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**In-depth review for Cyprus**

*Accompanying the document*

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PARLIAMENT, THE COUNCIL, THE EUROPEAN CENTRAL BANK, THE  
EUROPEAN ECONOMIC AND SOCIAL COMMITTEE, THE COMMITTEE OF  
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Cyprus

**In-Depth Review 2023**



**On the basis of this in-depth review for Cyprus undertaken under Regulation (EU) No 1176/2011 on the prevention and correction of macroeconomic imbalances, the Commission has considered in its Communication “European Semester – 2023 Spring Package” (COM(2023) 600 final) that:**

**Cyprus** is experiencing imbalances after being identified with excessive imbalances until 2022. Vulnerabilities related to private, government and external debt have overall declined but remain a concern. In particular, high debts including non-performing loans have decreased significantly and are expected to continue doing so, while current account deficits remain an issue. Private debt has been decreasing since 2015, except in 2020 amid the COVID-19 crisis, and is expected to continue declining this year and next supported by nominal GDP growth. Still, higher interest rates could put pressure on debt service though, as variable interest rate loans prevail. Private and external debt stocks are affected by the presence of special purpose entities in Cyprus, which elevate the levels but pose limited risks to the economy. Non-performing loans held by banks have declined very markedly over recent years thanks to non-performing loans sales, write-offs, cash repayments, curing and debt-to-asset swaps. The government debt has been steadily falling; it declined below its pre-pandemic level and is expected to fall further in 2023 and 2024. Despite the recovery in tourism, the large current account deficit widened in 2022, reflecting robust domestic demand as well as high energy prices; it is expected to decrease somewhat this year and next but to remain large. The policy response has been favourable. Several measures included in the RRP are expected to help diversifying the economy, support export growth, and alleviate the over-reliance on oil imports. As part of the RRP, a package of amending laws on credit-acquiring companies and credit servicers was adopted in mid-2022, improving their working environment and supporting non-performing loans reduction. Following several extensions, the suspension of foreclosures came to an end this February: an effective foreclosure framework is key to encourage borrowers to participate in loan restructuring, further reduce non-performing loans in the economy, help reduce private indebtedness, and enhance payment discipline.

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# 1. INTRODUCTION

**In 2022, over the previous annual cycle of surveillance under the Macroeconomic Imbalances Procedure (MIP), the Commission identified “excessive macroeconomic imbalances” in Cyprus.** <sup>(1)</sup> These imbalances were related to high government and private debt, large current account deficits and a still high stock of non-performing loans. The 2023 Alert Mechanism Report published in November 2022 concluded that an in-depth review (IDR) should be undertaken also this year for Cyprus with a view to assess the persistence or unwinding of imbalances. <sup>(2)</sup> The AMR concluded that in Cyprus, concerns related to household and non-financial corporate, government and external debt-to-GDP ratios remained, although they resumed their declining path after the COVID-19 crisis. Despite improvements, non-financial corporate and household debt-to-GDP ratios continued to be among the highest in the EU. The large current account deficit narrowed, but was forecast to increase again, amid the worsening external environment. The banking sector proved resilient, although risks remained, including those associated with non-performing loans.

**The Cypriot economy experienced a continued solid growth momentum in 2022, but high inflation, tightening monetary policy and a weaker external environment are expected to slow down growth in 2023.** <sup>(3)</sup> Real GDP grew by 5.6% in 2022, following a 6.6% increase in 2021. Despite rising inflation, private consumption remained robust, supported by increased employment and wages. Tourism continued its rebound after the COVID-19 crisis and an active diversification strategy to compensate for the loss of the Russian market. GDP growth is forecast at 2.3% in 2023 and 2.7% in 2024. The anticipated slowdown is due to the deterioration of global growth prospects, prolonged elevated inflation and increasing interest rates adversely impacting demand and in particular investments. Inflation picked up to 8.1% in 2022 fuelled by high energy prices and supply bottlenecks. Inflation is projected to decelerate to 3.8% in 2023 and 2.5% in 2024, as pressures from energy inflation and supply disruptions are easing, however, wage indexation is expected to a certain extent push prices up. The forecast is surrounded by uncertainties in particular around the turbulence in the global financial market and the evolution of the Russia’s war on Ukraine.

**This in-depth review presents the main findings of the assessment of macroeconomic vulnerabilities for Cyprus.** The assessment is backed by a thematic section on household savings. Vulnerabilities related to external balances in Cyprus are also discussed in a horizontal thematic note that was recently published. <sup>(4)</sup> The MIP assessment matrix is published in the 2023 Country Report for Cyprus. <sup>(5)</sup>

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<sup>(1)</sup> European Commission (2022), European Semester Spring Package 2022, COM (2022) 600 final.

<sup>(2)</sup> European Commission (2022), Alert Mechanism Report 2023, COM (2022) 381 final.

<sup>(3)</sup> European Commission (2023), European Economic Forecast: Spring 2023, Institutional Paper 200.

<sup>(4)</sup> European Commission (2023), External Sustainability Analysis: Thematic Note to Support In-Depth Reviews, European Economy: Institutional Papers, 196.

<sup>(5)</sup> European Commission (2023), Country Report Cyprus 2023, SWD(2023) 613 final.

## 2. ASSESSMENT OF MACROECONOMIC VULNERABILITIES

### Gravity, evolution and prospects

**On 5 April 2023, the Commission published a horizontal thematic note on external balances based on data up until Q3 2022, which also covers Cyprus.** It showed that the energy crisis had a significant impact on the current account deficit in 2022 reversing the improvement of 2021. Following a solid improvement in 2021 (by over 3 pps. to 6.8% of GDP) as tourism recovered from the slump inflicted by the pandemic, the current account deficit widened to 9.1% <sup>(6)</sup> of GDP in 2022 linked to strong increases in energy prices, and robust domestic demand. As a result, the goods balance recorded a deficit of 21.8% of GDP. The surplus in trade of services recovered to around pre-pandemic levels, recording 20.9% of GDP in 2021, and further expanding to 21.4% of GDP in 2022, on the back of the recovery of tourism and the on-going expansion of exports of financial, shipping, ICT and professional services.

**As a small open economy, Cyprus is highly dependent on imports.** Imports of consumer goods dominate, followed by intermediate goods, notably for manufacturing and construction. The high propensity to consume and consequently to import also reflects the low savings rate in the household sector. The large current account deficit is thus mirrored in savings falling short of domestic investment notably in the household sector (see Section 3). In addition, Cyprus relies on imports of oil, and has a 89.5% energy import dependency compared to 55.5% for the EU in 2021. As a result, the negative energy balance is one of the largest in the EU, and it worsened from -4.4% of GDP in 2021 to -8.8% of GDP in 2022 because of higher oil prices.

**Foreign companies operating in Cyprus have a positive impact on the current account, but repatriations of profits increase primary income deficits.** Since 2016 the primary income account deficits have increased mainly driven by the credit-acquiring companies and the government through the payment of interest on foreign debt. Furthermore, foreign-owned companies active in the domestic retail trade sector have added to the deficit through imports of goods for consumption and the repatriation of profits in the form of dividends or retained earnings. Foreign-owned companies in the sectors of professional services, transport and ICT contributed positively to the current account when including the corresponding exports of services of these sectors.

**The current account deficit is expected to gradually improve as energy price levels decrease, and exports of services continue to expand.** The current account deficit is projected at -7.3% in 2023, and -6.9% in 2024. However, this is considerably below the current account balance required to bring the NIIP above the prudential threshold in the medium term, which is estimated to be around zero. Similarly, to stabilise the NIIP above the benchmark of -35% over 20 years, a current account balance of above -0.9% of GDP would be needed.

**The current account deficit is mainly financed by foreign direct investments (FDI), but so far with limited impact on the potential output of the country.** FDI are concentrated in real

<sup>(6)</sup> While the data in the horizontal note go up to Q3 2022, here they are updated with the numbers for the whole 2022.

estate and transactions of special purpose entities (SPEs), 76.5% of the inflows in 2022, thus having a limited positive impact on the potential output of the country. FDI inflows from Russia have stopped since the outbreak of the Russian invasion of Ukraine, while investments by the EU countries, the UK, Israel and Lebanon are on the rise.

**The net international investment position (NIIP) has improved but remains highly negative.** In 2022, the NIIP improved to -105.3%, some 10 pps. above its 2019 level and some 30 pps. above the pandemic induced multi-year trough in 2020, mainly on account of strong nominal GDP growth and positive valuation effects. The NIIP excluding non-defaultable instruments (NENDI) was more favourable, at around -21.7% of GDP, in 2022. The NIIP excluding SPEs<sup>(7)</sup> stood at 40.9% of GDP at the end of 2022, around the fundamental and somewhat above prudential benchmarks, while NENDI excluding SPEs was positive at around 64% of the GDP. Hence, the risks to the external position of the economy are limited. The government sector contributes negatively to the NIIP, as most government debt is held by foreigners. Baseline projections show, however, that the headline NIIP is set to worsen to -118% of GDP by 2032 under the baseline scenario (Graph 2.1 e). As for the NIIP projections excluding SPEs, the NIIP is expected to worsen more steeply under the baseline, reaching the level of around -84% of GDP over the same period.<sup>(8)</sup> Sensitivity checks using two alternative scenarios show that the headline NIIP would improve only slightly under the optimistic assumptions of scenario 1. Conversely, the NIIP excluding the SPEs is projected to worsen also under the optimistic scenario 1, to close to -70% of GDP. Adverse scenarios would lead to a headline NIIP of around -134% of GDP, while the NIIP excluding the SPEs would amount to nearly -100% of GDP.<sup>(9)</sup>

**Private sector debt continues to decline.** The private debt-to-GDP ratio resumed its declining trend, which started in 2015, after an increase in 2020 as a result of the COVID-19 pandemic. Private debt stood at around 217% of GDP, at the end of 2022, down from almost 250% of GDP at the end of 2021. The reduction was driven by growth in nominal GDP (see Graph 2.1). Despite the decreases, private debt is still significantly above the MIP threshold of 133%. Household indebtedness accounted for 75% of GDP, while the debt of non-financial corporations was 142% of GDP. Overall, the private debt-to-GDP ratio is expected to decrease further in 2023-2024 supported by economic growth.

**Private debt in Cyprus is inflated by the debt of special purpose entities, which have a limited impact on the functioning of the economy.** A significant portion of the private debt is due to the operations of special purpose entities, which are mainly ship-owning entities. The SPEs are perceived to have limited links to the real economy because they have no or little physical presence, employment, or production in the country. Furthermore, their debt is overwhelmingly funded by foreign banks or other non-resident entities. Such set-up of special purpose entities reduces the risk to the domestic economy, nevertheless their debt inflates the private sector debt ratio. Overall, the debt stock of special purpose entities increased from 2015 to 2022 by approximately 17%. As a share of GDP, SPEs debt stood at 54% by the end of 2022. When

<sup>(7)</sup> Special purpose Entities (SPEs), mostly ship-owning, contribute significantly to the negative headline NIIP by around -80 pp of GDP. The risks of SPEs for the real domestic economy notably the banking system are reportedly limited, as ship-owning SPEs are mostly funded by foreign financial institutions or other related non-resident entities and own assets located outside Cyprus. (Cyprus IDR 2022 and Country Report 2018). Furthermore, the impact of SPEs on the current account balance is limited.

<sup>(8)</sup> Note that the projections assume constant primary income balances due to difficulties in projecting the very sizeable reinvested earnings in case of the headline NIIP projections, i.e. because of less detailed data available for the projections of the NIIP excluding the SPEs.

<sup>(9)</sup> The optimistic alternative scenario (scenario 1) assumes higher trade balances in 2025 and thereafter by 2 pp of GDP, and higher real GDP growth in 2025 by 2 pp, than in the baseline scenario. It illustrates a case of a more positive trade balance evolution amid lower energy prices and better export performance than under the baseline. The pessimistic alternative scenario (scenario 2) describes a corresponding adverse shock in which it assumes the same timing and the magnitude of deviations from the baseline, but with the opposite sign.

excluding SPEs' debt, the private debt ratio is reduced to 163% of GDP at the end of 2022, but still remains higher than the EU average.

**The household debt-to-GDP ratio decreased in 2022, but vulnerabilities remain.** The household debt-to-GDP ratio decreased to 75% of GDP in 2022 from 83% of GDP in 2021. The household debt ratio is below the fundamental benchmark<sup>(10)</sup>, but above the prudential one<sup>(11)</sup>, estimated at 91% of GDP and 41% of GDP, respectively. In 2022, new lending to the domestic economy surpassed the levels of previous years – with all major segments registering higher volumes. Lending for housing purposes exceeded pre-pandemic levels, reaching historic highs (of about EUR 1.2 bn), while lending for consumer loans remained stable (at EUR 155 mn)<sup>(12)</sup>. Although the household debt-to-GDP ratio decreased, supported by nominal GDP growth, the stock of debt slightly increased in 2022<sup>(13)</sup>. Debt-service to income ratios are expected to increase amid rising interest rates and in view of the share of loans with variable rates (about 95%). Therefore, rising interest rates could present challenges to households, particularly to those in the lower income quintiles. At the same time, the pass through of monetary policy has been rather moderate as a large share of the lending portfolio is linked to bank base rates rather than Euribor or ECB rates<sup>(14)</sup>. About 34% of the household debt relates to legacy non-performing loans (NPLs) held by the credit acquiring companies (CACs)<sup>(15)</sup>. While this part of the debt is not expected to be impacted by the rising rates, the bad household loans are affecting the overall speed of debt deleveraging. Furthermore, resolving the residential segment of NPLs has been even more challenging due to the numerous subsequent suspensions of foreclosures in the last years. GDP growth is expected to have a positive effect on driving down household debt to GDP ratio over 2023-2024, and furthermore, a deceleration in the credit growth is expected in the future amid rising interest rates.

**Non-financial corporations (NFCs) continued deleveraging in 2022.** The debt of the corporate sector decreased from 165% of GDP at the end of 2021 to 142% of GDP in 2022. Still, the NFC debt exceeds the fundamental and prudential thresholds of 132% and 64% of GDP, respectively. The debt overhang of non-financial corporations is reduced when excluding the debt of the special purpose entities. Without the SPEs, the non-financial corporations debt ratio is reduced to 89% of GDP for 2022. Net credit flows to NFCs turned negative in 2022, around -1.7% of GDP. The corporate sector's stock of liabilities (excluding special purpose entities) comprises mainly domestic bank loans. December 2022 data on the breakdown of outstanding loans to NFCs shows that a large proportion of the stock of bank loans is in accommodation and food services (19.4% of total loans), wholesale and retail trade (18.0% of total loans); real estate activities (17.7% of total loans); manufacturing (10.3% of total loans); transport and storage (11.3% of total loans) and in construction (9.2% of total loans). As with the household sector, part of non-financial sector debt (about 20%) is held by the credit acquiring companies and mainly consists of legacy NPLs.<sup>(16)</sup> Overall, corporations proved to be resilient to the shocks stemming from Russia's war on Ukraine and the energy crisis, with sectors such as transport and storage, manufacturing, mining and

<sup>(10)</sup> Fundamental-based benchmarks are derived from regressions capturing the main determinants of credit growth and take into account a given initial stock of debt (from 1995).

<sup>(11)</sup> 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.

<sup>(12)</sup> In 2021 mortgages recorded about EUR 1.1 bn, while households consumer loans stood at EUR 150 mn.

<sup>(13)</sup> The stock of household debt increased also in 2021.

<sup>(14)</sup> Based on preliminary analysis of the Central Bank of Cyprus, lending based on ECB and Euribor rates recorded a much larger pass through of monetary policy, in contrast to lending based on bank base rates. About 35% of the lending portfolio as of December 2022 was linked to bank base rates.

<sup>(15)</sup> According to Central Bank of Cyprus, Financial Stability Department calculations.

<sup>(16)</sup> According to Central Bank of Cyprus, Financial Stability Department calculations.



quarrying, and professional, scientific and technical activities, registering positive real growth in gross value added in 2022. In the medium term, rising interest rates may pose debt repayment challenges also to NFCs. Mitigating factors for this risk are expected to be economic growth and high levels of deposits in a number of sectors.<sup>(17)</sup> The NFC debt-to-GDP ratio is expected to continue declining in 2023-2024 supported by nominal GDP growth.

**The stock of non-performing loans in the banking sector has declined significantly since its peak in 2014.** Starting in 2018, banks have made significant progress in reducing NPLs by offloading them to credit acquiring companies and the state-owned asset management company, KEDIPEs. Furthermore, the decline in the stock of NPLs held by banks over the last years was also the result of write-offs, cash repayments, debt-to-asset swaps and curings (migration of non-performing loans into performing categories). In 2021, the NPL ratio in the banking sector recorded a single digit level following many years of double digits levels. Thereafter, the downward trend continued in 2022, with the NPL ratio reaching 5.2% in the third quarter of 2022, which is well below the 2014 peak of 38.6%. Nevertheless, with the NPL transfers to the CACs in the last years, particularly in 2018, 2020 and 2021, CACs now hold the majority of bad loans in the economy. At aggregate level, as of December 2022, CACs held a portfolio of EUR 19.7 bn of non-performing loans, whereas banks had about EUR 2.3 bn of NPLs. The pandemic, and the subsequent suspensions of foreclosures significantly slowed the resolution of NPLs held by CACs by delaying loan restructurings and rendering the conditions for NPL sales more complicated. Nevertheless, provided a well functioning foreclosure framework in place, NPL work-outs should accelerate in the future as credit-acquiring companies are specialised in managing and maximising loan recoveries. Inherently, NPL resolution is expected to support further private debt reduction.

**The public debt-to-GDP ratio decreased significantly in 2022 and is projected to continue on a downward path in the coming years.** In 2022, the public debt ratio fell by 14.5 percentage points to 86.5% of GDP on account of strong nominal growth and a budget surplus. For 2023 and 2024, the debt-to-GDP ratio is forecast to continue declining, to 80.4% and 72.5% respectively. The reduction is mainly driven by the projected economic growth and fiscal surpluses. The general government balance is expected to remain in surplus of around 2% of GDP in 2023 and 2024. Against the background of increasing interest rates and yields, Cyprus is facing higher borrowing costs when tapping the markets in the future. In April 2023, the Cypriot government issued its first sustainable bond worth of EUR 1 billion, with a maturity of 10-years and a coupon of 4.1%. The government has a large cash buffer while the gross financing needs for 2023 and 2024 are expected to be low, on the back of significant primary surpluses. According to the Commission's assessment, Cyprus faces medium fiscal sustainability risks over the medium-term, and low risks in the short-term and in the long run.<sup>(18)</sup> Cyprus continues to enjoy a favourable market perception as its debt rating continued to be upgraded over the past year.

## Assessment of MIP relevant policies

**Timely and full implementation of the reforms and investment of the Cyprus Recovery and Resilience Plan (RRP) and its long-term growth strategy is expected to support external rebalancing.** The on-going implementation of measures such as enhancement of digital

<sup>(17)</sup> Such sectors include: i) water supply, sewerage, waste management; ii) professional, scientific and technical activities; iii) electricity, gas, steam and air conditioning supply iv) Information and communication v) Administrative and support service activities

<sup>(18)</sup> See the DSA in the Commission Country Report 2023 for the latest risk classification and Debt Sustainability Report 2022 (April 2023) for methodological details.

skills and public services are facilitating the digital transition and thus strengthening productivity growth. Furthermore, several measures are being implemented to promote export-oriented sectors such as professional services, tertiary education, health and fintech, light manufacturing and agriculture, which are expected to help diversify the economy and support export growth in the medium-term. Efforts are on-going for greening the economic model of Cyprus and alleviating its over-reliance on oil imports with the introduction of several grant schemes encouraging investments in photovoltaics. In parallel, measures to increase energy efficiency of buildings and make transport more sustainable are also under implementation. In addition, competitiveness gains are expected from the digital transition and an increase of labour productivity supported by the RRP. Furthermore, measures to strengthen the payment discipline as described below are key to limit borrowing by the household sector, while expanding savings options would moderate private consumption and an over-dependence on imports, essential for correcting the current account deficit (see Section 3).

**Foreclosure proceedings resumed in February 2023.** Following several extensions since the start of the pandemic, the suspension of foreclosures expired on 31 January 2023. The recent suspensions, including the ones from 2022, had a more limited scope, applying to primary residences up to EUR 350,000, agricultural land with market value below EUR 100,000 and business premises of companies with up to EUR 750,000 in annual revenue. Nevertheless, the frequency and length of suspensions of the framework during the last years have been weighing on NPL resolution. Implementing an effective foreclosure framework is essential for encouraging borrowers to participate in loan restructuring, maintain payment discipline and reduce NPLs and private debt. In addition, the foreclosure tool is important for the viability and implementation of the recently approved mortgage to rent scheme which aims to protect the primary homes of vulnerable households.

**As part of the RRP, a package of amending laws on credit-acquiring companies and credit servicers was adopted in July 2022, improving their working environment and supporting NPL reduction.** The package put loan servicers under the Central Bank's licensing and supervision, and gave credit acquiring companies digital access to the Land Registry. Furthermore, the legal amendments grant credit servicers unrestricted access to the data of debtors held in the Artemis Database and in the e-services of the Land Registry. Moreover, credit servicers are granted indirect access (through credit institutions/CACs) to the data of guarantors held in the Artemis Database and in the e-services of the Land Registry. The package is expected to strengthen the working environment for servicing of loans by providing CACs and credit servicers with the tools they need to better work out legacy non-performing loans. This is expected to result in a more effective and efficient management of non-performing loans, compared to the previous legal framework.

**Several reforms and measures initiated in 2022 can help address private over-indebtedness.** Last year the authorities started to work on developing an action plan for the development of a liability monitoring register under the RRP. The full implementation and establishment of the liability monitoring register is planned to be completed by the end of 2024. The objective of the measure is to improve the ability of the authorities to design and implement targeted policies to prevent and manage private indebtedness. Another measure linked to private indebtedness is on preparing a strategy for improving financial literacy. It aims at enhancing financial education within the general population, to improve financial decision making and ultimately help improve debt repayment discipline and prevent future unsustainable borrowing. The strategy is envisioned to be finalized by the end of 2023. <sup>(19)</sup>

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<sup>(19)</sup> In general, improving financial literacy could also reduce under-savings for retirement and shift household investments from lower to more productive investments (see Section 3).

**The government is also working on strengthening the insolvency framework and promoting the use of insolvency tools, but progress is slow.** Borrowers' participation in insolvency proceedings should facilitate debt-workouts, but so far, examinership and personal insolvency arrangements continue to be scarcely used. A broader use of insolvency tools would further help viable businesses in financial difficulties. In 2022, the government worked on recruiting and filling the organisational structure of the Department of Insolvency (DoI). The new Director of the DoI was appointed and took over as of mid-April 2023. The managerial and officers' positions of the DoI were expected to be filled in by the end of 2022 but the process has not been completed yet. The plans to set-up a customer service and a communication plan for insolvency are stalled until all officers within the DoI are appointed. The implementation of continuous professional development and the licensing for insolvency practitioners were expected to start before the end of 2022, but instead were implemented in Q1 2023. The training sessions for insolvency practitioners, in cooperation with the Academy for public servants were also expected to start still in 2022, but instead they have been postponed for 2023. Importantly, the transposition of the Directive (EU) 2019/1023 on preventive restructuring into Cypriot law was completed in December 2022.

**The digitalisation of insolvency procedures in Cyprus, including the digitalisation and modernisation of the DoI's operations, is expected to be implemented by 2025.** The digitalisation of the DoI will take place by setting up an automated system to handle insolvency cases electronically. The current website of the DoI (online since 3Q 2021) will increase its capabilities in 2023 (mostly, the development of new e-tools), plus adapting its layout to all government official websites. In February 2023 there was the launch of the project for creating a digital archive / repository of insolvency files enhancing the organisation of the Department of Insolvency's filing system and the digitalisation of files.

**Limited scope of fiscal measures as well as policy measures under the RRP support the reduction of the government debt-to-GDP ratio.** The measures to mitigate the economic and social impact of high energy prices on household energy bills are limited in scale and time, which should have only a very limited negative effect on outstanding gross debt in 2023. They are projected to be phased out in 2024. In addition, the implementation of RRP measures – aiming at improving tax collection, addressing aggressive tax planning practices and shoring up healthcare system sustainability – should facilitate public debt reduction and its long-term sustainability.

## Conclusion

**In Cyprus, vulnerabilities relating to private, public and external debt remain high, but continue to recede and are heavily influenced by SPEs.** The private debt-to-GDP ratio has been on a declining trend since 2015, except for a one-off increase in 2020 as a result of the COVID-19 pandemic. Both household and non-financial corporate debt-to-GDP ratios decreased in 2022, but remain high. Nevertheless, private debt is inflated by the debt of special purpose entities, which pose limited risks to the economy. Increased interest rates could put pressure on the debt servicing capacity of households and NFCs, as variable interest rate loans prevail, although there are no signs of this yet. The decline in the stock of NPLs held by banks over the last years has been significant due to NPL sales, write-offs, cash repayments, curing and debt-to-asset swaps. NPL resolution by the credit acquiring companies is expected to support further private debt reduction. Mitigating factors that reduce vulnerabilities include projected economic growth, limited credit expansion due to increasing interest rates and furthermore, the debt overhang is reduced when excluding the debt of the special purpose entities. Private debt-to-GDP ratio is expected to continue declining in 2023-2024 supported by nominal GDP growth. The public debt ratio fell below the pre-pandemic level and is projected to continue a downward path over 2023-2024. The current account deficit is expected to narrow somewhat, albeit still not conducive to further decrease the net

international investment position over the medium term, even though the latter entails limited risks. The current account deficit is mostly financed by foreign direct investments. Potential risks affecting the ongoing consolidation process and unwinding of vulnerabilities relate mainly to uncertainty in the current macroeconomic context and the evolution of the Russian invasion of Ukraine.

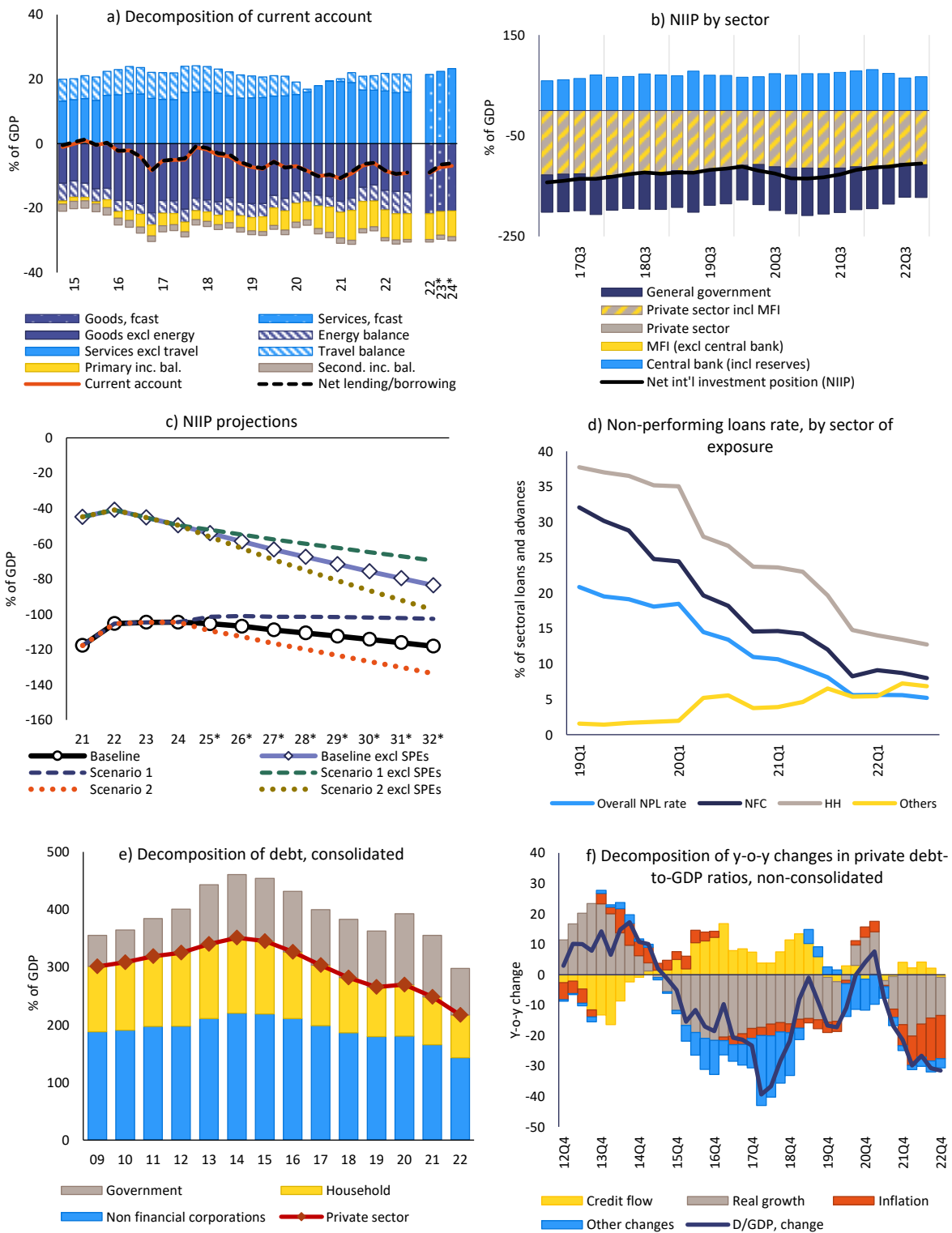
**Cyprus made progress on the policy side.** Cyprus took measures to facilitate the NPL management. Following several extensions since the start of the COVID-19 pandemic in March 2020, the suspension of foreclosures came to an end as of February 2023. The full implementation of an effective foreclosure framework is key to encourage borrowers to participate in loan restructuring, further reduce the stock of NPLs in the economy, help reduce private indebtedness and enhance payment discipline in Cyprus. As part of the RRP, a package of amending laws on credit-acquiring companies and credit servicers was adopted in July 2022, improving their working environment and supporting NPL reduction. Furthermore, the transposition of the Directive (EU) 2019/1023 on preventive restructuring into Cypriot law was completed in December 2022, significantly strengthening the insolvency framework. The authorities started to work on a financial literacy strategy and on a liability monitoring register that help address excessive private debt. Several measures included in the Recovery and Resilience Plan, which are being implemented, promote export-oriented sectors such as professional services, tertiary education, health and fintech, light manufacturing and agriculture. These measures are expected to help diversify the economy and support export growth in the medium-term. Efforts are on-going for greening the economic model of Cyprus and alleviating its over-reliance on oil imports with the introduction of several grant schemes encouraging investments in photovoltaics.

**Based on the findings in this in-depth review, the Communication “European Semester – 2023 Spring Package” sets out the Commission’s assessment as to the existence of imbalances or excessive imbalances in Cyprus, in line with Regulation 1176/2011. <sup>(20)</sup>**

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<sup>(20)</sup> European Commission (2023), European Semester Spring Package 2023, COM(2023) 600 final.

Graph 2.1: Selected graphs, Cyprus



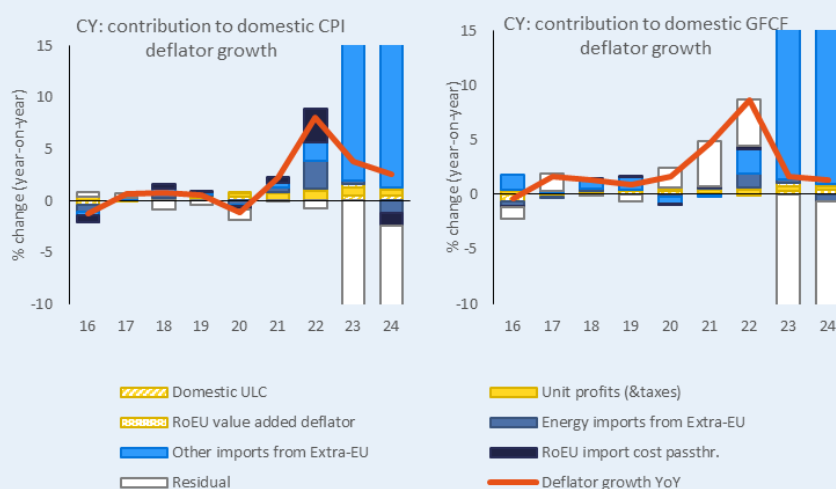
Source: European Commission services

### Box 1: Inflation exposures and cross-border pass-through

**This box sheds light on the sources of inflation in Cyprus and its spill-overs with EU partners.** The period since 2021 has been characterized by pandemic aftershocks and global supply chain disruptions compounding global inflationary pressures and a surge in commodity prices triggered by Russia's war of aggression against Ukraine. As a result, inflation in Cyprus surged to unprecedented levels. In response, wages and profits also picked up across the EU, which further added to price pressures in Cyprus. With input-output data, domestic inflation can be decomposed into the contributions from key cost factors. Taking into account some data limitations, the framework can be used to attribute consumer and investment price changes to i) extra-EU import price changes, which include both directly imported inflation and inflation passed through from EU partners import costs ii) domestic unit labour cost changes iii) domestic unit profit changes, including indirect taxation changes and iv) rest-of-EU value added price changes. <sup>(21)</sup>

**Data suggests that much of inflation in Cyprus in 2022 reflected surging import prices, which are projected to continue driving inflation over the forecast horizon.** In 2022, as shown in Graph 2.2, energy inflation contributed substantially to the increase in consumer and investment inflation. In addition, price changes in extra-EU non-energy imports and costs passed through EU partners further lifted consumer and investment prices in Cyprus. Domestic factors, wages and profits, did not contribute materially. Going forward, consumer and investment inflation is expected to be sustained mainly by non-energy imports from outside the EU this year and next. The contribution from domestic wages and profits is set to increase, but their overall impact is expected to remain subdued.

Graph 2.2: **Components of gross fixed capital formation deflator growth and consumer price inflation**



**Source:** European Commission services

<sup>(21)</sup> The graphs below are based on national accounts data and the Commission's Spring 2023 forecast, which are combined through a 'Ghosh' matrix based on Eurostat's Figaro input-output available for 2015-2020. HICP is taken as the measure of the price of private consumption, including non-residents. Energy import prices from extra-EU reflect realised median prices until 2022, and energy price assumptions underlying the Spring forecast thereafter. Other goods prices reflect median European prices per industry until 2022, and forecast non-energy goods and service trade prices for 2023-2024. Value added deflators are assumed to affect all industries within a country to the same degree. Changes in import prices and value added deflators are assumed to affect demand prices with a delay of 5 and 6 months for consumption and investment inflation, respectively. For a similar analysis using an input-output-based methodology, see "Inflation Differentials in Europe and Implications for Competitiveness: Thematic Note to Support In-Depth Reviews" European Commission 2023, Institutional paper 198.

Table 2.1: Selected economic and financial indicators (Part 1), Cyprus

	all variables y-o-y % change, unless otherwise stated								forecast	
	2003-07	2008-12	2013-18	2019	2020	2021	2022	2023	2024	
Real GDP	45	0.1	2.1	5.5	-4.4	6.6	5.6	2.3	2.7	
Potential growth (1)	3.7	2.1	0.8	3.6	3.3	3.0	3.5	3.2	3.0	
<b>Contribution to GDP growth:</b>										
Domestic demand	6.0	-1.1	1.8	5.5	-1.6	3.6	5.9	1.7	1.9	
Inventories	-0.2	0.4	0.0	0.5	-2.0	-0.6	3.7	0.0	0.0	
Net exports	-1.4	0.6	0.2	-0.5	-0.7	3.6	-3.9	0.7	0.8	
<b>Contribution to potential GDP growth (1)</b>										
Total Labour (hours)	1.3	0.9	0.2	1.4	1.0	0.9	1.4	1.4	1.3	
Capital accumulation	1.9	1.4	0.5	1.1	1.2	1.1	1.2	1.1	1.1	
Total factor productivity	0.5	-0.3	0.1	1.1	1.1	1.1	0.9	0.8	0.7	
Output gap (2)	3.1	0.3	-3.7	5.1	-2.7	0.7	2.7	1.8	1.5	
Unemployment rate	4.6	7.0	13.3	7.1	7.6	7.5	6.8	6.9	6.4	
Harmonised index of consumer prices (HICP)	2.5	2.7	-0.2	0.5	-1.1	2.3	8.1	3.8	2.5	
GDP deflator	3.5	2.0	-0.1	1.3	-1.2	2.9	6.4	5.0	2.8	
<b>External position</b>										
Current account balance (% of GDP), balance of payments	-6.2	-7.7	-3.2	-5.6	-10.1	-6.8	-9.1	-7.3	-6.9	
Trade balance (% of GDP), balance of payments	-2.2	-6.4	1.3	1.0	-1.4	2.9	-0.4	.	.	
Primary income balance (% of GDP)	-4.7	-0.3	-2.5	-5.4	-7.0	-8.4	-7.9	.	.	
Secondary income balance (% of GDP)	0.7	-0.9	-2.0	-1.2	-1.6	-1.3	-0.8	.	.	
Current account explained by fundamentals (CA norm, % of GDP) (3)	-1.6	-2.5	-1.6	-1.6	-1.6	-1.8	-1.8	-1.7	-1.7	
Required current account to stabilise NIIP above -35% of GDP over 20Y (% of GDP) (4)	0.3	2.8	-1.0	-1.1	-1.9	-1.5	-0.9	-0.6	-0.3	
Capital account balance (% of GDP)	0.1	0.3	0.4	-0.1	-0.1	0.4	0.2	.	.	
Net international investment position (% of GDP)	-68.2	-123.4	-145.5	-115.4	-134.5	-117.8	-105.3	.	.	
NENDI - NIIP excluding non-defaultable instruments (% of GDP) (5)	.	-69.0	-203.6	-155.3	-111.4	-76.4	-21.7	.	.	
Net FDI flows (% of GDP)	.	9.0	19.5	-3.5	-34.0	-18.2	-30.2	.	.	
<b>Competitiveness</b>										
Unit labour costs (ULC, whole economy)	3.6	2.8	-2.4	2.7	2.8	-1.4	1.0	5.6	3.2	
Nominal compensation per employee	4.5	2.8	-1.4	4.4	-0.5	3.8	3.8	6.3	4.0	
Labour productivity (real, hours worked)	1.6	0.2	0.9	0.9	2.1	1.7	1.5	-0.4	-0.4	
Real effective exchange rate (ULC)	1.6	0.5	-3.1	0.6	-1.8	-1.5	-2.1	0.4	-0.2	
Real effective exchange rate (HICP)	1.3	0.2	-0.4	-2.3	-0.3	0.0	-1.8	.	.	
Export performance vs. advanced countries (% change over 5 years)	-13.8	-7.1	3.5	23.2	39.7	30.6	.	.	.	
<b>Private sector debt</b>										
Private sector debt, consolidated (% of GDP)	247.1	308.0	324.8	265.5	269.7	248.4	217.2	.	.	
Household debt, consolidated (% of GDP)	84.7	116.9	117.2	86.1	89.4	83.0	74.8	.	.	
Household debt, fundamental benchmark (% of GDP) (6)	69.0	78.6	97.5	88.0	97.0	93.1	91.1	.	.	
Household debt, prudential threshold (% of GDP) (6)	41.7	41.6	40.7	46.7	44.7	43.9	40.7	.	.	
Non-financial corporate debt, consolidated (% of GDP)	162.5	191.1	207.6	179.4	180.4	165.4	142.4	.	.	
Corporate debt, fundamental benchmark (% of GDP) (6)	159.8	141.3	157.6	134.4	145.7	137.2	132.0	.	.	
Corporate debt, prudential threshold (% of GDP) (6)	65.3	65.3	64.3	69.2	68.9	68.2	64.3	.	.	
Private credit flow, consolidated (% of GDP)	22.6	18.7	3.7	-0.5	-1.2	4.3	-0.8e	.	.	
Corporations, net lending (+) or net borrowing (-) (% of GDP)	-5.9	2.3	5.2	-2.2	-3.9	-3.2	-6.0	-5.4	-5.8	
Households, net lending (+) or net borrowing (-) (% of GDP)	-7.5	-5.5	-5.1	-4.7	-0.4	-1.5	-4.8	-3.3	-2.6	
Net savings rate of households (% of net disposable income)	0.7	-0.5	-6.7	-0.1	6.8	5.0	.	.	.	

(e) estimate based on ECB quarterly data

(1) Potential output is the highest level of production that an economy can reach without generating inflationary pressures. The methodology to compute the potential output is based on K. Havik, K. Mc Morrow, F. Orlandi, C. Planas, R. Raciborski, W. Roeger, A. Rossi, A. Thum-Thysen, V. Vandermeulen, The Production Function Methodology for Calculating Potential Growth Rates & Output Gaps, COM, European Economy, Economic Papers 535, November 2014.

(2) Deviation of actual output from potential output as % of potential GDP.

(3) Current accounts in line with fundamentals ("current account norms") are derived from reduced-form regressions capturing the main determinants of the saving-investment balance, including fundamental determinants, policy factors and global financial conditions. See L. Coutinho et al. (2018), "Methodologies for the assessment of current account benchmarks", European Economy, Discussion Paper 86/2018, for details.

(4) This benchmark is defined as the average current account required to halve the gap between the NIIP and the indicative MIP benchmark of -35% of GDP over the next ten years, or to stabilise the NIIP at the current level if it is already above the indicative MIP benchmark. Calculations make use of Commission's T+10 projections.

(5) NENDI is a subset of the NIIP that abstracts from its pure equity-related components, i.e. foreign direct investment (FDI) equity and equity shares, and from intracompany cross-border FDI debt, and represents the NIIP excluding instruments that cannot be subject to default.

(6) Fundamentals-based benchmarks are derived from regressions capturing the main determinants of credit growth and taking into account a given initial stock of debt. Prudential thresholds represent the debt threshold beyond which the probability of a banking crisis is relatively high, minimising the probability of missed crisis and that of false alerts.

Methodology to compute the fundamentals-based and the prudential benchmarks based on Bricongne, J. C., Coutinho, L., Turrini, A., Zeugner, S. (2019), "Is Private Debt Excessive?", Open Economies Review, 1- 42.

**Source:** Eurostat and ECB as of 2023-04-28, where available; European Commission for forecast figures (Spring forecast 2023)

Table 2.2: Selected economic and financial indicators (Part 2), Cyprus

all variables y-o-y % change, unless otherwise stated	2003-07	2008-12	2013-18	2019	2020	2021	2022	forecast	
								2023	2024
<b>Housing market</b>									
House price index, nominal	8.2	-2.4	-0.5	3.7	-0.2	-3.4	3.2	.	.
House price index, deflated	5.2	-4.9	0.0	3.4	0.7	-4.3	-4.4	.	.
Overvaluation gap (%) (7)	4.2	6.1	-1.9	-5.5	-6.2	-12.5	-15.7	.	.
Price-to-income overvaluation gap (%) (8)	7.7	2.5	-1.8	-11.1	-9.9	-15.4	-18.4	.	.
Residential investment (% of GDP)	10.3	8.2	4.6	7.6	8.1	7.6	7.6	.	.
<b>Government debt</b>									
General government balance (% of GDP)	-1.9	-4.1	-2.8	1.3	-5.8	-2.0	2.1	1.8	2.1
General government gross debt (% of GDP)	61.1	60.4	102.1	90.8	113.8	101.2	86.5	80.4	72.5
<b>Banking sector</b>									
Return on equity (%)	.	-48.2	-27.7	2.9	-3.2	1.4	.	.	.
Common Equity Tier 1 ratio	.	7.7	14.3	18.3	18.4	18.9	.	.	.
Gross non-performing debt (% of total debt instruments and total loans and advances) (9)	.	8.9	31.3	15.4	9.1	4.7	.	.	.
Gross non-performing loans (% of gross loans) (9)	.	.	32.2	18.1	11.0	5.6	5.2	.	.
Cost of borrowing for corporations (%)	.	6.7	4.6	3.3	3.2	2.9	3.9	.	.
Cost of borrowing for households for house purchase (%)	.	5.3	3.3	2.1	2.2	2.2	3.4	.	.

(7) Unweighted average of price-to-income, price-to-rent and model valuation gaps. The model valuation gap is estimated in a cointegration framework using a system of five fundamental variables; total population, real housing stock, real disposable income per capita, real long-term interest rate and price deflator of final consumption expenditure, based on Philipponnet, N., Turrini, A. (2017), "Assessing House Price Developments in the EU," European Economy - Discussion Papers 2015 - 048, Directorate General Economic and Financial Affairs (DG ECFIN), European Commission. Price-to-income and price-to-rent gaps are measured as the deviation to the long term average (from 1995 to the latest available year).

(8) Price-to-income overvaluation gap measured as the deviation to the long term average (from 1995 to the latest available year).

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

**Source:** Eurostat and ECB as of 2023-04-28, where available; European Commission for forecast figures (Spring forecast 2023)



### 3. THEMATIC CHAPTER: SAVINGS-INVESTMENT GAP AND HOUSEHOLD SAVINGS

#### Savings-investment gap

**Savings falling short of domestic investment, particularly in the household sector, is reflected in current account deficits.** Cyprus has had a positive government savings and investment gap<sup>(22)</sup> since 2014. By contrast, corporate savings, which were previously higher than corporate investment, fell sharply following the financial crisis of 2013, leading to a negative savings-investment gap of around 3-4 percentage points (see graph 3.1 c, d). Moreover, this gap is not compensated for by the household sector, as is usually the case, given that the household sector in Cyprus historically invests considerably more than it saves. That reflects mainly traditionally high investments into housing, which are financed mostly by borrowing and a reduction of financial assets. Cyprus is one of the few EU countries where the household savings-investment gap has been negative throughout the last decade, driven primarily by the historically very low household savings rate. The principal cause for this is a relatively high propensity to consume, which, together with high real estate investments, can be linked in part to comparatively lower levels of public individualised expenditure (health, education, pension) and to inefficiencies in the legal framework (in particular past repeated suspensions of the foreclosure framework) weakening the natural household budget constraint, which may lead to higher consumption and investment.

#### Household savings rate and disposable income

**The gross household savings<sup>(23)</sup> rate has been historically well below the EU average, since at least the beginning of the millennium.** The savings rate has fluctuated widely over the last two decades and was even negative during the crisis in 2013-2015. On the back of the gradual recovery from the financial crisis, the savings rate has increased slowly, driven by the growth of disposable income outpacing the growth of consumption (see graph 3.1d). While real wages fell markedly during the economic crisis of 2010-2014, being the major force behind the negative household savings rate in that period, they subsequently hardly recovered ground. The decomposition of the changes in savings therefore reveals that the pre-COVID-19 rise in the savings rate, albeit slow, largely resulted from higher employment. In 2020, the households savings rate jumped to 12.5% due to COVID-19 related constrained spending opportunities (from 5.7% in 2019) before slightly decreasing to 10.9% in 2021 (compared to an EU average of 17%),

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<sup>(22)</sup> The savings-investment gap for all three sectors is defined as gross savings less gross capital formation as a share of GDP. It therefore equals the net lending/borrowing excluding net capital transfers of each respective sector.

<sup>(23)</sup> The gross household savings rate is calculated as disposable income less final consumption expenditure, as a share of disposable income, with the latter being adjusted for the change in the net equity of households in pension funds reserves. The latter, however, are negligible in size and largely cancel each other out over the years, which is why they do not receive any special attention here.

reflecting the reopening of the economy. Following a decline to 4.8% in 2022, the savings rate is expected to slowly increase over the forecast horizon. <sup>(24)</sup>

**Gross disposable income is comparatively high as a share of GDP and may be even underestimated because of underreporting.** The level of disposable income as a share of GDP has been above the EU average in the past years (see Table 3.1), and is likely even higher in reality due to an estimated large informal economy in Cyprus. A study by the European Parliament estimated the size of the shadow economy at 23.9% of GDP in 2022, well above the EU average of 17.3%. <sup>(25)</sup> Despite challenges in clearly identifying individuals involved in undeclared work and in particular their number, the European Labour Authority listed three major sources of undeclared work in Cyprus. <sup>(26)</sup> Apart from illegal immigrants working legal jobs, some income of the self-employed may be not reported or underreported. In addition, some legal jobs may not be declared as they are illegal per contract (e.g. public employees working illegally on private account). Cyprus' economy is largely driven by sectors in which undeclared work is common, for instance construction, accommodation and food services, agriculture, retail trade as well as wide range of vocational and professional services. The impact of the shadow economy on the household savings rate depends heavily on how much of unreported income is saved and on the magnitude of unreported or "hidden" consumption. A lack of conclusive information therefore complicates the interpretation of the household savings rate.

**The high stock of debt weighs on the saving capacity of households.** The gross debt-to-income ratio of households steadily decreased from its peak of 197% (2013) to 125% (2021) but still lies well above the euro area average of 96%. <sup>(27)</sup> The high stock of debt, consisting mainly of mortgage loans, constitutes a high financial burden for households. Interest payments on household debt alone reduced the disposable income of Cypriot households by 1.6-2.7% annually in the years between the financial and COVID-19 crises, with the euro area average ratio ranging from 0.7-1%. <sup>(28)</sup> Gross disposable income would have been lowered by a further 3% on average in the event that all household debt had performed between the years 2014-2017. <sup>(29)</sup> Debt and, in particular, mortgage payments weigh on the financial capacity of households with debt (equalling 57% of households in 2017), which were reportedly spending on average almost a quarter of their gross household income on it, compared to 13% in the euro area. <sup>(30)</sup> Households in Cyprus are under risk of an increasing interest burden, as their mortgage loans have almost exclusively variable interest rates facing recent increases.

<sup>(24)</sup> European Commission (2023). European Economic Forecast. Spring 2023.

<sup>(25)</sup> European Parliament (2022). Taxation of the Informal Economy in the EU. [https://www.europarl.europa.eu/RegData/etudes/STUD/2022/734007/IPOL\\_STU\(2022\)734007\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2022/734007/IPOL_STU(2022)734007_EN.pdf). Other studies have also estimated the longstanding existence of a sizeable informal economy, one of the largest in the EU. These include, for example, the IMF's estimate of 28-31% for the period 2001-2016 using the MIMIC model (Kelmanson et al. (2019). Explaining the shadow economy in Europe: Size, Causes and Policy Options. IMF Working Paper), or the University of Cyprus' estimate in the ranges of 11-18% (currency demand method) or 26-34% (energy consumption method) for the period 1995-2018 (Christoforos Andreou & Elena Andreou & Stephanie Michael & George Syrichas, 2021. "The Shadow Economy in Cyprus: Evidence from the Electricity Consumption and Currency Demand Methods," Cyprus Economic Policy Review, University of Cyprus, Economics Research Centre, vol. 15(1), pages 46-74, June.).

<sup>(26)</sup> European Labour Authority (ELA). Factsheet on Undeclared Work – CYPRUS. 2017.

<https://www.ela.europa.eu/sites/default/files/2021-09/CY%20UDW%20Factsheet%202017%20-%20Cyprus.pdf>

<sup>(27)</sup> Eurostat. The ECB Household Finance and Consumption Survey 2017 (3<sup>rd</sup> wave) indicates much higher debt-to-income ratios for Cyprus.

<sup>(28)</sup> Own calculation based on Eurostat data.

<sup>(29)</sup> Own calculation based on Eurostat and ECB data. An implicit interest rate was calculated, used to arrive at an estimate of interest payments on non-performing debt not made. No estimate was made for the period from 2018 onwards, as the data on the exact household NPL stock in a given year is limited due to the transfer of large parts of the NPLs from the banks to CACs.

<sup>(30)</sup> ECB HFCS (3<sup>rd</sup> Wave). 2017.

## Consumption

**The high propensity of Cypriot households to consume contributes significantly to their low savings rate.** Real consumption expenditure per capita, adjusted for purchasing power, is generally well above EU average, confirming the important role of consumption in explaining low household savings. While real expenditure per capita was 29% above EU average in 2018, it decreased to 10% above the EU average in 2019 (and 3.8% above EA level). However, even in 2013, at the peak of the crisis in Cyprus, Cypriots spent 3% more than the EU average.<sup>(31)</sup> Interestingly, in Cyprus, the above-average consumption expenditure of the higher income households seems to be in part behind the low savings rate. The above-average overall propensity to consume in Cyprus in the two years with available data, 2010 and 2015, seems to be mainly attributable to the upper two income quintiles.<sup>(32)</sup> The lowest income quintile on the other hand exhibits propensities to consume well below the EU average. For instance, in 2015 households in this quintile consumed 111% of their disposable income, while households in EU average spent 140% of their disposable income on consumption.

**Cypriot households typically spend significantly less on housing compared to the euro area average, but significantly more on hotels and restaurants, and transport, with these three categories constituting their largest consumption expenditure items.** In contrast to the euro area average, as well as peer countries such as Greece, Ireland or Spain, a noticeably smaller share of consumption expenditure (15%) was directed towards housing (rents, maintenance and repair, dwelling-related services) in Cyprus (euro area: 24%)<sup>(33)</sup>, indicating more affordable housing in Cyprus. Cypriots spent per capita 17.8% more on transport than the euro area.<sup>(34)</sup> As one of the EU countries with the highest number of passenger cars per capita registered (0.645) in 2020<sup>(35)</sup>, ownership of a private car is the norm in Cyprus and linked to insufficient provision of functioning public transport infrastructure. Compared to the EU average, Cypriots spent per capita twice as much on restaurants and hotels, which is mainly driven by the use of accommodation services, i.e. tourism.

**Cypriot households have had higher expenditure on health and education compared to the EU average, possibly linked to lower public spending on those items.** While final consumption expenditure is elevated, actual individual consumption (which takes all goods and services purchased by households into account, irrelevant if paid by the household, NPISH or the government) is below the EU average (97% in 2019).<sup>(36)</sup> Responsible for this is the low individual consumption expenditure of the government. It has hovered at 50% of the EU average since Cyprus' EU accession and remained the lowest in the EU in 2021, despite a small increase to 58% most recently. Important examples for this individualised government expenditure are health and education. Cypriot households have spent a more than three times larger share of their total consumption expenditure on education than the euro area average (3.1% vs 0.9% of respective total consumption expenditure) which is reflected in one of the highest rates of tertiary education

<sup>(31)</sup> Eurostat.

<sup>(32)</sup> Eurostat – Income, consumption and wealth statistics. This data is computed by Eurostat through the statistical matching of three data sources: the EU Statistics on Income and Living Conditions (EU-SILC), the Household Budget Survey (HBS) and the Household Finance and Consumption Survey (HFCS). Propensity to consume calculated as the household consumption divided by disposable income.

<sup>(33)</sup> Eurostat. COICOP 04 which includes actual and imputed rents for housing, maintenance and repair of the dwelling, water supply and miscellaneous services relating to the dwelling.

<sup>(34)</sup> Adjusted for the overall higher consumption level in Cyprus.

<sup>(35)</sup> Eurostat.

<sup>(36)</sup> Eurostat.

attainment in the euro area. This share has slowly increased since 2008 and reflects mostly expenses on secondary (e.g., out-of-school secondary education) and tertiary education (e.g., private universities or tuitions for universities abroad). Health expenditure shares used to be well above euro area shares for a long time before the reform of the National Health System in 2018. It increased the coverage to all legal residents and reduced previously common out-of-pocket payments significantly, resulting in a continuous drop of health expenditure as a share of total consumption expenditure from 5.5% in 2019 to only 2% in 2021. While this contributes to the better understanding of high household consumption expenditure, it is unlikely to drive the consumption behaviour and can explain only partially the overall above EU consumption levels.

## Investment rate

**While the Cypriot economy suffers from low total investment, household investment, primarily in real estate, is high.** In the wake of the financial crisis a decade ago, the total investment rate in Cyprus fell well below the EU level, reaching a low of 12.8% of GDP in 2015 (20.6% in the EU), recovering afterwards but not yet reaching its pre-crisis level (2021: 19.5% against 22.4% in the EU). At the same time, the household investment rate in Cyprus has generally been, with the exception of the period 2013-2015, significantly above the EU average<sup>(37)</sup>, while government investment and in particular corporate investment have typically been (well) below. For example, household investment has accounted for more than 35% of total investment in almost all years since 2010, and even around 45% since 2019, while this share ranges between 23-28% in the EU.<sup>(38)</sup> The strong household investment is partially reflected in comparatively high ownership of real estate.<sup>(39)</sup> In 2017, almost 94% of Cypriot households reported to own real assets and 75% had real estate property (the household's main residence plus other real estate property), the latter well above the euro area average of 65%.<sup>(40)</sup> Home ownership, however, decreased from 74.1% in 2007 to 69.8% in 2021 and is thus at same levels as the EU average (69.9%), while still above the euro area average (65.8%).<sup>(41)</sup> The main driver of this decline is households with dependent children, who have increasingly turned to renting in recent years due to the rising cost of living.

**Cypriot households finance their real estate investment only to a small extent by current savings, relying instead on borrowing and reduction of financial assets.** While non-financial investments (mostly purchase and renovation of real estate) stood at 14% of GDP in 2008, this ratio fell to 5% in 2015 and has since increased to 9% in 2019. Until the financial crisis in 2013, households financed their financial and non-financial investments mainly by taking on new liabilities. Savings which typically finance investments in the euro area almost entirely play only a secondary role in Cyprus.<sup>(42)</sup> Since 2013, net borrowing by the household sector has continued, but this time financed through a winding down of their financial investments (see graph 3.1b). Cypriot households reduced their financial asset-to-GDP ratio by 19.8% (or 54 pps) from their peak in 2013 to 2019, before savings and financial investments temporarily rose again due to COVID-19-related restrictions. The change in the source of financing can also be seen in the steep

<sup>(37)</sup> The path of the Cypriot household investment rate resembles a U-shape from 2007-2020 with its low point in 2015. A contributor to its rise after the financial crisis was the citizenship-by-investment scheme (abolished in 2020) and renewed foreign demand for holiday homes in Cyprus.

<sup>(38)</sup> Eurostat.

<sup>(39)</sup> According to the ECB Household Finance and Consumption Survey, Cypriot households had a reported median wealth of €196,000 in 2017, ranking fourth in the euro area (euro area €99,000).

<sup>(40)</sup> ECB Household Finance and Consumption Survey (HFCS) 2017.

<sup>(41)</sup> Eurostat. EU-SILC survey.

<sup>(42)</sup> ECB HH sector report 2021Q4

decline in net mortgage lending growth from 2010-2014, which has only slowly increased again since then and only temporarily rose more strongly in 2021 due to the government interest subsidy scheme.<sup>(43)</sup> Lending activity for house purchase is expected to decline due to rising construction costs (+30% from 2020 to 2022) and interest rates, and general economic uncertainty. However, continued net borrowing by the household sector over the past two decades to invest in low-productivity fixed assets, whether by new loans or reductions in their financial resources, raises the question about the sustainability of this practice.

**Investment in and ownership of real estate may be linked to their use as a complement to income and a safeguard for retirement, and the lack of attractive alternative investment options.** Almost half of households in Cyprus (45%) reported owning real estate property that is not their main residence, compared to 25% in the euro area.<sup>(44)</sup> In particular, apartments with their higher rental yields than houses, in the context of falling interest rates especially in the second half of the last decade, have become more attractive for buy-to-let schemes. Investments in such schemes may be considered more attractive than investments in deposits and bonds, and in the absence of a mature stock market in Cyprus. In addition, local demand for holiday homes has contributed to residential investment in the past, in particular prior to the financial crisis. With regards to the household main residence, it could be seen as a safeguard against low pensions in old age. Equivalent to 8.8% of GDP in 2019, Cyprus spent much less on pensions compared to the EU and euro area averages of 12.7% and 13.1% respectively. In the same year, the purchasing power of the average Cypriot pension stood at only 61% of the EU average level.<sup>(45)</sup> While a significant portion of household financial investments in the euro area relate to life insurance and pensions, the overall figure was often only slightly positive or even negative for Cyprus. At the end of 2021, total financial wealth per capita in this position thus ranked at the bottom end of the EU.<sup>(46)</sup> In addition to low pensions of the Cypriot PAYG-financed system, the Voluntary Provident Funds (Pillar 2) also show serious weaknesses, ultimately translating into above-average at-risk-of-poverty figures for pensioners (20.2% vs 15.6% in the EU in 2021<sup>(47)</sup>). For both the primary and secondary real estate, perceived general resilience of real assets during economic distress may contribute to the high, historically steady household non-financial investment.

## The households' budget constraint

**Inefficiencies in the legal framework, in particular the repeated suspensions of the foreclosure framework, have hindered the effective management of non-performing loans.** Legacy NPLs, dating back largely to overborrowing for consumption and house purchase from the period prior to the financial crisis, are primarily in the hands of CACs and can only be reduced slowly. Repeated suspensions of the foreclosure framework, weak contract enforcement and backlogs of pending cases related to financial disputes have created legal uncertainty hindering a faster NPL resolution. While some improvements are ongoing supported also by the RRP, addressing remaining inefficiencies in the judicial system, such as expediting court proceedings in financial matters, improving the legal framework for movable property seizures and providing certainty on the foreclosure framework, would help ease the household debt burden in

<sup>(43)</sup> <https://www.pwc.com/cy/en/industries/assets/real-estate-market-year-review-2022.pdf>

<sup>(44)</sup> ECB Household Finance and Consumption Survey (HFCS) 2017.

<sup>(45)</sup> Eurostat

<sup>(46)</sup> ECB HH sector report, p. 12.

<sup>(47)</sup> Eurostat.

the medium term, create financial predictability for households and help assert the budget constraint of the households thus avoiding over-consumption.

**Improving financial literacy and creating attractive savings options could help raise both the savings rate and the low investment rate in financial assets.** In the past two decades, around 60% of the financial assets of Cypriot households consisted of currency and deposits, a figure that, together with Greece, has consistently been at the top of the EU comparison. At the same time, they held only about 20% in equity and investment fund shares, consistently among the lowest in the EU, while the share of insurance and pensions was broadly comparable (in the range 10-16%).<sup>(48)</sup> Lack of trust in financial institutions due to the deep financial crisis in Cyprus and the haircut in 2013 may have contributed to the net disinvestment into equity and shares (with the sole exception of 2019) since then. Savings seem to be invested instead mostly into real estate and kept in currency and deposits, for which the deposit guarantee scheme of the EU may act as a risk mitigation system<sup>(49)</sup>, in particular in the context of relatively lower wealth per capita. In Cyprus, the average financial knowledge score of individuals is below the benchmark score, set by the OECD, for an individual to be considered as financially knowledgeable.<sup>(50)</sup> Moreover, according to the scientific literature, the proportion of financially knowledgeable individuals in Cyprus ranges between 35% and 37%, one of the lowest ratios in the EU.<sup>(51)</sup> This is a reflection of individuals in Cyprus having an insufficient level of understanding of a number of financial matters, such as the consequences of over indebtedness, the importance of saving for a rainy day and saving for retirement. Improving financial literacy could address under-saving for retirement and diversify the households' investments thus reducing risks. Moreover, it would have a positive impact on reducing the high level of household debt and help prevent excessive and unsustainable future borrowing.

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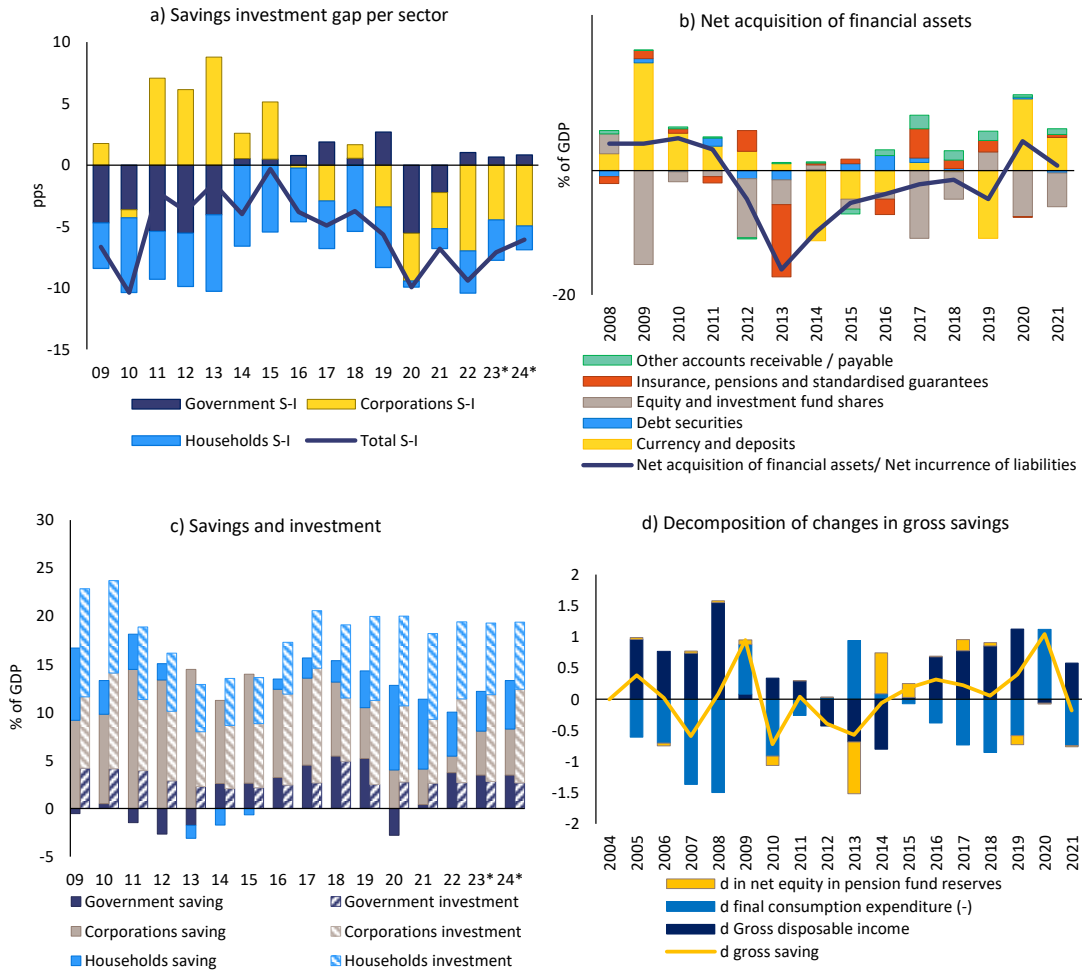
<sup>(48)</sup> Eurostat. Financial balance sheet data.

<sup>(49)</sup> European Fund and Asset Management Association (2020). Household Participation in Capital Markets. <https://www.efama.org/newsroom/news/household-participation-capital-markets>.

<sup>(50)</sup> According to the OECD /INFE methodology a person is classified as financially knowledgeable if he/she answers correctly at least of 5 out of 7 financial knowledge questions (score 5 out of 7 or higher).

<sup>(51)</sup> S&P Global FinLit Survey (2014). [3313-Finlit\\_Report\\_FINAL-5.11.16.pdf \(gflec.org\)](#); Andreou, Panayiotis C., and Sofia Anyfantaki (2021). Financial literacy and its influence on internet banking behaviour, *European Management Journal* 39, 658–674; Andreou, Panayiotis C., Sofia Anyfantaki, and Adele Atkinson (2023). Financial Literacy for Financial Resilience: Evidence From Cyprus During the Pandemic Period, Cyprus University of Technology, Central Bank of Cyprus; Results from the Central Bank of Cyprus Survey for Financial Literacy in Cyprus, Central Bank of Cyprus Working Paper (to be published)

Graph 3.1: Selected graphs, Cyprus



Source: Ameco, Eurostat, European Commission services

Table 3.1: Disposable income and consumption indicators, CY and EU

	Disposable income	Final consumption expenditure HH & NPISH	Individual consumption expenditure of the general government	Actual individual consumption
<b>CY</b>				
2017	66%	8%	65%	73%
2018	65%	7%	65%	72%
2019	66%	8%	63%	71%
2020	70%	11%	62%	73%
2021	66%	11%	59%	70%
<b>EU</b>				
2017	60%	13%	54%	67%
2018	60%	13%	54%	67%
2019	60%	13%	53%	66%
2020	63%	14%	52%	66%
2021	61%	14%	51%	65%

**Source:** Eurostat and European Commission calculations

Table 3.2: Selected household debt indicators, Cyprus

		2003-07	2008-12	2013-20	2021	2022	2023f	22Q1	22Q2	22Q3	22Q4
	<i>Source</i>										
<b>Stocks</b>											
Debt, consolidated (% of GDP)	(a,d)	85	117	110	83	75	71	81	79	76	75
Debt, consolidated (% of potential GDP)	(a,b,d)										
Prudential threshold (% of GDP)	(c)	42	42	42	44	41	30				
Fundamental benchmark (% of GDP)	(c)	69	79	96	93	91	90				
Debt (% of gross disposable income)	(a,b,d)	129	169	164	126	117	110	124	122	119	117
Interest paid (% of gross disposable income) <sup>(2)</sup>	(a,b)	1.4	2.0	1.9	1.5						
Debt (% of gross financial assets)	(a,d)	36.3	45.8	44.6	35.4			34.4	34.5	34.0	33.5
Share of variable rate loans for house purchase (%)	(d)		75.1	93.2	97.8	94.7					
Domestic loans in forex (% of adjusted dom. loans)	(d)	2.6	4.0	2.9	1.8	0.8					
Adjusted domestic loans (% of gross disposable income)	(d)	129.8	164.4	145.2	78.3	73.7					
Loans for house purchase (% of gross disposable income)	(d)	50.3	84.0	80.1	53.0	48.7					
<b>Flows</b>											
Credit flows (% of gross disposable income) <sup>(2)</sup>	(a)	15.6	11.0	-1.2	4.0	0.9	1.0	-0.6	2.7	0.7	3.1
Loans for house purchase (% gross disposable income)	(a,b)	12.6	6.9	-1.5	1.4	1.2					
Benchmark for flows (% of GDP)	(c)	5.0	5.2	4.2	5.2	5.1	4.0				
Savings rate (% gross disposable income)	(b)	6.1	5.4	2.6	10.9	4.8	6.7				
Investment rate (% gross disposable income)	(b)	17.8	14.0	11.1	13.5	13.5	12.9				
<i>p.m. Bank HH NPLs (% of HH loans)<sup>(1)</sup></i>	(d)			44.4	14.8						

(f) European Commission forecast. (1) Gross non-performing bank loans and advances to Households and non profit institutions serving households (% of total gross bank loans and advances to Households and non profit institutions serving households). (2) Quarterly data is annualized.

**Sources:** (a) Eurostat, (b) Ameco, (c) European Commission calculations, (d) ECB.