o-y)	5,9	-0,1	4,9	12,8	2,4	.	.	.
Contribution to GDP growth:								
Domestic demand (y-o-y)	6,5	-1,1	-0,1	7,6	1,3	.	.	.
Inventories (y-o-y)	-0,2	0,4	-0,3	-0,5	1,2	.	.	.
Net exports (y-o-y)	-1,4	0,5	0,7	-2,7	1,6	.	.	.
Contribution to potential GDP growth:								
Total Labour (hours) (y-o-y)	1,3	1,0	-0,4	1,2	1,0	0,9	0,9	0,9
Capital accumulation (y-o-y)	2,0	1,4	0,2	1,3	1,1	1,4	1,5	1,6
Total factor productivity (y-o-y)	0,4	-0,2	-0,6	-0,3	-0,1	0,0	0,1	0,2
Output gap	4,2	-0,2	-6,6	1,4	3,4	3,9	4,0	3,7
Unemployment rate	4,6	7,0	15,0	11,1	8,4	7,5	6,6	6,0
GDP deflator (y-o-y)	3,0	2,0	-1,0	1,7	1,4	1,5	1,5	1,7
Harmonised index of consumer prices (HICP, y-o-y)	2,1	2,7	-0,7	0,7	0,8	0,5	0,8	1,2
Nominal compensation per employee (y-o-y)	3,7	2,7	-2,8	1,0	0,5	3,4	3,1	3,0
Labour productivity (real, person employed, y-o-y)	1,4	-0,1	0,7	-0,9	0,0	.	.	.
Unit labour costs (ULC, whole economy, y-o-y)	2,3	2,8	-3,5	1,9	0,6	3,0	2,7	2,5
Real unit labour costs (y-o-y)	-0,7	0,7	-2,5	0,2	-0,8	1,5	1,2	0,8
Real effective exchange rate (ULC, y-o-y)	0,6	0,8	-4,0	2,6	0,6	-0,3	-0,1	0,5
Real effective exchange rate (HICP, y-o-y)	-0,1	-0,4	-1,6	0,5	1,5	-1,9	-1,6	-0,8
Net savings rate of households (net saving as percentage of net disposable income)	1,4	-0,5	-8,8	-2,8	-4,0	.	.	.
Private credit flow, consolidated (% of GDP)	29,4	18,5	1,0	6,7	8,4	.	.	.
Private sector debt, consolidated (% of GDP)	244,5	308,6	342,8	304,0	282,6	.	.	.
of which household debt, consolidated (% of GDP)	88,5	117,1	126,2	105,1	97,0	.	.	.
of which non-financial corporate debt, consolidated (% of GDP)	155,9	191,5	216,6	198,9	185,6	.	.	.
Gross non-performing debt (% of total debt instruments and total loans and advances) (2)	.	8,9	35,3	28,9	17,4	.	.	.
Corporations, net lending (+) or net borrowing (-) (% of GDP)	-9,8	2,2	7,3	-2,8	5,9	-5,1	-6,6	-7,5
Corporations, gross operating surplus (% of GDP)	23,7	20,0	21,6	20,5	20,9	20,3	20,0	20,1
Households, net lending (+) or net borrowing (-) (% of GDP)	-7,7	-5,5	-5,6	-3,5	-5,3	-5,7	-6,0	-5,2
Deflated house price index (y-o-y)	6,8	-4,9	-0,5	1,3	0,2	.	.	.
Residential investment (% of GDP)	10,9	8,2	4,0	5,1	5,8	.	.	.
Current account balance (% of GDP), balance of payments	.	-7,7	-2,6	-5,1	-4,4	-8,1	-10,6	-11,1
Trade balance (% of GDP), balance of payments	.	-6,4	1,7	-0,4	0,8	.	.	.
Terms of trade of goods and services (y-o-y)	-0,5	-0,4	0,3	0,8	-0,5	0,1	0,0	0,2
Capital account balance (% of GDP)	.	0,3	0,4	0,4	0,6	.	.	.
Net international investment position (% of GDP)	.	-123,6	-153,8	-126,5	-121,3	.	.	.
NENDI - NIIP excluding non-defaultable instruments (% of GDP) (1)	.	-69,2	-206,7	-210,1	-176,1	.	.	.
IIP liabilities excluding non-defaultable instruments (% of GDP) (1)	.	622,7	661,6	571,2	524,6	.	.	.
Export performance vs. advanced countries (% change over 5 years)	-13,5	-8,7	-4,6	15,4	14,2	.	.	.
Export market share, goods and services (y-o-y)	-5,6	-4,3	4,0	1,6	1,1	-3,7	-4,3	-2,8
Net FDI flows (% of GDP)	.	9,1	36,4	-6,9	-34,5	.	.	.
General government balance (% of GDP)	-0,9	-4,1	-3,9	1,7	-4,4	3,7	2,6	2,4
Structural budget balance (% of GDP)	.	.	1,9	1,0	1,9	1,7	0,6	0,5
General government gross debt (% of GDP)	60,4	60,5	106,0	93,9	100,6	93,8	87,8	81,8
Tax-to-GDP ratio (%) (3)	32,2	32,3	32,8	33,3	33,8	36,2	39,2	39,5
Tax rate for a single person earning the average wage (%) (4)	.	.	.	9,1	9,5	.	.	.
Tax rate for a single person earning 50% of the average wage (%) (4)	.	.	.	7,8	7,8	.	.	.

(1) NIIP excluding direct investment and portfolio equity shares.

(2) Domestic banking groups and stand-alone banks, EU and non-EU foreign-controlled subsidiaries and EU and non-EU foreign-controlled branches.

(3) The tax-to-GDP indicator includes imputed social contributions and hence differs from the tax-to-GDP indicator used in the section on taxation.

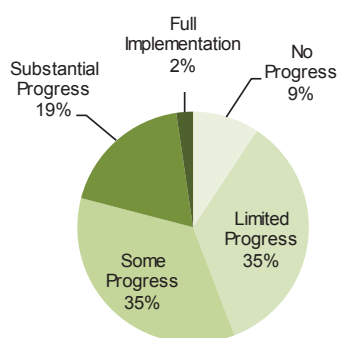
(4) Defined as the income tax on gross wage earnings plus the employee's social security contributions less universal cash benefits, expressed as a percentage of gross wage earnings

Source: Eurostat and ECB as of 4-2-2020, where available; European Commission for forecast figures (Winter forecast 2020 for real GDP and HICP, Autumn forecast 2019 otherwise)

2. PROGRESS WITH COUNTRY-SPECIFIC RECOMMENDATIONS

Since the start of the European Semester in 2011, 56% of all country-specific recommendations addressed to Cyprus have recorded at least ‘some progress’. ⁽¹⁾ 44% of these country-specific recommendations (CSRs) recorded ‘limited’ or ‘no progress’ (see Graph 2.1). Full implementation and substantial progress have been achieved in a wide range of reforms, in particular fiscal and financial ones supported by the 2013-2016 European Union-International Monetary Fund economic adjustment programme. These reforms address most of the CSRs made in 2011 and 2012. As regards the CSRs made after the programme’s completion mostly cover persisting challenges, which are also reflected in the CSRs for 2019.

Graph 2.1: Overall multiannual implementation of 2011-2019 CSRs to date



* The overall assessment of the country-specific recommendations related to fiscal policy exclude compliance with the Stability and Growth Pact.

** 2011-2012: Different CSR assessment categories.

***The multiannual CSR assessment looks at the implementation since the CSRs were first adopted until the February 2020 Country report.

Source: European Commission

Public financial management and the budgetary framework were significantly strengthened with the adoption and implementation of the Financial Responsibility and Budget Framework Law, which has helped in ensuring the transparency and sustainability of the public finances. The pension system and retirement age were reformed to ensure the system’s long-term sustainability. The country-specific recommendations on social benefits and

the high ‘at-risk-of-poverty’ rate among the elderly were addressed by introducing the guaranteed minimum income, which allows for more efficient and targeted social benefits. The reform has helped reduce income inequalities.

On the financial sector, significant reforms were undertaken notably during the implementation of the macroeconomic adjustment programme 2013-2016 mainly through the harmonisation and integration of the supervision of banks and cooperative credit institutions. Furthermore, since 2018 the authorities have been working on a comprehensive strategy to reduce non-performing loans. The strategy is comprised: (i) the adoption in 2018 of a legislative package, including amendments to the foreclosure and insolvency frameworks and to the Sale of Loans Law and a new Securitisation Law; (ii) the sale of the Cyprus Cooperative Bank, which struggled with a high volume of non-performing loans (completed in 2018), and (iii) the setting-up of a temporary State support scheme (ESTIA) aimed at reducing non-performing loans collateralised by primary residences (ongoing). Key challenges in the sector remain. Most sector-specific obstacles to the freedom of establishment and the freedom to provide services have been removed.

Some measures were introduced to promote renewable energy production and diversify the energy mix as recommended. However, energy production is still heavily dependent on fossil fuels. Measures to improve the labour market situation have been put in place through a reform of wage indexation, active labour market policies to reduce unemployment, notably among young people, the long-term unemployed and receivers of the guaranteed minimum income, and policies to the upgrade workers’ skills. Some measures were also undertaken to make the vocational education system more attractive. Since 2017, progress has been made on the long-standing recommendation regarding the reform of the national healthcare system with the adoption of the necessary legislative framework in 2017, the launching of the first phase in 2019 and the ongoing preparations for full implementation in 2020.

Cyprus has so far made limited progress in addressing the 2019 country-specific

⁽¹⁾ For the assessment of other reforms implemented in the past, see in particular Section 4.

recommendations (see Table 2.1). Reforms related to the efficiency of the public administration and local governments are still pending enactment. Some measures were adopted concerning the governance of State-owned enterprises, but their efficacy has yet to be assessed. Limited progress was recorded on addressing aggressive tax planning, since the transposition of relevant EU Directives is still in the process, and additional measures such as the introduction of a withholding tax on dividend, interest, and royalty payments to countries in Annex I of the EU List of Non-cooperative jurisdictions on tax matters are only announced.

Some measures to help reduce non-performing loans (NPLs), notably the ESTIA scheme (for addressing NPLs collateralised by primary residences) and e-auctions (for properties subject to foreclosure proceedings) are being implemented. Cyprus is also progressing, albeit slowly, with addressing the challenges faced by the state-owned asset management company, KEDIPES. For example, the setting-up of the governance structure of the State-owned asset management company is facing delays. Some efforts are under way to improve payment discipline, but their effectiveness remains to be seen. The new insolvency department is expected to operate more efficiently and effectively and promote the insolvency framework. Efforts to strengthen the supervision of credit-acquiring companies and of insurance companies and pension funds are facing delays as the relevant draft bills are pending for adoption.

Some progress has been made on the outreach efforts for young people not in employment, education or training. The capacity of the public employment services was strengthened, but on a short-term basis, thus risking the longer-term sustainability of the services. The education reform is progressing unevenly, and results on the evaluation of teachers are not yet available. Supporting actions for affordable early childhood education and care are still lagging behind. The first phase of the National Health System was introduced in 2019 and preparations are ongoing for the second phase planned for mid-2020. However, fiscal sustainability risks remain.

Measures to promote sustainable transport are only at an initial stage. Serious waste and water

management inefficiencies remain, and progress is limited. Grant schemes are being implemented for small and medium-sized enterprises and households to encourage energy efficiency and the use of renewables, however challenges remain. Authorities have announced several measures to improve digitalisation and upgrade digital skills, but implementation is still pending. Some progress was recorded on research and innovation as the new strategy is in place and efforts to bring universities and businesses together are moving ahead.

There has also been some progress regarding access to finance for small and medium-sized enterprises as several grant schemes and financial instruments are being implemented and an equity fund is being set up. Measures to simplify and shorten the procedures for obtaining the necessary permits for strategic investments are pending enactment. It has proved very challenging to carry out privatisations.

Although preparations for a comprehensive reform of the justice system are ongoing, legislation and administrative measures that would improve the efficiency of the system are pending. These include the establishment of commercial courts, the recruitment of judges and the handling of financial disputes. A reliable and efficient system for issuing and transferring immovable property rights (e.g. building and land) is pending and progress is slow. An action plan for anti-corruption reforms is being implemented, but key legislation is pending adoption. The capacity to investigate corruption has been strengthened including with the adoption of the bill on telephone tapping. Some measures regarding the independence of the prosecution are being discussed.

Table 2.1: Assessment of the 2019 country-specific recommendations implementation

2019 Country-Specific Recommendations (CSRs)	Overall assessment of progress with 2019 CSRs: Limited progress
CSR1: <i>Adopt key legislative reforms to improve efficiency in the public sector, in particular as regards the functioning of the public administration and the governance of State-owned entities and local governments. Address features of the tax system that may facilitate aggressive tax planning by individuals and multinationals, in particular by means of outbound payments by multinationals.</i>	Overall limited progress <ul style="list-style-type: none"> • Limited progress, as the relevant laws are pending adoption. • Some progress through the adoption of measures to improve oversight and reporting. Their effectiveness is still to be assessed. • Limited progress on the local governments reform as it is pending enactment. • Limited progress on addressing aggressive tax planning.
CSR2: <i>Facilitate the reduction of non-performing loans including by setting up an effective governance structure for the State-owned asset management company, taking steps to improve payment discipline and strengthening the supervision of credit-acquiring companies. Strengthen supervision capacities in the non-bank financial sector, including by fully integrating the insurance and pension-fund supervisors.</i>	Overall limited progress <ul style="list-style-type: none"> • Some progress on facilitating the reduction of non-performing loans through implementation of the ESTIA scheme and e-auctions. Slow progress, though, in setting up the state-owned asset management company. • Limited progress on improving payment discipline. • Limited progress on strengthening the supervision of credit-acquiring companies, as the law is still under preparation. • Limited progress on the supervision capacities in the non-bank financial sector as the law is pending adoption.
CSR3: <i>Complete reforms aimed at increasing the effectiveness of the public employment services and reinforce outreach and activation support for young people. Deliver on the reform of the education and training system, including teacher evaluation, and increase employers' engagement and learners' participation in vocational education and training, and affordable childhood education and care. Take measures to ensure that the National Health System becomes operational in 2020, as planned, while preserving its long-term sustainability.</i>	Overall some progress <ul style="list-style-type: none"> • Some progress, as the reforms are progressing and their effectiveness is improving, but the sustainability of services is at risk, as the additional recruitments are on short-term contracts. • Limited progress on educational reform. • Limited progress on affordable early childhood education and care. • Some progress on healthcare, as the first phase of the reform has been launched and the second phase is under way. Operational and sustainability risks remain.
CSR4: <i>Focus investment-related economic policy on sustainable transport, environment, in particular waste and water management, energy efficiency and renewable energy, digitalisation, including digital skills, and research and innovation, taking into account territorial disparities within Cyprus. Adopt legislation to simplify the procedures for strategic investors to obtain necessary permits and licences. Improve access to finance for SMEs, and resume the implementation of privatisation projects.</i>	Overall limited progress <ul style="list-style-type: none"> • Limited progress on sustainable transport. • Limited progress on waste and water management. • Some progress on energy efficiency and renewable energy measures. • Limited progress on digitalisation and digital skills. • Some progress on increasing R&D capacity. • Limited progress on facilitating strategic investments as the relevant law is pending adoption. • Some progress on improving access to finance. • No progress on privatisation projects.
CSR5: <i>Step up efforts to improve the efficiency of the judicial system, including the functioning of administrative justice and revising civil procedures, increasing the specialisation of courts and setting up an operational e-justice system. Take measures to strengthen the legal enforcement of claims and ensure reliable and swift systems for the issuance and transfer of title deeds and immovable property rights. Accelerate anti-corruption reforms, safeguard the independence of the prosecution and strengthen the capacity of law enforcement.</i>	Overall limited progress <ul style="list-style-type: none"> • Limited progress on the judicial system reform as key legislation is pending for adoption. • Limited progress on ensuring reliable and swift systems for issuing and transferring title deeds. • Limited progress on anti-corruption reforms and the independence of the prosecution services as legislations are pending adoption.

(1) The assessment of CSR 4 does not take into account the contributions of the EU 2021-2027 cohesion funds as the Regulatory framework underpinning the programming of the 2021-2027 EU cohesion funds has not yet been adopted by the co-legislator, pending inter alia agreement on the MFF.

Source: European Commission

Box 2.1: Commission Structural Reform Support Programme in Cyprus

Upon request from a Member State, the Commission can provide tailor-made expertise via the Structural Reform Support Service to help design and implement growth-enhancing reforms. Since 2015, such support has been provided to Cyprus, including the support provided previously under the special Support Group for Cyprus, to help the country undertake a series of reforms. Up until now, support has been provided for over 120 projects. In 2019, several projects in various policy areas were delivered on the ground.

The Commission has been supporting the Cypriot authorities in the area of governance and public administration in the design of a workforce planning system, enabling the alignment of the government's human resources management with the country's strategic priorities. Support was also provided for improving the web presence of the government through a study for the design of new information platforms and services. As regards judicial reform, the Commission has supported the development of evaluation criteria for the recruitment and promotion of judges, which has already been used for the recruitment of new judges. In addition, a comprehensive study was delivered in 2019 to assess the feasibility of the introduction of a digital audio recording system in the court proceedings.

In the area of growth and business environment, the Commission has supported Cyprus' efforts to improve environmental inspections, by providing a comprehensive training and development programme. The Cypriot authorities are also benefitting from expertise for developing economic diplomacy. Moreover, a new project was approved in 2019, which will focus on developing a long-term economic strategy for sustainable development and international competitiveness. Another project, which started in 2019, will provide support to the Cypriot authorities in revising the national strategy for the management of municipal waste.

Support has also been provided in the area of labour market, social welfare, health and education. In the area of the health sector, Cyprus has benefitted from technical support for capacity planning, leading to the launch of the first phase of the National Health Insurance System (NHIS) in June 2019. Additionally, the Commission supported the Cypriot Health Insurance Organisation in designing a budget negotiation strategy with healthcare providers, based on international best practices. In 2019, a new project was launched to support Cyprus with the completion of the special education reform in order to make the school system more inclusive. Additionally, another education project was initiated, which will focus on addressing student disengagement and school dropouts.

The Cypriot authorities have been receiving support in the area of revenue administration, tax policy and public financial management, including support for the management of changes resulting from reforms of the public financial management system. The Commission has also delivered a project to strengthen the administrative capacity of the Ministry of Finance by setting up mechanisms to monitor and evaluate performance in the framework of strategic planning. Additionally, the Cyprus Tax Department received support to prepare the procurement of a new integrated tax administration system.

Lastly, the Cypriot authorities are working with the Commission in the area of finance and access to finance to improve the insolvency framework. In 2019, support was delivered to improve the efficiency and effectiveness of the operations of the Insolvency Service of Cyprus and to enhance the overall regulation of insolvency practitioners. This will lead to the establishment of a new Insolvency Department at the Ministry of Energy, Commerce and Industry in early 2020. The Commission has also started work on a new project, which will focus on raising awareness about Cyprus' insolvency framework and developing a customer service policy for the Insolvency Service of Cyprus.

Box 2.2: EU funds and programmes to address structural challenges and to foster growth and competitiveness in Cyprus

Cyprus is one of the countries that benefit significantly from EU support. Cyprus receives €873.6 million from the EU cohesion policy funds ⁽¹⁾ in the current Multiannual Financial Framework, equivalent to around 0.6% of its GDP. By the end of 2019, Cyprus allocated almost the entirety of this amount to specific projects and had already spent €407.3 million on concrete projects ⁽²⁾, showing a level of implementation well above the EU average.

While achieving more harmonious development through reducing economic, social and territorial disparities, EU cohesion funding also plays a significant role in addressing structural challenges in Cyprus. The cohesion policy programmes for Cyprus have allocated €188 million for smart growth (including support to research & innovation and to small and medium-sized enterprises), €370 million for sustainable growth (including environmental infrastructure) and sustainable transport and €164 million for inclusive growth (including training and social inclusion). In 2019, following the performance review ⁽³⁾, €42.6 million were made available for Cyprus within performing priorities.

EU cohesion funding is contributing to major transformations of the Cypriot economy. By 2019, investments driven by the European Regional Development Fund and the cohesion fund have contributed to connecting Limassol Port to the main motorway in the Trans-European Transport Network, and to providing some 5,000 population equivalent with new or improved waste water treatment. Furthermore, the investments supported more than 400 enterprises; generated 975 new direct jobs (full time equivalents) and more than €12 million of private matching funding, and contributed to reducing greenhouse gas emissions by 15,000 tons of CO₂.

Cohesion Policy is helping Cyprus to achieve the digitalisation of its economy and develop eGovernment. It has helped to develop the IT system for the introduction and support of the new General Healthcare System. The system will perform all the basic functions related to the provision of services within the framework of the System, having allowed some 615 providers to register as personal doctors and more than 1,200 as specialist doctors, as well as around 500 pharmacies to join. Over 80% of the population has also registered as beneficiaries (687,000 people), while more than 1 100 000 visits to personal doctors and some 700,000 visits to specialist doctors have taken place so far.

The European Social Fund (ESF) has been contributing to major transformations of the Cypriot labour market. The European Social Fund has supported more than 10,500 unemployed persons, including more than 3,000 long-term unemployed, 5,500 young people, and 500 jobless people above 54 years old. The policy contributes to the upgrading of technical and vocational education and training, and will train almost 3,000 people by 2023. 3,200 people have successfully been employed after participating in such work/training schemes.

Agricultural and fisheries funds and other EU programmes also contribute to addressing development needs. As well as receiving support of €132.2 million from the European Agricultural Fund for Rural Development (EAFRD), and €39.7 million from the European Maritime and Fisheries Fund (EMFF), Cyprus also benefits from other EU programmes. The Connecting Europe Facility has allocated €66.5 million to specific projects for strategic transport networks (TEN-T), and Horizon 2020 has provided €231 million for research and innovation, including €72 million for small and medium-sized enterprises.

EU funding contributes to the mobilisation of important private investment. European Structural and Investment funds ⁽⁴⁾ provide programmes with about €40 million in the form of loans and guarantees.

EU funds already invest substantial amounts on measures in line with the Sustainable Development Goals (SDGs). In Cyprus the European Structural and Investment Funds support 12 out of the 17 SDGs and up to 91% of the expenditure contributes to achieving those goals.

⁽¹⁾ European Regional Development Fund, Cohesion Fund, European Social Fund, Youth Employment Initiative.

⁽²⁾ <https://cohesiondata.ec.europa.eu/countries/CY>

⁽³⁾ The performance review is regulated by Article 22 of Regulation (EU) No 1303/2013, whereby 5-7 % of overall resources allocated are released to operational programmes' priority axes that have achieved their milestones. The amount does not include national co-financing.

⁽⁴⁾ European Regional Development Fund, Cohesion Fund, European Social Fund, European Agricultural Fund for Rural Development Fund and European Maritime and Fisheries Fund

3. SUMMARY OF THE MAIN FINDINGS FROM THE MIP IN-DEPTH REVIEW

Introduction

The 2020 Alert Mechanism Report concluded that a new in-depth review should be undertaken for Cyprus to assess the persistence or unwinding of the imbalances (European Commission, 2019a). In February 2019, the Commission concluded that Cyprus was experiencing excessive macroeconomic imbalances in particular involving a very high share of non-performing loans, high stocks of private, public and, external debt in a context of still relatively high unemployment and weak potential growth. In the updated scoreboard, a number of indicators remain beyond the indicative thresholds, namely the current account balance, the net international investment position, private sector debt, government debt and the unemployment rate. This chapter summarises the findings of the analyses in the context of the macroeconomic imbalance procedure in-depth review that is contained in various sections in this report. ⁽¹²⁾

Imbalances and their gravity

The non-performing loans (NPL) ratio declined visibly since its peak but remains one of the highest in the EU. After a significant decline in the NPL ratio in 2018 (from 50.4% at the start of the year to 35.6% at the end of the year) driven by two one-off operations ⁽¹³⁾, very limited progress was made with NPL reduction in 2019. In June 2019, the NPL ratio stood at 33.5%, down from 35.6% at the beginning of the year. The largest volume of NPLs belongs to households, amounting to a share of 37.1% of gross loans to households. For non-financial corporations the stocks are lower, equivalent to a NPL ratio of 30.2%. The decline in the stock of NPLs during the first half of the year reflects write-offs, cash repayments, debt-to-asset swaps and curings (migration of non-performing loans into performing categories). Large asset sales are expected to materialise in

⁽¹²⁾ Analyses relevant for the in-depth review of excessive government debt can be found in Section 4.1.1 and Annex B; financial sector imbalances and private debt are discussed in Section 4.2.

⁽¹³⁾ The decline in 2018 was driven by the transfer of the Cyprus Cooperative Bank's NPLs to the newly established state-owned asset management company (KEDIPEs) and the sale of a large NPL portfolio (Helix) by the Bank of Cyprus.

2020, accelerating the reduction of bad loan in the banking system.

Private sector debt continues to decline, but it is still at high levels. In consolidated terms, the private debt-to-GDP ratio has been falling in the last years, reaching 282.6% of GDP at the end of 2018, compared to an EU average of 138.3% of GDP. Private debt in Cyprus is inflated by the debt of non-financial special purpose entities, which has been relatively stable as a percentage of GDP since 2013 – close to 70% of GDP. Nevertheless, the debt stock of special purpose entities increased from 2015 to 2018 by approximately 15%. Both households and non-financial corporations are over-indebted. In September 2019, households' debt stood at 91.2% while non-financial corporations' debt-to-GDP ratio was 169.6% (103.5% excluding special purpose entities). Both are above fundamental and prudential benchmarks, even when excluding special purpose entities (see Section 4.2.3).

The public debt ratio remains elevated, although it decreased in 2019. While in 2018 the government debt-to-GDP ratio increased by approximately 7 percentage points to 100.6% (due to one-off factors related to the sale of the Cyprus Cooperative Bank), in 2019 public debt is coming down – close to 94% of GDP (see Section 4.1.1). Cyprus enjoys favourable market access, with low sovereign bond yields and has been given an investment grade rating by all the main rating agencies, apart from Moody's.

The country's net international investment position (NIIP), particularly concerning net external debt, remains a source of vulnerability. In the third quarter of 2019, the NIIP stood at around -115% of GDP — one of the largest in the EU. The 'defaultable' part of the NIIP ⁽¹⁴⁾, which excludes foreign direct investment and portfolio equity shares, amounted to around -160% of GDP, reflecting large external debt liabilities. According to the Central Bank of Cyprus, a part of this around -30% of non-adjusted GDP relates to the debt of non-financial special purpose entities

⁽¹⁴⁾ The NIIP excluding non-defaultable instruments or NENDI is part of the MIP scoreboard auxiliary indicators and aims to capture risks related to the composition of the NIIP.

(excluding net foreign direct investment and net portfolio equity shares). Even taking this effect into account, the ‘defaultable part’ of the NIIP is well beyond estimated benchmarks (see Section 4.2.4). Another part of this net external debt (-81%) is in the government sector, the bulk of which is explained by debt to international financial institutions under the macroeconomic adjustment programme, and is less exposed to short-term risks.

The large current account deficit is not conducive to external rebalancing. The current account deficit amounted to -7.4% in the third quarter of 2019, reflecting an adverse international environment coupled with continued strong domestic demand. The current account balance is below the current account ‘norm’ ⁽¹⁵⁾ implied by fundamentals and below what would be required to stabilise the NIIP and its ‘defaultable’ part at prudent levels (see Section 4.2.4). Excluding the activities of ship-owning SPEs the current account was still significantly negative at -4.4%.

The labour market has improved on the back of solid growth. Most indicators improved markedly and unemployment fell to 7.5% in 2019. Long-term and youth unemployment also decreased significantly, reducing the gravity of the problem (see Sections 1 and 4.3.1).

Potential growth is gradually increasing. In 2018, potential growth was estimated at 2%, and is expected to increase to 2.3% in 2019 and to 2.5% in 2020. Labour and gross fixed capital formation continue to be the main drivers of potential growth but total factor productivity is also expected to provide a small positive contribution from 2020 onwards, after 10 years of negative contributions. However, the high dependency on construction investment for residential properties, the remaining debt overhang and insufficient progress with structural reforms constrain potential growth in the longer term (see Sections 1 and 4.4).

⁽¹⁵⁾ The current account ‘norm’ benchmark is derived from regressions capturing the main fundamental determinants of the saving-investment balance (e.g. demographics, resources), as well as policy factors and global financial conditions. See also Coutinho et al., 2018.

Evolution, prospects and policy responses

The Cypriot government continues to follow the three-pillar strategy aimed at reducing non-performing loans (NPLs) that was introduced in 2018. The first pillar – a legislative package that strengthened the framework for NPL resolution – was implemented already in 2018. However, the amendments to the foreclosure framework approved by Parliament in August 2019 risk weakening this framework, if implemented. The Supreme Court is expected to decide on the constitutionality of these amendments in spring 2020. Under the second pillar, in 2018, the Cyprus Cooperative Bank was sold and KEDIPEs, the state-owned asset management company, was established to manage the remaining ‘bad assets’ of the Cyprus Cooperative Bank residual entity. KEDIPEs holds approximately €6.8 billion of non-performing loans and is, thus, the largest asset management company in EU relative to the size of the economy. While it has been set up and is operational, progress needs to be stepped-up, including implementing a long-term business plan, a new organizational model and enhancing its governance. The last pillar of the strategy, the ESTIA scheme – for NPLs collateralised with primary residences – was launched in September 2019 (see Section 4.2.1), with the banks’ assessment of applications expected to be completed in spring 2020. The checks and approvals by the competent Ministry are expected to be completed in summer 2020.

Other steps have also been taken to reduce the NPLs. Other efforts to facilitate the reduction of non-performing loans include the introduction of e-auctions (in November 2019), strengthening the supervision of credit-acquiring companies, which is under-way, and ongoing judicial reform. The planned reform of the judicial system aims to increase the efficiency of the system, strengthen the enforcement of judgments and ultimately improve the payment culture in the country (see Section 4.4.3).

Private sector debt reduction reflects both strong GDP growth and nominal debt reduction, nevertheless further deleveraging is needed. Both households’ and non-financial corporations’ debt ratios are on a declining path, helped by GDP growth (denominator effect). The nominal debt stocks are also declining (albeit

slowly) in both sectors, driven by write-offs of bad loans, cash repayments and debt-to-asset swaps (see Section 4.2.3). In 2018, the deleveraging was led by non-financial corporations excluding special purpose entities, as their debt stock declined faster than households' stocks. For continuing deleveraging in the future, it is important to maintain the strengthened foreclosure framework. This is even more relevant, given that the take-up of the ESTIA scheme, which provides very attractive terms (including debt reductions) to defaulted borrowers, was lower than expected. Furthermore, the absence of an efficient and reliable system for transferring and issuing property rights hinders foreclosure procedures and makes it difficult to value collaterals (see Section 4.2.3). Private debt reduction may accelerate once the credit-acquiring companies – which now hold a significant share of NPLs – become successful in extracting value from their portfolios of bad loans.

Public debt is expected to continue declining in 2020-2021, underpinned by strong projected budgetary surpluses. Cyprus' debt-to-GDP ratio is forecast to decline by approximately 6 percentage points per year in 2020 and 2021, mainly on the back of high primary surpluses (of above 4% of GDP). As in 2019, the government is engaged in active debt management operations, and plans to repay the IMF loan in the first part of 2020. Despite all this, the downside risks to fiscal sustainability remain significant (see Section 4.1.1).

Cyprus' net international investment position narrowed somewhat, but remains a key vulnerability, as the current account deficit is widening. The net international position improved from -121% of GDP at the end of 2018 to -115% in the third quarter of 2019. A decline in foreign government debt by about 12.8 percentage points (year-on-year), partly offset by an increase in equity liabilities and long-term debt of other sectors, contributed to the adjustment and has also helped lower the 'defaultable' part of the international investment position by around 15 percentage points, from 175% of GDP to -160% of GDP (see Section 4.2.4). Further adjustment is expected to be limited, as it is forecast that the current account will remain in a substantial deficit of around 10% of GDP in 2020 and 2021. The structure of foreign liabilities in the recent years shows a shift from loans and other investments to

foreign direct investment. The foreign direct investment in Cyprus, however, mostly involves the financial transactions of holding companies, property sales and ship registrations, as opposed to green field investments and those that have greater potential to enhance productivity.

Some policies are in place to improve the business environment and competitiveness, but implementation needs to be stepped up. Most of the progress made concerns e-governance and strengthening entrepreneurship, by also addressing issues related to the internationalisation of small and medium-sized enterprises. A law to facilitate major investments through simplified procedures is expected to be adopted. Some institutional measures were also undertaken to prioritise flagship sectors for Cyprus such as tourism and shipping, with the establishment of competent deputy ministries. Furthermore, regarding digitalisation, a new deputy ministry is expected to be established, which will be responsible for the implementation of a digital transformation strategy and R&D policy. The planned reform of the justice system is crucial for a conducive business environment. In addition, a long-term growth strategy to overhaul Cyprus's growth model is under preparation. However, tangible results of the above measures are only expected in the medium term. Other reforms that would help to improve the efficiency of the public administration and the local governments are pending.

Labour productivity remains low. Depressed investment activity during the crisis and the current concentration on residential buildings are not conducive to productivity growth. Weak total factor productivity over a prolonged period of time has also driven labour productivity down. Strong investment in productivity-enhancing areas and continued upskilling and reskilling of workers in particular, in digital skills are essential in raising productivity in the long-term (see Sections 4.3.1 and 4.4.1).

Unemployment is rapidly falling. The unemployment rate fell from 8.4% in 2018 to 7.5% in 2019. Unemployment among young people also declined to 17.5% in 2019. While unemployment is still above the pre-crisis period, there are positive signs that unemployment is set to continue falling in the near term (see Sections 1 and 4.3.1). Despite some efforts, more action is needed to

improve the efficiency of the public employment services and to promote active labour market policies (see Section 4.3.1).

Overall assessment

Cyprus continues to experience significant stock imbalances such as a considerable number of non-performing loans, high private and public debt levels and a large stock of foreign liabilities. Despite significant consolidation, the asset quality of the banking sector remains a concern given the large proportion of non-performing loans in total loans. Private debt is still excessive despite its ongoing reduction, with both households and non-financial corporations experiencing a debt overhang. The public debt stock also remains elevated, at above 90% of GDP. Furthermore, Cyprus continues to have a large negative net international investment position, linked in turn with a large current account deficit, which make the country vulnerable to economic shocks, changes in investors' sentiment and the deterioration of the global environment.

The constellation of risks changed in 2019, with some imbalances unwinding while others deteriorated. Private and public debt are decreasing, but from still high levels. Government debt is coming down after the increase in 2018, which reflected government support to the banking sector. The non-performing loans decreased slowly throughout 2019, with more significant progress expected in 2020 assuming that plans for large asset disposals materialise. Nevertheless, despite the off-loading from the banking sector, vulnerabilities associated with NPLs persist, as the bad loans still remain in the economy. Other sources of vulnerabilities stem from the widening of the current account deficit, which does not support the correction of the external debt stock imbalances. The labour market improved significantly, with the unemployment rate declining to a nine-year low. Potential growth is gradually increasing.

Steadfast implementation of key policy measures is essential for correcting the excessive imbalances, improving economic resilience and supporting sustainable growth. Some progress has been made on implementing the measures that address macroeconomic imbalances, particularly the high stock of non-

performing loans. On this front, the government continues to follow the three-pillar strategy introduced in 2018. However, reform commitments are still pending in several areas. The effective implementation of the judicial reform remains the main priority for the enforcement of claims and for the better functioning of the economy. Setting up a reliable and transparent system to issue and transfer title deeds is important to facilitate the resolution of the non-performing loans and to improve the business environment. Other key structural priorities include the public administration and local government reforms and privatisations. Instead of planned legislative measures, some administrative measures, were taken to address the long-standing pending reform of the governance of the State-owned enterprises. The efficacy of these measures is yet to be assessed. A continued commitment to sound public finances and the safeguarding of fiscal surpluses are essential for ensuring public debt reduction.

Table 3.1: Macroeconomic imbalance procedure assessment matrix – Cyprus

	Gravity of the challenge	Evolution and prospects	Policy response
<i>Imbalances (unsustainable trends, vulnerabilities and associated risks)</i>			
Financial sector	<p>The non-performing loans (NPL) ratio was around 20 % of total loans in mid-2019, covering all loans and advances, and 33.5 % considering only the non-financial private sector. Cyprus thus, continues to have one of the highest ratios in the EU. Both households and non-financial corporations have large shares of NPLs, partly reflecting a weak payment discipline. A non-negligible share of NPLs lies outside the banking system, held by credit-acquiring companies, including the state-owned asset management company, KEDIPEs. The capacity of Cypriot banks to generate profits continues to be challenged by excess liquidity, high operating costs and large stocks of NPLs. (see Section 4.2.1)</p>	<p>Progress in reducing NPLs in the banking sector slowed down in 2019. Acceleration is expected in 2020 if the sales of large-portfolio materialise. (see Section 4.2.1)</p>	<p>The insolvency and foreclosure frameworks were strengthened in 2018 to enhance the debt repayment discipline in the country. Attempts to weaken these frameworks are detrimental. Successful management of the Cyprus Asset Management Company is a key priority for repaying the state, as well as for reducing the high stock of NPLs outside the banking sector. The ESTIA scheme was launched in September 2019. (see Section 4.2.1) Furthermore, it is essential to accelerate reforms that would improve the handling of NPL cases by the courts. (see Section 4.4.3)</p>
Private debt	<p>Standing at 261 % of GDP in Q3 2019 (195 % excluding special purpose entities), private sector debt remains one of the highest in the EU. The level of debt is above benchmarks for both non-financial corporations and households, exposing them to risks. Corporate debt remains high even when excluding the debt of special purpose entities. Household sector debt-overhang reflects high stocks of mortgage and consumption loans. Corporate debt is concentrated in construction, real estate activities and trade. A large proportion of private debt stock is non-performing mainly due to weak contract enforcement. (see Section 4.2.3)</p>	<p>The private sector debt-to-GDP ratio continues to decline on the back of strong nominal growth (denominator effect), but also due to decreases in the stock of debt. As nominal growth decelerates, more active deleveraging is needed to reach prudential benchmarks. The use of foreclosures is picking-up following the strengthening of framework in 2018. Insolvency tools remain under-utilised. (see Section 4.2.1) Private debt reduction may accelerate with credit-acquiring companies becoming successful in extracting value from their portfolios of bad loans. (see Section 4.2.3)</p>	<p>Full implementation of insolvency and foreclosure frameworks, as adopted in 2018, may accelerate private debt reduction. The ESTIA scheme may also contribute to reducing private debt. However, its effects remain to be seen especially in view of the lower than expected take-up of the scheme. (see Section 4.2.1) E-auctions were introduced in November 2019, facilitating foreclosures. (see Section 4.2.1) Progress to strengthen debt repayment discipline by improving the handling of the NPLs in courts and the enforcement of judgements is slow (see Section 4.4.3). A quick and transparent system for issuing and transferring property titles that would enable liquidation of collaterals is still pending.</p>
Public debt	<p>Public debt is resuming its declining path after a one-off increase in 2018. The level of the government debt still remains high exposing the country to changes in financial or economic conditions. (see Section 4.1)</p>	<p>Cyprus' debt-to-GDP ratio is expected to fall below 90 % by the end of 2020, and to continue declining in 2021 (based on the Commission's Autumn Forecast), on the back of continued structural budgetary surpluses. (see Section 4.1)</p>	<p>Ensuring that government debt continues to fall requires a strong fiscal performance, based on prudent expenditure management. (see Section 4.1)</p>
External position	<p>The net international investment position remains negative and large. It stood at -121 % of</p>	<p>The net international investment position is declining mainly as a result of the nominal GDP growth</p>	<p>A tourism strategy is set to be implemented with the aim of further extending the season and improving the quality of tourism services.</p>

(Continued on the next page)

Table (continued)

	<p>GDP at the end of 2018. Adjusting for non-financial special purpose entities, according to Cyprus Central Bank's data, the net international investment position is close to the scoreboard's threshold (-35 %), but its 'defaultable' part is large and close to -130 %, excluding the special purpose entities, as external debt liabilities are covered by positive foreign direct investment and portfolio equity positions are often subject to large valuation effects.</p> <p>The current account is in substantial deficit, at -7.4 % of GDP in 2019 Q3. (see Section 4.2.4)</p>	<p>and valuation effects.</p> <p>Strong domestic demand for imports and intensifying competition in the tourism sector are projected to keep the current account in substantial deficit, which will not help to decrease the net international investment position and its 'defaultable' part in the near term.</p> <p>Domestic savings are recovering but remain low, particularly for the household sector. Investment, notably in the construction sector, has accelerated. (see Sections 1 and 4.2.4)</p>	<p>However, its medium-term impact remains to be seen. Connectivity difficulties have surfaced again with the bankruptcy of certain airlines.</p> <p>The real effective exchange rate appreciation in 2017 and 2018 has been reversed almost fully in 2019. Looking ahead, stronger productivity gains and low wage inflation become of key importance. (see Sections 1 and 4.2.4)</p>
<i>Adjustment issues</i>			
Potential growth	<p>Potential growth, estimated at around 2.5 % in 2018-2021, remains modest in view of the need to support further deleveraging.</p> <p>There are concerns regarding the sustainability of the current growth model. (see Sections 1, and 4.4)</p>	<p>Potential growth is forecast to increase somewhat in the medium-term.</p> <p>The composition of investment (skewed to residential construction) is not conducive to increasing potential growth. (see Section 1 and 4.4)</p> <p>Productivity growth remains stagnant. (see Section 4.4)</p>	<p>Key structural reforms that would significantly improve the business environment, attract strategic investments and diversify the economy are delayed.</p> <p>Progress in implementing privatisation projects to attract investment, increase competition and reduce prices in network industries is limited. (see Section 4.4)</p>
Conclusions from IDR analysis			
<p>Cyprus continues to experience significant stock imbalances such as a considerable stocks of non-performing loans, high private and public debt levels and a large stock of external liabilities – all in a context of still moderate potential growth and relatively high, albeit decreasing unemployment. This makes the country vulnerable to external shocks.</p> <p>Stock imbalances, in particular public debt, household and corporate debt, and the net international investment position are declining, mainly on the back of strong economic growth. The non-performing loan ratio of the banking sector also decreased in 2019, but only modestly compared with the progress in 2018. In contrast, the current account deficit deteriorated significantly, driven by a weaker international environment and still solid domestic demand. As a result, there is no support for the reduction of external debt.</p> <p>Making full use of the foreclosure and insolvency frameworks remains essential for the reduction of non-performing loans and private debt and for improving payment discipline. Addressing the challenges of the state-owned asset management company and strengthening the supervision of credit acquiring companies are important for the work-out of non-performing loans outside the banking sector. Furthermore, steadfast efforts are needed to improve the system for issuing and transferring property titles, the handling of the non-performing loans in the courts and the enforcement of judgements. Measures are still needed to foster competitiveness and diversify investments towards more productivity-enhancing sectors and the environment, thus ensuring sustainable growth in the long term and rebalancing the current account. Ensuring fiscal discipline and maintaining budget surpluses are crucial for public debt reduction.</p>			

Source: European Commission

4. REFORM PRIORITIES

4.1. PUBLIC FINANCES AND TAXATION

4.1.1. DEBT SUSTAINABILITY ANALYSIS AND FISCAL RISKS

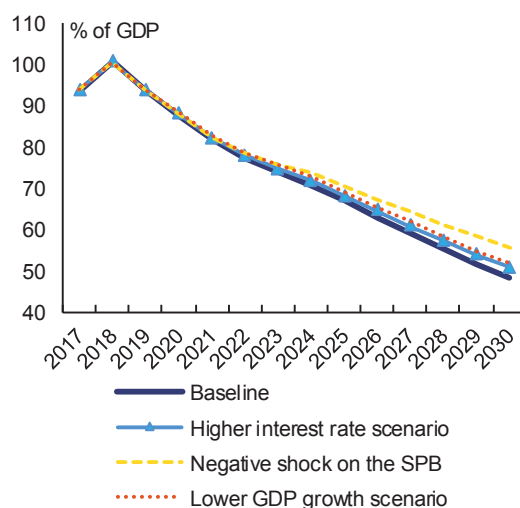
The general government gross debt-to-GDP ratio is projected to decline steadily from 2019 onwards. The government's support for the Cyprus Cooperative Bank sale increased public debt by about 8% of GDP in 2018, and was financed by several government bonds issued in April and July 2018. The debt reduction trend that started in 2015, when the debt-to-GDP ratio reached 109.2% of GDP, is expected to resume in 2019. From 100.6% of GDP in 2018, the debt-to-GDP ratio is expected to decline to 94% of GDP in 2019, to 88% in 2020 and to 82% in 2021 (European Commission, 2020a). The projected steady decline of the debt-to-GDP ratio is driven by sizeable, but slowly declining headline surpluses, a favourable interest rate and economic growth differential (snow-ball effect) supported by robust real growth and active debt management.

Risks to the sustainability of the government's finances are considered low in the short term but international imbalances expose the country to potential short-term challenges. After one-off operations negatively affected the government's finances in 2018, the value of the S0 indicator, which is the Commission's early-detection indicator of fiscal stress, returned to 'low risk'. This improvement reflects the strong budgetary performance in 2019. However, the S0 indicator is only slightly below the critical threshold, whereas the financial competitiveness sub-index still points to considerable vulnerabilities to international shocks. In particular, it emphasises weaknesses stemming from the widening of the current account deficit in the context of the large negative net international investment position, as well as high private debt, a significant proportion of which is short term (see Section 2 for a summary of the MIP assessment).

Despite the large debt-to-GDP ratio, Cyprus is considered to face low fiscal sustainability risks in the medium and long term. The debt sustainability analysis (DSA) indicates that medium-term risk is low under the baseline scenario (see Annex B), which is based on normal

economic conditions and assumes a constant structural primary balance based on the last Commission forecast year (2021). The debt-to-GDP ratio is projected to decline below the critical 60% threshold by 2027, and to stand at 48% of GDP by 2030. This corresponds to a reduction of 3.7 percentage points on average per year from 2021 onwards. This substantial decline in government debt would be driven mostly by the continued strong fiscal performance that is assumed under the no fiscal policy change scenario (with the structural primary balance stable at 2.2% of GDP), and would be further supported by favourable snow-ball effects (i.e. the interest rate – growth rate differential) and decreasing costs associated with ageing. The sustainability gap indicator S1 also points to low risk in the medium term. Over the longer run, both the debt sustainability analysis and the S2 indicator point to low risk, as pressures on the government's finances related to ageing, in particular pensions, are more than compensated by the strong initial budgetary position.

Graph 4.1.1: Government debt projection (% GDP)



Source: European Commission

Risks relating to the debt structure are low and financing conditions continue to improve. The weighted average maturity of government debt is expected to increase again in 2020 after the issuance in January 2020 of an €1 billion 10-year benchmark and €750 million 20-year benchmark.

This recent issuance reflects ongoing efforts to smooth the maturity profile of government debt and to take advantage of favourable financing conditions, following the issuances of international benchmarks bonds (10-year, 15-year and 30-year bonds) since September 2018. In September 2019, a large proportion of government debt was held by non-resident creditors (78%), reflecting the important share of official borrowing from the European Stability Mechanism (31%) and recent additional issuances of foreign bonds, which accounted for 38% of total government debt (Ministry of Finance of Cyprus, 2019b). The yields on Cyprus' government debt decreased throughout 2019, partly driven by improved sovereign rating of Cyprus since 2018 and by international trends of declining sovereign yields in 2019. ⁽¹⁶⁾ Interest payments are expected to decrease further on account of favourable market conditions and debt reduction. Given the high headline budgetary surpluses, financing risks are thus relatively low in the short and medium term. The early repayment of the Russian loan in September 2019 and the expected early repayment of the remainder of the IMF loan in early 2020 would reduce the country's financing needs and the annual cost of debt in the coming years.

Contingent risks remain a major source of concern, as the ratio of non-performing loans in the economy is still high. The government's financial support for the orderly winding down of the publicly-owned Cyprus Cooperative Bank (CCB) significantly reduced the level of non-performing loans in the banking sector, as bad assets were transferred to an Asset Management Company (KEDIPES) and consolidated in the general government sector. These operations led to a change in the nature of the contingent liabilities to which the government is exposed. Some implicit contingent liabilities from the large portfolio of non-performing loans from the CCB materialised into government debt in 2018 whereas the asset protection schemes offered to Hellenic Bank in the context of the CCB sale increased the government exposure to explicit contingent liabilities. As a result the explicit public guarantees increased to about 22.6% of GDP in 2018 (Ministry of Finance of Cyprus, 2019c), the bulk of which concern

financial sector measures (13.4%). The remainder of explicit public guarantees relate to state-owned enterprises, private corporations, local authorities, and exposure to retail loans. Explicit contingent liabilities linked to the financial sector are expected to have decreased to 11.8% of GDP in 2019 and to 10.5% of GDP in 2020, bringing down total public guarantees to an expected 19.4% of GDP by 2020 (Ministry of Finance of Cyprus 2018).

4.1.2. FISCAL FRAMEWORK AND POLICY CHALLENGES

Policy challenges

The rise in public expenditure growth underlines the need for it to be strictly managed. While public expenditure in Cyprus remains below the EU average, current expenditure growth has risen since 2017. The high pace of public expenditure was offset by buoyant tax revenue, largely caused by the strong macroeconomic and job market conditions. At the same time, the favourable economic and fiscal outlook have increased pressure for a further increase in public expenditure. Future expenditure growth is expected to outpace revenue growth even though the level of revenue would still exceed that of expenditure. Expenditure developments should, thus, be carefully monitored to maintain the favourable fiscal position and debt reduction. This is particularly crucial amid concerns about the sustainability of the recent strong increases in tax revenue (further discussed in Section 4.1.3) and given the deterioration of the international environment which could affect economic growth. Moreover, there is a need to create some fiscal space, possibly by re-prioritising existing expenditure, to support the transition to a greener economy, especially as Cyprus faces several environmental challenges (see section 4.5).

The public wage bill continues to grow and the forthcoming court decisions could entail large additional costs. Currently pending court decisions could potentially lead to the reversal of civil service pay cuts implemented during the crisis, thus representing a substantial short-term risk to the government's finances. The final decision is expected early 2020 and could lead to substantial fiscal costs in addition to already

⁽¹⁶⁾ The interest rate on the 10-year and 20-year benchmark bonds issued in January 2020 is respectively of 0.625% and 1.25%.

legislated stepwise reversals of wage cuts. Setting up a permanent legal mechanism could allow to safeguard against the growth of the public wage bill. Such a permanent mechanism would secure long-term wage moderation in the public sector, and thereby, would contribute to the sustainability of public finance. The mechanism that was agreed upon in 2016 in order to cap the growth of the public wage bill at nominal GDP growth through collective agreements still applies, but has proven insufficient to stem the growth of the public wage bill. In 2019, wage increments, the resumption of new recruitment, and a revised cost of living allowance indexation system, and most importantly the gradual reversal of wage cuts since the crisis have significantly increased the public sector wage bill. All in all, the public sector wage bill is expected to amount to 12.4% of GDP in 2019 compared to 11.7% in 2018.

The impact of the health reform on public finances requires close financial monitoring.

The first phase of the reform implementation has thus far been relatively smooth, with encouraging registration rates by citizens and growing enrolment of health providers (also see Section 4.3.4). However, a number of implementation challenges have arisen and need to be addressed promptly to ensure the effectiveness of the system. In particular, the timely charging of public doctors posed challenges and the execution of the budget of public hospitals has been delayed. At the same time, a number of specialists are leaving public hospitals and opting to contracting with the health insurer for outpatient services. This could affect public hospitals' ability to become competitive and therefore financially autonomous. The details of the participation of the private hospitals in the National Health Insurance System (NHIS) are still under negotiation. In addition, there are potential risks to the government's finances, as the law establishing the NHIS commits the government to funding potential financial losses incurred during the transition towards the autonomous financial management of public hospitals (expected over the first five years of the reform implementation, namely 2019-2024).

Revenue administration reforms have progressed slowly. The Council of Ministers approved a legislative amendment in October 2019 criminalising the non-payment of income taxes. However, progress on implementing the integrated

tax administration system remains rather slow. Seven chapters of the Tax Procedure Code are awaiting legal vetting, whereas chapters on administrative penalties, criminal provisions and tax collection are still to be agreed. Furthermore, it is expected to take several years for the new tax IT system to become operational. A tender was launched for the implementation of the new tax IT system, which could improve income tax collection. Finally, the creation of a tax portal that will enhance communication between the tax authorities and taxpayers is still underway.

4.1.3. TAXATION*

While the tax structure in Cyprus seems favourable to growth, the tax base remains narrow, depending heavily on consumption and corporate income taxes.

Tax revenue in 2018 amounted to 33.8% of GDP, which remains lower than the EU average of 39.2%. Consumption taxes are the major contributor to tax revenues in Cyprus, mainly due to the substantial revenues from value added tax (VAT), which accounts for 9.9% of GDP. Also corporate income taxes represent a significant source of revenue. They amounted to 5.5% of GDP in 2018, largely exceeding the EU average of 2.7% of GDP, although the effective average corporate income tax rate is lower than the EU one (13% vs 19.8%). Revenue from taxes on labour amounted to 11.9% of GDP in 2018, well below the EU average of 19.6%. The tax system's potential for growth and its general tax base narrowed in 2017, when the recurrent tax on immovable property was abolished. In addition, households' capital income is virtually untaxed.

Strong tax revenue growth in recent years might have been caused by temporary factors.

Tax revenue started to recover in 2016 and increased by 20% in 2016-2018, amounting to an increase of more than 4% as a proportion of nominal GDP. The strong revenue growth has partially reflected the economic upswing and strengthening job market conditions. While the cycle remains favourable, there are risks that the strong growth of revenue may not continue in the future because it is mainly due to two specific potentially volatile revenue items. About 58% of the increase in tax revenue observed in 2016-2018 is due to increasing value added tax revenue,

which is concentrated in a few sectors (e.g. construction, information and communication). Corporate income tax revenue growth accounted for another 17% of the total increase in tax collection in 2016-2018. However, large companies that benefit from Cyprus' tax jurisdiction might decide to relocate this corporate income tax revenue, for example in the case of changes in the international corporate tax framework.

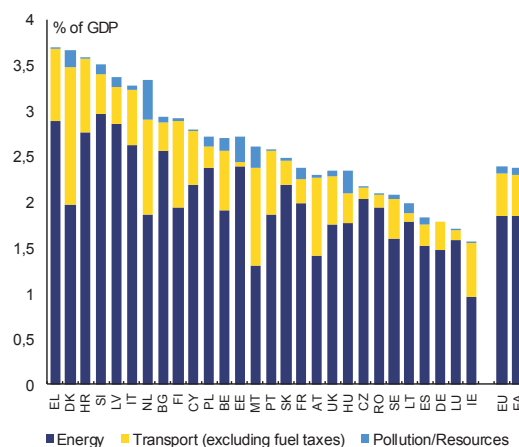
Despite increasing social contributions, the tax burden on labour will remain comparatively low compared to the EU average. The tax burden on labour is among the lowest in the EU, which is reflected in a tax wedge ⁽¹⁷⁾ of 18.7% compared to 42.9% in the EU in 2018. The tax wedge is however set to increase substantially in 2019 and 2020 due to the pre-legislated increases in the social security contribution rate in 2019 and the introduction of compulsory health contributions to finance the National Health Insurance System in 2019 and 2020. Nevertheless, even after these changes, tax revenue from labour and the tax wedge are expected to remain well below the EU average.

While revenues from environmentally-related taxes are above the EU average, there is scope to adjust the tax system in order to better support environment and climate policy objectives. In 2018, environmental taxes accounted for 2.8% of GDP and for 8.2% of total tax revenues, whereas the EU average amounted, respectively, to 2.4% of GDP and to 6.2% of total tax revenues. Although energy taxes are the major contributor to environmental tax revenues, excise duties on fuels do not reflect the carbon emissions and therefore do not foster the most energy-efficient technologies. In particular, circulation and registration taxes are not differentiated according to CO₂ emissions and vehicle usage. Excise duties on fossil fuels used for heating (gas oil, natural gas, etc.) are low. Despite considerable progress made on reducing the 'diesel differential' (difference in the excises on diesel versus petrol) since 2005, excises duties on those transport fuels

remain low as compared to other Member States. There are several examples of sound fiscal measures on environment, such as the domestic and irrigation water pricing policy, supported by environmental non-governmental organisations and academia. However, Cyprus remains one of the few Member States that does not appear to have a landfill tax nor an incineration tax for waste management (European Environment Agency, 2016).

Cyprus intends to introduce a Carbon Tax and a Digital Tax. Consultations are being carried out to introduce a Digital Advertising Tax of 3%. The Carbon Tax is intended to be fiscally neutral and is expected to be introduced gradually from 2021. In order to ensure that the transition to a green, climate-neutral economy leaves no one behind, the effects of environmental taxation on the distribution of wealth and income and corresponding compensatory measures for the most vulnerable households should be taken into account (see European Commission, 2019b). Consultations are being carried out to introduce a Digital Advertising Tax of 3%.

Graph 4.1.2: Revenue from environmentally-related taxes



Source: Eurostat

The economic evidence ⁽¹⁸⁾ suggests that Cyprus' tax rules are used by companies and individuals that engage in aggressive tax planning. Eurostat data show that, on average, 90% of total dividend payments from Cyprus were

⁽¹⁷⁾ The ratio between the amount of taxes paid by an average single worker (a single person at 100% of average earnings) without children and the corresponding total labour cost for the employer. The average tax wedge measures the extent to which tax on labour income discourages employment.

⁽¹⁸⁾ The high levels of inward and outward foreign direct investment, in addition to the high levels of dividend and interest payments as a percentage of GDP. See European Commission, 2019c.

sent to non-EU countries over the period 2013-2017. Cyprus does not provide information on the country destination of the dividends. The rules identified as being of particular concern include: the absence of withholding taxes ⁽¹⁹⁾, the design of the Cypriot corporate tax residence rules, and the residence and citizenship by investment schemes. Owing to the absence of withholding taxes, the outbound payment of dividends, interest, and royalties from Cyprus based companies to non-EU jurisdictions could lead to little or no taxation if these payments are not taxed, or taxed at a low level, in the recipient jurisdiction. The Cypriot corporate tax residence rules are based on the management and control test, so that a company may be incorporated in Cyprus without being a Cypriot tax-resident. This has the potential to create a mismatch that could also be exploited for tax planning purposes. In 2015, Cyprus introduced a notional interest deduction regime in order to deal with the debt-equity bias. However, in 2019 the Code of Conduct on Business Taxation Group decided this regime needs to be amended to bring it into line with the agreed EU rules on tax competition. Finally, the ‘Citizenship’ and ‘Residence by investment’ schemes operated by Cyprus (Citizenship by Investment: Scheme for Naturalisation of Investors in Cyprus by Exception and Residence by Investment Scheme) give access to a low personal tax rate on income from foreign financial assets and do not require an individual to spend a significant amount of time in Cyprus. Although individuals are subject to tax on a worldwide basis, non-domiciled taxpayers are exempt from tax on dividends and interest. These measures can create the potential for misuse when used as tools to hide assets held abroad from reporting. According to the Organisation for Economic Co-operation and Development, there is potentially a high risk that they could be misused to circumvent the automatic exchange of financial account information by helping to conceal the real jurisdictions of residence.

Cyprus is acting to curb aggressive tax planning through the implementation of European and internationally agreed initiatives as well as unilateral measures. Cyprus is in the process of transposing into national law the first EU Directive on Anti-Tax Avoidance.

Cyprus plans to introduce a withholding tax on dividend, interest, and royalty payments to countries in Annex I of the EU List of Non-cooperative jurisdictions on tax matters. The design and timeline of this measure will need to be examined. Cyprus intends to introduce a further corporate tax residency test based on incorporation. This test would be in addition to the existing “management and control” test and would bring Cyprus into line with other jurisdictions and could reduce the potential for tax planning. Required changes to the notional interest deduction regime are expected to be adopted by Parliament in the first quarter of 2020 in order to bring it into line with the Code of Conduct on Business Taxation of the Council. Cyprus has ratified the Multilateral Convention to Implement Tax Treaty Related Measures to Prevent Base Erosion and Profit Shifting and has chosen to apply it to the vast majority of its treaty partners. However, it has introduced numerous reservations, not forming part of the minimum standard which significantly limits the effectiveness of implementation of the multilateral convention in Cyprus. Cyprus is in consultations with the OECD in order to deal with concerns relating to the ‘Citizenship’ and ‘Residence by investment’ schemes. The Cyprus tax authority is reviewing the wider transfer pricing legal framework with a view to update the law taking into account the OECD BEPS project transfer pricing recommendations in the Organisation for Economic Co-operation and Development’s project on base erosion and profit shifting. The effectiveness of these planned and new measures in limiting the scope for aggressive tax planning and their impact on the corporate income tax revenue in the medium term will need to be assessed.

⁽¹⁹⁾ There is a withholding tax on royalties if the intellectual property rights are used locally. See ZEW, 2016.

4.2. FINANCIAL SECTOR

4.2.1. BANKING SECTOR DEVELOPMENTS*

Considerable progress has been made with deleveraging and de-risking banks' balance sheets. Following the carve-out of the distressed assets of the Cyprus Cooperative Bank (CCB) during its liquidation, and major sales of non-performing loans (NPLs) by commercial banks, the banking sector shrank to below 300% of GDP in mid-2019, compared to 338% at the end of 2017, and more than 700% before the financial crisis of 2013. Performing CCB assets were acquired by Hellenic Bank, which benefits from an asset protection scheme.⁽²⁰⁾ There has been an overall reduction in the importance of subsidiaries of Greek banks in Cyprus, which were once a channel of contagion, although in some cases they still have a high level of non-performing loans. Correspondent banking relations that were previously under pressure have stabilised.⁽²¹⁾

The largest domestic bank, the Bank of Cyprus, continues its efforts to improve asset quality. In March 2019, the bank disposed of a small portfolio of terminated loans (with a gross value of €245 million) to APS Loan Management (a foreign investor in NPLs). The Bank of Cyprus's direct real estate exposure remains large, primarily on account of debt-to-asset swaps and the repossessions of foreclosed assets. In the short term, the sale of the Helix II portfolio (up to €2.8 billion of NPLs) in the first half of 2020, with ongoing additional sales of unsecured loans and collateralised loans granted to foreigners, together with additional reductions in NPLs due to the ESTIA scheme, should help improve asset quality further. At the same time, cost reduction is ongoing, as the latest voluntary redundancy

scheme reduced staff numbers by 470, equivalent to more than 10% of total staff.

Following the acquisition of the CCB's performing assets, the business model and risk profile of the Hellenic Bank have changed significantly. The incorporation of CCB's assets made the Hellenic Bank the second largest bank in Cyprus. The operational integration of the acquired parts of CCB (including the migration to a common IT infrastructure) was finalised in September 2019. The gap between the salary structure of former CCB employees and Hellenic Bank employees is an important challenge.

Pressures on profitability remain significant. Profits in 2019 have benefited significantly from the conversion of deferred tax assets to deferred tax credits (DTCs) for Bank of Cyprus.⁽²²⁾ However, the high stock of NPLs still weighs heavily on bank profitability and the overall stability of the banking sector, even after the disposals of bad assets.

Enhancing efficiency and diversifying investment could support bank profitability. All major banks are engaging in measures to reduce their physical footprint. At 62% in June 2019, the system-wide cost-to-income ratio remains above the EU average and is, in fact, artificially lowered by including the accrued interest income on impaired assets and excluding the offsetting provisioning charges. Furthermore, staff costs can only be reduced slowly and in a delayed manner. Although the larger banks have already invested in enhanced internet banking capacities, there is still significant potential for improvement, especially in the case of the online marketing of products. In addition, the declining, but still high level of private debt, severely constrains the pool of bankable investment projects. Better investment opportunities for banks, firms and retail savers may be supported by improved NPL resolution actions and broader measures to improve the investment climate.

⁽²⁰⁾ Hellenic Bank took over almost the entire Cyprus Cooperative Bank's performing loan portfolio, all government bonds and customer deposits. Around €2.1 billion (gross book value) of the performing loans transferred to Hellenic Bank are covered by the asset protection schemes (APSs) provided by the Cyprus Cooperative Bank and counter-guaranteed by the Cypriot Republic. Hellenic Bank also took over a NPL portfolio worth approximately €0.7 billion (gross book value), which was entirely covered by the APSs. Under the current set-up of the APSs, the Cypriot government would provide compensation for 90% of the approved credit risk losses while Hellenic Bank would be exposed to 10%. The duration of the APSs will be ten to twelve years, depending on the loans.

⁽²¹⁾ See European Commission, 2019d.

⁽²²⁾ Pursuant to legislation enacted in March 2019, which allowed the conversion of a bank's deferred tax assets that arose from the acquisition of a resolved bank, to deferred tax credit, Bank of Cyprus converted the deferred tax asset that was transferred from Laiki, following its resolution in 2013, to deferred tax credits. This resulted in an immediate accounting profit of €101 million and an improved CET1 capital position of €285 million.

Bank profitability prospects are adversely affected by excess liquidity. With a regulatory liquidity buffer of €21.7 billion (around one-third of the total assets), Cypriot banks continue to maintain significant excess liquidity. Several banks attempted to reduce the size of customer deposits by lowering interest rates, which are at historical lows of 0.3%-0.5%. These efforts have not been successful to date, partly as there are no alternative low-risk investment opportunities available to retail savers. As a further step, some banks already charge negative rates on large corporate deposits, but these have not yet been extended to retail depositors.

Capital levels have increased slightly. Recent NPL reductions, the injection of capital in Hellenic Bank and the one-off conversion of deferred tax assets into deferred tax credits have strengthened the aggregate capital position to 16.3%, up from 14.8% at end-2018. Although the capital ratios are higher than the EU averages, Cypriot banks have to maintain higher capital ratios than the minimum levels, as required by their supervisors, to absorb potential shocks associated with a weak asset quality.

Meeting the minimum requirement for own funds and eligible liabilities (MREL) will be challenging. Binding MREL targets or phase-in arrangements for Cypriot banks have not yet been announced by the Single Resolution Board. Due to their heavy reliance on deposit funding, Cypriot banks will need to raise more non-deposit funding to meet their MREL requirements. This will create additional pressure on banks already facing profitability and asset quality challenges.

Following a strong reduction in 2018, the NPL ratio declined only marginally in 2019. The NPL ratio went down to 33.5% in June 2019. ⁽²³⁾ Although it is declining, the ratio remains very high (see Table 4.2.1). The NPL ratio therefore remains well above the EU average of around 3.0%. The stock of non-performing loans for both non-financial corporations and households contracted significantly in 2018, while subsequent declines have been more moderate. In particular,

by the end of June 2019 the NPL ratio of non-financial corporations stood at 30.2%, whereas for households it was 37%. The planned sale of large-scale NPL portfolios by the two biggest banks in Cyprus, if successful, would imply a significant further reduction in 2020. The envisaged transactions would in turn, increase the NPL stock held outside the banking sector, which has grown significantly in 2018 to represent more than half the entire stock of NPLs.

Coverage levels have been gradually increasing. The average coverage ratio for the banking sector rose to 51.4% as of June 2019, as compared with 47% a year earlier. Thus, the aggregate coverage level continues to exceed the EU average of 46.2%. This development largely reflected the transfer of the Cyprus Cooperative Bank's bad assets to the state-owned asset management company, KEDIPES. A part of the overall provisioning levels is also explained by the offsetting of accrued interest on NPLs.

Progress in setting up KEDIPES has been slower than expected. With a net book value of 20% of GDP, KEDIPES is the largest asset management company in the EU relative to the size of the economy. Adequate capacity building, proper governance and operational independence of KEDIPES are key for achieving the objective of maximising government proceeds. The poor quality of data on borrowers (e.g. regarding their occupation and income) makes appropriate resolution strategies difficult to determine, and potentially ineffective. Once operational, the key elements of the strategy for KEDIPES are likely to involve tapping the ESTIA scheme, restructuring, foreclosures and NPL sales. Furthermore, from the authorities' point of view, KEDIPES should become a much leaner organisation dealing with oversight of the servicer, managing operations with Hellenic Bank and making regular payments to the government.

The August 2019 amendments to the foreclosure framework, if implemented, risk undermining the progress achieved through the July 2018 reform. The reform of 2018 was a key step towards improving financial stability, inter alia by strengthening the effective enforcement of claims and the effective resolution of NPLs. As a result, foreclosure is gradually becoming a credible threat against strategic defaulters. At the request of

⁽²³⁾ Based on ECB data, this figure is the private sector NPL ratio consisting only of exposures to non-financial corporations and households, excluding loans to financial institutions and the government sector.

Table 4.2.1: Financial soundness indicators, all banks in Cyprus

	2014q4	2015q4	2016q2	2016q3	2016q4	2017q1	2017q2	2017q3	2017q4	2018q1	2018q2	2018q3	2018q4	2019q1	2019q2
Non-performing loans (1)	38,6	36,3	37,6	36,8	35,4	34,1	33,4	32,1	30,7	30,8	28,1	21,8	20,2	20,9	19,5
o/w foreign entities	17,1	26,6	24,3	24,3	26,5	25,2	24,8	24,7	24,2	24,8	23,6	24,1	20,5	19,9	19,2
o/w NFC & HH sectors (2)	54,6	55,1	56,2	55,5	54,8	53,7	52,7	51,3	50,4	49,3	44,7	37,4	35,6	34,8	33,5
o/w NFC sector	57,2	55,3	57,2	55,7	55,0	52,8	50,9	49,3	48,3	46,4	37,5	36,8	33,7	32,1	30,2
o/w HH sector	52,1	55,0	55,2	55,4	54,7	54,5	54,5	53,2	52,4	52,0	50,7	38,0	37,7	37,7	37,0
Coverage ratio	31,7	37,2	37,8	38,5	41,0	42,2	46,2	46,3	46,4	47,9	47,0	50,4	49,8	51,0	51,4
Return on equity (3)	-7,1	-7,7	6,3	4,7	1,7	2,0	-18,8	-13,1	-11,9	9,8	3,9	9,9	7,1	10,2	9,4
Return on assets (3)	-0,6	-0,6	0,7	0,5	-0,3	-0,1	-1,9	-1,3	-1,1	0,9	0,3	0,4	0,3	0,8	0,8
Total capital ratio	15,3	16,6	16,6	16,9	16,8	17,3	16,3	16,3	16,3	15,4	15,6	16,5	17,1	18,0	18,7
CET 1 ratio	14,2	15,6	15,7	16,0	15,9	15,8	14,9	15,0	14,9	14,0	14,2	14,9	14,8	15,6	16,3
Tier 1 ratio	14,6	16,0	16,2	16,5	16,4	16,3	15,4	15,5	15,4	14,6	14,8	15,6	16,1	17,1	17,8
Loan to deposit ratio	83,7	83,2	78,6	78,8	77,9	78,2	76,6	73,7	71,9	73,1	65,6	60,5	60,3	60,5	58,8

(1) The aggregate NPL ratio covers all loans and advances. For Cyprus, this ratio may be misleading due to the large exposures (nearly a quarter of gross loans) of domestic and foreign banks to central banks and other financial institutions. More representative is the private sector NPL ratio below.

(2) This is the private sector NPL ratio comprising only of exposures to non-financial corporations and households.

(3) For comparability, annualized values are presented.

Source: ECB

the President, the amendments to the foreclosure framework approved by Parliament on 2 August 2019 were referred to the Supreme Court, which is expected to decide on their constitutionality in the spring of 2020. In the meantime, the foreclosure framework as adopted by Parliament in July 2018 will remain effective.

The revised foreclosure framework, if implemented, can be expected to have adverse effects on progress in NPL resolution and financial stability. The new law may render foreclosure procedures longer and more cumbersome, with negative implications for bank profitability, capitalisation, credit ratings and on the prospects and price of future NPL portfolio sales. The inflow of new NPLs is likely to rise, as the incentives for borrowers to adhere to the contractual repayment schedule may be reduced by the extension of foreclosure deadlines and recovery periods. The foreclosure amendments may also have consequences for the functioning of the ESTIA scheme, as they would undermine the consequences of non-participation (the threat of the swift initiation of foreclosure procedures).

Electronic auctions started in November 2019. As a first step, a pilot of the new system was successfully tested. The first e-auction took place on 18 December 2019. The electronic process could streamline the sale of collateral and consequently contribute to the enforcement of claims.

There has been limited progress on insolvency proceedings. Examinership and personal insolvency arrangements are still scarcely used despite the legislative amendments made in 2018.

The establishment of a separate department of insolvency by early 2020 should enhance the efficiency and effectiveness of the insolvency framework. Meanwhile, the review of the regulation of the insolvency practitioners' profession is underway. In particular, the authorities are reviewing the design of the framework for the licensing of insolvency practitioners and will soon finalise the training programmes and certification standards for the profession.

The period for applications to the ESTIA scheme ended with a lower uptake than initially expected. Following several months of delay, the ESTIA scheme, which provides subsidies to qualifying borrowers with NPLs collateralised by primary residences, was launched on 2 September 2019. (24) Applications were to be submitted by mid-November 2019, but the deadline was extended until the end of 2019 due the limited take-up – possibly reflecting expectations for a future, more generous scheme and, in some cases, reluctance to reveal assets (as per the wealth criteria) or concerns about eligibility. In total, there were 5,638 applications submitted, whereas originally the government expected above 10,000

(24) The ESTIA scheme is designed to provide debt reduction subsidies for eligible borrowers with NPLs backed by primary residences. Under the scheme, a subsidy will be paid by the government to lower the debt servicing costs, including interest charges, of all eligible performing borrowers by one third. The eligibility criteria are: (i) a maximum net household income ranging from €20,000 to €60,000, depending on family size; (ii) a primary residence with a market value of up to €350,000 and with at least 20% of the outstanding balance more than 90 days past due as of end September 2017; and, (iii) a maximum net wealth of 80% of the market value of the primary residence, capped at €250,000.

applications based on the preliminary assessment of eligibility criteria. The process of assessing the applications is on-going, with government approvals expected at the end of July 2020.

A number of concerns remain regarding the implementation of ESTIA. There are concerns about the authorities' capacity to verify the wealth criterion for assets held abroad. Lastly, the success of the scheme depends crucially on rigorous adherence to the 2018-strengthened foreclosure framework.

4.2.2. OTHER FINANCIAL ISSUES

Supervision of non-bank financial sectors

The integration of the supervisors of the pension funds and insurance companies is progressing slowly. The draft legislation covering the functioning of the new independent supervisory authority was submitted for discussions in Parliament in October and is pending approval. The aim is to have it implemented in 2021. The management of the several hundred small occupational pension funds remains challenging. The entry into force of the new legislation and the increased supervisory powers should trigger a consolidation in both the pension sector and the insurance sector. Staff numbers are expected to increase as a result of the new legislation and planned integration.

The failure of Olympic Insurance generated a number of uncertainties. The Cypriot insurance supervisor suspended Olympic Insurance's licence in May 2018, following the insurer's failure to meet its solvency requirements. A liquidation procedure was initiated in early August 2018. While it had a modest presence in Cyprus, the insurer had an estimated 9% market share in the motor third party liability insurance segment in Bulgaria, with up to 200,000 policyholders. As it operated through a branch, Olympic Insurance's unpaid claims in Bulgaria are outside the scope of the insurance guarantee scheme in Bulgaria (and Cyprus). The court appointed liquidators at the end of August 2019. Without a burden-sharing agreement, the handling of claims from Bulgaria is expected to proceed slowly via arbitration and with very limited compensations, given the company's few remaining assets.

Diversifying the investment opportunities for retail savers and the financing possibilities for corporations remains a challenge. Cyprus ranks lowest within the EU in terms of non-bank financing of the non-financial corporations, as listed shares account for only around 2% of the total financial liabilities of businesses. Households hold nearly two thirds of their financial assets as cash and bank deposits, the highest ratio within the EU. The local stock and bond markets are small, especially since the 2001 crash and the more recent 2013 financial crisis, which discouraged investment in capital market instruments. In addition, the poor protection of minority shareholders and the ineffective insolvency procedures deter capital market development. At the same time, the major banks aim to expand their product portfolios by selling investment and life insurance products. The Securities and Exchange Commission is making efforts to develop the alternative investment fund industry, following the example of Luxembourg and Ireland. Although these funds currently cater mostly to cross-border investors, the growing expertise and activity may be drawn upon to provide wider investment opportunities to domestic investors.

Access to finance

Access to finance for small and medium-sized enterprises is improving but still challenging. Given the still high level of non-performing loans, banks' appetite to lend is rather low and bank credit supply is limited. Alternatives to bank loans and grant finance are evolving. Regarding the progress with the legal framework, consultations on the set of conditions and rules under which the crowdfunding service providers will operate, are ongoing. Following the new Alternative Investment Fund Manager (AIFM) Law in 2018, a new legislation has been submitted for the authorisation and supervision of fund managers managing funds under the AIFM thresholds. The funding agreement for the Cyprus Energy Fund, a loan instrument under the European Structural and Investment Funds, was concluded. In 2020, it is expected to provide financial resources to small and medium-sized enterprises, households and the public sector, enabling them to invest in energy efficiency and renewable energy sources. It has been decided to set up a co-investment equity fund with the aim of increasing the availability of alternative financing sources, particularly for

innovative companies and start-ups. The Equity Fund for Cyprus will be established with an initial public investment of approximately €20 million, in combination with additional private funds.

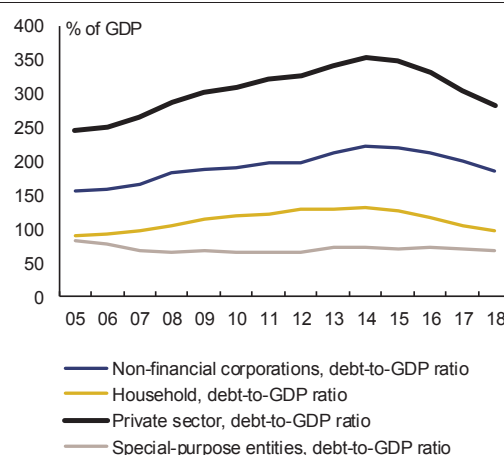
The capacity building for the supply side of the business ecosystem is lagging behind. While small and medium-sized enterprises have access to support structures (such as the Point of Single Contact, a one-stop-shop, Enterprise Europe Network, the Advice for Small Business facility), local private equity finance sources, like the business angels, lack resources to assess investments particularly into innovative SMEs and start-ups.

4.2.3. PRIVATE INDEBTEDNESS*

Private debt continues on a downward path, remaining nevertheless elevated – close to 260% of GDP in September 2019 (195% excluding special purpose entities). The private debt-to-GDP ratio is declining, with both households and non-financial corporations undergoing deleveraging (see Graph 4.2.1).⁽²⁵⁾ Despite the reductions, the large debt overhang remains a vulnerability in both sectors. At the end of 2018, household debt fell to 97.0% of GDP, thus approaching the fundamental benchmark of 93%.⁽²⁶⁾ Nevertheless, it remains well above the prudential benchmark estimated at 40% of GDP.⁽²⁷⁾ Meanwhile, the consolidated debt of the corporate sector stood at 185.6% of GDP, exceeding the fundamental and prudential thresholds of 157% and 69% of GDP, respectively. In Cyprus, the debt-to-GDP ratio of non-financial corporations is heavily influenced by non-financial special purpose entities, which mainly have foreign debt. Thus, excluding the special purpose

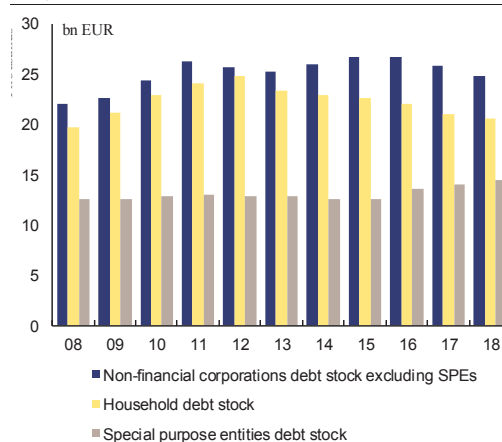
entities reduces the over-indebtedness in the corporate sector, although it remains well above 100% of GDP.⁽²⁸⁾

Graph 4.2.1: Private debt, percentage of GDP



Source: Eurostat

Graph 4.2.2: Private debt stocks



Source: Eurostat, Central Bank of Cyprus

Debt reduction has been supported by both nominal GDP growth and nominal debt stock declines. The stocks of debt for both households and non-financial corporations are slowly decreasing (see Graph 4.2.2). At the end of 2018, the corporate sector excluding the special purpose entities was indebted with approximately €24.8 billion (i.e. 117.3% of GDP), whereas households held a debt stock of approximately €20.5 billion

⁽²⁵⁾ Private sector debt refers to the non-financial private sector, thus including, households and non-financial corporations.

⁽²⁶⁾ Fundamental-based benchmarks are derived from regressions capturing the main determinants of credit growth and take into account a given initial stock of debt. In the case of Cyprus, the initial household debt stock corresponding to household debt in 1995 was already relatively high, much above the prudential benchmark. This possibly introduced an upward bias of the fundamental benchmark.

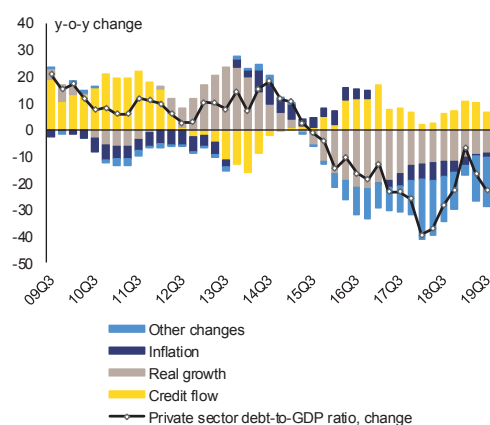
⁽²⁷⁾ Prudential thresholds represent the debt threshold beyond which the probability of a banking crisis is relatively high, based on a signalling approach. Methodologies are described in European Commission, 2017a and updates to the methodology have been subsequently proposed in European Commission, 2018b.

⁽²⁸⁾ This is still significantly above the prudential threshold of 69% and is also above the fundamentals-based threshold for non-financial corporations debt excluding special purpose entities (82%), where the initial stock of debt has been corrected for the presence of special purpose entities.

(97.0% of GDP). Overall, in 2018 deleveraging was driven by corporations excluding special purpose entities, as their debt volumes decreased quicker (-3.8%) than those of households (-2.6%). Conversely, the special purpose entities saw their stocks slightly increasing (€14.2 billion at the end of 2018). Nevertheless, the special purpose entities' debt as a percentage of GDP has been stable (see Graph 4.2.1).

Cash repayments, write-offs of non-performing loans and debt-to-asset swaps drive down the stocks of private debt. Changes in the private debt-to-GDP ratio and the breakdown of the key factors driving its decline are illustrated in Graph 4.2.3.⁽²⁹⁾ Despite the positive credit flows, the (unconsolidated) private debt ratio continued to decline in 2019, reflecting strong GDP growth (grey bars) as well as cash repayments, write-offs of non-performing loans, debt-to-asset swaps and other valuation changes – as indicated by the light blue bars in the graph. Furthermore, in the second quarter of 2019, deleveraging picked-up compared to the first quarter due to increases in write-offs and cash repayments of non-performing loans – mainly related to non-financial corporations.

Graph 4.2.3: **Changes in private debt-to-GDP ratio and breakdown**

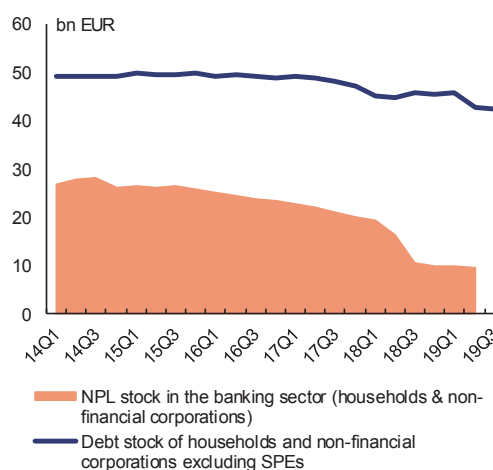


Source: Eurostat

Reducing private debt continues to be challenging as the level of non-performing loans remains high. The debt overhang is coupled with large stocks of bad loans (see Graph 4.2.4). While the non-performing loans (NPLs) in the banking sector decreased sharply in 2018 though loans

sales, the private debt declined more gradually. In the future, continued work-out of NPLs will be important for reducing private indebtedness. The ESTIA scheme could potentially have a significant impact on reducing private debt. However, the scheme's take-up was lower than expected. In this context, it is crucial to maintain in place the 2018-strengthened foreclosure framework, particularly for addressing strategic defaulters, as banks will be able to act more forcefully against defaulting borrowers who did not apply for ESTIA. Borrowers' participation in insolvency processes should also facilitate debt-workouts, but so far, progress with insolvency proceedings has been limited (see also Section 4.2.1).

Graph 4.2.4: **Private debt stock and NPLs stock**



Source: Central Bank of Cyprus, Eurostat

Inefficiencies in the system for issuing and transferring title deeds⁽³⁰⁾ remain hindering the liquidation of collaterals. A significant number of buyers, even those who have paid the full price for a property, still do not have a title deed. A collateral without a title deed cannot be liquidated or foreclosed, and even deters banks from using it for debt-to-asset swaps, thus significantly preventing faster debt reduction. A new system of property transactions increasing transparency and due diligence of transactions is under discussion (European Commission, 2019e).

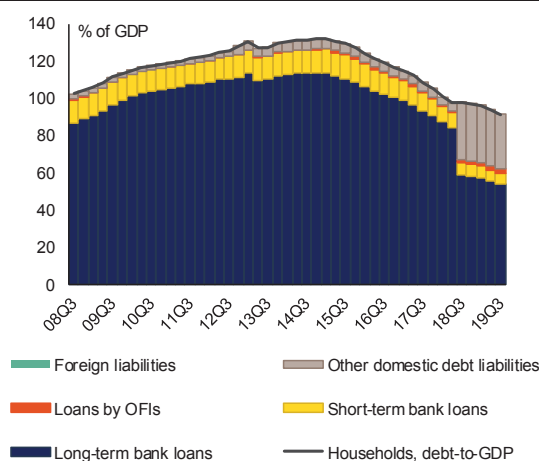
Debt reduction may accelerate in the medium term in view of the large NPL portfolios held by credit-acquiring companies, which are

⁽²⁹⁾ The graph relies on unconsolidated debt series.

⁽³⁰⁾ The legal document constituting the evidence of a right to the ownership of property.

specialised in managing and maximising loan recoveries. The market for credit acquiring companies was established in Cyprus in 2018, in connection with the development of a secondary market for loans. The transfer of bad loans from Cyprus Cooperative Bank to the state-owned asset management company (which is set-up as a credit acquiring company) together with the Bank of Cyprus's sale of the Helix NPL portfolio, constitute the largest transactions, which increased the credit acquiring companies' holdings of loans. As a result, both households and non-financial corporations owe part of their debt to credit-acquiring companies instead of banks. Graph 4.2.5 illustrates this shift in the structure of liabilities for households – where the grey bars incorporate the debt owed to credit acquiring companies. These changes may speed up debt reduction for both households and non-financial corporations.

Graph 4.2.5: **Breakdown of households indebtedness**



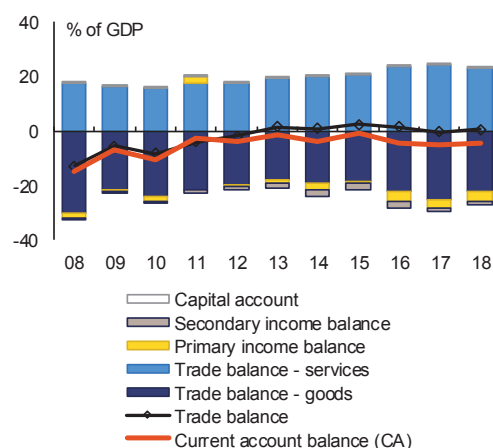
Source: European Commission

4.2.4. SAVINGS AND INVESTMENT IMBALANCE*

The current account balance is expected to deteriorate significantly, also in cyclically adjusted terms. In the third quarter of 2019, the current account deficit is estimated to reach 7.4% of GDP (around 4% cyclically adjusted). It is useful to keep in mind that the current account balance in Cyprus has never been in a positive territory at least for the last 20 years. The deficit is mainly attributable to a structural negative trade balance, which is not fully compensated by the surplus in the services balance. Primary income

and secondary income balances are also in deficit, albeit at a lesser extent (see Graph 4.2.6). As a small open economy, Cyprus is highly dependent on imports. Imports of consumer goods predominate, followed by intermediate goods, notably for manufacturing and construction. In addition, Cyprus relies on imports of fuels, and has a 93.6% energy import dependency compared to 55.1% for the EU average in 2017 (SDG 7). Exports of services notably tourism, transport and financial services have the highest proportion, around 60-65%, of total exports. While exports of goods are only 20% of total exports. Even though the presence of non-financial (ship-owning) special purpose entities (SPEs) distorts export and import statistics through the registration and de-registration of ships, its impact on the current account balance is limited in general.⁽³¹⁾ The most recent widening of the current account deficit is to some extent associated with a reduction in the services surplus, linked to the slowdown in tourism. At the same time, goods imports continue to be robust, prompted by investment, particularly construction investment (see Section 1).

Graph 4.2.6: **Current account balance components**



Source: Eurostat, European Commission

The net international investment position (NIIP) is also improving on the back of strong nominal GDP growth and valuation effects, but net external debt remains large. Despite the negative contribution of current account dynamics to the adjustment, nominal GDP growth and

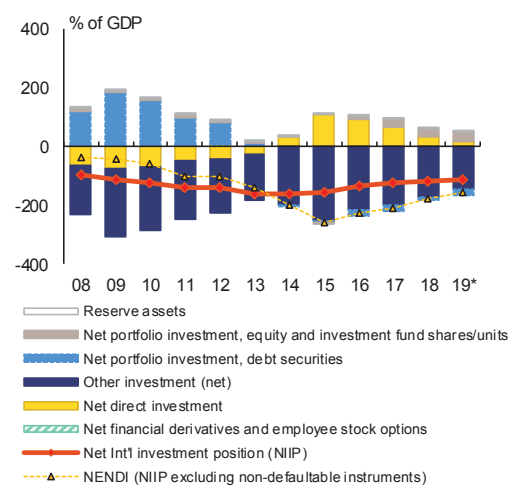
⁽³¹⁾ In years where net registrations of ships (imports-exports) cover the depreciation in the shipping stock there would be no impact on the current account.

valuation changes helped to reduce the NIIP further in the third quarter 2019 to -115%, from its trough of -164% in 2014. As a reference, this is well beyond the Macroeconomic Imbalance Procedure scoreboard threshold of -35%, and the country specific fundamental and prudential NIIP benchmarks of -46% and -56%, respectively, estimated for Cyprus.⁽³²⁾ Excluding net foreign direct investments (FDI) and net portfolio equity positions, which are at times subject to large valuation effects, the ‘defaultable’ part of the NIIP amounted to around -160% of GDP in the third quarter of 2019, reflecting still very large net external debt liabilities (see Graph 4.2.7). A significant part of this net external debt (about 30%) corresponds to external debt liabilities (excluding FDI and equity) of ship-owning non-financial special purpose entities. Excluding these, the ‘defaultable’ part of the NIIP still amounts to around -130% of GDP. Even though there is a relatively large positive equity and FDI position covering part of these external debt liabilities, the former could be subject to large negative valuation effects in the case of a global downturn.

The current account deficit is well below what is warranted both in terms of fundamentals and prudential considerations. According to the Commission’s current account ‘norm’ estimates⁽³³⁾, fundamental drivers, mostly a low share of manufacturing, explain only about 2 percentage points of the deficit. Moreover, the current account balance is below what is required to ensure no further deterioration of the negative net international investment (NIIP) position. According to data from the Central Bank of Cyprus, the NIIP of non-financial special purpose entities (SPEs) (including debt, equity and foreign direct investments net positions) stood at about -80% of GDP in the third quarter of 2019. Excluding this, the NIIP was around -35% of GDP in the third quarter of 2019. To maintain this level

over the next 10 years a current account balance of about -2% and a positive trade balance of about 2% would be required. Given that only the ‘defaultable’ part of the NIIP, which, excluding non-financial SPEs, amounted to around -130% of GDP in the third quarter of 2019, as explained above, a current account surplus close to 3% and a trade surplus close to 9% would be needed in order to generate enough savings to reduce it to a prudential value of around -56% of GDP.

Graph 4.2.7: **Net international investment position**



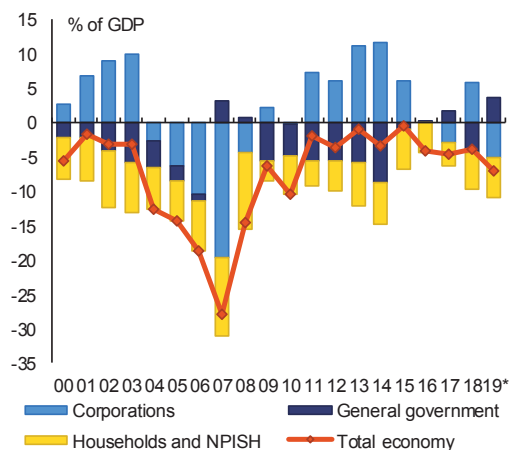
Source: Eurostat, European Commission

The large current account deficit is mirrored in savings falling short of domestic investment, particularly in the household sector. The household sector has consistently been a sizeable contributor to the economy’s negative net lending position (Graph 4.2.8). Households in Cyprus have been net borrowers since at least as far back as 2000. While the households’ savings-investment gap has narrowed since the crisis, it remains negative and is widening again. The government sector was running large deficits during the global financial crisis and in its aftermath, but has turned net lender for most of the period since 2016 (with the exception of 2018 when it had to intervene again in support of the banking sector). Both financial and non-financial corporations, have fluctuated between surplus and deficit over the past three years.

⁽³²⁾ The country-specific prudential benchmark denotes the NIIP level beyond which the probability of an international economic and financial crisis becomes higher. The NIIP level explained by fundamentals represents the NIIP that would result if a country had run its current account in line with fundamentals since 1995. For details see Turrini and Zeugner, 2019.

⁽³³⁾ This benchmark is derived from regressions representing the main fundamental drivers of the saving-investment balance (e.g. demographics, resources), as well as policy factors and global financial conditions, see Coutinho et al., 2018.

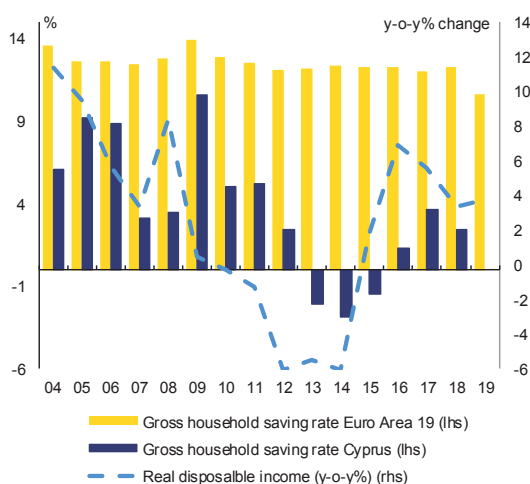
Graph 4.2.8: Net Lending/ Borrowing by Sector



Source: Eurostat, European Commission

Household savings are recovering, but remain low. Following a significant fall in households' savings during the banking crisis, the savings rate has started to recover since 2016 supported by the growth of disposable income. However, historically, the savings rate in Cyprus is among the lowest in the EU, well below the euro area average (see Graph 4.2.9). Households continue to borrow to finance investment, particularly housing investment, even though the flow of new credit is still lower than before the crisis (see Section 1).

Graph 4.2.9: Household savings rate



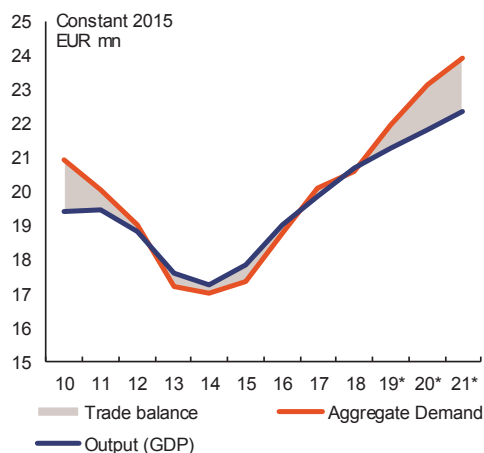
(1) Available data for the 3 first quarters of 2019

Source: Eurostat

Without rebalancing, the trade deficit is likely to continue to widen further. A more permanent shift in the composition of investment towards

export-oriented sectors and lower import dependence is essential to ensure that levels of external debt remain sustainable in the future. Stagnant productivity, moderate GDP and export growth and/or an increasing domestic demand, all else unchanged, could undermine the sustainability of the external debt levels in the medium term (see Graph 4.2.10).

Graph 4.2.10: Demand, output and trade balance



Source: Eurostat

4.3. LABOUR MARKET, EDUCATION AND SOCIAL POLICIES

4.3.1. LABOUR MARKET

Overall, labour market conditions are improving but challenges remain.

Unemployment fell sharply compared to the crisis years (7.5% in 2019 compared to 16.1% at its peak in 2014). In the medium term, Cyprus is expected to achieve almost full employment conditions. However, with the favourable labour market environment, new challenges are emerging for upskilling and re-skilling as some sectors have started to face labour shortages. Furthermore and despite progress, youth unemployment (17.2% in the third quarter of 2019) and the number of young people not in employment education or training (13.2% in the third quarter of 2019) remain at considerably high levels compared to the EU average (14.4% and 10%, respectively). This is probably due to the lack of job opportunities for tertiary graduates, low enrolment in vocational education and training and difficulties in school-to-work transition. Another factor could be undeclared work (see also Box 4.3.1).

Outreach to young people not in employment, education or training (NEETs) and other vulnerable groups continues to be one of the key issues. Recently, Cyprus has strengthened outreach activities by mapping and profiling the population of NEETs twice a year and building partnerships with local actors as part of an action plan. The plan was set up in April 2019 and is currently being implemented, but its results are still to be evaluated. Efforts are also being made to promote collaboration between the public employment services, the counselling and career education services and other providers of Youth Guarantee interventions, targeting unregistered youth through regional partnerships and informing schools about employment and training opportunities.

Public Employment Services' operations have been temporarily enhanced but their long-term capacity is at risk. The hiring of 30 additional counsellors and the restructuring of the Services' procedures have improved the quality of tailor-made services and individualised counselling with encouraging monitoring results. ⁽³⁴⁾ However, the support provided to the registered unemployed still

does not include systematic provision of individual action plans and the coordination with other services is weak. Furthermore, as the counsellors are only on short-term contracts, the sustainability of the enhanced services is at risk. The preparation of a strategic document and the full review of the existing manual of the Services' operations are expected to be completed by early 2020.

Active Labour Market Policies and targeted schemes for vulnerable groups remain below the EU average. Cyprus has increased its budget allocation by 26.4% in 2019 compared to 2018, following the needs arising from the current increasing labour market demand. From 2015-2019, various training schemes were implemented, financed by both national and EU funds, aiming to help around 48,000 vulnerable persons into work or train, notably youth, guaranteed minimum income recipients, and people with disabilities. Cyprus has also recently introduced a monitoring and evaluation tool for all these schemes. However, the evaluation results and the comprehensive analysis are not yet available to inform better decision on shifting investments to areas where employment activation is most successful.

Permanent employment is growing strongly, the fastest in the EU, while in-work poverty is declining. In 2019 (average Q1-Q3) an increasing trend was observed in both the number of employees with permanent contracts (increase by 11,600, 4.0%) and the number of self-employed (increase by 2,900, 6.3%). However, self-employed have limited social protection as they continue not to have access to unemployment benefits, accident and occupational injuries schemes. The number of employees with temporary contracts decreased by 800 (1.7%) (see graph 4.3.1). Involuntary part-time work as a share of employment decreased in 2018 to 63.9%, but is still among the highest in the EU. At the same time, the in-work-poverty rate further declined to 7.4% in 2018, lower than the EU average (9.5%), and it is also well below the EU average for single parents (CY 7.1% vs EU 23.6%) and for young people (CY 6.7% vs. EU 12.3%). However, it remains above EU average for temporary employees (CY 17.6% vs EU 16.2%) while the rate increased for part-time employees (CY 16% vs EU 15.7%).

⁽³⁴⁾ 1.420 persons under 29 years old have been served since September 2018 and almost 500 have been placed in a job.

Box 4.3.1: Monitoring performance in light of the European Pillar of Social Rights

The European Pillar of Social Rights is a compass for a renewed process of upward convergence towards better working and living conditions in the European Union. It sets out twenty essential principles and rights in the areas of equal opportunities and access to the labour market; fair working conditions; access to healthcare and social protection and inclusion.

The Social Scoreboard supporting the European Pillar of Social Rights points to a few employment and social challenges in Cyprus. In 2019 Q3, the long-term unemployment rates dropped to 2.2% and the employment rate increased to 75.5%. However, the real gross disposable household per capita income is still below the 2008 level and was still about 15% lower than the EU average in 2018 (at 90 against 106 for the

EU, current prices, million euro). The gender gap in inactivity due to caring responsibilities and the gender pay gap are high, placing Cyprus quite low on the Gender Equality Index. The share of people at risk of poverty or social exclusion is at the EU average. The early school-leaving rate remains rather stable (7.8%), whilst further progress could be made with regard to individuals' level of digital skills, as well as upskilling and reskilling of the population. On the positive side, Cyprus performs better than the EU average in terms of income inequality (at 4.3 against 5.2 for the EU), as measured by the income quintile share ratio (S80/S20). Furthermore, the guaranteed minimum income scheme (GMI) has had a positive impact on the conditions of vulnerable groups.

SOCIAL SCOREBOARD		SDGs
Equal opportunities and access to the labour market	Early leavers from education and training (% of population aged 18-24)	4 QUALITY EDUCATION
	Youth NEET (% of total population aged 15-24)	5 GENDER EQUALITY
	Gender employment gap	10 REDUCED INEQUALITIES
	Income quintile ratio (S80/S20)	
	At risk of poverty or social exclusion (in %)	
Dynamic labour markets and fair working conditions	Employment rate (% population aged 20-64)	8 DECENT WORK AND ECONOMIC GROWTH
	Unemployment rate (% population aged 15-74)	
	Long-term unemployment rate (population aged 15-74)	
	GDHI per capita growth	
	[Net earnings of a full-time single worker earning AW]	
Social protection and inclusion	Impact of social transfers (other than pensions) on poverty reduction	1 NO POVERTY
	Children aged less than 3 years in formal childcare	3 GOOD HEALTH AND WELL-BEING
	Self-reported unmet need for medical care	
	Individuals' level of digital skills	

Members States are classified on the Social Scoreboard according to a statistical methodology agreed with the EMCO and SPC Committees. It looks jointly at levels and changes of the indicators in comparison with the respective EU averages and classifies Member States in seven categories. For methodological details, please consult the draft Joint Employment Report 2019, COM (2018)761 final; NEET: neither in employment nor in education and training; GDHI: gross disposable household income.

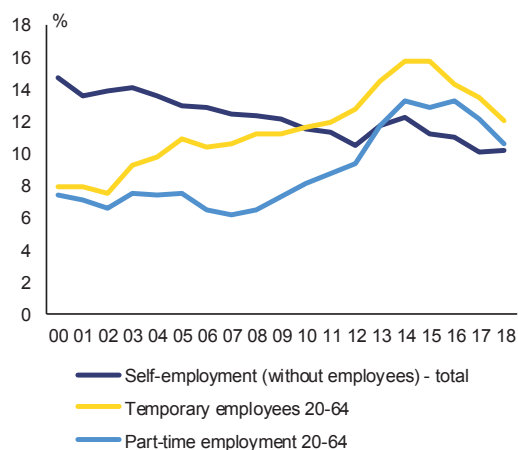
Although decreasing, the share of young people not in employment, education or training (NEETs) is still a concern. Despite positive labour market developments, the rate of youth unemployment (17.2% in 2019 Q3) and NEETs (13.2% in 2019 Q3) remain at considerably high levels compared to the EU average. There has been some improvement in reinforcing youth outreach measures, to further strengthen activation and increase the potential for sustainable growth. On average, the estimated proportion of NEETs under 25 registered in the Youth Guarantee was 23% in 2018 and 34% of those registered had been waiting for an offer for more than 4 months. This is a significant improvement compared to 2017 (when these statistics were 19%

and 44%, respectively), but more efforts are still needed.

Cyprus strives to ensure fair labour market working conditions, through its newly established unified inspection service. The reform of the labour inspectorate is coupled with the implementation of an action plan that aims at improving the effectiveness and efficiency of the inspectorate. The objective is to transform undeclared work into declared formal work, and include preventive measures rather than only focus on deterring measures with sanctions and suppression. The success of this reform is essential as closely linked with other ongoing reforms such as the provision of a guaranteed minimum income and the introduction of a statutory minimum wage.

The under-utilisation of highly qualified graduates' skills remains a concern. In 2018, while the tertiary education attainment was very high (57.1%), one third of these high-skilled people were employed in occupations that do not require tertiary education. However, according to the latest forecast study and analysis on employment demand of the Human Resource Development Authority (Human Resource Development Authority, 2017) the majority of the jobs that will be created in 2017-2027 will be in middle and high-level occupations. The study shows a forecasted annual increase in total employment demand of 3.9% and 3.5% for middle and high-level occupations respectively. Nevertheless, labour shortages still exist. In 2019, employers reported labour shortages in the construction and industry sectors, 7.5% and 3.0% of the total respectively, while in the services sector the proportion was 2.3%. Labour shortages were also reported for the tourist and agriculture sectors, as well as for ICT professionals.

Graph 4.3.1: **Temporary, part-time and self-employment (without employees) - proportion in employment**



Source: Eurostat

Cyprus has one of the lowest growth in compensation per employee. In 2018, the compensation of employees in Cyprus grew by 0.5% one of the lowest rates in the EU. This was below the rate consistent with economic fundamentals (2.9%) and marginally above the rate consistent with a stable evolution of cost competitiveness.⁽³⁵⁾ At the same time, wage

growth per employee was 1.0% with the highest rates recorded in the construction sector (1.3%) followed by the services sectors (1.1%) while the industry sector lagged behind with 0.7%. In 2018, the public sector wages per employee grew faster (1.9%) than wages in the private sector (0.2%) (see section 4.1.2 for a description of the growth of the overall public sector wage bill). This reverses the trend observed during 2014-2017, when public sector wages lagged behind private sector wages (-1.7% vs -0.7%, respectively) (European Commission, 2019f).

The government is planning to introduce a statutory minimum wage, once the economy reaches full employment. Cyprus has committed to introduce a statutory minimum wage once the unemployment rate falls below 5%. Currently, minimum wages apply only in selected sectors. Minimum wages for nine professions with low union representation are fixed each year by a governmental decree. A separate wage grid applies to minimum wage workers who completed six months' experience in their current job. In addition, the newly signed sectoral collective agreement in the hotel industry, provides for new wage minimum which was legislated through a Minimum Wage Order issued by the Minister of Labour, Welfare and Social Insurance. The legislated minimum varies within the 13 occupations (for 6 occupations, an increased wage level is provided for workers with experience in the industry). In the construction sector, a collective agreement was also reached in which elements such as working hours, overtime, holidays, contributions to provident funds and bonuses would be passed in legislation.

There is room for improving gender equality. Cyprus ranks as one of the least equal countries in the EU on the Gender Equality Index 2019⁽³⁶⁾, with its score being 11.1 points lower than the EU's average score (56.3 out of 100 points). The

calculated as the wage growth predicted on the basis of changes in labour productivity, prices and the unemployment rate, and wage growth consistent with constant unit labour cost based real effective exchange rate (see European Commission, 2019f; Arpaia, A. and Kiss, A., 2015).

⁽³⁶⁾ The Gender Equality Index is a tool to measure the progress of gender equality in the EU, developed by the European Institute for Gender Equality. Available at: <https://eige.europa.eu/gender-equality-index/2019>.

⁽³⁵⁾ This is a benchmark for wage growth consistent with domestic and international labour market conditions. It is

employment rate for women reached 69.7% in 2019 Q3. While still lower than that for men (81.7% in 2019 Q3), it remains higher than the EU average of 68.2% (2019 Q3). Female participation in the labour market is relatively high, but this participation is disproportionately concentrated in poorly paid occupations, resulting in an increased gender pay gap. This gap is lower in the public sector and higher among the low-income population. The pension gender gap for 2017 is also higher than the EU average (41.1% vs. EU 35.7%). Furthermore, in 2018, the percentage of inactive female population (aged 20-64) that was inactive due to caring responsibilities was considerably higher, at 58.4%, than the EU average (31.7%). In order to promote gender equality and encourage more women to work or look for a job, thereby contributing to advancing towards SDG 5, it is essential to encourage further female participation in the labour market, increase the availability of affordable and accessible childcare and long-term care services, and foster voluntary part-time work as well as other flexible working arrangements (see Section 1).

The inclusion of women in digital jobs, careers and entrepreneurship is also a challenge. Cyprus scores 41.3 (50 in the EU) in the Women in Digital Scoreboard (European Commission, 2019g). Female ICT specialists represent 0.8% of total employment, while men make up 3.8% (vs 1.4% and 5.7% in the EU, respectively). The government has been implementing female entrepreneurship schemes encouraging women participation in technical fields of activity. Furthermore, the third national action plan on gender equality 2019-2023 aims to tackle the issue by focusing on the education and training of women in ICT.

Social dialogue has a long tradition in Cyprus and is embedded into the decision making process, especially regarding employment and social issues. Collective bargaining takes place at sectoral and enterprise levels. Although the labour union density has been decreasing, its role and contribution in maintaining a stable labour market environment has been significant in the past, particularly during the crisis (European Commission, 2019h). Social partners are involved and consulted on ongoing reforms, such as the introduction of the National Health Insurance System, the fight against undeclared work, as well

as the introduction of a statutory minimum wage (Eurofound, 2019a). In June 2019, the social partners have concluded a *Code Preventing and Dealing with Harassment and Sexual Harassment at Work*. The social partners receive EU funds to further improve their capacity. Similarly, civil society organisations also have many opportunities for participation in policymaking and could benefit from further financing.

Cyprus has taken steps to reduce the high levels of undeclared work. Undeclared work reduced from 21% in 2012 to 12.7 % in 2019 Q3 (National Labour Inspectorate Cyprus), improving working conditions and access to social protection and security for workers. However, the National Labour Inspectorate bill is still pending for approval in the House of Representatives, thus reducing the scope of further action on undeclared work. The amendments include an increase in administrative fines, and the right to inspectors to directly impose administrative fines instead of going through the current heavy procedures of the legal system. Trust in organisations in charge of tackling undeclared work is rather low (European Commission, 2020b). To that respect, an action plan has been set up for further improving the effectiveness and efficiency of the services (see Box 4.3.1).

4.3.2. SOCIAL POLICIES

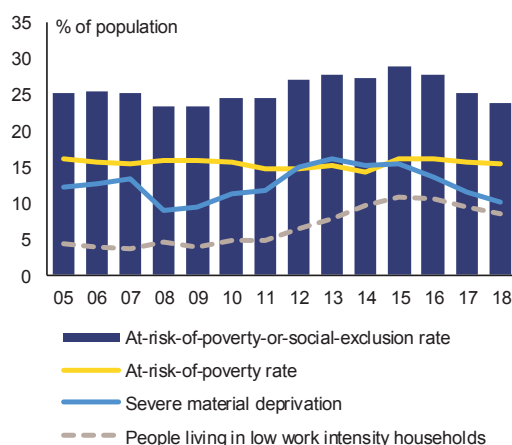
The social situation has been improving because of positive economic developments and a good social safety net. Strong economic growth and the introduction of a guaranteed minimum income have had a significant positive impact on poverty and inequality in Cyprus (European Commission, 2019h). The guaranteed minimum income scheme encompasses access to supporting social services when needed. Recently, it has been further improved by extending eligibility criteria and increasing allowances for vulnerable groups. Depending on the family composition and the province of residence, in August 2019 the rent allowances were increased by up to 57% compared to 2014.

Despite the introduction of a general minimum income, social protection in general is somewhat underfunded compared to the EU average. Government expenditure on social protection

(13.1% in 2018) remains lower than the EU average (18.8% in 2017). Most of the social protection expenditure in Cyprus goes to pensions and health care, with other functions of the social protection system (family benefits, unemployment benefits, disability benefits, housing benefits and social exclusion) receiving relatively less resources. The number of general minimum income beneficiaries has fallen considerably since 2015 on the back of strong employment growth. Cyprus is also in the process of upgrading its occupational pension framework considering the inclusion of mandatory supplementary occupational pension schemes.

Poverty indicators have been improving but the depth of poverty has increased. The proportion of people at risk of poverty or social exclusion (AROPE) and of material and social deprivation is declining but still above the EU average (21.7% and 12.9% in 2018) (see Graph 4.3.2) whereas the at-risk of poverty (AROP) rate was 15.4%, below the EU average of 17.1% (2018). The depth of poverty increased in 2018 (from 15.1% to 18.6%) with an increasing number of poor people furthest from the poverty threshold. Migrants are more affected as reflected by the proportion of people at risk of poverty or social exclusion of non-EU-born (CY 40% vs. EU 37.2% in 2018).

Graph 4.3.2: The proportion of people at risk of poverty and social exclusion (2005-2018)



Source: Eurostat

Children continue to be disproportionately affected by a risk of poverty. The proportion of children below the age of 18 at risk of poverty or social exclusion (AROPE) remained unchanged at

25.5%, unchanged in 2018 and just above the EU average of 24%. However, there has been an increase in the AROPE for children below the age of 6 (see Graph 4.3.3). Supporting measures for vulnerable children in schools co-financed by EU funds have a positive impact on combating child poverty and social exclusion.

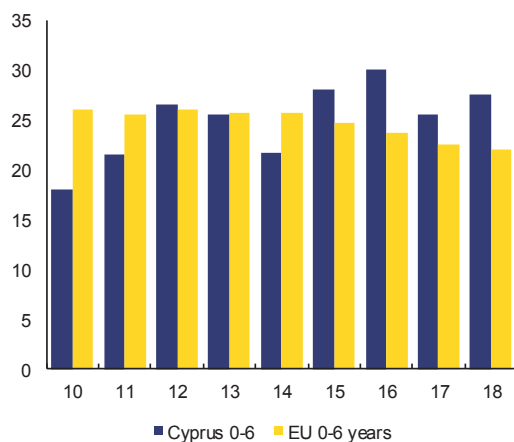
Challenges also persist for people with disabilities. The at-risk-of-poverty-or-social-exclusion (AROPE) rate for people with disabilities is significantly higher than the EU average (34.1% vs. 28.7% in 2018). People with disabilities face particularly strong challenges regarding poverty, educational attainment and employment. The employment rate for people with disabilities is lower than the EU average. As a response, in July 2019, the government increased and expanded the mobility benefits of people with disabilities by 50%. Moreover, the European Social Fund is funding projects that support disabled people and help them into work and training, including de-institutionalisation through plans for setting up 10 additional social homes.

The early childhood education and care gap is higher for children under the age of three. While 92% of children aged four to six were enrolled in early childhood education and care (ECEC) in 2017 (EU average 95.4%), in 2018 31.4% of children under the age of three participated, below the EU average of 35.1% and the Barcelona target (33%). Cyprus relies heavily on informal settings or private institutions. Out of 349 day care centres for preschool age children in 2019, only 4 were public, while 279 were private and 66 were operated by non-governmental organisations/local authorities, the majority of which is being subsidised via a State Aid Scheme. In addition, childcare services are also provided by around 60 private Child Minders. Free childcare is mainly limited only to guaranteed minimum income recipients, who also receive subsidisation for private childcare. Depending on the age of the child, the type and provider of services, monthly fees range from €70 to €400, creating a disproportionate burden for families. Social protection for families and children, as a proportion of GDP, is comparatively low at 1.3% v EU 2.5% in 2016. This low investment is linked to weak support for disadvantaged children in early childhood education and care (ECEC) and

undermines potential long-term benefits of quality ECEC for inclusive educational outcomes.

Income inequality increased significantly during the crisis years but returned to pre-crisis levels in 2018. In particular, the Gini index increased from 29.5 in 2009 to 34.8 in 2014. Nevertheless, the Gini index ⁽³⁷⁾ recorded an impressive reduction in inequality between 2015 and 2017 (falling from 33.6 in 2015 to 29.1 in 2018), returning to its pre-crisis level. Furthermore, while in 2017 the disposable income of the richest 20% of the population was 4.6 times that of the poorest 20% (vs. 5.1% in the EU), this ratio further dropped to 4.3 in 2018, implying a reduction in inequality. However, in 2018, the annual real gross disposable household income (GDHI) per head remains significantly lower than the EU average (90 vs. 106) and below the 2008 levels. ⁽³⁸⁾

Graph 4.3.3: Risk of poverty and social exclusion for children below the age of six (%) (2010-2018)



Source: Eurostat

The number of asylum applications is growing, thus requiring a national integration strategy. Cyprus has become one of the EU countries that receives the most asylum seekers, with one of the

highest asylum application by inhabitant ratio across EU Member States since 2017 (5,235 first-time applicants per million population in 2017 and 8,805 in 2018). In the first eight months of 2019, around 8,400 first-time asylum applications were registered, more than double than in the same period in 2018. Subsequently, the number of pending asylum applications reached 16,700 in August 2019, compared to 7,700 in August 2018. A national strategy for the integration of non-EU country nationals, including beneficiaries of international protection, is under preparation.

The cost of housing is increasing with particularly negative consequences for young people. Rents and purchasing prices of residences, in particular new properties, are on the rise (see Section 1). Although the housing cost overburden rate for the poor is well below the EU average (CY 10.3% vs EU 37.9% in 2017), the severe housing deprivation among young people is more than double the rate of the general population (Grow Digital Cyprus, 2019). In response, the rent allowances for guaranteed minimum income recipients were increased as well as for the recipients of rent assistance, while housing schemes that support low- and middle-income households are being implemented. In addition, households that are debt-overburdened with debt and cannot repay their housing loans could be benefitting from the “ESTIA” scheme (see Section 4.2.3).

4.3.3. EDUCATION AND SKILLS

Cyprus’ performance on key Europe 2020 education targets and social scoreboard indicators is mixed and basic skills achievement remains a concern. In 2018, the school drop-out rate (‘early school leaving’) declined, with 7.8% of 18-24 year-olds leaving school early compared to 8.5% in 2017, improving its position in the Social Scoreboard. Tertiary educational attainment has risen further. At 57.1%, Cyprus has the second-highest tertiary educational attainment rate in the EU (the average is 40.7%). Underachievement in basic skills among 15 year old remains a concern, as also flagged by the SDG 4. Modernising the education system is therefore vital to improving educational outcomes. However, education and training reforms are only progressing slowly. This makes it difficult to address challenges including

⁽³⁷⁾ The Gini coefficient is a summary statistic of inequality. The closer the Gini is to 1, the more unequal is the distribution of income. If there is no inequality in a society, the indicator is equal to 0. If all national income is earned by one person alone, the Gini coefficient is equal to 1.

⁽³⁸⁾ The values are offered as an index calculated in relation to the European Union (EU28) average set to equal 100. If the index of a country is higher than 100, this country's level of adjusted gross disposable income of households per person is higher than the EU average and vice versa.

poor educational outcomes, low participation in vocational education and training and adult learning, as well as lacking digital skills. Labour market needs and opportunities, including the greening of the economy, require stronger efforts in upskilling and reskilling.

There was slow progress on the 2019 proposal for a unified student assessment system. The new system provides for modern pedagogic assessment methods, which aim at improving pupils' educational outcomes. After stakeholder discussions, it has been implemented in primary education as of September 2019 while resistance from teacher unions and students has delayed implementation in secondary education. Consultation on the new proposal for teacher evaluation ended in December 2019. A second round of competitive entry exams under the new teacher appointment system was conducted in November 2019. In 2018 and 2019, 866 candidates were hired through the new system and the same number from the old system valid until 2027.

The skills level of Cyprus' students remains of concern. The performance of 15-year-olds in reading, maths and sciences in the Organisation for Economic Co-operation and Development Programme for International Student Assessment (PISA) 2018 showed a high proportion of low achievers in Cyprus in all three subjects and a low proportion of top performers compared to other EU countries (OECD, 2019a). Reading proficiency has decreased on average since 2015 while performance in maths and science has increased somewhat. The proportion of students without basic reading skills rose by 8.1pps, more than in any other EU Member State. At the same time, Cyprus reduced the proportion of low achievers in both maths (-5.7pps) and science (-3.2pps) more than any other EU Member State, suggesting that targeted remedial measures for those competences have had an impact.

Socio-economic profile and type of schools have a significant impact on learning outcomes. Almost two out of three students (58.9%) from the lowest socioeconomic quartile are low achievers in reading (EU: 34.8%). A smaller gap between the lowest and highest quartile since 2009 is mainly due to a decreased performance across the socio-economic spectrum – the 29.7% proportion of low achievers in the top socio-economic quartile is the

highest in the EU (9.3%). Similarly, the reduced performance gap between pupils with a migrant background and those without is a result of the steeper rise in underachievers among the latter. Differences between disadvantaged and advantaged schools in average reading score are high, equivalent to two to three years of schooling, and students at private schools outperform their peers at public schools by more than one year of schooling. Given the low general performance level, sustained efforts to deliver educational reforms that raise educational quality across the board are therefore crucial. A comprehensive skills strategy as well as improvements in teacher evaluation and training can help tackle these challenges.

Inclusive education has been strengthened. Remedial measures, including supportive teaching and psychosocial support, to improve equality in education are provided through the ESF-funded DRASE programme and were expanded in the 2019-2020 school year to 102 schools, covering 15.6% of the student population. New 2019 draft legislation on special needs education aims to make education more inclusive. In 2018-19, 8,534 children (16% of all children) followed all-day programmes, which exist at 143 primary schools (43%) and 57 kindergartens (21%). To facilitate the integration of newly arrived migrants into schools, Cyprus has launched several measures to improve initial assessment, networking and support for teachers and schools and Greek-language provision in primary education. However, no integration policy exists for providing post-secondary education for young migrant adults; even though the proportion of young people (aged 18-34) among recently arrived asylum seekers is especially high at 62% (2018).

Schools focus on competences for sustainable development is being developed. At pre-primary, primary and secondary level schools integrate environmental and social topics for sustainable development. Environmental programmes include topics on global warming, climate change, energy, urban development, and means of transport. Since 2007, the National Strategic Plan for Environmental Education is monitored and upgraded on annual basis.

Employment prospects for recent tertiary educated graduates have improved but

concerns remain. The employment rate of recent tertiary educated graduates grew by 6.2 percentage points since 2017 to 81.3% (EU average: 85.4%). However, 33.3% of these high-skilled people are employed in occupations that do not require tertiary education. This proportion has remained relatively stable over the last decade indicating a persistent significant challenge in terms of matching skills with available job requirements. Cyprus has not yet set up a qualification database for its national qualifications framework which was also referenced to the European one in 2017. Furthermore, systematic graduate tracking will help to inform on skills mismatches, in particular for tertiary graduates, who constitute the vast majority of graduates in Cyprus.

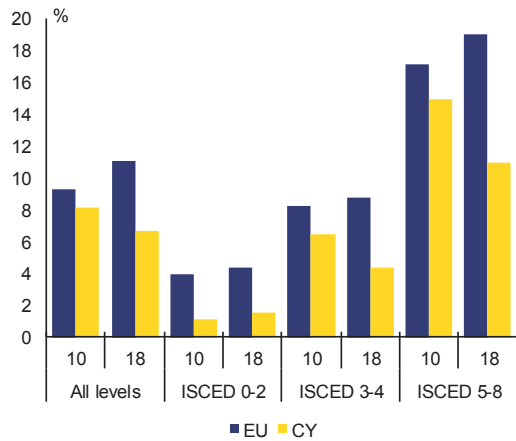
Digital and science, technology, engineering and mathematics skills need to be strengthened further. Despite an increasing number of Cypriots going online, basic and advanced digital skills' levels remain a challenge. Only 45% of individuals between 16 and 74 years old report basic digital skills (58% in the EU). In the labour force, i.e. individuals aged 25-64 who are employees, self-employed or family workers, the proportions of those reporting low digital skills (42%) or at least basic digital skills (51%) are higher than the EU average (26% and 68%). The proportion of ICT graduates remains low. Out of the total number of university graduates in 2019, only 2.7% acquired an ICT degree (3.6% in the EU) (European Commission, 2019k). A new Scheme for Digital Entrepreneurship with a total budget of €6 million, was launched in December 2019. Cyprus at 10% has one of the lowest proportions of science, technology, engineering and mathematics (STEM) graduates in the EU%. In response, a voluntary STEM programme for sixth graders was launched in October 2019 and is being piloted in nine primary all-day schools started in October 2019 and the creation of the first STEM school was approved in April 2019. To boost digital education at schools, the European Computer Driving Licence certification is provided free of charge for secondary students.

The National Coalition for Digital Skills and Jobs contributed towards the enhancement of digital skills. More than 40 stakeholders (Grow Digital Cyprus, 2019) are involved and have proposed measures in order to ensure the adequate and continuous supply of high quality graduates to

keep up with labour market needs. The Coalition's Action Plan ran until the end of 2019 and aimed to promote the diffusion and the improvement of digital skills in order to address the anticipated future mismatch between ICT professionals and job vacancies.

Participation in vocational education and training (VET) remains low. The government is making efforts to improve VET capacity by building new technical schools, and to enhance outreach to the rural areas. In 2019, participation levels in upper secondary VET rose to 20% (national sources) from 16.7% in 2017, but remains well below the EU average of 47.8% (UOE, 2017). The government set a participation target of 35% by 2025 following the completion of the new infrastructures. Students enrolled in VET had at best limited exposure to work-based learning. (UOE, 2017). The level of employability of recent VET graduates in 2018 saw a notable increase to 67.3% as compared to 51.8% in 2017, but remains below the EU average of 79.5% in 2018 (LFS, 2018). The setting-up of a national monitoring system of IVET and CVET graduates, which will inform the upgrading of the VET system, is at the last stages of planning and the system is expected to be operational in 2020. The main areas of ongoing apprenticeship reforms include updating legislation, improving the quality of training in the workplace and increasing the attractiveness for the employers.

Despite the need for upskilling and reskilling, adult participation in learning remains below the EU average. Only 6.7% of adults aged 25-64 have had a recent learning experience during the last four weeks, negatively flagged in SDG 4, compared to the EU average of 11.1% (LFS, 2018) (Graph 4.3.4). Around 50 adults aged 25 or above have acquired an upper-secondary qualification (UOE, 2017), which highlights the need for more substantial upskilling and reskilling efforts. In response, Cyprus plans to set up a validation mechanism of non-formal and informal learning with the first results from its pilot project to be completed in 2020. To address the challenges with regard to adult learning, a new Lifelong Learning strategy covering 2021-2027 is currently being developed. The authorities intend to upskill 4,000 people, mostly NEETs, as part of the national efforts to implement the Council Recommendation on Upskilling Pathways.

Graph 4.3.4: **Adult learning participation per ISCED levels. (2010-2018)**

Source: Eurostat

4.3.4. HEALTHCARE

Cyprus currently enjoys an overall good health status but the outlook is less bright. The life expectancy at birth is above the EU average (82.2 years vs 80.9 years in the EU). However, Cyprus is lagging behind in terms of disease prevention and health promotion in some key areas, such as smoking and childhood obesity (SDG 3). This jeopardises the population's health status in the long term.

The introduction of the National Health System is expected to help decrease high out of pocket health expenditure. In 2017, health expenditure was €1,674 per person (or 6.7% of GDP) compared to the EU average of €2,884 (9.8% of GDP). At 43%, the public share of health expenditure remains the lowest in the EU (EU 79%) while out of pocket payments⁽³⁹⁾ are among the highest in the EU (44.6%) (see Graph 4.3.5). The new universal health system is a major social reform that is expected to benefit Cyprus' residents and is in line with the health targets of the UN Sustainable Development Goals (SDG 3). It aims at reducing the high out-of-pocket expenditure, contributing to reducing inequalities and improving access for all. It will also help to change the fragmentation between the two current systems (private and public).

⁽³⁹⁾ On-the-spot payments to healthcare providers.

The implementation of the health reforms is progressing steadily. The first phase (outpatient services) of the healthcare reform started in June 2019. While its implementation has been relatively successful (in terms of the number of beneficiaries, doctors and pharmacies enrolled in the system, and the quality of IT and audit systems), the health insurance organisation is considering further initiatives to manage increased demand for services and medicinal products. The communication strategy is ongoing and health providers are receiving support and training for the new tools. One of the key milestones is the successful enrolment of specialised care in the system by June 2020, as planned. The negotiations with private clinics have advanced⁴⁰. Successfully implementing the National Health Insurance System will be crucial in order to contain fiscal risks (see section 4.1.2).

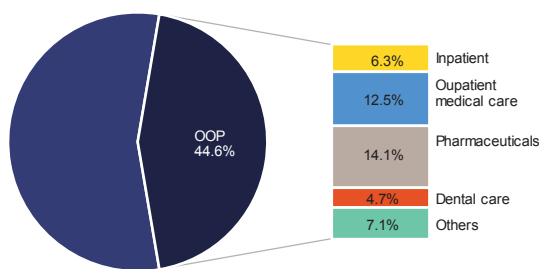
Before the system becomes fully functional in 2020, challenges and investment needs remain.

Over 80% of the population have registered as beneficiaries. Therefore, further progress is needed in order to achieve universal health coverage. Although unmet health care needs are lower than the EU average (CY1.4% vs EU1.8%), they vary considerably by income, owing to the high costs of private sector visits. Currently, there is an uneven distribution of health workers and specialised personnel in the public and the private sector, with a number of public hospital doctors opting to go private. More efforts are needed to improve research opportunities, continuous learning, digital skills for health personnel and the system's overall attractiveness. The new IT system — a tool to implement capacity planning, measure the performance of primary or hospital care and assess quality and effectiveness — has been enhanced. The introduction of accreditation and quality monitoring systems is still outstanding and crucial. The capacity that the newly set up State Health Service Organisation needs in order to access and manage the financing sources of public healthcare providers still has to be developed. The actions for a long-term plan on the necessary investments in

⁴⁰ The Private Hospitals Association has approved in January 2020 the Memorandum of Understanding proposed by the Health Insurance Organisation, which sets the main principles for private hospitals to operate within the General Health System. This is expected to accelerate and assist the on-going negotiations between the HIO and the private hospitals.

primary, secondary and mental care have not started. As healthcare investments remain lower than the EU (0.12% vs 0.65% of GDP), a steering role would promote targeted investments to improve the quality, accessibility and efficiency of health care.

Graph 4.3.5: **Distribution of out-of-pocket payments for healthcare**



Source: OECD, European Observatory on Health (2019)

Long-term care services are under-developed in Cyprus. This is particularly worrying because, as the population ages, the number of dependent people is projected to increase at a faster pace in the next decades than the EU average. With only 3.5% of current health spending (0.3% of GDP), long-term care receives low levels of funding, as opposed to a much higher EU average of 16.3% (1.6% of GDP). Only 21% of the dependent population receives long-term care services. Most long-term care benefits are in the form of cash, available only to guaranteed minimum income recipients and people with severe disabilities. In addition, through the 2018 State Aid Scheme, 99 programmes, operated by NGOs and local authorities, were subsidised, covering long-term social care needs for elderly and people with disabilities. Cyprus lacks specific legislation to regulate formal home and community care, with high fragmentation of services and lack of coordination, creating many negative side effects for dependent people and burdening their families. The number of long-term care workers is well below the EU average (OECD, 2019b).

4.4. COMPETITIVENESS, REFORMS AND INVESTMENT

4.4.1. INVESTMENT AND PRODUCTIVITY

Investment

Despite the recovery after the crisis, investment in Cyprus remains relatively low and concentrated in sectors with weak prospects for raising long-term growth. In 2018, the ratio of investment, excluding ships ⁽⁴¹⁾, to GDP amounted to 17.5%. Even when ships are included, investment is still lower than the EU average (20.4%) (see Graph 4.4.1). Despite the increasing trend, Cyprus is currently underperforming with respect to SDG 8 on investment share. Construction predominates, notably housing supported by foreign demand in relation to the investor citizenship scheme.

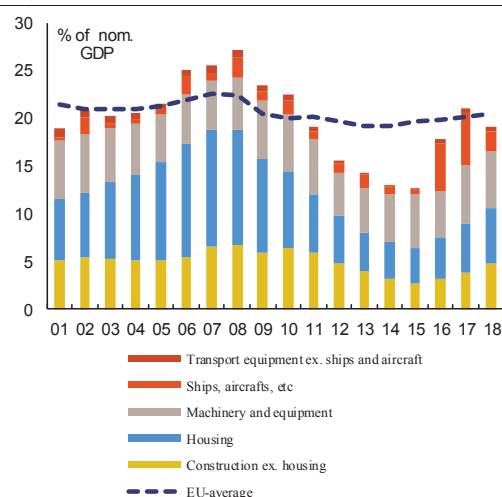
Some investments are expected to boost the productivity of the Cypriot economy, but their share is still limited. Tertiary education has emerged as a relatively new sector with increasing infrastructure investment carried out by private and public universities. Investment in the energy sector, notably renewables is still low despite the country's natural advantage in this area. At the same time, tourism, which is expected to continue to be the key sector in Cyprus, is expanding and upgrading its infrastructure.

Public investment has recovered since the crisis. It exhibited a strong rise during the period 2015-2017, and in 2018, it remained at the levels of the previous year. ⁽⁴²⁾ As a percentage of GDP it reached 2.6% compared to the EU average of 2.9% in 2018. In the same year, public investment represented 6.4% of total government expenditure, slightly above the EU average of 6.3%. Investment that could positively affect growth accounted for around 30% ⁽⁴³⁾ of total public investment in

Cyprus, lagging behind the EU average of around 50% in 2017. In coming years, more projects related to renewable sources of energy, and natural gas, waste management and R&D are planned, which could boost potential growth and address environmental challenges.

Long-standing needs for investment in environment, energy, digitalisation and innovation remain unaddressed, and could impede Cyprus' growth potential in the future. Environmental and circular economy investments are not being prioritised, despite the high risks that underinvestment in these areas carries for the well-being of Cyprus' population and tourism revenues in the longer term. In particular, investments in water and waste management, energy efficiency and sustainable transport are long overdue. Moreover, there is still sizeable unexplored investment potential in green energy transition (see Section 4.5). Despite a progressive increase since 2000, research and innovation intensity remains among the lowest in the EU. Digitalisation is key in improving competitiveness and modernising the public sector. Despite some improvement, Cyprus still ranks among the lowest in the EU in terms of digital performance (European Commission, 2019k).

Graph 4.4.1: Investment by category



Source: Statistical Service of Cyprus, Eurostat

⁽⁴¹⁾ Shipping related transactions (ship registrations/deregistrations) introduce bias in Cyprus' economic statistics by significantly affecting investment, export and import data. The data in this paragraph refer only to the gross fixed capital formation, where the SDG indicator includes inventories.

⁽⁴²⁾ Excluding the fixed assets transfer as collateral from the former Cyprus Cooperative Bank to an asset management company.

⁽⁴³⁾ It includes government expenditure on R&D, education, environment, transport and communication (Categorisation based on European Commission, 2016).

Box 4.4.1: Investment challenges and reforms in Cyprus

Macroeconomic perspective

Investment, excluding ships, in Cyprus is on an upward trajectory since 2014, predominately driven by construction (in particular dwellings) and is supported by external demand. Part of the construction activity concerns infrastructure, notably related to the tourism sector, and it is expected to enable growth in the medium term (see Section 1). Public investment has also been recovering, however, public investment with potential to boost growth is still low.

Assessment of barriers to investment and reforms priorities: preliminary assessment

Public administration/ Business environment	Regulatory/ administrative burden		Financial Sector / Taxation	Taxation	
	Public administration	CSR		Access to finance	CSR
	Public procurement /PPPs		R&D&I	Cooperation between academia, research and business	
	Judicial system	CSR		Financing of R&D&I	CSR
	Insolvency framework		Sector specific regulation	Business services / Regulated professions	
	Competition and regulatory framework	CSR		Retail	
Labour market/ Education	EPL & framework for labour contracts			Construction	
	Wages & wage setting			Digital Economy / Telecom	
	Education, skills, lifelong learning			Energy	
				Transport	

Legend:

	No barrier to investment identified		Some progress
CSR	Investment barriers that are also subject to a CSR		Substantial progress
	No progress		Fully addressed
	Limited progress		Not assessed yet

The business environment in Cyprus, although improving, it is not optimal for boosting investments in the country. Cyprus' position in the latest World Bank Doing Business report improved as starting a business become less expensive due to lower registering cost and paying and filling labour contributions become easier with the creation of an online system. However, access to finance, enforcement of contracts, efficiency of the court system and dealing with construction permits remain weak points.

1. Access to finance represents a significant constraint to investing in Cyprus, especially for small and medium-sized enterprises (see Section 4.2.2). Banks are reluctant to lend due to the debt overhang, and alternative funding sources such as venture capital, crowdfunding and equity financing are still restrained. The first equity fund in Cyprus is under preparation, whereas a number of grant schemes and financial instruments are being implemented.
2. Administrative burden is still high, in particular in relation to enforcing contracts and dealing with construction permits. Moreover, registering and transferring property, lengthy court proceedings and low clearances rates have a negative impact on the business environment (see Section 4.4.2). Further strengthening of digital public services and their uptake, as well as swift implementation of the investment law that would facilitate strategic investments are important elements for a competitive business environment.

The stock of foreign direct investment is considerably high relative to the size of the economy. It amounts to 1805% of GDP for outward and 1770% of GDP for inward investment. A significant part of stocks of foreign direct investment (both inward and outward) is linked to the activities of holding companies in the

financial sector, as opposed to green field and other types of investment that could help raise the potential growth. Important source and destination countries include financial centres (including, Luxembourg, the United Kingdom, the Netherlands, Jersey and British Virgin Islands) and non-EU countries including Russia, which

altogether account for about 50% of gross stocks, while the positions of other partner countries are classified as confidential.

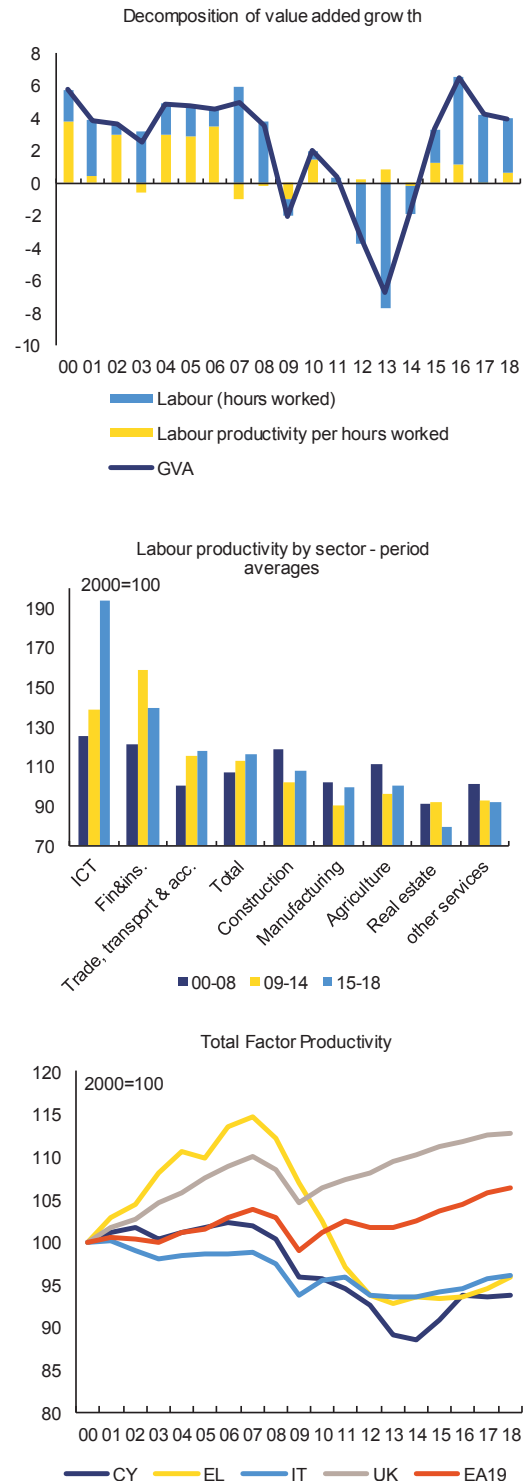
Productivity

Labour productivity remains low, weighing on the country's competitiveness. In 2018, labour productivity per hour increased slightly by 0.6%. Growth was driven mainly by strong employment (see Graph 4.4.2). Stagnant productivity growth might be driven by the fact that jobs are mainly low-skilled (and in particular this is what we see in Services). As Cyprus is characterised by a highly-educated workforce, the presence of skill mismatches has intensified (Cyprus Economy and Competitiveness Council, 2019). The country has a significant rate of on-the-job over-qualification, which has expanded over past years and reached more than 20% in total employment in 2017 (Vandeplas and Thum-Thysen, 2019). This may suggest that employed labour is under-utilised. Different strategies can be helpful in order to tackle this issue.⁽⁴⁴⁾ At the same time, there are noticeable shortages of workers in tourism, ICT, agriculture and manufacturing (see Section 4.3). By contrast, there is an over-supply of qualified labour in the financial sector (European Commission, 2019e). Productivity caught up with or exceeded pre-crisis levels in the sectors related to tourism, ICT and financial services. Construction and manufacturing are recovering but still lag behind (see Graph 4.4.2).

Total factor productivity is starting to stabilise after a prolonged dip, but remains low. Despite some improvement since 2014, prolonged weak total factor productivity (see Graph 4.4.2) has affected the country's competitiveness. This path reflects a low level of innovation and digitalisation, and a predominance of investments in residential construction and shipping. Moreover, difficulties in accessing finance (see Section 4.2) constrain investment by small and medium-sized enterprises.

⁽⁴⁴⁾ These strategies include ensuring the quality and labour market relevance of education and training programs, initiatives to promote the regional development of skills-intensive industries, reducing barriers to the entry of firms, and creating jobs that make good use of people's skills.

Graph 4.4.2: Productivity factors



Source: European Commission

4.4.2. DIGITAL TRANSFORMATION RESEARCH AND INNOVATION AND BUSINESS ENVIRONMENT

Digitalisation

Cyprus performs well in relation to digital infrastructure, however the ICT sector's contribution to growth remains low. While the country's digital infrastructure (broadband connection, internet bandwidth, etc.) is above the EU average and it has one of the highest shares of small and medium-sized ICT enterprises in proportion to the total number of these enterprises, Cyprus has one of the EU's lowest rates of ICT sector added value as a percentage of GDP (European Commission, 2018c). Increasing this potential further would help diversify the economy.

Cyprus has made progress in business digitalisation but does not fully exploit its potential. Cypriot enterprises still lag behind in the uptake of several of the most common digital technologies (see Table 4.4.1). Small and medium-sized enterprises and big firms in Cyprus are lagging behind the EU average in digitalisation. In 2019, 10% of small firms were selling online, compared to 16.2% in the EU, and 31.9% for big firms (39.2% in the EU) (European Commission, 2020d). The use of e-commerce is increasing. To further foster e-commerce, the authorities have recently launched a grant scheme to incentivise small and medium-sized enterprises to invest in the relevant equipment and services.

Table 4.4.1: **Selected indicators on digitalisation of businesses, 2019 (% of enterprises)**

Technology	Cyprus	EU average
3D printing	1%	4.1%
Industrial or service robots	1.2%	6.7%
Big Data (analyse from any data source)	4.7%	12.3%
Cloud services	14%	18%

Source: European Commission, 2020d

Despite some efforts, Cyprus still underperforms in e-government. The number of e-government users increased in 2019 compared to 2018, although the number of digital public services provided in the country remains low. However, 20 e-government projects are underway, with a total budget of more than €250 million, aiming to promote the further digitisation of the public sector. The expected establishment of the

Deputy Ministry for Research, Innovation and Digital Policy is expected to help to implement the renewed national strategy for the digital transformation due in 2020, including e-government and research and innovation.

Cyprus is committed to making progress on new digital technologies. Cyprus is a member of the European High-Performance Computing Joint Undertaking. The country has also signed the Declaration on the Cooperation Framework on High-Performance Computing, the Declaration on the European Blockchain Partnership, and the Declaration on cooperation on Artificial Intelligence. In June 2019 Cyprus has published its National Blockchain Strategy. In January 2020, the government approved the country's first national Artificial Intelligence strategy.

Connectivity and broadband coverage are progressing. In total, 90% of households have access to broadband networks, although in rural areas the coverage drops to 65%. While the offer on Next Generation Access is above the EU average of 83%, the take-up by households remains low (20% in Cyprus and 49% in the EU). Efforts are being made with the help of the Connecting Europe Facility to develop telecommunications infrastructure and services in order to meet rising demand. The Department of Electronic Communications (DEC) is planning the auction of 700 MHz and 3.6 GHz band in June or July 2020. The broadcaster has agreed to clear 700 MHz from broadcasting by September 2020. The main issue with the effective utilisation of this band is the interference from Cyprian territories, which are not under the effective control of the Republic of Cyprus. The band will be vacated in that area when new digital TV equipment is in place with EU funding. The 3.4-3.8 GHz band is currently free of use.

Research and Innovation

While Cyprus benefits from a highly educated population, its R&D system remains very small, and its role in economic development is limited. In 2018, 57.1% of the population aged 30-34 had a tertiary education. However, only a small percentage of these graduates have degrees linked to technological innovation. Cyprus is among the lowest performers in the EU in terms of science and engineering graduates. The R&D intensity

increased progressively from 0.21% in 2000 to 0.5% of GDP in 2018, but is among the lowest in the EU. Both public and private R&D intensities remain well below the EU average. ⁽⁴⁵⁾

The quality of the public research system is a point of strength, but its interaction with the business sector is very limited. Despite being founded recently (in 1992), public universities and research centres in Cyprus, achieve relatively good scientific performance. ⁽⁴⁶⁾ However, university-business cooperation is very weak, due to both low demand from the business side and a lack of entrepreneurial culture in the academic sector. As a result, the commercialisation of research results remains at a low level (Demetriades et al., 2020). ⁽⁴⁷⁾

Even though the volume of research and innovation (R&I) activities remains limited, several sectors increased investments. The business landscape in Cyprus is not conducive to a high level of research and innovation activities. 95% of the business population are micro companies — mainly risk-averse, family-run businesses without professional management and innovation capacity. ⁽⁴⁸⁾ However, despite these structural features, investments in the pharmaceutical and software publishing sectors have led to a significant increase in business R&D expenditure since 2016 (Business R&D

expenditure as a percentage of GDP increased from 0.11% in 2015 to 0.20% in 2018).

A new R&I Strategy Framework for the period 2019-23 has been announced by the National Board for Research and Innovation in May 2019, with ambitious yet uncertain outcomes.

Key enablers of this strategy framework include a new integrated governance system, in particular the establishment of a Deputy Ministry for Research, Innovation and Digital Policy, and a focus on knowledge transfer and commercial exploitation to stimulate R&I activity in the private sector. One of the planned measures is the creation of clusters of excellence, gathering universities and businesses in the areas of environment/climate, agrotech, maritime, health and ICT, in line with the national Smart Specialisation Strategy, which should be updated to reflect the recent changes at national level and new priorities at EU level. Several measures have been announced, most of them to be implemented with existing financial resources. Consequently, it is not clear whether a key deliverable of the strategy, the target of tripling the national R&D intensity to 1.5% by 2023 (with half of the expenditure expected from the private sector) can be achieved.

Despite efforts, the implementation of the Smart Specialisation Strategy to boost innovation performance continue to face several challenges. Cyprus mobilised a wide range of public and private innovation actors. Reinforcing the bottom-up dimension of the process by involving local innovation stakeholders, boosting the matching of academia with businesses and putting in place a monitoring and evaluation mechanism remain important to help diversify the economy and increase competitiveness. The establishment of the Deputy Ministry of Innovation and Digital Policy is expected to facilitate the implementation of the strategy.

Business environment and functioning of the markets

The ease of doing business in Cyprus is improving. According to the latest World Bank Doing Business report, the country was classified at 54th position — a rise of three positions compared to the previous year. The country got its best scores in the categories ‘starting a business’ and ‘trading across borders’. Enforcing contracts,

⁽⁴⁵⁾ In 2018, public R&D intensity was 0.28%, the fourth lowest in the EU (average of 0.69%), of which 0.23% comes from tertiary education (EU average of 0.46% of GDP). The R&D expenditure in the business sector was the second lowest in the EU, at 0.20% of GDP in 2018, compared an EU average of 1.41% in 2018.

⁽⁴⁶⁾ In 2018, about 69% of the total number of publications were international co-publications (among the top ranking in the EU) and in 2016 9% of Cyprus' publications were among the top 10% worldwide most cited scientific publications, (Centre for Science and Technology Studies, 2019).

⁽⁴⁷⁾ Incentives have been adopted recently to stimulate academia-business cooperation. Following the adoption of the law allowing universities to create spin-offs in 2018, an expert panel appointed by the Horizon 2020 [Policy Support Facility](#) provided recommendations in December 2019 on how to stimulate the use of public laboratories by businesses.

⁽⁴⁸⁾ According to the 2018 Global Competitiveness Report (World Economic Forum, 2018), Cyprus is ranked 101st on the reliance of companies with regard to professional management. In terms of the attitudes towards entrepreneurial risk, it is ranked 40th, while it is ranked 78th regarding the embracing of disruptive ideas.

getting credit and dealing with construction permits remain the weak points of the Cypriot business environment. In 2019, Cyprus reduced the cost of registering a company and implemented an online system for filing mandatory labour contributions.

For certain regulated professions, Cyprus has more restrictive regulation than the EU (OECD) average. This is the case for lawyers, architects, civil engineers and real estate agents, as demonstrated by the European Commission's restrictiveness indicator (European Commission, 2017b) and as confirmed more recently by the OECD Product Market Regulation indicator (2018). Some of the existing licensing requirements, residency requirements and shareholding requirements may disproportionately restrict market competition and the mobility of professionals, distorting efficient resource allocation. No specific measures to address these issues have been adopted or proposed so far. Focused reviews and assessment of the proportionality of the identified restrictions on professional services would improve the growth opportunities and economic performance of these sectors.

Obtaining permits and licences to invest in Cyprus remains cumbersome. The law aiming to simplify the procedure for a strategic investor to obtain permits and licences to invest in Cyprus is still pending adoption by the House of Representatives. Furthermore, the procedures for issuing building permits — mainly issued at local level — are complex and lengthy. It can take several years for a large-scale project. Having acknowledged all the above, the Government announced in November 2019 the New Policy for the simplification and significant acceleration of the permitting procedures, with the involvement of the private sector. The development of a mechanism for the same-day issuing of building permits for certain residential developments concerning more than 50% of permits issued annually, is already well advanced and expected to be launched within first half of 2020. The local government reform, which is currently under preparation, should help in addressing these bottlenecks (see Section 4.4.3).

Setting up large retail shops in Cyprus is also challenging. Investments in large retail outlets

such as hypermarkets, shopping malls and outlet villages are discouraged by the complex and lengthy procedures needed to obtain the necessary licences. The examination of the applications takes one to three years, a period which is sufficiently long to discourage investors. Moreover, in the last ten years, a large amount of applications were rejected. This kind of investment is expected to create jobs and further reduce retail prices. On the positive side, the flexible opening hours of shops and the absence of regulation for sales have had a positive impact on the retail sector.

4.4.3. GOVERNANCE AND INSTITUTIONAL QUALITY

State-owned Enterprises and Privatisation

Investment potential is hindered by slow progress on privatisations. The privatisation of the port of Larnaca and the corporatisation of the Cyprus Telecommunications Authority are progressing slowly. These two large-scale projects could help attract investment, increase competition and reduce prices in network industries.

Monitoring of state-owned enterprises has improved somewhat. Some administrative measures, including increased oversight and reporting requirements, were introduced in view of improving the corporate governance of state-owned enterprises. The effectiveness of these measures are still to be assessed. In particular, additional efforts are needed to create a transparent process for board nominations and further align and improve corporate governance practices. These measures replace provisions envisaged in the draft law for the governance of state-owned enterprises, which was withdrawn from the House of Representatives as it was deemed that it would not be adopted.

A solid performance of state-owned enterprises, through improved corporate governance practices and possibly privatisation, are key to reduce state's exposure to contingent liabilities. Facilitating private investment in key utilities and well-governed and monitored state-owned companies is essential to mitigate a potential build-up of public contingent liabilities in the future.

Public administration and local government

The long awaited public administration reform is still pending. Overhauling the appraisal system for civil servants and the promotion procedures is essential for improving the efficiency of the public administration. To this respect a reform is pending since 2015. Revised proposals on the recruitment, appraisal and promotion systems were submitted to the House of Representatives in October 2019 and they are currently under discussion.

The reform of local government is progressing. The reform aims to: (i) improve the efficiency of the system by reducing the number of municipalities and granting them new responsibilities with greater administrative and financial autonomy, (ii) create clusters of communities with their own budgets in order to benefit from economies of scale, and (iii) improve the efficiency of water and waste management at local level. Overall, the authorities expect that the reform will make local governments significantly more efficient while generating savings in public funds. The reform has been pending since 2015, but a revised proposal is in the final stage of preparation. Importantly, the reform is also set to simplify the procedures for building and spatial permits and to speed up the issuance of title deeds.

Justice system

The justice system in Cyprus continues to face serious efficiency challenges. While the performance of courts improved in 2018, the time needed to resolve civil, commercial and administrative cases in first instance courts (737 days compared to 1118 in 2017), still remains among the highest in the EU. In administrative justice, efficiency gains at first instance, reflected in a reduced length of proceedings (487 days compared to 2162 days in 2017) and higher clearance rates (219/2% compared to 73/6% in 2017) coincide with very lengthy proceedings in the final instance (2156 days; 2020 EU Justice Scoreboard, forthcoming). The main inefficiencies stem from outdated and complex rules for civil procedures, the absence of digitalisation, non-use of mediation. Furthermore, courts' buildings are considerably subpar thus hindering the efficient operation of the courts.

The authorities have expressed their commitment to overhaul the justice and address shortcomings. Nevertheless, so far there are only limited tangible results and most planned reforms are delayed. The revised rules of civil procedure — a key element of the reform — were initially expected to be in place at the beginning of 2020, however, no concrete revised timeline has been announced.

Specialisation of Courts is ongoing, but key legislation is still pending. The Administrative Court of International Protection dealing with asylum seekers became operational in June 2019 with three judges. Its capacity is expected to be strengthened in the coming months. The draft legislations for the establishment of a Commercial Court, an Appeal Court and the re-operation of the Constitutional Court are pending for adoption. Furthermore, efforts to recruit additional judges and to set up a taskforce to clear a fifteen-year backlog of cases, including cases dealing with non-performing loans, have been delayed. In the meantime, six existing judges have been assigned to handle financial disputes, including the ones related to non-performing loans. When completed, the specialisation of courts, coupled with the expected strengthening of the capacity of all courts, is expected to help in reducing the lengthy court proceedings and improving the debt repayment discipline in the country.

Strengthening the enforcement of judgments is also essential to help improve the debt repayment discipline. Inefficiencies regarding court proceedings are coupled with weak enforcement of judgments, adversely affecting the payment discipline in the country. To this end, an amendment to the Civil Procedure Law that will make it easier to carry out court decisions to seize movable property is still pending for adoption. Furthermore, the revised rules of civil procedure are expected to improve the enforcement of judgments.

Public procurement

Measures have been taken to open up the public procurement market and attract more competition. Such measures included simplifying the award procedures to make it easier for economic operators to participate, as well as generalising the use and enhancing the capacities

of the existing e-procurement system. An effort has also been made to train and support procurement officers with a view to better preparing and carrying out award procedures, including with respect to promoting green and socially responsible procurement.

Nevertheless, some performance indicators continue raising concerns. Despite measures taken, there is still a high number of contracts with a single bidder (49% of procedures in 2018, as opposed to 24% in 2009). Cyprus remains one of the EU countries with the highest proportion of direct awards (25% of total procedures in 2018, as opposed to just 1% in 2009). Most single bid procedures and direct awards take place in the health procurement sector. In addition, Cyprus remains one of the EU countries with the highest number of contracts awarded exclusively based on the lowest price (93% of public contracts awarded in 2018, against an average of 47% in the EEA countries), contrary to best practice favouring the use of more quality-based criteria.

Strengthening administrative capacity, professionalising procurement staff, as well as other targeted measures could help addressing these deficiencies and foster a truly competitive and efficient public procurement market. Measures pursued by the government, such as enhancing central purchasing, training and professionalising contracting authorities, as well as supporting smaller contracting authorities (including by organising centrally award procedures on their behalf), are expected to have a positive impact on a short-term basis. In addition, contracting authorities are taking some positive steps with a view to opening up competition, such as undertaking joint procurement together with other contracting authorities in Cyprus or abroad. Lastly, the authorities have undertaken an effort to raise awareness among contracting authorities on the importance of using quality-based award criteria, in order to guarantee the quality and sustainability of public purchases.

Fight against corruption

Perception of corruption in Cyprus remains high in the business context. The Worldwide Governance Indicators and other indexes show a decline in Cyprus's performance on control of corruption (WGI, 2019, TI, 2019). Corruption

perception has ameliorated in the latest Eurobarometer survey, although the scores remain high, with 88% of businesses thinking that corruption is widespread in their country (as compared to 100% in 2017). 86% of businesses believe that bribery and networking is often the easiest way to obtain certain public services, one of the highest score among the EU, (European Commission, 2019l).

Implementation of actions to fight corruption is progressing but coordination capacity remains insufficient. An action plan against corruption was approved by the Council of Ministers in May 2019 and is currently being implemented. Focal points have been designated in the public bodies and codes of conduct for the Council of Ministers and for the public prosecutors have been adopted. Furthermore, the law for the establishment and operation of the internal affairs service, a body in charge of tackling corruption in the Cypriot national police force, has been enacted. However, the office for transparency and prevention of corruption, the body in charge of coordinating the implementation of the action plan, remains severely understaffed.

Key legislation for the prevention of corruption is pending. The draft law establishing an independent authority against corruption was submitted to the House of Representatives for adoption in March 2019. The authority would strengthen the consistency and effectiveness of the actions taken by the public and private sector in preventing and combating corruption. However, the procedure for appointing the president of the authority is key to ensure independence. A draft law to regulate lobbying activities is also pending for adoption since May 2019. Finally, the amendment of the Reporting Act, including provisions on protecting whistle-blowers is under discussion in the House of Representatives.

Asset disclosure is transparent, but the verification of declarations could be improved. Asset declarations of the President of the Republic, ministers and members of the House of Representatives were submitted to a special parliamentary committee and published in 2019. The body entrusted with the verification of the other officers and PEPs' declarations is a special Council, consisting of three members appointed by the Council of Ministers in 2017. The special

Council entrusted with verification of the information has filed several fines for non-submission of declarations, but has not found any irregularities to date. However, there are concerns regarding the accuracy of the declarations. The need to improve the effectiveness of monitoring the asset declarations was also pointed out by the Group of States Against Corruption (GRECO, 2016 and 2018). As regards conflicts of interest, while codes of conduct exist for members of the government, public officials and prosecutors, there are no similar provisions for the members of the House of Representatives.

Corruption issues of public and private sector are handled by the Cyprus Police. Specific measures have been taken to improve its capacity of handling such cases, including within the Police. Between 2013 and 2018, Cyprus Police reported that a total number of 120 corruption cases had been investigated or were under investigation, out of which 98 have been completed. 37 persons were convicted for corruption in 26 cases, out of which there were 12 high-level corruption convictions, including the deputy Attorney General, members of the House of Representatives and ex-ministers. Furthermore, measures have been taken to improve the capacity and reinforce the financial investigation unit and forensics, by the recruitment of four forensic accountants. As for the corruption within the Cyprus Police, an internal affairs service was established in 2018 to investigate corruption committed by police officers. The newly established service is fully operational and has already investigated 12 corruption cases, of which one resulted in a conviction. The bill on telephone tapping was approved by the House of Representatives in January 2020. This is envisaged to improve the investigative capacity for corruption-related crimes.

Strengthening the independence of the prosecutorial functions and enhancing the autonomy of law officers and prosecutors are still pending. A draft law revising the existing provisions related to the Law Office's budgetary independence, the separation of functions, and recruitment procedures, is still under discussion. The office of Attorney General combines several functions, a situation that calls for checks and balances to prevent risks of undue influence over the prosecution system as signalled by the GRECO

evaluation (GRECO, 2016) In order to improve the effective prosecution of corruption cases, the specialisation of prosecutors in financial crimes could be further strengthened.

New rules have been introduced to address risks related to the investor citizenship scheme, but questions about its long-term sustainability remain. The European Commission has identified a number of inherent risks related to the investor citizenship and residence schemes in Cyprus, in particular as regards security, money laundering, tax evasion and corruption.⁽⁴⁹⁾ Moreover, investor citizenship schemes potentially raise concerns with respect to their compatibility with the EU Treaties.⁽⁵⁰⁾ The Cypriot authorities have adopted some measures and recommendations to address these risks, including by establishing certain categories of high-risk individuals who are not eligible to acquire Cypriot nationality through the investor scheme, such as politically exposed persons, persons facing criminal charges, being under investigation or having been convicted for serious offences in the country of origin, persons having a connection with legal entities subject to EU or international sanctions. The new measures foresee the automatic rejection of applicants who have been previously rejected by other EU Member States. Furthermore, investors are now required to obtain a Schengen visa before applying. However, these measures are not applicable to the investor residence scheme despite similar risks, and their effective implementation remains to be assessed.

Territorial Disparities

Significant socio-economic differences persist within Cyprus. In 2018, the unemployment rate in cities was at 7.7% of the active population, lower than the rate in both towns and suburbs (9.7%) and rural areas (9.2%). In Cyprus, highly educated workers tend to live in cities, while the proportion of early leavers from school and training, as well as NEETs tends to be higher in towns, suburbs,

⁽⁴⁹⁾ Following reports about potential inadequacies in the screening process, the Cypriot authorities announced the revocation of the nationality of 29 individuals who had obtained Cypriot nationality pursuant to the scheme and a review of all naturalisations granted until 2018. The European Commission continues to also monitor wider issues of compliance with EU law raised by the scheme.

⁽⁵⁰⁾ European commission, 2019m and European Commission, 2019n.

and rural areas. Labour market inefficiencies and a less educated work force in towns, suburbs, and rural areas translate into a higher percentage of population at-risk-of poverty and exclusion. In 2018, the lowest at-risk-of-poverty and exclusion rates are found in cities (at 20.4% of total population), while more than one out of four people living in towns, suburbs, and rural areas is at risk of poverty and social exclusion.

4.5. ENVIRONMENTAL SUSTAINABILITY

Cyprus' growth model has a negative impact on the environment and hinders climate neutrality.

So far, economic growth in Cyprus has been mainly driven by tourism and construction. For instance, in 2019, the island hosted around 4 million tourists (4.5 times more than its population). Construction activity is expanding at double digits to satisfy the housing and accommodation demand and to provide the necessary infrastructure. Over the years, this model has adversely affected the island's natural environment, notably its coastal areas. In addition, Cyprus is performing below the EU average with a deteriorating trend when it comes to resource productivity (how efficient is the economy when using material resources to produce wealth – Sustainable Development Goal (SDG) 8 on sustainable economic growth). Moreover, growing population and a strong migration inflow are putting pressure on Cyprus' resources. Therefore, protecting and using resources efficiently is of paramount importance to ensure sustainable growth in the future.

Steering the transition to a greener and more sustainable economic growth leading to climate neutrality calls for a long-term comprehensive strategy. It is essential that environmental concerns and sustainability are well-integrated into the new long-term growth strategy for Cyprus which is under preparation. Future economic growth would need to go hand in hand with decisive efforts to: (i) address prolonged inefficiencies in waste and water management (SDG 12), (ii) use energy more efficiently (SDG 7 and SDG 12), (iii) invest more in renewable sources of energy (SDG 7, 12 and 13), (iv) promote sustainable transport (SDG 9 and SDG 11), and (v) protect the country's natural environment and biodiversity (SDG 13, 14 and 15). This policy mix is key in improving the country's competitiveness, fostering new areas of economic growth and jobs, protecting citizen's health and quality of life as well as maintaining the island's attractiveness as a tourist destination.

Waste and water management

An overarching policy framework for the circular economy is lacking. Policy as well as funding measures and mechanisms promoting the circular economy still largely depend on EU funds. Investing in the circular economy could create new

jobs and opportunities to tap into new export markets. This is also very much highlighted by Cyprus weak relative performance in reaching Sustainable Development Goals, especially SDG 12 on responsible consumption and production.

High waste generation, low recycling rates and strong dependence on landfilling are major concerns.

Municipal waste generation is significantly higher than the EU average (640 kg per year per inhabitant compared to around 482 kg in the EU in 2016) as also highlighted by SDG 12. Cyprus landfills most of its municipal waste (75% compared to the EU average of 24%) which contributes to high greenhouse emissions. Cyprus' recycling rate for municipal waste is only 17% (4% of which is from composting), which is significantly below the EU average of 46% in 2016. According to the Early Warning Report (European Commission, 2018d), Cyprus's continued difficulties in implementing EU waste law are mainly due to the lack of the necessary infrastructure, lack of coordination and lack of incentives.

The absence of financial incentives makes recycling unattractive.

Cyprus does not apply any taxes on landfill or mechanical biological treatment. Therefore, incentives for recycling and for producers to take responsibility for their waste are limited, despite the fact that a large network of collecting and separating waste points supported by EU funds is now operational. Eliminating landfilling and putting in place the necessary infrastructure for re-use, source separation, recycling and high-level composting remain a challenge. The 2010 and 2013 targets for the diversion of biodegradable municipal waste from landfills were missed by a significant margin. In addition, Cyprus is lagging behind the 2020 municipal waste recycling target of 50% (European Commission, 2019a). In addition, Cyprus does not recover energy from its municipal waste and the output of the mechanical biological treatment facilities is landfilled. Furthermore, this contributes to the growing greenhouse gas emissions of the country bringing it even further away from its 2020 and 2030 targets.

Additional investments are needed to increase municipal waste recycling.

Investments of €102 million are required to achieve the 2035 targets (European Commission, 2019a). Projects

supporting actions higher up in the waste hierarchy (prevention, re-use, recycling) will help in this direction, whereas creating installations, such as mechanical biological treatment facilities, with a large capacity for the treatment of residual waste, may discourage recycling. Raising public awareness through various communication activities could also be useful.

Significant investment is also needed to improve water management and prevent floods. Cyprus has reported investment needs of around 3.5% of its GDP to significantly improve water management (including removal of obstacles to fish migration, re-naturalisation of the flow of rivers, and various measures for flood prevention and mitigation) and to ensure adequate water collection and treatment. Regarding the latter, a considerable amount of urban wastewater is still discharged without collection or treatment. Only 54.4% of the total waste water is subject to secondary treatment, well below the EU average. Unfortunately, many ongoing projects in this area are expected to be completed only by 2027, far exceeding the 2012 compliance deadline. ⁽⁵¹⁾ The third river basin management plan ⁽⁵²⁾ and its environmental impact assessment are expected to be published in 2021. The plan will assess the status of all water bodies in Cyprus and will update policies and measures for the efficient use of water in all sectors.

Climate change and energy efficiency

Despite some action, Cyprus remains vulnerable to climate change due to droughts and water scarcity. Cyprus has taken measures outlined in the national climate change adaptation plan and the draft national climate change adaptation strategy for agriculture (MARDE, 2019), however challenges remain and need to be addressed in a more decisive manner. Rainwater is the only natural supply of water, and is supplemented by desalinated sea water. This practice is energy-intensive and therefore costly and polluting, as it depends on fossil fuels. Prolonged lower precipitation in recent years, with

the exception of 2019, and higher temperatures (average rise of +0.5°C) are putting extreme pressures on the country's scarce natural resources, particularly on water, agricultural land, forests and soils, and are threatening ecosystem biodiversity. Furthermore, forest fires, agricultural land abandonment, poor crop yields, erosion, desertification and loss of biodiversity also pose a challenge and negatively affect the rural economy and tourism. In this respect, effective protection of the Natura 2000 areas from incompatible activities or developments that fragment or degrade them, especially on private land, is vital. Furthermore, severe weather events such as droughts, heatwaves or water shortages are all expected to call for a rethink of social assistance, education and training and other climate change adaptation policies (see Section 4.3).

Cyprus is far off track from meeting its 2020 and even more so 2030 greenhouse gas emission reduction targets. For 2020, the target will be missed by 9 percentage points, and by 25 percentage points for 2030 compromising significantly the transition to climate neutrality and sustainable growth (see Box 4.5.1). This is also highlighted by SDG 13 on climate action.

Improving the energy efficiency of buildings has great potential for unlocking economic, social and environmental benefits. The big majority of buildings in Cyprus were constructed with no or low levels of thermal protection, which is a substantial source of energy inefficiency. Several measures are being implemented to support energy efficiency in households, small and medium-sized enterprises and public buildings, in particular with the help of the EU funds and additional ones that have been announced, mainly through the Energy Financial Instrument expected to be activated in 2020. However, the budgets for some grants schemes from national funds are decided on an annual basis, preventing long-term investment planning on the part of the applicants. Furthermore, a shortage of skilled labour in energy-efficient building sector hinders implementation.

Higher energy efficiency of buildings would alleviate 'energy poverty' in Cyprus. The proportion of the population unable to keep their homes adequately warm (SDG 1) is considerably higher in Cyprus (21.9%) than the EU average

⁽⁵¹⁾ Council Directive 91/271/EEC of 21 May 1991 concerning urban waste-water treatment: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:31991L0271>

⁽⁵²⁾ The plan was prepared under the Water Framework Directive and is currently under public consultation.

(7.4%). In addition, the proportion of the population with arrears on utility bills is also one of the highest in the EU (12.2% CY vs 6.6% EU).

Ensuring sustainable and green mobility system is key for Cyprus due to the large and growing proportion of transport in CO₂ emissions. Transport, which currently accounts for 40% of final energy demand, is the most energy intensive sector in the economy (see Box 4.5.1). The increasing share of transport in CO₂ emissions also jeopardises the meeting of the 2020 and 2030 climate and energy targets.

Energy transition

Cyprus' transition to green energy is a key challenge. Cyprus is among the Member States with the highest greenhouse gas emissions per capita in EU (SDG 13). Moreover, these emissions have increased significantly since 1990. The two sectors with the highest emissions are electricity and transport (see Box 4.5.1). Apart from addressing environmental and climate concerns, a transition to renewable energy sources would also significantly reduce the costs of energy generation (SDG 7), especially given Cyprus' potential for solar energy generation. In addition, it would also reduce Cyprus' reliance on imported fossil fuels and, thus, reduce Cyprus exposure to fluctuations in global oil prices.

Efforts to import liquefied natural gas are ongoing. The authorities have committed to complete the necessary infrastructure and the contract to import liquefied natural gas by the end of 2021. This is expected to help to diversify the energy mix in the country, although not in the direction of renewables.

The opening up of the electricity market is long overdue. The Electricity Authority of Cyprus – a state-owned enterprise – is the only active supplier of electricity, although there are currently 14 licensed suppliers. Only few private renewable generators are available for wholesale production. Therefore, consumers actually have no choice when it comes to their electricity supplier. The process of opening up the electricity market in Cyprus, which is paramount to increase production

of electricity from renewables and reduce the price of electricity, has faced several setbacks and progress so far has been limited.

The transition from highly polluting oil power plants towards increased use of renewable energy sources for electricity production is becoming urgent (see Box 4.5.1). Measures have been taken to reduce the sulphur oxides and nitrogen oxides emissions of the fossil fuel power plants which can improve air quality. A process has started to convert these plants to natural gas, but this will not increase the share of RES and contribute sufficiently to the low-carbon transition. The Commission's proposal for a Just Transition Mechanism will also help ensure that the transition towards climate neutrality is fair by helping most affected regions address the social and economic consequences (see Annex D).

Labour market and skills

The transition to a green economy is a key opportunity for job creation and re-skilling. ⁽⁵³⁾ In Cyprus, jobs are expected to be created mostly in green(ing) areas of manufacturing, construction and the services sectors, as well as in waste management and sustainable finance. Therefore, education and adult learning policies need to be reviewed (see Section 4.3.3). Climate action is expected to favour job creation for all skill groups, introducing in particular more low to middle-skilled, middle-paying jobs in the market (Eurofound, 2019b).

A special focus on the gender dimension of a just transition is essential to ensure that women benefit equally from new opportunities. Since new green jobs are expected to be created in sectors with traditionally limited female representation, education and skills need to be strengthened to mitigate pre-existing gender inequalities (SDG 5). Therefore, if nobody is to be left behind, the transition will require careful and fair management. In this context, social dialogue is crucial.

⁽⁵³⁾ See European Commission, 2019b.

Box 4.5.1: Transition to a more sustainable and decarbonised growth model (in particular in the electricity and transport sectors)

Cyprus is among the Member States with the highest greenhouse gas emissions per capita at 11.6 tonnes of CO₂ equivalent per capita in 2017, compared with the EU average of 8.8 tonnes. Moreover, emissions increased significantly by 56% between 1990 and 2017 – among the highest in the EU. Emissions in Cyprus are almost equally split between sectors inside the EU Emissions Trading System (ETS) (52%) and sectors outside of it (non-ETS sectors) (48%). They are dominated by energy production, which amounted to 33% of total emissions in 2017, closely followed by transport with a share of 21% of total emissions.

Cyprus will not be able to meet its greenhouse gas emission reduction target for the non-ETS sectors for 2020, and even less so the target for 2030 (see Graph1a). The projected gap to the target for 2020 is 9%, while for 2030 it is 22% with additional measures foreseen so far by the government, and 25% with existing ones.

Electricity production – challenges and possible solutions

Almost half of the emissions comes from two big power stations ⁽¹⁾ since more than 90% of electricity is generated from imported heavy oil or diesel. Only about 10% of final energy consumption came from renewable energy sources in 2017, despite the fact that Cyprus has a unique potential in terms of producing solar power. Even in the absence of relevant taxes (see Section 4.1), the final tariffs for consumers remain higher than the EU average. This has a negative impact on air quality ⁽²⁾ and electricity prices (0.1762 €/kWh without taxes in comparison with 0.1356 €/kWh in the EU. ⁽³⁾)

According to the final National Energy and Climate Plan of January 2020 ⁽⁵⁴⁾, Cyprus estimates that it will reach a final renewable energy sources share of 15% by 2021 and 22.9% by 2030. These targets appear difficult to reach, unless policy and investment measures, especially in storage technologies, are stepped up. The Plan also forecasts an investment of around €30 million a year in renewable energy sources (mostly photovoltaic and wind, but also biomass) as well as the replacement by oil for natural gas as a source for electricity production from 2022. Significant investments in natural gas have already been committed, but investments in renewable energy sources are lagging behind.

Since March 2019, several support schemes focusing on small scale renewable energy sources, energy saving in households, deployment of photovoltaic systems, biogas and biomass plants have been announced, but have not yet started. However, the legal and regulatory environment is not conducive for large-scale investments in renewable energy sources. For instance, a 50 MW project on concentrated solar power, which was approved for receiving a €60 million EU funding from the NER300 programme, has not proceeded yet due to the difficulties in financing since there are no support schemes (with feed in tariffs) since 2015 in Cyprus. Investments for improving interconnections with neighboring countries and for creating the necessary storage capacity can also enhance the penetration of renewable energy sources in the country.

More decisive action is needed to create an open electricity market to allow renewable energy sources producers to introduce a carbon tax and to promote investments in large-scale renewables. That would significantly increase electricity production from renewable energy sources, eventually replacing oil power plants. These measures, apart from having a positive impact on emissions, are expected to bring significant health and environmental benefits. They would also help improve the cost-competitiveness of the country and reduce prices for consumers, by lowering the cost of electricity production, as the cost of producing electricity from renewable energy sources is much lower than from fossil oil. This shift would also minimise the exposure of the Cypriot economy to oil price risks. Favourable conditions would also be created for enterprises specialised, among others, in planning and installation of photovoltaic panels and building insulation, which would help diversify the economy and create new jobs.

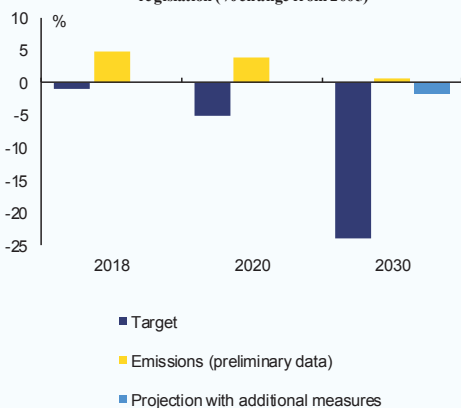
⁽⁵⁴⁾ The Commission will assess, in the course of 2020, the final National Energy and Climate Plan submitted by Cyprus on 22.01.2020.

Road transport – challenges and possible solutions

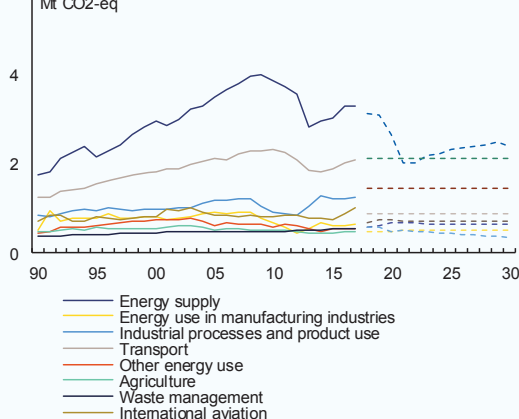
Transport emissions are steadily growing and constitute 21% of Cyprus' total emissions. The use of private cars is well above the EU average, while the use of public transport is very low (3% of total trips). Cyprus has a very low share of renewables in transport (2.5%), and the uptake of alternative fuels in the road transport mode is extremely low. In addition, the authorities' plans to increase the share of electric vehicles in the car fleet appear modest and they would not deliver results if energy keeps being produced from fossil fuels. Cyprus will likely not comply with requirements on renewable energy sources for road transport fuels. ⁽⁴⁾ In 2018 the percentage of biofuels was only 2.69% ⁽⁵⁾, which is very far from the 10% renewable energy sources target for the transport sector for 2021-2030.

To tackle this challenge, sustainable public urban and inter-urban transport is essential. This could include electric and hybrid buses, trams and light rail systems. Increasing the use of public transport will have environmental, health and productivity-enhancing benefits by reducing the time spent in the car. Promoting the use of electric vehicles is also crucial, but the necessary charging infrastructure is lagging behind, despite some EU funded projects. The potential for using biofuels could also be explored further. The shift to more sustainable transport would help create new jobs and new value added to the economy from enterprises specialised in selling and repairing electric vehicles, as well as the planning and installation of recharging facilities. Furthermore, the swift introduction of a carbon tax for non-ETS sectors, including transport, and decreasing the environmentally harmful fossil fuel subsidies (see Section 4.1) are essential policy measures that would give the right price signal for behavioural change, and generate income that could be used to finance sustainable mobility and other climate and energy investments, including up-skilling and re-skilling and other labour market transition needs. The implementation of the Sustainable Urban Mobility Plans for all cities as well as the National Transport Plan should contribute to the necessary modal shift from road transport (and in particular private vehicles) to public transport and to sustainable and clean modes. Further efforts are needed to reduce the current modal share of cars (over 90%) and to increase the use of sustainable and clean modes.

Graph 1a: Targets and emissions under the effort sharing legislation (% change from 2005)



Graph 1b: GHG emissions by sector



⁽¹⁾ Vassilikos Power Station – 22.6 % of total emissions and Dhekelia Power Station – 16 %.

⁽²⁾ Exposure to air pollution by particulate matter ($\mu\text{g}/\text{m}^3$) is higher than EU average.

⁽³⁾ https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Electricity_price_statistics#Electricity_prices_for_household_consumers

⁽⁴⁾ Each MS is obliged to fulfil two obligatory targets for road transport fuels by 2020, according to EU Directives 2009/28/EC and 2009/30/EC: 10 % of the energy consumption of transport sector should come from RES, such as biofuels. In addition, fuel suppliers are required to reduce the greenhouse gas intensity of the transport fuels entering the market by 6 % compared with the fuel baseline standard (greenhouse gas emission of EU transport fuels mix in 2010).

⁽⁵⁾ <https://ec.europa.eu/eurostat/documents/38154/4956088/SUMMARY+partial+provisional+results+SHARES+2018/25ce9f29-7053-17c5-12a6-8efe878b6031>

ANNEX A: OVERVIEW TABLE

Commitments	Summary assessment ⁽⁵⁵⁾
2019 Country-Specific Recommendations (CSRs)	
<p>CSR 1: Adopt key legislative reforms to improve efficiency in the public sector, in particular as regards the functioning of the public administration and the governance of State-owned entities and local governments. Address features of the tax system that may facilitate aggressive tax planning by individuals and multinationals, in particular by means of outbound payments by multinationals.</p> <p>Adopt key legislative reforms to improve efficiency in the public sector, in particular as regards the functioning of the public administration</p> <p>and the governance of State-owned entities</p>	<p>Cyprus has made limited progress in addressing CSR 1</p> <p>limited progress in improving the efficiency of the public administration by further promoting e-governance. However, the key legislation on modernising the functioning of the public administration is still pending endorsement, despite the fact that revised legislation was submitted to the House of Representatives in October 2019.</p> <p>Some progress has been made on the improvement of the governance of State-owned enterprises as additional requirements for increased oversight and reporting were introduced</p>

⁽⁵⁵⁾ The following categories are used to assess progress in implementing the 2017 country-specific recommendations (CSRs):

No progress: The Member State has not credibly announced or adopted any measures to address the CSR. This category covers a number of typical situations, to be interpreted on a case-by-case basis taking into account country-specific conditions. They include the following:

- no legal, administrative, or budgetary measures have been announced
- in the national reform programme,
- in any other official communication to the national parliament/relevant parliamentary committees or the European Commission, publicly (e.g. in a press statement or on the government's website);
- no non-legislative acts have been presented by the governing or legislative body;
- the Member State has taken initial steps in addressing the CSR, such as commissioning a study or setting up a study group to analyse possible measures to be taken (unless the CSR explicitly asks for orientations or exploratory actions). However, it has not proposed any clearly-specified measure(s) to address the CSR.

Limited progress: The Member State has:

- announced certain measures but these address the CSR only to a limited extent; and/or
- presented legislative acts in the governing or legislative body but these have not been adopted yet and substantial further, non-legislative work is needed before the CSR is implemented;
- presented non-legislative acts, but has not followed these up with the implementation needed to address the CSR.

Some progress: The Member State has adopted measures

- that partly address the CSR; and/or
- that address the CSR, but a fair amount of work is still needed to address the CSR fully as only a few of the measures have been implemented. For instance, a measure or measures have been adopted by the national parliament or by ministerial decision, but no implementing decisions are in place.

Substantial progress: The Member State has adopted measures that go a long way towards addressing the CSR and most of them have been implemented.

Full implementation: The Member State has implemented all measures needed to address the CSR appropriately.

<p>and local governments.</p> <p>Address features of the tax system that may facilitate aggressive tax planning by individuals and multinationals, in particular by means of outbound payments by multinationals.</p>	<p>by decisions of the Council of Ministers. These administrative measures are intended to replace provisions envisaged in the draft law for the governance of State-owned enterprises, which was withdrawn from the House of Representatives as it was deemed that it would not be adopted. However the effectiveness of these measures is still to be assessed. In particular, additional efforts are needed to create a transparent process for board nominations and to further align and improve corporate governance practices.</p> <p>Limited progress on the reform of the local government, despite the intense preparations for revising the proposal of the government, as it is still pending for adoption.</p> <p>Limited progress since Cyprus is in the process of transposing into national law the first EU Directives on Anti-Tax Avoidance. Some additional measures were announced, such as the introduction of withholding taxes on dividend, interest and royalty payments to countries on the EU list of non-cooperative jurisdictions on tax matters, the introduction of a tax residency test based on incorporation and the reviewing of the transfer pricing framework to take into account the OECD base erosion and profit shifting (BEPS) project transfer pricing recommendations. However, their effectiveness in addressing the issue of aggressive tax planning remains to be seen.</p>
<p>CSR 2: Facilitate the reduction of non-performing loans including by setting up an effective governance structure for the State-owned asset management company, taking steps to improve payment discipline and strengthening the supervision of credit-acquiring companies. Strengthen supervision capacities in the non-bank financial sector, including by fully integrating the insurance and pension-fund supervisors.</p> <p>Facilitate the reduction of non-performing loans including by setting up an effective governance structure for the State-owned asset management company,</p>	<p>Cyprus has made limited progress in addressing CSR 2</p> <p>Some progress has been made in facilitating the reduction of non-performing loans by implementing the ESTIA scheme (for addressing non-performing loans collateralised by primary residences) and by introducing e-auctions for</p>

<p>taking steps to improve payment discipline</p> <p>and strengthening the supervision of credit-acquiring companies.</p> <p>Strengthen supervision capacities in the non-bank financial sector, including by fully integrating the insurance and pension-fund supervisors.</p>	<p>properties subject to foreclosure proceedings. However, progress is slow in setting up the new governance structure of the State-owned asset management company. New members have been appointed in its board of directors. However the governance and organisational structure of the company are not yet complete, while the long-term business plan is still under preparation.</p> <p>Limited progress in improving payment discipline as in 2019, a new insolvency service was established, which is expected to operate more efficiently and effectively and to promote the insolvency framework. The ESTIA scheme may help deal with strategic defaulters. The foreclosure framework was strengthened in 2018, whereas the amendments adopted in 2019 may undermine the framework if implemented.</p> <p>Limited progress has been made in strengthening the supervision of credit-acquiring companies, as a bill for the strengthening of the supervision of Authorized Credit Institutions has been drafted, but has not yet been submitted to the House of Representatives.</p> <p>Limited progress has been made in strengthening the supervision capacities in the non-bank financial sector, with a bill aiming to consolidate and strengthen the supervision of insurance companies and pension funds being submitted to the House of Representatives at the end of 2019. The bill has not been adopted yet.</p>
<p>CSR 3: Complete reforms aimed at increasing the effectiveness of the public employment services and reinforce outreach and activation support for young people. Deliver on the reform of the education and training system, including teacher evaluation, and increase employers' engagement and learners' participation in vocational education and training, and affordable childhood education and care. Take measures to ensure that the National Health System becomes operational in 2020, as planned, while preserving its long-term sustainability.</p>	<p>Cyprus has made some progress in addressing CSR 3.</p>

<p>Complete reforms aimed at increasing the effectiveness of the public employment services and reinforce outreach and activation support for young people</p>	<p>Some progress has been made, as the reforms of the public employment services, outreach to young people and support to get them into work or training are progressing and their effectiveness is improving. However, the sustainability of services is at risk as the additional staff recruited are only on short-term contracts until mid-2020, and youth unemployment is still high.</p>
<p>Deliver on the reform of the education and training system, including teacher evaluation, and increase employers' engagement and learners' participation in vocational education and training,</p>	<p>Limited progress has been made, as there is only partial progress in the area of student assessment, with sizeable deviations from the original reform proposal. Stakeholder discussions are ongoing on the reform of teacher evaluation, but no concrete legislative progress has been made so far. Overall, performance in basic skills as measured by PISA is poor, with slight improvements in mathematics and sciences, but a decline in reading. Levels of vocational education and training and adult learning remain low.</p>
<p>and affordable childhood education and care.</p>	<p>Limited progress has been made, as supporting measures for affordable early childhood education and care are still lagging behind. The availability of affordable and accessible childcare is an area where divergence exists and free/low cost childcare is limited, creating a disproportionate burden for families.</p>
<p>Take measures to ensure that the National Health System becomes operational in 2020, as planned, while preserving its long-term sustainability.</p>	<p>Some progress has been made as the first phase of the reform for out-patient care has been launched and the second phase of in-patient care, expected by June 2020, is in progress. Sustainability risks and operational challenges remain.</p>
<p>CSR 4: Focus investment-related economic policy on sustainable transport, environment, in particular waste and water management, energy efficiency and renewable energy, digitalisation, including digital skills, and research and innovation, taking into account territorial disparities within Cyprus. Adopt legislation to simplify the procedures for strategic investors to</p>	<p>Cyprus has made limited progress ⁽⁵⁶⁾ in addressing CSR 4.</p>

⁽⁵⁶⁾ The assessment of the investment CSR 4 does not take into account the contribution of the EU 2021-2027 cohesion policy funds as the Regulatory framework underpinning the programming of the 2021-2027 EU cohesion policy funds, has not yet been adopted by the co-legislator, pending inter alia an agreement on the Multiannual Financial Framework.

obtain necessary permits and licences. Improve access to finance for SMEs, and resume the implementation of privatisation projects.	
Focus investment-related economic policy on sustainable transport,	Limited Progress has been made as the obligation of fuel suppliers for blending biofuels to conventional transport fuels was increased to at least 5% in energy content for 2019. Additional measures, such as increasing the obligation up to 10% and the introduction of a grant scheme for photo-voltaic installation on residential houses for the charging of electric vehicles or plug-in hybrid electric vehicles, are still under discussion.
environment, in particular waste and water management,	Limited progress has been made, as an integrated environmental permitting and inspection system is expected to be introduced in 2020. An update of the National Strategy for the Management on Municipal Waste up to 2021 will start in 2020. Draft rules regulating the waste management by local authorities, including the introduction of 'pay as you through' mechanisms, are under consultation with the stakeholders, with the aim to be finalised and submitted to the House of Representatives in 2020.
energy efficiency and renewable energy,	Some progress has been made as schemes are being implemented to support energy efficiency in SMEs and in private and public buildings. A new financial instrument for SMEs, energy efficiency and RES is expected to start implementation in 2020. A green tax reform is under discussion. However, Cyprus remains well below its targets.
digitalisation, including digital skills,	Limited progress has been made as announced measures are still under implementation. The establishment of the new deputy ministry for Innovation and Digital Policy as of 1 st March 2020 was adopted. The new National Digital Strategy is under preparation. To foster e-commerce, the authorities have also launched a grant scheme to incentivise small and medium-sized enterprises to invest in relevant equipment and services. Furthermore, measures to enhance digital skills are under preparation.

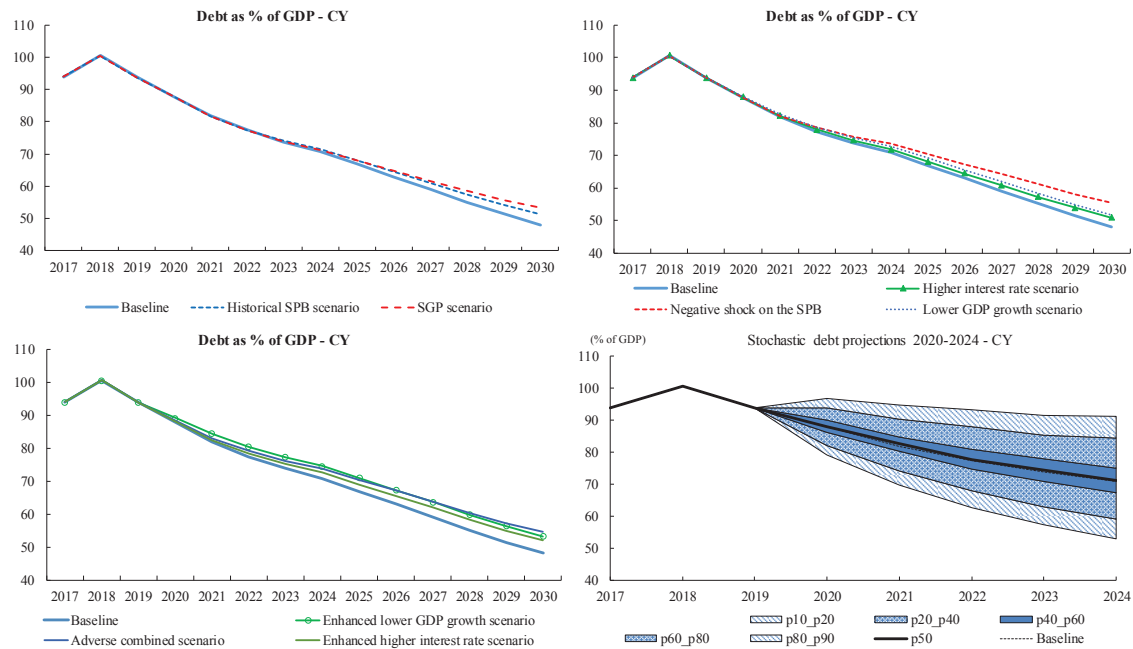
and research and innovation, taking into account territorial disparities within Cyprus.	Some progress has been made as the new national research and innovation strategy for 2019-2023 has entered into force. The law allowing universities to create spin-offs was adopted as well as measures to stimulate academia-business cooperation.
Adopt legislation to simplify the procedures for strategic investors to obtain necessary permits and licences.	Limited progress has been made, as the relevant legislation for simplifying and shortening the procedures to obtain the necessary permits for strategic investments has been revised, but is still pending enactment.
Improve access to finance for SMEs,	Some progress has been made, as grant schemes are ongoing. In addition, the establishment of an equity fund was adopted for the first time, and its implementation is under way.
and resume the implementation of privatisation projects	No progress has been made as a few privatisation projects are still under consideration by the authorities, but without any progress so far.
<p>CSR 5: Step up efforts to improve the efficiency of the judicial system, including the functioning of administrative justice and revising civil procedures, increasing the specialisation of courts and setting up an operational e-justice system. Take measures to strengthen the legal enforcement of claims and ensure reliable and swift systems for the issuance and transfer of title deeds and immovable property rights. Accelerate anti-corruption reforms, safeguard the independence of the prosecution and strengthen the capacity of law enforcement.</p> <p>Step up efforts to improve the efficiency of the judicial system, including the functioning of administrative justice and revising civil procedures, increasing the specialisation of courts and setting up an operational e-justice system. Take measures to strengthen the legal enforcement of claims</p>	<p>Cyprus has made limited progress in addressing CSR 5</p> <p>Limited progress has been achieved on enhancing the efficiency of the judicial system, as several draft laws regarding the specialisation of courts are still pending for adoption. The revision of the civil procedures rules, the implementation of e-justice and the recruitment of additional judges to clear the backlog are delayed. A draft law to facilitate the enforcement of claims is also pending adoption.</p>

and ensure reliable and swift systems for the issuance and transfer of title deeds and immovable property rights.	Limited progress has been made, as there is still a large backlog in cases of buyers who paid the full amount for a property and have yet to receive their legal ownership documents. A new transparent and reliable system is still under discussion. On the positive side, an amended law to facilitate the transfer of title deeds was enacted in 2019.
Accelerate anti-corruption reforms, safeguard the independence of the prosecution and strengthen the capacity of law enforcement.	Limited progress has been made, as an action plan against corruption is being implemented. However, key measures and legislation are pending adoption, notably the draft Act for the enhancement of transparency in public decision making (through the regulation of lobbying), the draft Act for the establishment of the Independent Authority against Corruption, the draft Act for reporting corruption and the draft Act for the protection of whistle-blowers. The capacity to investigate corruption has been strengthened with the newly established internal affairs service of the Police, which is fully operational and some measures have been taken to improve the capacity of the financial investigation unit and forensics. The bill on telephone tapping was approved by the House of Representatives in January 2020. This is envisaged to improve the investigative capacity for corruption-related crimes. A draft Act law revising the existing provisions related to the Law Office's budgetary independence, separation of functions, and recruitment procedures, is still under discussion.
Europe 2020 (national targets and progress)	
Employment rate target: 75% - 77% of the population aged 20–64.	The employment rate increased to 73.9% in 2018 from 70.8% in 2017, above the EU average, making notable progress, yet remaining below the target.
R&D target: 0.5% of GDP	0.55% in 2018 almost unchanged from 2017 and exceeding the target.
National greenhouse gas emissions target: - 5% in 2020 compared with 2005 (in sectors not	-4% (c.t. 2005) (2018). Greenhouse gas emissions in Cyprus continue to increase, and according to preliminary 2018 data and the latest national

included in the EU emissions trading scheme)	projections, Cyprus is expected to miss its target with a significant margin of around 9 percentage points.
2020 renewable energy target: 13%	13.9% in 2018 compared to 10.5% in 2017 driven by the increased contribution of renewables for heating and cooling, which grew from 26.1% in 2017 to 36.8% in 2018.
Energy efficiency, 2020 energy consumption targets: Cyprus' 2020 energy efficiency target is 2.2Mtoe expressed in primary energy consumption	2.5 Mtoe (2018) almost unchanged from 2017. This poses a serious challenge in reaching the target without strong additional measures. Furthermore, over 90% of Cyprus' energy consumption continues to be covered by imported oil and oil products.
Early school/training leaving target: 10%.	The proportion of early school leavers aged 18-24 dropped to 7.8% in 2018 from 8.5% in 2017, thus staying well below the target.
Tertiary education target: 46% of population aged 30-34.	Tertiary educational attainment increased yet again to 57.1% in 2018, compared to 55.9% in 2017. A substantial gap of 20.3 percentage points between the attainment rates of native- and foreign-born students persists.
Target for reducing the number of people at risk of poverty or social exclusion, expressed as an absolute number of people: 27,000 (base year 2010: 19.3%).	The proportion of people at risk of poverty or social exclusion is high at 23.9%, but declining. The overall number declined for the third year in a row by 9,000 compared to 2017, or 28,000 compared to 2016, or 38,000 compared to 2015.

ANNEX B: COMMISSION DEBT SUSTAINABILITY ANALYSIS AND FISCAL RISKS

General government debt projections under baseline, alternative scenarios and sensitivity tests													
CY - Debt projections baseline scenario													
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Gross debt ratio	100,6	93,8	87,8	81,8	77,4	73,8	70,8	66,9	62,9	59,1	55,1	51,4	48,1
Changes in the ratio (-1+2+3)	6,7	-6,7	-6,0	-6,0	-4,4	-3,6	-3,0	-3,9	-3,9	-3,8	-4,0	-3,7	-3,4
of which													
(1) Primary balance (1.1+1.2+1.3)	-2,0	6,0	4,6	4,1	3,5	2,9	2,4	2,5	2,6	2,5	2,8	2,6	2,5
(1.1) Structural primary balance (1.1.1-1.1.2+1.1.3)	4,3	4,0	2,6	2,2	2,3	2,3	2,4	2,5	2,6	2,5	2,8	2,6	2,5
(1.1.1) Structural primary balance (def. CoA)	4,3	4,0	2,6	2,2	2,2	2,2	2,2	2,2	2,2	2,2	2,2	2,2	2,2
(1.1.2) Cost of ageing					0,0	-0,1	-0,2	-0,3	-0,4	-0,3	-0,6	-0,4	-0,3
(1.1.3) Others (taxes and property incomes)					0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
(1.2) Cyclical component	1,7	2,0	2,0	1,9	1,3	0,6	0,0	0,0	0,0	0,0	0,0	0,0	0,0
(1.3) One-off and other temporary measures	-8,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
(2) Snowball effect (2.1+2.2+2.3)	-2,5	-2,0	-1,8	-1,7	-0,8	-0,6	-0,6	-1,4	-1,3	-1,3	-1,2	-1,1	-0,9
(2.1) Interest expenditure	2,4	2,3	2,0	1,7	1,6	1,5	1,4	1,3	1,2	1,1	1,0	1,0	0,9
(2.2) Growth effect	-3,6	-2,8	-2,4	-2,0	-1,0	-0,7	-0,5	-1,3	-1,2	-1,1	-1,1	-0,9	-0,8
(2.3) Inflation effect	-1,3	-1,4	-1,4	-1,4	-1,4	-1,4	-1,4	-1,4	-1,3	-1,2	-1,2	-1,1	-1,0
(3) Stock-flow adjustments	7,2	1,2	0,4	-0,2	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0



Short term	Medium term	S1	Debt sustainability analysis (detail)						DSA	S2	Long term
			Risk category	Baseline	Historical SPB	Lower GDP growth	Higher interest rate	Negative shock on SPB			
LOW (S0 = 0.5)	LOW	LOW (S1 = -2.4)	Debt level (2030)	48.1	51.5	51.6	50.8	55.5	LOW	LOW (S2 = -0.7)	LOW
			Debt peak year	2019	2019	2019	2019	2019			
			Percentile rank	22.0%	27.0%						
			Probability debt higher					6.8%			
			Dif. between percentiles					38.2			

Note: For further information, see the European Commission Debt Sustainability Monitor (DSM) 2019.

[1] The first table presents the baseline no-fiscal policy change scenario projections. It shows the projected government debt dynamics and its decomposition between the primary balance, snowball effects and stock-flow adjustments. Snowball effects measure the net impact of the counteracting effects of interest rates, inflation, real GDP growth (and exchange rates in some countries). Stock-flow adjustments include differences in cash and accrual accounting, net accumulation of assets, as well as valuation and other residual effects.

[2] The charts present a series of sensitivity tests around the baseline scenario, as well as alternative policy scenarios, in particular: the historical structural primary balance (SPB) scenario (where the SPB is set at its historical average), the Stability and Growth Pact (SGP) scenario (where fiscal policy is assumed to evolve in line with the main provisions of the SGP), a higher interest rate scenario (+1 pp. compared to the baseline), a lower GDP growth scenario (-0.5 pp. compared to the baseline) and a negative shock on the SPB (calibrated on the basis of the forecasted change). An adverse combined scenario and enhanced sensitivity tests (on the interest rate and growth) are also included, as well as stochastic projections. Detailed information on the design of these projections can be found in the FSR 2018 and the DSM 2019.

[3] The second table presents the overall fiscal risk classification over the short, medium and long term.

- For the short-term, the risk category (low/high) is based on the S0 indicator. S0 is an early-detection indicator of fiscal stress in the upcoming year, based on 25 fiscal and financial-competitiveness variables that have proven in the past to be leading indicators of fiscal stress. The critical threshold beyond which fiscal distress is signalled is 0.46.
- For the medium term, the risk category (low/medium/high) is based on the joint use of the S1 indicator and of the DSA results. The S1 indicator measures the fiscal adjustment required (cumulated over the 5 years following the forecast horizon and sustained after that) to bring the debt-to-GDP ratio to 60 % by 2034. The critical values used are 0 and 2.5 pps of GDP. The DSA classification is based on the results of five deterministic scenarios (baseline, historical SPB, higher interest rate, lower GDP growth and negative shock on the SPB scenarios) and the stochastic projections. Different criteria are used such as the projected debt level, the debt path, the realism of fiscal assumptions, the probability of debt stabilisation, and the size of uncertainties.
- For the long term, the risk category (low/medium/high) is based on the joint use of the S2 indicator and the DSA results. The S2 indicator measures the upfront and permanent fiscal adjustment required to stabilise the debt-to-GDP ratio over the infinite horizon, including the costs of ageing. The critical values used are 2 and 6 pps of GDP. The DSA results are used to further qualify the long term risk classification, in particular in cases when debt vulnerabilities are identified (a medium / high DSA risk category).

ANNEX C: STANDARD TABLES

Table C.1: **Financial market indicators**

	2014	2015	2016	2017	2018	2019
Total assets of the banking sector (% of GDP) ⁽¹⁾	523,6	510,6	458,6	401,3	331,1	301,4
Share of assets of the five largest banks (% of total assets)	63,4	67,5	65,8	84,2	86,9	-
Foreign ownership of banking system (% of total assets) ⁽²⁾	35,2	19,2	21,6	19,1	21,7	21,1
Financial soundness indicators: ⁽²⁾						
- non-performing loans (% of total loans)	38,6	36,3	35,4	30,7	20,2	19,5
- capital adequacy ratio (%)	15,3	16,6	16,8	16,3	17,1	18,7
- return on equity (%) ⁽³⁾	-7,1	-7,7	1,7	-11,9	7,1	9,4
Bank loans to the private sector (year-on-year % change) ⁽¹⁾	-4,2	3,6	-8,3	0,7	-5,5	-6,2
Lending for house purchase (year-on-year % change) ⁽¹⁾	-2,8	-3,0	-1,0	-0,7	-0,8	-0,4
Loan-to-deposit ratio ⁽²⁾	83,7	83,2	77,9	71,9	60,3	58,8
Central bank liquidity as % of liabilities ⁽¹⁾	12,4	6,9	1,3	1,6	1,5	0,0
Private debt (% of GDP)	352,8	347,8	329,5	304,0	282,6	-
Gross external debt (% of GDP) ⁽²⁾ - public	-	-	-	-	-	-
- private	-	-	-	-	-	-
Long-term interest rate spread versus Bund (basis points)*	483,7	404,1	368,3	230,6	177,8	136,5
Credit default swap spreads for sovereign securities (5-year)*	423,1	330,6	262,5	180,0	117,3	90,4

(1) Latest data Q3 2019. Includes not only banks but all monetary financial institutions excluding central banks.

(2) Latest data Q2 2019.

(3) Quarterly values are annualized.

* Measured in basis points.

Source: European Commission (long-term interest rates); World Bank (gross external debt); Eurostat (private debt); ECB (all other indicators).

Table C.2: **Headline Social Scoreboard indicators**

	2014	2015	2016	2017	2018	2019 ⁵
Equal opportunities and access to the labour market						
Early leavers from education and training (% of population aged 18-24)	6,8	5,2	7,6	8,5	7,8	:
Gender employment gap (pps)	7,7	8,3	9,7	9,5	10,4	11,7
Income inequality, measured as quintile share ratio (S80/S20)	5,4	5,2	4,9	4,6	4,3	:
At-risk-of-poverty or social exclusion rate ⁽¹⁾ (AROPE)	27,4	28,9	27,7	25,2	23,9	:
Young people neither in employment nor in education and training (% of population aged 15-24)	17,0	15,3	16,0	16,1	13,2	:
Dynamic labour markets and fair working conditions						
Employment rate (20-64 years)	67,6	67,9	68,7	70,8	73,9	75,6
Unemployment rate ⁽²⁾ (15-74 years)	16,1	15,0	13,0	11,1	8,4	7,3
Long-term unemployment rate (as % of active population)	7,7	6,8	5,8	4,5	2,7	2,2
Gross disposable income of households in real terms per capita ⁽³⁾ (Index 2008=100)	78,2	80,1	85,5	89,3	90,9	:
Annual net earnings of a full-time single worker without children earning an average wage (levels in PPS, three-year average)	:	:	:	:	:	:
Annual net earnings of a full-time single worker without children earning an average wage (percentage change, real terms, three-year average)	:	:	:	:	:	:
Public support / Social protection and inclusion						
Impact of social transfers (excluding pensions) on poverty reduction ⁽⁴⁾	41,5	36,2	35,6	35,9	36,4	:
Children aged less than 3 years in formal childcare	25,5	20,8	24,8	28,1	31,4	:
Self-reported unmet need for medical care	4,7	1,5	0,6	1,5	1,4	:
Individuals who have basic or above basic overall digital skills (% of population aged 16-74)	:	43,0	43,0	50,0	:	:

(1) People at risk of poverty or social exclusion (AROPE): individuals who are at risk of poverty (AROP) and/or suffering from severe material deprivation (SMD) and/or living in households with zero or very low work intensity.

(2) Unemployed persons are all those who were not employed but had actively sought work and were ready to begin working immediately or within two weeks.

(3) Gross disposable household income is defined in unadjusted terms, according to the draft Joint Employment Report 2019.

(4) Reduction in percentage of the risk of poverty rate, due to social transfers (calculated comparing at-risk-of poverty rates before social transfers with those after transfers; pensions are not considered as social transfers in the calculation).

(5) Average of first three quarters of 2019 for the employment rate, unemployment rate and gender employment gap.

Source: Eurostat

Table C.3: Labour market and education indicators

Labour market indicators	2014	2015	2016	2017	2018	2019 ⁵
Activity rate (15-64)	74,3	73,9	73,4	73,9	75,0	76,1
Employment in current job by duration						
From 0 to 11 months	18,5	18,1	19,7	20,0	20,1	:
From 12 to 23 months	7,6	9,5	9,7	10,2	11,3	:
From 24 to 59 months	15,7	14,9	13,7	13,7	14,7	:
60 months or over	58,2	57,5	56,9	56,1	53,9	:
Employment growth*						
(% change from previous year)	-2,0	1,6	4,7	5,3	4,1	3,3
Employment rate of women						
(% of female population aged 20-64)	63,9	64,0	64,1	66,2	68,9	69,9
Employment rate of men						
(% of male population aged 20-64)	71,6	72,3	73,8	75,7	79,3	81,6
Employment rate of older workers*						
(% of population aged 55-64)	46,9	48,5	52,2	55,3	60,9	61,0
Part-time employment*						
(% of total employment, aged 15-64)	13,5	13,0	13,4	12,2	10,8	10,4
Fixed-term employment*						
(% of employees with a fixed term contract, aged 15-64)	19,0	18,4	16,5	15,3	13,8	13,6
Transition rate from temporary to permanent employment (3-year average)	20,4	21,7	26,3	31,2	30,8	:
Youth unemployment rate						
(% active population aged 15-24)	36,0	32,8	29,1	24,7	20,2	17,1
Gender gap in part-time employment	6,3	5,4	4,3	6,6	6,8	8,3
Gender pay gap ⁽²⁾ (in unadjusted form)	14,2	14,0	13,9	13,7	:	:
Education and training indicators	2014	2015	2016	2017	2018	2019
Adult participation in learning	7,1	7,5	6,9	6,9	6,7	:
(% of people aged 25-64 participating in education and training)						
Underachievement in education ⁽³⁾	:	42,6	:	:	:	:
Tertiary educational attainment (% of population aged 30-34 having successfully completed tertiary education)	52,5	54,5	53,4	55,9	57,1	:
Variation in performance explained by students' socio-economic status ⁽⁴⁾	:	9,5	:	:	:	:

* Non-scoreboard indicator

(1) Long-term unemployed are people who have been unemployed for at least 12 months.

(2) Difference between the average gross hourly earnings of male paid employees and of female paid employees as a percentage of average gross hourly earnings of male paid employees. It is defined as "unadjusted", as it does not correct for the distribution of individual characteristics (and thus gives an overall picture of gender inequalities in terms of pay). All employees working in firms with ten or more employees, without restrictions for age and hours worked, are included.

(3) PISA (OECD) results for low achievement in mathematics for 15 year-olds.

(4) Impact of socio-economic and cultural status on PISA (OECD) scores.

(5) Average of first three quarters of 2019. Data for youth unemployment rate is seasonally adjusted.

Source: Eurostat, OECD

Table C.4: Social inclusion and health indicators

	2013	2014	2015	2016	2017	2018
Expenditure on social protection benefits* (% of GDP)						
<i>Sickness/healthcare</i>	3,7	3,3	3,4	3,4	3,3	:
<i>Disability</i>	0,7	0,7	0,7	0,8	0,8	:
<i>Old age and survivors</i>	11,0	11,1	11,1	10,4	10,1	:
<i>Family/children</i>	1,5	1,4	1,4	1,3	1,2	:
<i>Unemployment</i>	2,6	1,8	1,4	1,3	1,0	:
<i>Housing</i>	0,4	0,3	0,4	0,4	0,3	:
<i>Social exclusion n.e.c.</i>	1,1	1,2	1,3	1,3	1,3	:
Total	20,9	19,8	19,6	18,9	18,1	:
<i>of which: means-tested benefits</i>	2,7	2,7	2,8	2,8	2,7	:
General government expenditure by function (% of GDP)						
<i>Social protection</i>	13,4	13,7	13,6	13,5	13,1	:
<i>Health</i>	3,1	2,6	2,6	2,6	2,6	:
<i>Education</i>	6,8	6,0	6,0	5,9	5,7	:
Out-of-pocket expenditure on healthcare	43,1	44,8	44,3	45,3	44,6	:
Children at risk of poverty or social exclusion (% of people aged 0-17)*	27,7	24,7	28,9	29,6	25,5	25,5
At-risk-of-poverty rate ⁽¹⁾ (% of total population)	15,3	14,4	16,2	16,1	15,7	15,4
In-work at-risk-of-poverty rate (% of persons employed)	8,9	7,8	9,1	8,2	7,9	7,4
Severe material deprivation rate ⁽²⁾ (% of total population)	16,1	15,3	15,4	13,6	11,5	10,2
Severe housing deprivation rate ⁽³⁾ , by tenure status						
<i>Owner, with mortgage or loan</i>	1,1	1,5	0,0	2,0	0,7	0,2
<i>Tenant, rent at market price</i>	2,6	3,0	1,3	1,6	1,7	3,7
Proportion of people living in low work intensity households ⁽⁴⁾ (% of people aged 0-59)	7,9	9,7	10,9	10,6	9,4	8,6
Poverty thresholds, expressed in national currency at constant prices*	8148	7363	7072	7301	7642	8031
Healthy life years						
<i>Females</i>	8,7	8,8	7,3	10,3	8,5	:
<i>Males</i>	9,5	10,4	8,4	11,2	9,5	:
Aggregate replacement ratio for pensions ⁽⁵⁾	0,4	0,4	0,4	0,4	0,4	0,4
Connectivity dimension of the Digital Economy and Society Index (DESI) ⁽⁶⁾	:	37,7	40,4	48,2	54,6	:
GINI coefficient before taxes and transfers*	43,8	44,8	47,4	47,1	45,8	:
GINI coefficient after taxes and transfers*	32,4	34,8	33,6	32,1	30,8	:

* Non-scoreboard indicator

(1) At-risk-of-poverty rate (AROP): proportion of people with an equivalised disposable income below 60 % of the national equivalised median income.

(2) Proportion of people who experience at least four of the following forms of deprivation: not being able to afford to i) pay their rent or utility bills, ii) keep their home adequately warm, iii) face unexpected expenses, iv) eat meat, fish or a protein equivalent

(3) Percentage of total population living in overcrowded dwellings and exhibiting housing deprivation.

(4) People living in households with very low work intensity: proportion of people aged 0-59 living in households where the adults (excluding dependent children) worked less than 20 % of their total work-time potential in the previous 12 months.

(5) Ratio of the median individual gross pensions of people aged 65-74 relative to the median individual gross earnings of people aged 50-59.

(6) Fixed broadband take up (33%), mobile broadband take up (22%), speed (33%) and affordability (11%), from the Digital Scoreboard.

Source: Eurostat, OECD

Table C.5: Product market performance and policy indicators

Performance indicators	2013	2014	2015	2016	2017	2018
Labour productivity per person ¹ growth (t/t-1) in %						
Labour productivity growth in industry	-2,06	3,66	6,85	7,85	-4,45	0,34
Labour productivity growth in construction	1,20	-3,69	-5,27	13,26	4,10	12,23
Labour productivity growth in market services	-1,71	-1,10	2,18	1,02	-1,74	-1,18
Unit Labour Cost (ULC) index ² growth (t/t-1) in %						
ULC growth in industry	-12,32	-1,67	-5,79	-6,29	7,84	0,50
ULC growth in construction	-8,49	-1,77	5,22	-11,34	-0,37	-9,08
ULC growth in market services	-2,74	-2,32	-3,00	-1,66	1,89	1,31
Business environment	2013	2014	2015	2016	2017	2018
Time needed to enforce contracts ³ (days)	735	1100	1100	1100	1100	1100
Time needed to start a business ³ (days)	8,0	8,0	8,0	6,0	6,0	6,0
Outcome of applications by SMEs for bank loans ⁴	1,41	1,34	1,76	0,76	1,57	0,98
Research and innovation	2013	2014	2015	2016	2017	2018
R&D intensity	0,49	0,51	0,48	0,52	0,55	0,55
General government expenditure on education as % of GDP	6,80	6,00	6,00	5,90	5,70	:
Employed people with tertiary education and/or people employed in S&T as % of total employment	48	50	49	48	47	48
Population having completed tertiary education ⁵	35	36	36	38	38	39
Young people with upper secondary education ⁶	90	92	94	91	90	92
Trade balance of high technology products as % of GDP	-0,23	-1,26	-0,33	-1,86	-1,55	-0,62
Product and service markets and competition	2003	2008	2013			2018*
OECD product market regulation (PMR) ⁷ , overall	:	:	1,65			1,80
OECD PMR ⁷ , retail	:	:	1,67			1,29
OECD PMR ⁷ , professional services ⁸	:	:	3,11			2,14
OECD PMR ⁷ , network industries ⁹	:	:	2,64			1,58

*While the indicator values from 2003 to 2013 are comparable, the methodology has considerably changed in 2018. As a result, past vintages cannot be compared with the 2018 PMR indicators.

(1) Value added in constant prices divided by the number of persons employed.

(2) Compensation of employees in current prices divided by value added in constant prices.

(3) The methodologies, including the assumptions, for this indicator are shown in detail here:

<http://www.doingbusiness.org/methodology>.

(4) Average of the answer to question Q7B_a. "-Bank loan-: If you applied and tried to negotiate for this type of financing over the past six months, what was the outcome?". Answers were codified as follows: zero if received everything, one if received 75% and above, two if received below 75%, three if refused or rejected and treated as missing values if the application is still pending or don't know.

(5) Percentage population aged 15-64 having completed tertiary education.

(6) Percentage population aged 20-24 having attained at least upper secondary education.

(7) Index: 0 = not regulated; 6 = most regulated. The methodologies of the OECD product market regulation indicators are shown in detail here: <http://www.oecd.org/competition/reform/indicatorsofproductmarketregulationhomepage.htm>

(8) Simple average of the indicators of regulation for lawyers, accountants, architects and engineers.

(9) Aggregate OECD indicators of regulation in energy, transport and communications (ETCR).

Source: European Commission; World Bank — Doing Business (for enforcing contracts and time to start a business); OECD (for the product market regulation indicators); SAFE (for outcome of SMEs' applications for bank loans).

Table C.6: **Green growth**

Green growth performance		2013	2014	2015	2016	2017	2018
Macroeconomic							
Energy intensity	kgoe / €	0,13	0,13	0,13	0,13	0,13	0,13
Carbon intensity	kg / €	0,45	0,48	0,47	0,46	0,45	-
Resource intensity (reciprocal of resource productivity)	kg / €	0,68	0,69	0,67	0,70	0,78	0,74
Waste intensity	kg / €	-	0,11	-	0,13	-	-
Energy balance of trade	% GDP	-6,4	-5,9	-4,0	-3,3	-4,1	-4,2
Weighting of energy in HICP	%	9,53	9,33	8,35	7,46	7,36	8,37
Difference between energy price change and inflation	p.p.	-7,0	-8,8	-17,5	-13,5	12,9	9,1
Real unit of energy cost	% of value added	16,9	15,2	15,7	16,2	-	-
Ratio of environmental taxes to labour taxes	ratio	0,25	0,27	0,25	0,25	0,24	-
Environmental taxes	% GDP	2,7	3,1	2,9	2,8	2,8	2,8
Sectoral							
Industry energy intensity	kgoe / €	0,10	0,13	0,12	0,10	0,10	0,09
Real unit energy cost for manufacturing industry excl. refining	% of value added	37,3	33,2	35,1	37,1	-	-
Share of energy-intensive industries in the economy	% GDP	3,00	2,88	3,12	3,28	2,93	-
Electricity prices for medium-sized industrial users	€ / kWh	0,20	0,18	0,14	0,12	0,14	0,16
Gas prices for medium-sized industrial users	€ / kWh	-	-	-	-	-	-
Public R&D for energy	% GDP	0,00	0,00	0,00	0,00	0,00	0,00
Public R&D for environmental protection	% GDP	0,00	0,00	0,00	0,00	0,00	0,00
Municipal waste recycling rate	%	14,6	16,8	17,9	17,2	16,1	-
Share of GHG emissions covered by ETS*	%	50,5	53,2	51,8	53,1	52,2	52,3
Transport energy intensity	kgoe / €	0,76	0,74	0,74	0,79	0,81	0,79
Transport carbon intensity	kg / €	0,37	0,29	0,18	0,22	0,32	0,31
Security of energy supply							
Energy import dependency	%	96,3	93,2	97,7	96,2	96,3	-
Aggregated supplier concentration index	HHI	0,0	0,0	0,0	0,0	0,1	-
Diversification of energy mix	HHI	88,0	87,8	86,1	86,5	85,3	81,0

All macro intensity indicators are expressed as a ratio of a physical quantity to GDP (in 2010 prices)

Energy intensity: gross inland energy consumption (in kgoe) divided by GDP (in EUR)

Carbon intensity: greenhouse gas emissions (in kg CO₂ equivalents) divided by GDP (in EUR)

Resource intensity: domestic material consumption (in kg) divided by GDP (in EUR)

Waste intensity: waste (in kg) divided by GDP (in EUR)

Energy balance of trade: the balance of energy exports and imports, expressed as% of GDP.

Weighting of energy in HICP: the proportion of 'energy' items in the consumption basket used for the construction of the HICP.

Difference between energy price change and inflation: energy component of HICP, and total HICP inflation (annual% change).

Real unit energy cost: real energy costs as% of total value added for the economy.

Industry energy intensity: final energy consumption of industry (in kgoe) divided by gross value added of industry (in 2010 EUR).

Real unit energy costs for manufacturing industry excluding refining: real costs as% of value added for manufacturing sectors.

Share of energy-intensive industries in the economy: share of gross value added of the energy-intensive industries in GDP.

Electricity and gas prices for medium-sized industrial users: consumption band 500–20 000MWh and 10 000 -100 000 GJ; figures excl. VAT.

Recycling rate of municipal waste: ratio of recycled and composted municipal waste to total municipal waste.

Public R&D for energy or for the environment: government spending on R&D for these categories as% of GDP.

Proportion of GHG emissions covered by EU emissions trading system (ETS) (excluding aviation): based on GHG emissions.

(excl. land use, land use change and forestry) as reported by Member States to the European Environment Agency.

Transport energy intensity: final energy consumption of transport activity including international aviation (kgoe) divided by gross value added in transportation and storage sector (in 2010 EUR).

Transport carbon intensity: GHG emissions in transportation and storage sector divided by gross value added in transportation and storage sector (in 2010 EUR).

Energy import dependency: net energy imports divided by gross inland energy consumption incl. consumption of international bunker fuels.

Aggregated supplier concentration index: Herfindahl index covering oil, gas and coal. Smaller values indicate larger diversification and hence lower risk.

Diversification of the energy mix: Herfindahl index covering natural gas, total petrol products, nuclear heat, renewable energies and solid fuels. Smaller values indicate larger diversification.

* European Commission and European Environment Agency - 2018 provisional data.

Source: European Commission and European Environment Agency (Share of GHG emissions covered by ETS); European Commission (Environmental taxes over labour taxes and GDP); Eurostat (all other indicators).

ANNEX D: INVESTMENT GUIDANCE ON JUST TRANSITION FUND 2021-2027 FOR CYPRUS

Building on the Commission proposal, this Annex ⁽⁵⁷⁾ presents the preliminary Commission services' views on priority investment areas and framework conditions for effective delivery for the 2021-2027 Just Transition Fund investments in Cyprus. These priority investment areas are derived from the broader analysis of territories facing serious socio-economic challenges deriving from the transition process towards a climate-neutral economy of the Union by 2050 in Cyprus, assessed in the report. This Annex provides the basis for a dialogue between Cyprus and the Commission services as well as the relevant guidance for the Member States in preparing their territorial just transition plans, which will form the basis for programming the Just Transition Fund. The Just Transition Fund investments complement those under Cohesion Policy funding for which guidance in the form of Annex D was given in the 2019 Country Report for Cyprus ⁽⁵⁸⁾.

Cyprus is among the Member States with higher greenhouse gas (GHG) emissions: 11.6 tons of CO₂ equivalent per capita in 2017, compared to 8.8 at EU level. Cyprus was also the Member State with the highest increase (+56%) of GHG emissions in 2017 in relation to 1990 levels. Currently, around 39% of CO₂ equivalent emissions come from the electricity production in the two power plants located in the areas of Vassilikos and Dhekelia. Furthermore, in the area of Vassilikos there is a cement plant which produces some 16% of the total GHG emissions.

Against this background, it is particularly challenging for Cyprus to meet the carbon neutrality goals and adapt to climate change. Its challenges are twofold:

- First, the potential need for a considerable shift in energy production and consumption, increasing significantly electricity production and consumption from Renewable Energy Sources (RES). These represent currently around 13% of energy production in Cyprus, the remaining 87% coming from heavy oil or diesel power plants. This would allow a phasing out/smooth transformation of the highly pollutant oil power plants in Vassilikos and Dhekelia.
- Second, the potential need to invest in cleaner technologies to make manufacturing productions more efficient and less pollutant, particularly for the Vassilikos cement factory.

Based on this preliminary assessment, it appears warranted that the Just Transition Fund concentrates its intervention on these two areas. To make such transition effective, investment needs have therefore been identified for diversifying, greening and making the economy more modern and competitive and for alleviating the socio-economic costs of the transition. Key actions of the Just Transition Fund could target in particular investment in:

- the deployment of technology and infrastructures for affordable clean energy, in greenhouse gas emission reduction, energy efficiency and renewable energy production;
- research and innovation activities fostering the transfer of advanced technologies;
- upskilling and reskilling of workers;
- job-search assistance to jobseekers.

The Vassilikos industrial site, performing activity listed in Annex I to Directive 2003/87/EC, employs a substantial number of workers and its activity their activity is at risk due to its high greenhouse gas emissions. Support to investments to reduce the emissions could be considered, provided that they

⁽⁵⁷⁾ This Annex is to be considered in conjunction with the EC proposal for a Regulation of the European Parliament and of the Council on the Just Transition Fund 2021-2027 (COM(2020) 22) and the EC proposal for a Regulation of the European Social Fund Plus, the Cohesion Fund, and the European Maritime and Fisheries Fund and financial rules for those and for the Asylum and Migration Fund, the Internal Security Fund and the Border Management and Visa Instrument (COM (2020) 23).

⁽⁵⁸⁾ SWD(2019) 1012 final.

achieve a substantial reduction of emissions (going substantially below the relevant benchmarks used for free allocation under Directive 2003/87/EC) and on the condition that the investments are compatible with the European Green Deal.

ANNEX E: PROGRESS TOWARDS THE SUSTAINABLE DEVELOPMENT GOALS (SDGs)

Assessment of Cyprus' short-term progress towards the SDGs ⁽⁵⁹⁾

Table E.1 shows the data for Cyprus and the EU-28 for the indicators included in the EU SDG indicator set used by Eurostat for [monitoring progress towards the SDGs in an EU context](#) ⁽⁶⁰⁾. As the short-term trend at EU-level is assessed over a 5-year period, both the value at the beginning of the period and the latest available value is presented. The indicators are regularly updated on the [SDI dedicated section](#) of the Eurostat website.

Table E.1: Indicators measuring Cyprus' progress towards the SDGs

SDG / Sub-theme	Indicator	Unit	Cyprus				EU-28			
			Starting		Latest		Starting		Latest	
			year	value	year	value	year	value	year	value
SDG 1 – No poverty										
Multidimensional poverty	People at risk of poverty or social exclusion	% of population	2013	27.8	2018	23.9	2013	24.6	2018	21.9
	People at risk of income poverty after social transfers	% of population	2013	15.3	2018	15.4	2013	16.7	2018	17.1
	Severely materially deprived people	% of population	2013	16.1	2018	10.2	2013	9.6	2018	5.8
	People living in households with very low work intensity	% of population aged 0 to 59	2013	7.9	2018	8.6	2013	11.0	2018	8.8
	In-work at-risk-of-poverty rate	% of population aged 18 or over	2013	8.9	2018	7.4	2013	9.0	2018	9.5
Basic needs	Population living in a dwelling with a leaking roof, damp walls, floors or foundation or rot in window frames or floor	% of population	2013	31.1	2018	30.2	2013	15.6	2018	13.9
	Self-reported unmet need for medical care	% of population aged 16 or over	2013	4.4	2018	1.4	2013	3.7	2018	2.0
	Population having neither a bath, nor a shower, nor indoor flushing toilet in their household	% of population	2013	1.0	2018	0.5	2013	2.2	2018	1.7
	Population unable to keep home adequately warm	% of population	2013	30.5	2018	21.9	2013	10.7	2018	7.3
	Overcrowding rate	% of population	2013	2.4	2018	2.5	2013	17.0	2018	15.5
SDG 2 – Zero hunger										
Malnutrition	Obesity rate	% of population aged 18 or over	2014	14.5	2017	14.7	2014	15.9	2017	15.2
Sustainable agricultural production	Agricultural factor income per annual work unit (AWU)	EUR, chain linked volumes (2010)	2012	13 295	2017	16 459	2012	14 865	2017	17 304
	Government support to agricultural research and development	million EUR	2013	7.0	2018	5.9	2013	3 048.6	2018	3 242.5
	Area under organic farming	% of utilised agricultural area	2013	4.0	2018	4.6	2013	5.7	2018	7.5
	Gross nitrogen balance on agricultural land	kg per hectare	2010	191	2015	194	2010	49	2015	51
Environmental impacts of agricultural production	Ammonia emissions from agriculture	kg per ha of utilised agricultural area	2012	55.2	2017	51.5	2011	19.7	2016	20.3
	Nitrate in groundwater	mg NO ₃ per litre	2012	27.0	2017	42.1	2012	19.2	2017	19.1
	Estimated soil erosion by water	km ²	2010	507.8	2016	514.6	2010	207 232.2	2016	205 294.5
	Common farmland bird index	index 2000 = 100	N/A	:	N/A	:	2013	83.9	2018	80.7
SDG 3 – Good health and well-being										
Healthy lives	Life expectancy at birth	years	2012	81.1	2017	82.2	2012	80.3	2017	80.9
	Share of people with good or very good perceived health	% of population aged 16 or over	2013	76.4	2018	77.8	2013	67.3	2018	69.2
Health determinants	Smoking prevalence	% of population aged 15 or over	2012	30	2017	28	2014	26	2017	26
	Obesity rate	% of population aged 18 or over	2014	14.5	2017	14.7	2014	15.9	2017	15.2
	Population living in households considering that they suffer from noise	% of population	2013	26.2	2018	19.6	2013	18.8	2018	18.3
	Exposure to air pollution by particulate matter (PM _{2.5})	µg/m ³	2012	24.3	2017	14.7	2012	16.8	2017	14.1
Causes of death	Death rate due to chronic diseases	number per 100 000 persons aged less than 65	2011	82.7	2016	82.4	2011	132.5	2016	119.0
	Death rate due to tuberculosis, HIV and hepatitis	number per 100 000 persons	2010	0.7	2015	1.6	2011	3.4	2016	2.6
	People killed in accidents at work	number per 100 000 employed persons	2012	2.74	2017	0.54	2012	1.91	2017	1.65
	People killed in road accidents	number of killed people	2012	51	2017	53	2012	28 231	2017	25 257
Access to health care	Self-reported unmet need for medical care	% of population aged 16 or over	2013	4.4	2018	1.4	2013	3.7	2018	2.0

(Continued on the next page)

⁽⁵⁹⁾ Data extracted on 9 February 2020 from the Eurostat database (official EU SDG indicator set; see <https://ec.europa.eu/eurostat/web/sdi/main-tables>).

⁽⁶⁰⁾ The EU SDG indicator set is aligned as far as appropriate with the UN list of global indicators, noting that the UN indicators are selected for global level reporting and are therefore not always relevant in an EU context. The EU SDG indicators have strong links with EU policy initiatives.

Table (continued)

SDG / Sub-theme	Indicator	Unit	Cyprus				EU-28			
			Starting		Latest		Starting		Latest	
			year	value	year	value	year	value	year	value
SDG 4 – Quality education										
Basic education	Early leavers from education and training	% of the population aged 18 to 24	2013	9.1	2018	7.8	2013	11.9	2018	10.6
	Participation in early childhood education	% of the age group between 4-years-old and the starting age of compulsory education	2012	83.8	2017	92.0	2012	94.0	2017	95.4
	Underachievement in reading	% of 15-year-old students	2015	35.6	2018	43.7	2015	19.7	2018	21.7
	Young people neither in employment nor in education and training	% of population aged 15 to 29	2013	20.4	2018	14.9	2013	15.9	2018	12.9
Tertiary education	Tertiary educational attainment	% of the population aged 30 to 34	2013	47.8	2018	57.1	2013	37.1	2018	40.7
	Employment rate of recent graduates	% of population aged 20 to 34	2013	62.1	2018	78.9	2013	75.4	2018	81.7
Adult education	Adult participation in learning	% of population aged 25 to 64	2013	7.2	2018	6.7	2013	10.7	2018	11.1
SDG 5 – Gender equality										
Gender-based violence	Physical and sexual violence to women experienced within 12 months prior to the interview	% of women	N/A	:	2012	5	N/A	:	2012	8
Education	Gender gap for early leavers from education and training	percentage points, persons aged 18–24	2013	10.6	2018	3.9	2013	3.4	2018	3.3
	Gender gap for tertiary educational attainment	percentage points, persons aged 30–34	2013	11.8	2018	15.2	2013	8.5	2018	10.1
	Gender gap for employment rate of recent graduates	percentage points, persons aged 20–34	2013	0.9	2018	8.7	2013	4.4	2018	3.4
Employment	Gender pay gap in unadjusted form	% of average gross hourly earnings of men	2012	15.6	2017	13.7	2012	17.4	2017	16.0
	Gender employment gap	percentage points, persons aged 20–64	2013	10.4	2018	10.4	2013	11.7	2018	11.6
	Gender gap in inactive population due to caring responsibilities	percentage points, persons aged 20–64	2013	44.3	2018	49.0	2013	25.5	2018	27.1
Leadership positions	Seats held by women in national parliaments and governments	% of seats	2014	14.3	2019	18.2	2014	27.2	2019	31.5
	Positions held by women in senior management	% of board members	2014	9.3	2019	10.5	2014	20.2	2019	27.8
SDG 6 – Clean water and sanitation										
Sanitation	Population having neither a bath, nor a shower, nor indoor flushing toilet in their household	% of population	2013	1.0	2018	0.5	2013	2.2	2018	1.7
	Population connected to at least secondary wastewater treatment	% of population	N/A	:	N/A	:	N/A	:	N/A	:
Water quality	Biochemical oxygen demand in rivers	mg O ₂ per litre	2012	2.97	2017	3.31	2012	2.06	2017	2.00
	Nitrate in groundwater	mg NO ₃ per litre	2012	27.0	2017	42.1	2012	19.2	2017	19.1
	Phosphate in rivers	mg PO ₄ per litre	N/A	:	N/A	:	2012	0.096	2017	0.093
	Inland water bathing sites with excellent water quality	% of bathing sites with excellent water quality	N/A	:	N/A	:	2013	76.5	2018	80.8
Water use efficiency	Water exploitation index	% of long term average available water (LTAA)	2012	79.6	2017	67.4	N/A	:	N/A	:
SDG 7 – Affordable and clean energy										
Energy consumption	Primary energy consumption	million tonnes of oil equivalent (Mtoe)	2013	2.2	2018	2.6	2013	1 577.4	2018	1 551.9
	Final energy consumption	million tonnes of oil equivalent (Mtoe)	2013	1.6	2018	1.9	2013	1 115.5	2018	1 124.1
	Final energy consumption in households per capita	kgoe	2013	356	2018	388	2013	605	2018	552
	Energy productivity	EUR per kgoe	2013	7.2	2018	7.1	2013	7.6	2018	8.5
	Greenhouse gas emissions intensity of energy consumption	index 2000 = 100	2012	100.5	2017	97.8	2012	91.5	2017	86.5
Energy supply	Share of renewable energy in gross final energy consumption	%	2013	8.5	2018	13.9	2013	15.4	2018	18.0
	Energy import dependency	% of imports in gross available energy	2013	96.1	2018	92.5	2013	53.2	2018	55.7
Access to affordable energy	Population unable to keep home adequately warm	% of population	2013	30.5	2018	21.9	2013	10.7	2018	7.3

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Table (continued)

SDG / Sub-theme	Indicator	Unit	Cyprus				EU-28			
			Starting		Latest		Starting		Latest	
			year	value	year	value	year	value	year	value
SDG 8 – Decent work and economic growth										
Sustainable economic growth	Real GDP per capita	EUR per capita, chain-linked volumes (2010)	2013	20 400	2018	23 770	2013	25 750	2018	28 280
	Investment share of GDP	% of GDP	2013	14.1	2018	19.1	2013	19.5	2018	20.9
	Resource productivity	EUR per kg, chain-linked volumes (2010)	2013	1.48	2018	1.32	2013	1.98	2018	2.04
Employment	Young people neither in employment nor in education and training	% of population aged 15 to 29	2013	20.4	2018	14.9	2013	15.9	2018	12.9
	Employment rate	% of population aged 20 to 64	2013	67.2	2018	73.9	2013	68.4	2018	73.2
	Long-term unemployment rate	% of active population	2013	6.1	2018	2.7	2013	5.1	2018	2.9
	Gender gap in inactive population due to caring responsibilities	percentage points, persons aged 20–64	2013	44.3	2018	49.0	2013	25.5	2018	27.1
Decent work	People killed in accidents at work	number per 100 000 employed persons	2012	2.74	2017	0.54	2012	1.91	2017	1.65
	In-work at-risk-of-poverty rate	% of population	2013	8.9	2018	7.4	2013	9	2018	9.5
SDG 9 – Industry, innovation and infrastructure										
R&D and innovation	Gross domestic expenditure on R&D	% of GDP	2013	0.49	2018	0.55	2013	2.01	2018	2.12
	Employment in high- and medium-high technology manufacturing and knowledge-intensive services	% of total employment	2013	39.3	2018	40.6	2013	45.0	2018	46.1
	R&D personnel	% of active population	2013	0.29	2018	0.38	2013	1.15	2018	1.36
	Patent applications to the European Patent Office (EPO)	number	2012	3	2017	9	2012	56 772	2017	54 649
Sustainable transport	Share of buses and trains in total passenger transport	% of total inland passenger-km	2012	18.7	2017	19.0	2012	17.2	2017	16.7
	Share of rail and inland waterways in total freight transport	% of total inland freight tonne-km	N/A	:	N/A	:	2012	25.4	2017	23.3
	Average CO2 emissions per km from new passenger cars	g CO ₂ per km	2013	139.2	2018	123.3	2014	123.4	2018	120.4
SDG 10 – Reduced inequalities										
Inequalities within countries	Relative median at-risk-of-poverty gap	% distance to poverty threshold	2013	17.7	2018	18.6	2013	23.8	2018	24.6
	Income distribution	income quintile share ratio	2013	4.9	2018	4.3	2013	5.0	2018	5.2
	Income share of the bottom 40 % of the population	% of income	2013	20.8	2018	22.1	2013	21.1	2018	21.0
	People at risk of income poverty after social transfers	% of population	2013	15.3	2018	15.4	2013	16.7	2018	17.1
Inequalities between countries	Purchasing power adjusted GDP per capita	Real expenditure per capita (in PPS)	2013	22 300	2018	27 600	2013	26 800	2018	31 000
	Adjusted gross disposable income of households per capita	Purchasing power standard (PPS) per inhabitant	2013	17 365	2018	19 801	2013	20 392	2018	22 824
	Financing to developing countries	million EUR, current prices	N/A	:	N/A	:	2012	147 962	2017	155 224
	Imports from developing countries	million EUR, current prices	2013	467	2018	1 110	2013	817 475	2018	1 013 981
Migration and social inclusion	Asylum applications	Positive first instance decisions, per million inhabitants	2013	191	2018	1 396	2013	213	2018	424
SDG 11 – Sustainable cities and communities										
Quality of life in cities and communities	Overcrowding rate	% of population	2013	2.4	2018	2.5	2013	17.0	2018	15.5
	Population living in households considering that they suffer from noise	% of population	2013	26.2	2018	19.6	2013	18.8	2018	18.3
	Exposure to air pollution by particulate matter (PM _{2.5})	µg/m ³	2012	24.3	2017	14.7	2012	16.8	2017	14.1
	Population living in a dwelling with a leaking roof, damp walls, floors or foundation or rot in window frames or floor	% of population	2013	31.1	2018	30.2	2013	15.6	2018	13.9
	Population reporting occurrence of crime, violence or vandalism in their area	% of population	2013	15.3	2018	13.9	2013	14.5	2018	12.7
Sustainable mobility	People killed in road accidents	number of killed people	2012	51	2017	53	2012	28 231	2017	25 257
	Share of buses and trains in total passenger transport	% of total inland passenger-km	2012	18.7	2017	19.0	2012	17.2	2017	16.7
Adverse environmental impacts	Settlement area per capita	m ²	2012	787.8	2015	977.2	2012	625.0	2015	653.7
	Recycling rate of municipal waste	% of total waste generated	2012	13.6	2017	16.1	2013	41.7	2018	47.0
	Population connected to at least secondary wastewater treatment	% of population	N/A	:	N/A	:	N/A	:	N/A	:

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Table (continued)

SDG / Sub-theme	Indicator	Unit	Cyprus				EU-28			
			Starting		Latest		Starting		Latest	
			year	value	year	value	year	value	year	value
SDG 12 – Responsible consumption and production										
Decoupling environmental impacts from economic growth	Consumption of toxic chemicals	million tonnes	N/A	:	N/A	:	2013	300.3	2018	313.9
	Resource productivity	EUR per kg, chain-linked volumes (2010)	2013	1.48	2018	1.32	2013	1.98	2018	2.04
	Average CO2 emissions per km from new passenger cars	g CO ₂ per km	2013	139.2	2018	123.3	2014	123.4	2018	120.4
	Energy productivity	EUR per kgoe	2013	7.2	2018	7.1	2013	7.6	2018	8.5
Energy consumption	Primary energy consumption	million tonnes of oil equivalent (Mtoe)	2013	2.2	2018	2.6	2013	1 577.4	2018	1 551.9
	Final energy consumption	million tonnes of oil equivalent (Mtoe)	2013	1.6	2018	1.9	2013	1 115.5	2018	1 124.1
	Share of renewable energy in gross final energy consumption	%	2013	8.5	2018	13.9	2013	15.4	2018	18.0
Waste generation and management	Circular material use rate	% of material input for domestic use	2012	2.0	2017	2.2	2012	11.5	2017	11.7
	Generation of waste excluding major mineral wastes	kg per capita	2012	762	2016	839	2012	1 716	2016	1 772
	Recycling rate of waste excluding major mineral wastes	% of total waste treated	2012	34	2016	31	2012	55	2016	57
SDG 13 – Climate action										
Climate mitigation	Greenhouse gas emissions	index 1990 = 100	2012	147.0	2017	155.7	2012	82.1	2017	78.3
	Greenhouse gas emissions intensity of energy consumption	index 2000 = 100	2012	100.5	2017	97.8	2012	91.5	2017	86.5
	Primary energy consumption	million tonnes of oil equivalent (Mtoe)	2013	2.2	2018	2.6	2013	1 577.4	2018	1 551.9
	Final energy consumption	million tonnes of oil equivalent (Mtoe)	2013	1.6	2018	1.9	2013	1 115.5	2018	1 124.1
	Share of renewable energy in gross final energy consumption	%	2013	8.5	2018	13.9	2013	15.4	2018	18.0
	Average CO2 emissions per km from new passenger cars	g CO ₂ per km	2013	139.2	2018	123.3	2014	123.4	2018	120.4
Climate impacts	European mean near surface temperature deviation	temperature deviation in °C, compared with the 1850–1899 average	N/A	:	N/A	:	2013	1.4	2018	2.1
	Climate-related economic losses	EUR billion, in 2017 values	N/A	:	N/A	:	2012	2 719	2017	2 649
	Mean ocean acidity	pH value	N/A	:	N/A	:	2013	8.06	2018	8.06
Support to climate action	Contribution to the international 100bn USD commitment on climate related expending	EUR million, current prices	N/A	:	2017	:	N/A	:	2017	20 388.7
SDG 14 – Life below water										
Ocean health	Coastal water bathing sites with excellent water quality	% of bathing sites with excellent water quality	2013	100.0	2018	99.1	2013	85.5	2018	87.1
	Mean ocean acidity	pH value	N/A	:	N/A	:	2013	8.06	2018	8.06
Marine conservation	Surface of marine sites designated under NATURA 2000	km ²	2013	132	2018	131	2013	251 566	2018	551 899
Sustainable fisheries	Estimated trends in fish stock biomass	index 2003 = 100	N/A	:	N/A	:	2012	110.0	2017	136.0
	Assessed fish stocks exceeding fishing mortality at maximum sustainable yield (F _{msy})	% of stocks exceeding fishing mortality at maximum sustainable yield (F>F _{msy})	N/A	:	N/A	:	2012	52.9	2017	42.7
SDG 15 – Life on land										
Ecosystems status	Share of forest area	% of total land area	2012	33.3	2015	39.7	2012	40.3	2015	41.6
	Biochemical oxygen demand in rivers	mg O ₂ per litre	2012	2.97	2017	3.31	2012	2.06	2017	2.00
	Nitrate in groundwater	mg NO ₃ per litre	2012	27.0	2017	42.1	2012	19.2	2017	19.1
Land degradation	Phosphate in rivers	mg PO ₄ per litre	N/A	:	N/A	:	2012	0.096	2017	0.093
	Soil sealing index	index 2006 = 100	2009	103.7	2015	113.7	2009	101.7	2015	104.2
	Estimated soil erosion by water	km ²	2010	507.8	2016	514.6	2010	207 232.2	2016	205 294.5
Biodiversity	Settlement area per capita	m ²	2012	787.8	2015	977.2	2012	625.0	2015	653.7
	Surface of terrestrial sites designated under NATURA 2000	km ²	2013	1 628	2018	1 654	2013	787 766	2018	784 252
	Common bird index	index 2000 = 100	N/A	:	N/A	:	2013	94.7	2018	93.5
	Grassland butterfly index	index 2000 = 100	N/A	:	N/A	:	2012	72.2	2017	74.1

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Table (continued)

SDG / Sub-theme	Indicator	Unit	Cyprus				EU-28			
			Starting		Latest		Starting		Latest	
			year	value	year	value	year	value	year	value
SDG 16 – Peace, justice and strong institutions										
Peace and personal security	Death rate due to homicide	number per 100 000 persons	2011	2.3	2016	1.3	2011	0.9	2016	0.6
	Population reporting occurrence of crime, violence or vandalism in their area	% of population	2013	15.3	2018	13.9	2013	14.5	2018	12.7
	Physical and sexual violence to women experienced within 12 months prior to the interview	% of women	N/A	:	2012	5	N/A	:	2012	8
Access to justice	General government total expenditure on law courts	million EUR	2012	26	2017	26	2012	48 381	2017	51 027
	Perceived independence of the justice system	% of population	2016	56	2019	59	2016	52	2019	56
Trust in institutions	Corruption Perceptions Index	score scale of 0 (highly corrupt) to 100 (very clean)	2013	63	2018	59	N/A	:	N/A	:
	Population with confidence in the EU Parliament	% of population	2013	28	2018	46	2013	39	2018	48
SDG 17 – Partnerships for the goals										
Global partnership	Official development assistance as share of gross national income	% of GNI	2010	0.23	2015	0.09	2013	0.43	2018	0.48
	EU financing to developing countries	million EUR, current prices	N/A	:	N/A	:	2012	147 962	2017	155 224
	EU imports from developing countries	million EUR, current prices	2013	467	2018	1 110	2013	817 475	2018	1 013 981
Financial governance within the EU	General government gross debt	% of GDP	2013	104.0	2018	100.6	2013	86.3	2018	80.4
	Shares of environmental and labour taxes in total tax revenues	% of total tax revenues	2013	8.6	2018	8.3	2013	6.4	2018	6.1

Source: Eurostat

REFERENCES

Agarwal, S., Amromin, G., Ben-David, I., and Chomsisengphet, S. (2010), *Learning to Cope: Voluntary Financial Education and Loan Performance during a Housing Crisis*, American Economic Review: Papers & Proceedings, 495-500.

Andreou, Panayiotis, C., and Anyfantaki, S. (2019), Financial Literacy and Its Influence on Consumers' Internet Banking Behaviour, <https://ssrn.com/abstract=3499104> or <http://dx.doi.org/10.2139/ssrn.3499104>

Arpaia, A. and Kiss, A. (2015), *Benchmarks for the assessment of wage developments: Spring 2015*, Analytical Web Note 2/2015, European Commission, Brussels.

Cedefop 2020. Developments in vocational education and training policy in 2015-19: Cyprus. Cedefop monitoring and analysis of VET policies forthcoming

Christofides, L., and Koutsampelas, C. (2019), *ESPN European Semester Report: Cyprus 2019-2010*, ESPN.

Coutinho, L., Turrini, A., Zeugner, S. (2018), *Methodologies Methodologies for the Assessment of Current Account Benchmarks*, European Commission Discussion Paper 086/September 2018, European Commission, Brussels.

CWTS (2019), *Leiden Ranking 2019*, Centre for Science and Technology Studies, Leiden, <https://www.leidenranking.com/ranking/2019>

Cyprus Economy and Competitiveness Council, (2019), 2019 *Cyprus Competitiveness Report*.

Demetriades M., and Robledo-Bottcher N. (2020), *RIO Country Report 2019: Cyprus*, Joint Research Centre, European Commission, Publications Office of the European Union, Luxembourg.

Eurofound (2019a), *The involvement of social partners in national policymaking*, Publications Office of the European Union, Luxembourg.

Eurofound (2019b), *The future of manufacturing in Europe*, Publications Office of the European Union, Luxembourg.

European Commission (2016), *Report on Public Finances in EMU 2016*, Directorate-General for Economic and Financial Affairs, European Economy, Institutional Paper 045/2016, European Commission, Brussels.

European Commission (2017a), *Benchmarks for the assessment of private debt*, European Commission note to LIME, October, European Commission, Brussels.

European Commission (2017b), *COMMISSION STAFF WORKING DOCUMENT accompanying the document: Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on reform recommendations for regulation in professional services*, SWD(2016) 436 final, 10.01.2017, European Commission, Brussels.

European Commission (2018a), *Country Report Cyprus 2018 - Including an In-Depth Review on the prevention and correction of macroeconomic imbalances*, SWD(2018) 211, European Commission, Brussels.

European Commission (2018b), *Fundamentals-based private debt benchmarks: enhanced sample and robustness checks*, European Commission note to LIME, June, European Commission, Brussels.

European Commission (2018c), *Digital Transformation Scoreboard 2018: EU businesses go digital: Opportunities, outcomes and uptake*, Publications Office of the European Union, Luxembourg.

European Commission (2018d), *The early warning report for Cyprus accompanying the document REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS on the implementation of EU waste legislation, including the early warning report for the Member States at risk of meeting the preparation for re-use/recycling target on municipal waste*, SWD(2018) 415 final, 24.09.2018, European Commission, Brussels.

European Commission (2019a), *Alert Mechanism Report 2020*, COM(2019) 651, Directorate-General Eurostat, European Commission, Brussels.

European Commission (2019b), *Employment and Social Developments in Europe: Sustainable growth for all: choices for the future of Social Europe*, Directorate-General for Employment, Social Affairs and Inclusion, European Commission, Brussels.

European Commission (2019c), *Tax policy survey in the European Union 2019 ?*, Directorate-General for Taxation and Customs Union, European Commission, Publications Office of the European Union, Luxembourg.

European Commission (2019d), *Post-Programme Surveillance Report Cyprus, Spring 2019*, Directorate-General for Economic and Financial Affairs, European Economy, Institutional Paper 104/2019, European Commission, Brussels.

European Commission (2019e), *Post-Programme Surveillance Report Cyprus, Autumn 2019*, Directorate-General for Economic and Financial Affairs, European Economy, Institutional Paper 118/2019, European Commission, Brussels.

European Commission (2019f), *Labour Market and Wage Developments in Europe*, Annual Review 2019, Publications Office of the European Union, Luxembourg, <https://ec.europa.eu/social/main.jsp?catId=89&furtherNews=yes&langId=fr&newsId=9485>

European Commission (2019g), *Women in Digital Scoreboard 2019*, <https://ec.europa.eu/digital-single-market/en/news/women-digital-scoreboard-2019-country-reports>

European Commission (2019h), *Country Report Cyprus 2019, Including an In-Depth Review on the prevention and correction of macroeconomic imbalances*, SWD(2019) 1012, European Commission, Brussels.

European Commission (2019i), *Education and Training Monitor 2019 – Cyprus analysis*, Directorate-General for Education, Youth, Sport and Culture, European Commission, Publications Office of the European Union, Luxembourg.

European Commission (2019j), *PISA 2018 AND THE EU. Striving for social fairness through education*, Directorate-General for Education, Youth, Sport and Culture, European Commission, Brussels.

European Commission (2019k), *Digital Economy and Society Index (DESI) 2019, Country Profile Cyprus*, European Commission, Brussels, <https://ec.europa.eu/digital-single-market/en/desi>

European Commission (2019l), *Flash Eurobarometer 482 “Businesses’ attitudes towards corruption in the EU” Report*, Survey requested by the European Commission, Directorate-General for Migration and

Home Affairs and co-ordinated by the Directorate-General for Communication, European Commission, Brussels.

European Commission (2019m), *COMMISSION STAFF WORKING DOCUMENT Accompanying the document REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT AND THE COUNCIL on the assessment of the risk of money laundering and terrorist financing affecting the internal market and relating to cross-border activities*, SWD(2019) 650 final, 24.07.2019, European Commission, Brussels.

European Commission (2019n), *REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS Investor Citizenship and Residence Schemes in the European Union*, SWD(2019) 5 final, 23.01.2019, European Commission, Brussels.

European Commission (2019o), *Study on investment needs in the waste sector and on the financing of municipal waste management in Member States*, Eunomia, COWI, Publications Office of the European Union, Luxembourg.

European Commission (2020a), *European Economic Forecast, Winter 2020*, Directorate-General for Economic and Financial Affairs, European Economy, Institutional Paper xx/2020, European Commission, Brussels, forthcoming.

European Commission (2020b), *Eurobarometer Special Survey on Undeclared Work*, 498, forthcoming.

European Commission (2020c), *Joint Employment Report*, forthcoming.

European Commission (2020d), Digital Agenda Scoreboard (https://digital-agenda-data.eu/datasets/digital_agenda_scoreboard_key_indicators/visualizations)

European Environment Agency, (2016), *Landfill taxes and bans overview 2017*, European Environment Agency, 2016; and Confederation of European Waste-to-Energy Plants (CEWEP), <http://www.cewep.eu/wp-content/uploads/2017/12/Landfill-taxes-and-bans-overview.pdf>

GDC (2019), *Digital jobs, Grow Digital Cyprus*, <http://www.digitaljobs.cyprus-digitalchampion.gov.cy/el/page/emplekomenoi-foreis>

HRDA (2017), *Forecasts of Employment Needs in the Cyprus Economy 2017-2027*, Human Resource Development Authority, http://www.anad.org.cy/easyconsole.cfm/page/project/p_id/404.

MARDE (2019), *Cyprus Agriculture Adaptation Strategy on Climate Change, including Implementation Monitoring Plan*, Ministry of Agriculture, Natural Resources and Environment -Department of Environment - Υπουργείο Γεωργίας, Αγροτικής Ανάπτυξης και Περιβάλλοντος- Τμήμα Περιβάλλοντος, 2019a. Στρατηγική Προσαρμογής Της Γεωργίας Της Κύπρου Στην Κλιματική Αλλαγή, Συμπεριλαμβανομένου Σχέδιου Παρακολούθησης Της Υλοποίησης, http://news.ari.gov.cy/content/ADAPTATION_STRATEGY.pdf

MOF (2018), *Cyprus Draft Budgetary Plan 2019*, Ministry of Finance of the Republic of Cyprus, Nicosia.

MOF (2019a), *Cyprus Investment Programme*, Ministry of Finance of the Republic of the Republic of Cyprus, Nicosia.

MOF (2019b), *Public debt management: Review of operations for the 3rd Quarter of 2019*, Quarterly Bulletin NO.35: 3rd Quarter 2019, Ministry of Finance of the Republic of Cyprus, Nicosia, [https://www.mof.gov.cy/mof/pdmo/pdmo.nsf/All/B14632E68753B0E7C22584B800398A88/\\$file/CY%20Qrt%20Bulletin%20Q3_2019%20EN.pdf](https://www.mof.gov.cy/mof/pdmo/pdmo.nsf/All/B14632E68753B0E7C22584B800398A88/$file/CY%20Qrt%20Bulletin%20Q3_2019%20EN.pdf)

MOF (2019c), *Stability Programme 2019-2022*, Ministry of Finance of the Republic of the Republic of Cyprus, Nicosia.

OECD (2019a), PISA 2018 Results (Volume I): What Students Know and Can Do. <https://doi.org/10.1787/5f07c754-en>

OECD (2019b), *Report 2019: Ensuring an adequate LTC workforce*, OECD Publishing, Paris.

OECD, European Observatory on Health Systems and Policies (2019), *Cyprus: Country Health Profile 2019*, State of Health in the EU, OECD Publishing, Paris/European Observatory on Health Systems and Policies, Brussels.

Philipponet, N. and Turrini, A. (2017), *Assessing House Price Developments in the EU*, European Commission Discussion Paper 048/May 2017, European Commission, Brussels.

Turrini, A. and Zeugner, S. (2018), *Benchmarks for net international investment positions*, European Commission Discussion Paper, forthcoming.

Vandeplas, A. and Thum-Thysen, A. (2019), *Skills Mismatch & Productivity in the EU*, European Economy, Discussion Paper 100, European Commission, Brussels.

WEF (2019), *The Global Competitiveness Report 2019*, ed. Klaus Schwab; World Economic Forum, Geneva. in the text, refer to version 2018

World Bank (2019). *Doing Business 2020*, Economy profile Cyprus, World Bank Group, Washington D.C..

ZEW (2016), *The impact of Tax Planning on Forward-looking Effective Tax Rates*, Taxation Papers No. 64, Publications Office of the European Union, Luxembourg.