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CORRIGENDUM

This document corrects document SWD(2022) 633 final of 23.05.2022.
Correction of figures in table 2.1.

The text shall read as follows:

COMMISSION STAFF WORKING DOCUMENT

In-depth review for Croatia

in accordance with Article 5 of Regulation (EU) No. 2011/1176 on the prevention and correction of macroeconomic imbalances

Accompanying the document

COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN CENTRAL BANK, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE, THE COMMITTEE OF THE REGIONS AND THE EUROPEAN INVESTMENT BANK

2022 European Semester – Spring Package

{COM(2022) 600 final} - {SWD(2022) 628 final} - {SWD(2022) 629 final} - {SWD(2022) 630 final} - {SWD(2022) 631 final} - {SWD(2022) 632 final} - {SWD(2022) 634 final} - {SWD(2022) 635 final} - {SWD(2022) 636 final} - {SWD(2022) 637 final} - {SWD(2022) 638 final} - {SWD(2022) 639 final}

On the basis of this in-depth review for Croatia undertaken under Regulation (EU) No 1176/2011 on the prevention and correction of macroeconomic imbalances, the Commission has considered in its Communication "European Semester – 2022 Spring Package" (COM(2022)600 final) that:

Croatia, identified with imbalances in 2021, is found to experience no imbalances. Important progress has been made in reducing private indebtedness and net external liabilities. General government debt remains high but has resumed the downward trajectory that delivered marked improvements before the pandemic. The banking sector remains stable and liquid, with a decreasing non-performing loans ratio. Potential output growth has increased, building on strong policy action, and a further strengthening based on a strong implementation of the RRP can address remaining vulnerabilities. On current forecasts, both private and government indebtedness are expected to continue falling with the external position strengthening further benefiting also from the RRF funds.

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1. INTRODUCTION

In 2021, over the previous annual cycle of surveillance under the Macroeconomic Imbalances Procedure (MIP), the Commission identified "macroeconomic imbalances" in Croatia. ([1]) These imbalances are related to high external, private and government debt in a context of low potential growth. The 2022 Alert Mechanism Report concluded that a new in-depth review (IDR) should be undertaken for Croatia with a view to assess the persistence or unwinding of imbalances. ([2])

This year's IDR is prepared in the context of a full V-shaped recovery of Croatia's economy from the COVID-19 crisis, but also rising geopolitical uncertainties. ([3]) Croatia's economy expanded by 10.2% in real terms in 2021, after a fall of 8.1% in 2020, thus already surpassing its pre-pandemic GDP level. Real GDP is forecast to increase by 3.4% in 2022 and 3.0% in 2023. The nominal GDP level in 2023 is forecast to be 18.2% above its 2019 level. The Croatian economy is expected to keep its solid pace on account of a return of exports of services to the pre-pandemic level, positive labour market developments and the anticipated realisation of reforms and investments under the Recovery and Resilience Plan (RRP). Employment, which already recovered to its pre-pandemic level in 2021, is expected to grow by 3.4% from that level by 2023. Russia's military aggression against Ukraine and the resulting sanctions are not expected to have substantial direct effects on the Croatian economy. At the same time, indirect effects via higher prices of energy, raw materials and food products are expected to be felt but to a moderate extent. As a result, inflation is expected to rise to 6.1% in 2022, before decelerating to 2.8% in 2023.

This in-depth review presents the main findings of the assessment of imbalances. The assessment is backed by a thematic section on private debt developments. Spillovers and systemic cross-border implications of imbalances are also taken into account. In addition, assessments of structural issues made in previous IDRs and in the context of fiscal assessments are also considered if relevant. The MIP assessment matrix is published in the 2022 Country Report for Croatia. ([4])

([1]) European Commission (2021), European Semester Spring Package 2021, COM(2021) 500 final.
([2]) European Commission (2021), Alert Mechanism Report 2022, COM (2021) 741 final.
([3]) Forecast data are from European Commission (2022), European Economic Forecast: Spring 2022, Institutional Paper 172.
([4]) European Commission (2022), Country Report Croatia 2022, SWD(2022)614 final.

2. ASSESSMENT OF MACROECONOMIC IMBALANCES

Assessment of gravity, evolution and prospects of macroeconomic imbalances

Following the disruption brought by the COVID-19 crisis, and its significant impact on public finances in 2020, Croatia's government debt-to-GDP ratio resumed its decline in 2021. The government debt-to-GDP ratio had been on a firm adjustment path for several years until the outburst of COVID-19 pandemic. After reaching the pre-pandemic peak of 83.9% in 2014, the ratio continuously fell to 71.1% in 2019, supported by fiscal consolidation efforts and solid economic growth. The Croatian economy and public finances were severely hit by the COVID-19 shock. In 2020, economic output fell sharply -8.1%, depressing general government revenues (-6.4%) while expenditure rose considerably (+8.7%), raising the debt-to-GDP ratio by more than 16 pps, to 87.3% of GDP. The subsequent strong rebound of the economy pushed the government debt ratio down to 79.8% in 2021.

Government debt is forecast to further decrease in the following years, reaching around 73% of GDP in 2023. The fall is expected to be driven by the denominator effect due to solid GDP growth, the phasing out of COVID-19-related measures, falling interest expenditures and other debt-reducing stock-flow adjustments. Both the maturing debt, but also the newly accumulated debt, have been refinanced in recent years at very low rates and longer maturities. The Commission's fiscal sustainability assessment shows that Croatia faces medium fiscal sustainability risks over the medium term and medium fiscal sustainability risks in the long term. ([5])

The private debt-to-GDP ratio is returning close to its pre-pandemic level, resuming the trend that led to strong reductions over the last decade. The private-debt-to GDP ratio improved substantially in the pre-pandemic period. From a peak of above 120% of GDP in 2010, the ratio decreased to 88.3% of GDP in 2019. The COVID-19 shock led to an increase in the private-debt-to GDP ratio to 98% of GDP in 2020, mostly due to the denominator effect. With the economic recovery in 2021, the ratio decreased by more than 7 percentage points, reaching 90.7% of GDP. The adjustment was entirely driven by the strong nominal GDP growth in 2021, amounting to 13.3%, which helped both household and corporate debt-to-GDP ratios to decline substantially. Consequently, at 55.2 of GDP in 2021, the corporate debt ratio almost reached its pre-pandemic level of 54.5%.

The breakdown of the private debt to GDP ratio by sector remains broadly unchanged. The share of non-financial corporate (NFC) debt in GDP in 2021 reached the lowest level since 2005 and remained below the EU average and country-specific prudential thresholds. ([6]) The household debt ratio decreased to 36% of GDP in 2021 (by 2 pps compared to 2020), returning close to the pre-pandemic level. It is expected that household and corporate borrowing will remain strong. The dependency of the Croatian economy on imports of oil and gas is low. However, risks persist that the phase-out of state-support measures and potential second-round effects on economic growth from Russia's unprovoked invasion of Ukraine could lead to further vulnerabilities associated to private sector debt (see box 2.1). Nonetheless, deleveraging is expected to continue, supported by solid nominal GDP growth and various RRP-related measures, notably reforms aimed at improving the framework and speeding-up of bankruptcy and liquidation processes and those aimed at reducing the dependence of NFCs on debt instruments.

Croatia's external position improved markedly in 2021, after a small deterioration in 2020. After six consecutive years of surpluses, supported by both public and private sector deleveraging, the COVID-19 pandemic turned the current account balance mildly negative. However, thanks to strong export growth, ([7]) especially in services, the current account returned to a surplus of 3.1% of GDP in 2021.

([5]) See European Commission Country Report on Croatia for the latest results and the 'Fiscal Sustainability Report 2021', Institutional Paper 171, 25 April 2022 for methodological details.

([6]) While both household and corporate debt are higher than fundamental benchmarks, the estimation of these benchmarks may suffer from considerable downward bias in the case of Croatia, due largely to very low levels of debt in the initial period.

([7]) Goods exports were very fast to recover, thanks to their relatively low exposure to bottlenecks in the supply chain and the strong demand in key trading partners.

Exports of services benefitted from the relatively low dependence of Croatian tourism on air travel, a high share of private accommodation and comparatively lax COVID-19 measures. As the current account balance recovered, the net international investment position (NIIP) resumed its improvement in 2021, reaching -34% of GDP, which brought it in line with the prudential benchmark -44% and in conformity with the indicative -35% threshold in 2022. ([8]) The improvement was also supported by a substantial capital account surplus. The mid-term outlook for external balances remains positive due to the expected continued recovery in tourist activity and despite the worsening of the energy balance that partly impacted the current account already in 2021. Also, the Croatian economy is not highly and directly exposed to shocks related to the military aggression against Ukraine and the resulting sanctions against Russia. It is expected that the current account balance will remain positive also in 2022 and 2023 and that the NIIP will stay on a stable adjustment path, thus reaching -20.5% of GDP in 2023. As for the competitiveness of Croatian economy, it is expected that the ULC-deflated real effective exchange rate will benefit from gains in productivity supported by RRF-related reforms. Meanwhile, there are still risks stemming from the role of the public sector, instead of the tradable sector, as the wage leader, leaving wage-setting imperfectly aligned with productivity developments.

Croatia's banking sector is expected to stay well-capitalized, highly liquid and stable. The absence of repatriation of profits and targeted regulatory adjustments related to the pandemic in 2021 contributed to a strong capital position of the Croatian banking sector. At the end of 2021, credit institutions reported a Tier 1 ratio of 25.1%. Credit institutions' liquidity remained high, with the liquidity coverage ratio totalling 202.5% at the end of December 2021, compared to EU average of 173% (EU banks participating in SSM), according to CNB data. All credit institutions met the prescribed minimum liquidity requirements. Following Russia's military aggression against Ukraine, Croatia's banking system was briefly exposed to risks related to the illiquidity of Sberbank Europe AG, the owner of a local subsidiary in Croatia. However, the situation stabilized when the Single Resolution Board, in cooperation with the Croatian National Bank (CNB) as the national resolution authority, adopted the decision initiating the resolution proceedings of Sberbank d.d. Zagreb. After a competitive bidding process, the Single Resolution Board decided to transfer all shares of the Sberbank's Croatian subsidiary to Hrvatska Poštanska Banka d.d. This allowed the bank to resume operations under a new brand (Nova Hrvatska Banka). ([9]) The share of non-performing loans (NPL) in total loans in the banking system continued to decrease, with the NPL ratio decreasing from 5.3% at the end of 2020 to 4.6% at the end of 2021 (indicated by the CNB data).

Currency risks in the financial sector and the economy are still pronounced. Exposure to the euro exchange rate risk is sizeable. Ministry of finance data shows that around 70% of government debt is denominated in euro. CNB statistics indicate that foreign currency loans (dominantly euro-denominated) make up for around 45% of total loans to households and around 65% of total loans to NFCs. Due to the large exposure of domestic non-financial sectors to the exchange rate risks, the banking sector in Croatia is also exposed to a currency-induced credit risk. While exposure to both types of risks is high, the risks themselves are contained given the historical stability of the kuna exchange rate vis-à-vis the euro. Croatia's currency was included in the exchange rate mechanism ERM2 in July 2020 and Croatia continues to aim for euro adoption as of 1 January 2023, subject to the fulfilment of nominal criteria and the approval by the Council.

Although housing price growth remains below the MIP threshold, it poses a risk for the economy going forward. During the COVID-19 pandemic, house prices continued to rise. Research suggests that the growth in house prices in recent years has been partly driven by the government loan subsidy program. ([10]) Furthermore, the earthquakes in 2020 damaged a significant part of the housing stock, bringing about disturbances to the real estate market, particularly in Zagreb, which accounts for a high share of transactions. As the volume of transactions of older residential property declined, the demand for newer housing increased, which pushed up prices. House prices continued to increase in 2021, but the

([8]) Moreover, Croatia's NIIP excluding non-defaultable instruments (NENDI) was virtually balanced in 2021 and foreign exchange reserves reached a historical high in the of 44% of GDP, thus limiting exchange-rate risks.

([9]) See the SRB Notice summarising the decision taken in respect of Sberbank d.d: https://www.srb.europa.eu/system/files/media/document/20220103%20SRB%20Notice%20summarising%20the%20decision%20taken%20in%20respect%20of%20Sberbank%20d.d..pdf.

([10]) Kunovac and Žilić (2020). Home sweet home: The effects of housing loan subsidies on the housing market in Croatia. Croatian National Bank Working Papers W-60, Zagreb, October 2020.

growth remained below the MIP threshold. House price valuation indicators do not point to significant overvaluation. However, the European Systemic Risk Board (ESRB) still considered the prices to be overvalued, referring to the assessment made by the CNB, which – among other relevant factors in the context of financial stability - led to the ESRB issuing a warning to Croatia in February 2022. ([11]) Housing affordability is comparatively low in Croatia, as measured by the years of income needed to purchase a 100m^2 apartment (12.6 years in 2020, compared to an EU average of 10.2 years).

Labour market developments are favourable, but some challenges persist. Government measures to support wages and liquidity mitigated the fall in employment in 2020, and the employment rate increased to 66.9% at the end of the year, according to Eurostat data. In 2021, employment fully recovered to its pre-pandemic level, but at 68.2% remained significantly below the EU-27 average of 73.1%. Spring forecast indicated that by 2023 employment should rise by 3.4% compared to 2021 and the RRP-related investments and reforms and Cohesion Policy funding should tackle some of the structural issues that are keeping activity and employment rates below EU averages.**Croatia's potential growth accelerated in recent years but remained among the lowest in Central and Eastern Europe (CEE).** Potential growth in Croatia rose from around 0.9% on average in 2013-2018 period to 2.5% in 2019. After some disturbances brought about by the COVID-19 shock, the rate of potential growth is estimated to have surpassed the pre-pandemic levels and is converging towards the average of the CEE region. Low potential growth hinders the pace of Croatia's convergence towards the EU average. Low allocative efficiency, a cumbersome business environment and an inefficient public sector weigh on total factor productivity (TFP), which provided only a mild contribution to potential growth in recent years. Labour productivity growth was also low, which additionally hampered potential growth. In contrast, solid investment activity provided a boost to potential growth. RRF-related reforms and investments addressing structural rigidities in Croatia's economy are expected to lift the growth potential in the upcoming years (see below).

Assessment of MIP relevant policies

The steady unwinding of Croatia's imbalances witnessed since 2015 has been supported by policy action. The labour market reforms implemented in 2013-14 increased flexibility in the system and supported a more efficient reallocation of labour, benefitting productivity and competitiveness. The prudent fiscal policy conducted in the period 2016-2019 substantially contributed to the deleveraging of the economy and created a buffer that proved essential at the onset of the Covid-19 crisis. On a more granular level, structural weaknesses and slack in the economy were reduced through reforms such as those aimed at strengthening the fiscal framework, improving the efficiency of the judiciary, cutting administrative and financial burden on companies, liberalising regulated professions and improving the governance of SOEs. Such reform efforts were reiterated in Croatia's prior and post-entry ERM2 commitments, as well as its Recovery and Resilience Programme.

Various measures in Croatia's RRP should help reduce government debt and enhance external sustainability. The RRP includes different measures to increase efficiency and sustainability of the public sector. The new Budget act, that enhances the fiscal framework, was adopted at the end of 2021. In addition, the appointment of the Fiscal council Chair should improve the quality of oversight of fiscal policy in the long run. Measures to address the recurrent build-up of arrears, inconsistent procedures and the procurement of costly medicines in the healthcare sector are to be implemented by the end of 2022, which should increase the efficiency of expenditure. New funds for the commercialisation of innovation projects could increase non-price and price competitiveness and give an additional boost to the already dynamic export sector, thus contributing positively to the evolution of external balances in the medium term.

As regards private debt, the RRP contains measures that could reduce the dependency of corporates on bank loans, by promoting equity financing. A new equity-based financial instrument is expected to be set up in 2022. This instrument should reduce the dependency of NFCs, especially small

([11]) ESRB concluded that house price growth is elevated, mortgage credit growth is high and that there are signs of house price overvaluation, and of loosening of lending standards. Given these trends, the ESRB assessed housing market risks as medium and policy as partially appropriate and partially sufficient: Report available on this at https://www.esrb.europa.eu/pub/pdf/reports/esrb.report220211_vulnerabilities_eea_countries~27e571112b.en.pdf?421b2a7ec415416f4b9d6732d18af8d3.

and medium enterprises (SMEs) on debt instruments. In addition, amendments to the Bankruptcy Act and the Consumer Insolvency Act expected in 2022 should ensure greater efficiency of insolvency proceedings and improve the system of organisation and appointment of insolvency practitioners and the supervision of the performance of the service, which could also speed-up private debt reduction.

The RRP is also expected to boost productivity and lift the country's growth potential, making it more resilient in the face of future crises. A notable part of Croatia's RRP is aimed at reducing the administrative burden on the corporate sector from para-fiscal and regulatory charges and at supporting a further liberalization of services and the digitalisation of the Croatian economy, which should benefit productivity. The implementation of measures in the annual Action Plans to alleviate the administrative burden on the economy from 2018 to 2020 should be finished by 2022, with most of the red tape cuts already implemented over the course of 2020 and 2021. Croatia's RRP also contains different measures aimed at stimulating R&D investments and absorption, which could increase TFP. For example, the reform of the R&D incentive system and measures aimed at strengthening the R&D capacity of the public research sector are scheduled in 2022.

Croatia is preparing for the introduction of the euro as of 1 January 2023. Euro adoption remains contingent upon the fulfilment of the convergence criteria as assessed in the forthcoming Convergence report. In September 2021, the European Commission and euro area Member States signed a Memorandum of Understanding (MoU) with Croatia outlining the practical steps that will allow the country to begin producing euro coins after the Council formally abrogates the derogation on adopting the euro. In December 2021, the Croatian authorities adopted and presented the National Plan for the Changeover from the Croatian kuna to the euro, followed by the presentation and start of public consultation on the Law on euro adoption. In May 2022, Croatian authorities notified full implementation of post-entry ERM II commitments.

Euro adoption would practically eliminate the currency risk in Croatia. The CNB has managed to maintain a stable exchange rate of the kuna vis-à-vis the euro over more than two decades and has built up high foreign exchange reserves. Euro adoption should reduce the cost of borrowing for the private sector (due to a reduction of regulatory burden and fall in the risk premia). This could contribute to credit growth in nominal terms, but the expected solid growth performance should still keep debt indicators on a downward path and the private sector could benefit from the refinancing of part of the debt under more favourable terms. ([12]) In addition, against the rising uncertainties and potential changes in monetary policy stance in the medium run, euro adoption could cushion the effects of ensuing potential increases of bank interest rates, thereby containing the future interest rate burden of those possible developments.

Progress towards the euro adoption was one of the key factors behind the recent upgrade of Croatia's credit rating to investment grade. At the end of 2021, Fitch upgraded Croatia's credit rating to investment grade, quoting ([13]) the prospect of euro adoption as the key driver which would reduce transaction costs and limit exchange rate risk to corporate and household balance sheets. In March 2022, S&P confirmed Croatia's investment grade rating, also citing euro adoption as one of the key factors behind the decision. Besides euro adoption, both agencies emphasized the strong recovery after the pandemic shock and the positive economic outlook, owing to the rebound of tourism and the expected implementation of RRP reforms and investments. In addition, both agencies recognized that, despite the short-term deterioration of fiscal indicators in 2020, public finances are stable and expected that the fiscal position will continue to improve.

As concerns macro-prudential policies, the existing framework provides tools to manage possible risks. The legal framework for borrower-based measures was established in 2020. While recognizing and supporting the current CNB macro-prudential policies, the ESRB emphasizes that borrower-based measures should be activated and complement the current implicit DSTI (debt service-to-income) limit.

([12]) In addition, latest results of the Survey on the Access to Finance of Enterprises show that corporates in Croatia are not heavily dependent on bank loans and that cost of financing is not one of the main factors why the NFCs do not rely on this type of financing (see https://ec.europa.eu/growth/document/download/74614dc2-3e7a-4e97-bf44-a81d51165adc_en), while interest rates on housing and consumer loans (new lending) are already moving close to the lower bound of the euro area interval so the downward pressure on interest rates triggered by the euro adoption is not expected to strongly stimulate demand for loans in private sector.

([13]) Available on this linkhere: https://www.fitchratings.com/research/sovereigns/fitch-upgrades-croatia-to-bbb-outlook-positive-12-11-2021.

Meanwhile, in March 2022, the CNB activated the countercyclical buffer rate for the first time (raising it from 0% to 0.5%, to be applied as of 31 March 2023) in order to counter the procyclicality in bank lending.

Conclusion

Croatia's macroeconomic vulnerabilities related to high external, private and government debt, in a context of low potential growth, have substantially decreased in recent years despite the COVID-19 shock. The unwinding of macroeconomic imbalances was driven by the economic recovery following the prolonged recession from 2009 to 2014, but also a prudent fiscal policy stance and the reforms of the labour market and the business environment**.** After a temporary pandemic-induced deterioration in 2020, macroeconomic imbalances continued to unwind in 2021, returning to the favourable pre-pandemic adjustment trends. Croatia's private debt-to-GDP ratio decreased strongly over the period from 2010 to 2019, from 122 to 88 per cent of GDP. The pandemic led to a sharp increase in 2020, which was reversed with the strong economic rebound in 2021. The current account returned to a surplus in 2021, following its temporary marginal deficit in 2020. The NIIP surpassed the prudential benchmark and came very close to the indicative MIP threshold of -35% of GDP. The general government debt ratio remains above the 60% threshold, its downward path having been disrupted by the COVID-19 shock. However, in 2021, it returned to a downward trajectory. The banking sector remains stable and liquid, with a decreasing share of NPLs in total loans. Potential output growth has accelerated over the years, although it still remains below the potential growth rates of most new member states. Despite increased global uncertainties, debt–to-GDP ratios are expected to further decline in the medium term. The military aggression against Ukraine and the resulting sanctions against Russia are not expected to have substantial direct effects on the Croatian economy (see box 2.1).

Measures included in the RRP and the prospective euro adoption should contribute to further reductions of vulnerabilities by enhancing public and private debt reduction, increasing competitiveness of the economy and boosting potential growth. Croatia's RRP contains measures that should increase the efficiency and sustainability of the public sector, improve insolvency procedures and promote equity financing for the private sector, and increase the competitiveness and productivity of the Croatian economy. A new Budget act was adopted and the president of Fiscal Council was appointed at the end of 2021, while reforms in the healthcare sector are to be implemented in 2022. As regards private debt-related measures, the Croatian authorities have committed to set up new equity-based financial instruments, adopt amendments to the Bankruptcy Act and the Consumer Insolvency Act and continue with the reduction of administrative burden over the course of 2022. Also, the reform of the R&D incentive system and measures aimed at strengthening the R&D capacity of the public research sector should be implemented in 2022. Finally, a successful adoption of the euro would reduce risks from exchange rate exposures.

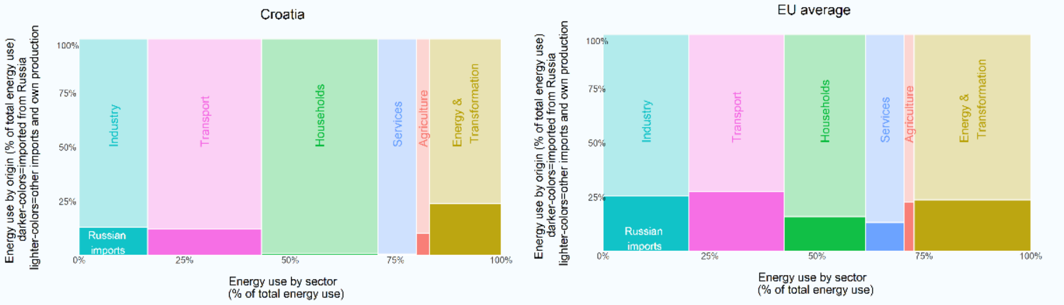
Based on the findings in this in-depth review, the Communication "European Semester – 2022 Spring Package" ([14]) sets out the Commission's assessment as to the existence of imbalances or excessive imbalances in Croatia, in line with Regulation 1176/2011.

([14]) European Commission (2022), European Semester Spring Package 2022, COM(2022)600 final.

Box 2.1: Exposures to the commodity price surge, and to Russia

This box summarizes risks and exposures regarding the commodity price surge, and the importance of direct links with the Russian economy. The surge of commodity prices since 2021 has been aggravated by the Russian military aggression against Ukraine. This box reviews the related macroeconomic risks for Croatia. The available data suggest higher dependency of the Croatian economy on imports of oil and gas in general, than for the EU as a whole, as measured by the share of net imports in GDP. The share of direct crude oil and natural gas imports from Russia in total oil and gas imports is below the corresponding EU share (Table b.1.1, see the caveat below the table on indirect imports of Russian gas). Croatia produces around a third of its natural gas needs. The recently started commercial operations of an LNG FSRU terminal on the island of Krk has a capacity close to total Croatian demand. All that capacity has been booked.

Graph b.1.1: Sectoral distribution of energy use and of energy imported from Russia

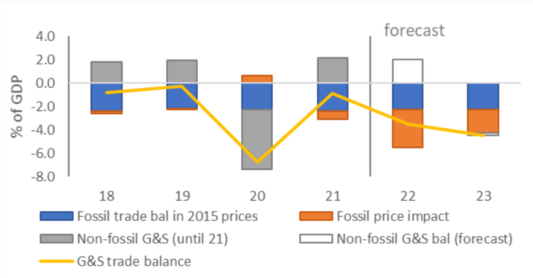


Notes: The left panel displays the distribution of primary energy usage in Croatia according to Eurostat energy balances. The horizontal axis displays the relative importance of energy-consuming sectors. The vertical axis displays the importance of energy importance from Russia in satisfying that need. Note that this dependence on Russia differs according to sector's use of natural gas vs oil and coal. The graph does not account for indirect imports of Russian gas. For comparison, the right hand panels displays the same concept for the EU aggregate.Russian imports include oil and petroleum products,natural gas and solid fossil fuels.
Sources: Eurostat and European Commission services calculations

The Transport and Energy & Transformation sectors are likely to be the most heavily hit by the recent surge in energy prices, as they account for the largest share of energy use in Croatia, along with the households (Graph b.1.1). Especially the Transport sector uses a much larger share of energy compared to the EU. Only the Energy & Transformation sector seems to rely somewhat more strongly on imports from Russia (see also the caveat in the notes on the indirect imports of Russian gas).

The increasing energy prices are expected to have a non-negligible impact on trade balances in 2022 and 2023. Since Croatia is a net importer of energy goods, and assuming roughly the same energy use in terms of physical units, higher energy prices are expected to strongly contribute to a deterioration of the trade balance (Graph b.1.2).

Graph b.1.2: Croatia goods and service trade balance – fossil trade contribution



Notes: The graph displays the trade balance as % of GDP, and highlights net trade of petroleum products, natural gas and solid fossil fuels (mainly coal), in 2015 import prices. The 'fossil price impact' component details the impact of price changes on the (also changing) real trade balance. 2022 and 2023 figures reflect central assumptions of the Commission spring forecast, notably combining the forecasted fossil price evolution with broadly forecasted import quantities of fossil energy sources.

Exposure of the Croatian economy to Russia through trade and financial links is comparatively small. The Croatian economy strongly relies on international tourism, but the share of Russian residents' nights spent in Croatia in the total of foreign tourists' nights spent is only around 1%. Still, the share of value-added created in the Croatian economy to satisfy Russian final demand is slightly higher than for the EU, and equals 0.5% of GDP. Croatian residents do not hold many assets in Russia, while Russian FDI in Croatia is not negligible as it stands at around 0.7% of GDP.

Table b.1.1: Selected exposures

Trade & financial exposures	unit	HR	EU
Domestic value added embodied in exports to Russia	% of GDP	0.5%	0.4%
Non-energy Russian import content in final demand	% of GDP	0.6%	0.4%
Russian tourist nights spent	% of total 2019	1.0%	2.7%
FDI assets held in Russia	% of 2020 GDP	0.1%	2.5%
Portfolio & other inv. assets held in Russia	% of 2020 GDP	0.0%	0.9%
FDI liabilities towards Russia	% of 2020 GDP	0.7%	1.2%
Portfolio & other inv. liabilities towards Russia	% of 2020 GDP	0.2%	1.1%
Consolidated banking exposures towards Russia	% of 2021 GDP		0.5%

Energy mix	unit	HR	EU
Solids fossil fuels (incl. peat)	% of Gross inland consumption 2020	4.6%	10.8%
Oil and petroleum products	% of Gross inland consumption 2020	35.2%	32.7%
Natural gas	% of Gross inland consumption 2020	31.9%	24.4%
Renewables and waste	% of Gross inland consumption 2020	28.3%	19.0%
Nuclear	% of Gross inland consumption 2020	0.0%	13.1%
Commodity exposures	**unit**	**HR**	**EU**
Net petroleum imports from all countries	% of GDP 2021	1.7%	1.2%
Crude oil imports from Russia '20	% of oil imports	0.0%	25.7%
Net gas imports from all countries	% of GDP 2021	1.3%	0.6%
Gas imports from Russia '20	% of gas imports	0.0%	43.6%

Notes: data source Eurostat for commodity exposures, European Commission Figaro for value-added exposures, BIS for consolidated banking exposures, European Commission FinFlows for other financial exposures. While Croatia does not have direct gas imports from Russia, data provided by the government suggests that indirect imports of gas from Russia are 22% of the total gas supply. Equally, while the share of nuclear power in Croatian energy mix is 0%, a significant share of the electricity Croatia imports from Slovenia is produced in a nuclear plant commonly owned by Slovenia and Croatia. Energy gross inland consumption excludes net imports of electricity and derived heat.

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

								forecast	
all variables y-o-y % change, unless otherwise stated	2003-07	2008-12	2013-17	2018	2019	2020	2021	2022	2023
Real GDP	4.8	-1.8	1.7	2.9	3.5	-8.1	10.2	3.4	3.0
Potential growth (1)	3.4	0.0	0.8	1.8	2.5	1.8	2.7	2.9	2.7
Contribution to GDP growth:									
Domestic demand	5.2	-2.4	1.0	3.2	5.0	-3.5	8.3	3.4	4.5
Inventories	0.6	-0.6	0.5	1.6	-1.6	0.7	-4.9	0.0	0.0
Net exports	-1.0	1.1	0.2	-1.8	0.1	-5.3	6.8	0.1	-1.5
Contribution to potential GDP growth (1):									
Total Labour (hours)	0.7	-0.6	-0.5	0.5	1.2	1.2	1.2	1.4	1.0
Capital accumulation	1.7	1.0	0.5	0.7	0.8	0.5	0.7	0.8	1.0
Total factor productivity	1.0	-0.3	0.8	0.6	0.4	0.2	0.8	0.7	0.7
Output gap (2)	2.8	-0.4	-2.0	2.5	3.6	-6.5	0.3	0.8	1.1
Unemployment rate	12.4	11.8	15.0	8.5	6.6	7.5	7.6	6.3	6.0
Harmonised index of consumer prices (HICP)	2.7	2.9	0.6	1.6	0.8	0.0	2.7	6.1	2.8
GDP deflator	3.7	2.5	0.4	2.0	1.9	-0.1	3.2	3.8	2.4
External position									
Current account balance (% of GDP), balance of payments	-7.7	-4.6	1.6	1.8	3.0	-0.1	3.1	1.5	0.1
Trade balance (% of GDP), balance of payments	-8.9	-4.1	-0.1	-0.8	-0.3	-6.8	-1.2	.	.
Primary income balance (% of GDP)	-2.5	-3.4	-1.0	-0.5	-0.1	2.3	0.3	.	.
Secondary income balance (% of GDP)	3.7	2.9	2.8	3.2	3.4	4.4	4.0	.	.
Current account explained by fundamentals (CA norm, % of GDP) (3)	-1.7	-1.0	-0.6	-0.2	-0.2	-0.1	-0.1	-0.2	-0.3
Required current account to stabilise NIIP above -35% of GDP over 20Y (% of GDP) (4)	-0.5	0.8	-2.6	-3.9	-4.1	-4.2	-4.7	-4.5	-3.9
Capital account balance (% of GDP)	0.1	0.1	0.7	1.3	1.6	2.1	2.3	.	.
Net international investment position (% of GDP)	-63.0	-88.4	-78.2	-55.7	-46.7	-47.8	-33.9	.	.
NENDI - NIIP excluding non-defaultable instruments (% of GDP) (5)	-30.7	-48.8	-36.6	-13.6	-1.5	-0.3	8.5	.	.
Net FDI flows (% of GDP)	-4.7	-2.9	-2.0	-1.6	-6.1	-1.3	-3.9	.	.
Competitiveness									
Unit labour costs (ULC, whole economy)	2.1	1.9	-2.0	3.6	0.0	9.8	-3.1	1.1	1.5
Nominal compensation per employee	5.4	2.0	-1.0	3.9	0.4	2.1	5.6	3.0	2.7
Labour productivity (real, hours worked)	2.6	0.2	2.1	1.0	-1.1	-6.8	8.9	0.3	-0.4
Real effective exchange rate (ULC)	1.7	-1.1	-2.6	3.1	-3.1	.	.	.	.
Real effective exchange rate (HICP)	0.8	-0.7	0.4	2.5	-1.5	-0.5	0.6	.	.
Export performance vs. advanced countries (% change over 5 years)	30.7	-3.7	-2.4	19.7	20.2	0.6	.	.	.
Private sector debt									
Private sector debt, consolidated (% of GDP)	82.4	117.4	108.2	92.1	88.3	98.0	90.7e	.	.
Household debt, consolidated (% of GDP)	30.8	40.3	37.1	33.4	33.8	37.6	35.5e	.	.
Household debt, fundamental benchmark (% of GDP) (6)	6.5	16.8	19.6	17.7	17.1	19.3	18.3	.	.
Household debt, prudential threshold (% of GDP) (6)	52.1	50.1	49.2	52.4	53.4	53.8	54.6	.	.
Non-financial corporate debt, consolidated (% of GDP)	51.6	77.1	71.1	58.7	54.5	60.4	55.2e	.	.
Corporate debt, fundamental benchmark (% of GDP) (6)	26.2	33.3	39.6	38.2	37.3	41.9	39.3	.	.
Corporate debt, prudential threshold (% of GDP) (6)	60.8	69.0	66.3	65.5	64.3	64.5	65.2	.	.
Private credit flow, consolidated (% of GDP)	13.9	3.6	-0.2	2.2	1.1	1.3	3.0e	.	.
Corporations, net lending (+) or net borrowing (-) (% of GDP)	-6.2	-0.7	1.8	-1.6	0.2	1.3	.	.	.
Households, net lending (+) or net borrowing (-) (% of GDP)	2.5	2.2	3.5	4.5	4.0	7.4	.	.	.
Net savings rate of households (% of net disposable income)	0.6	0.5	2.2	4.3	3.9	7.5	.	.	.

(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 reach and stabilise the NIIP at -35% of GDP over the next 20 years. 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 2022-05-02, where available; European Commission for forecast figures (Spring forecast 2022)

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

all variables y-o-y % change unless otherwise stated	2003-07	2008-12	2013-17	2018	2019	2020	2021	forecast 2022	2023
Housing market									
House price index, nominal	11.0	-2.0	-0.8	6.1	9.0	7.7	7.3	.	.
House price index, deflated	7.9	-4.9	-1.0	4.6	7.8	7.3	4.5	.	.
Overvaluation gap (%) (7)	11.3	3.0	-10.6	-10.2	-6.4	-1.1	0.7	.	.
Price-to-income overvaluation gap (%) (8)	5.9	7.5	-7.4	-12.2	-9.4	-2.9	-10.8	.	.
Residential investment (% of GDP)	3.6	3.4	2.7	2.6	3.0	3.4	3.1	.	.
Government debt									
General government balance (% of GDP)	-3.7	-5.7	-2.9	0.0	0.2	-7.3	-2.9	-2.3	-1.8
General government gross debt (% of GDP)	38.9	55.6	80.8	73.3	71.1	87.3	79.8	75.3	73.1
Banking sector									
Return on equity (%)	.	.	-7.7	3.9	6.1	6.8	.	.	.
Common Equity Tier 1 ratio	.	.	13.4	16.0	18.0	19.5	.	.	.
Gross non-performing debt (% of total debt instruments and total loans and advances)	.	.	11.1	7.0	4.6	4.7	.	.	.
Gross non-performing loans (% of gross loans) (9)	.	.	11.5	7.3	5.2	5.3	4.6	.	.
Cost of borrowing for corporations (%)	.	.	2.9	2.5	2.3	2.3	1.3	.	.
Cost of borrowing for households for house purchase (%)	.	.	3.7	3.6	2.9	2.5	2.8	.	.

(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 Philiponnet, 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 2022-05-02, where available; European Commission for forecast figures (Spring forecast 2022)

3. THEMATIC CHAPTER: PRIVATE DEBT

The private sector debt-to-GDP ratio improved in 2021. The ratio decreased by 7 percentage points in 2021, reaching 91% of GDP. The decline was driven by a sharp rebound of GDP. The share of non-financial corporations (NFC) debt in GDP decreased by 5 pps. to 55% in 2021, while that of households fell by 2 pps. to 36% of GDP. Both household and NFC debt were below the EU average and country-specific prudential thresholds and far below their peaks of 41% of GDP in 2012 and 81% of GDP in 2010, respectively. Still, they were considerably above the levels suggested by fundamentals (Table 3.1). ([15]) According to CNB data, the share of non-performing loans (NPL) in total loans declined to 4.3% at the end of 2021 from 5.3% in 2020.

Household debt

Although credit flows picked up, the ratio of household debt to GDP decreased in 2021 as real GDP growth and inflation contributed to passive deleveraging. After an increase by 4 pps. in 2020 to 38% of GDP, household debt decreased in 2021 by 2 pps. to 36% (Table 3.1), driven entirely by the high nominal GDP growth of 12.5% (Graph 3.1 (a)). Following the slowdown in 2020, household credit flow almost doubled in 2021 reaching 1.5% of GDP, thus slightly exceeding the benchmark for flows of 0.9% of GDP (Table 3.1). In nominal terms, total consolidated household debt increased by 3.2% in 2021 compared to the previous year. In 2020, the ratio of household debt to gross disposable income was 57%, well below the EU average.

Household borrowing in 2021 was largely driven by strong mortgage credit growth. The stock of household debt consists mainly of mortgages. The stock of mortgages grew by 9.5% y-o-y in 2021 Q4 (Graph 3.1 (d)), supported by declining mortgage rates, rising household disposable income and supportive policy measures. Strong mortgage lending growth was one of the risks that the ESRB emphasized in its report on residential real estate sector vulnerabilities in Croatia (see chapter 2) and it could contribute to a continued rise in house prices, thus additionally pressuring housing affordability. Personal loans, which represent only a small fraction of total household borrowing, recorded a decline in 2021 (Graph 3.1 (c)). Similar to other Member States, there has been a significant increase in household savings, as the COVID-19 pandemic containment measures constrained consumption (Table 3.1).

NPL growth remains contained. According to the CNB data, the households NPL ratio stood at 6.6% in the 4rth quarter of 2021, decreasing by 0.5 pps. compared to end of 2020, and still among the highest levels in EU. Housing NPLs slightly declined, whereas NPLs for other types of loans to households increased, such as general purpose loans and overdrafts.

Corporate debt

The consolidated non-financial corporate sector (NFCs) debt-to-GDP ratio decreased to 55% of GDP in 2021, from 60% in 2020, thus moving back to its 2019 level. The fall in the debt ratio was driven entirely by the sharp rebound of nominal GDP, while credit flows contributed positively to the overall change (Graph 3.2 (a)). The corporate debt ratio was below the prudential threshold estimated for Croatia (Table 3.1). The structure of corporate debt has changed little over the years. Loans comprise around 94% of total NFC debt, while debt securities account for only 6%, of which 65% is held by non-residents. Around 55% of the total loans to NFCs is provided by the domestic financial sector, predominantly banks.

([15]) Prudential threshold represents the debt level beyond which the probability of a banking crisis is relatively high. Fundamentals-based benchmarks are derived from regressions capturing the main determinants of credit growth and taking into account initial stock of debt. Note that the estimation of fundamental benchmarks may suffer from considerable downward bias in case of Croatia, due largely to very low levels of debt in the initial period. For methodologies see European Commission (2017), Benchmarks for the assessment of private debt. Note for the Economic Policy Committee, European Commission, Brussels, and European Commission (2018), Fundamentals-based private debt benchmarks: enhanced sample and robustness checks. Note to LIME, European Commission, Brussels.

The nominal stock of NFC debt slightly increased in 2021, driven largely by lending from outside the domestic banking sector. Based on data on changes of nominal stocks, NFC debt in 2021 increased by 2.0% compared to the previous year. The growth rate of NFC debt in 2021 was slightly above that in 2020 (1.7%) and the main growth drivers changed. Compared to 2020, in 2021 positive contribution of domestic bank loans turned to negative, while negative contribution of domestic loans from other financial institutions and foreign loans turned to positive territory. Moreover, in 2021 foreign loans took over the role of the key driver of growth of NFC debt stock from domestic bank loans that were the key driver in 2020. Government loans kept its positive, but milder contribution to changes in nominal stock of debt, while contribution of debt securities turned from neutral to mildly positive (see Graph 3.2 (b)).

The Croatian authorities rolled out different measures to support NFCs during the pandemic, most of which expired by the end of 2021. This included various fiscal measures (employee support, tax deferrals, tax and contribution reliefs, public loans ([16]) and public guarantees), moratoria by credit institutions, leasing corporations and HBOR and other measures, such as new "COVID" loans and restructuring and reprograms by credit institutions. According to the CNB, ([17]) during 2021, most measures were phased out or downsized. At the end of the third quarter of 2021, active moratoria and public guarantees were almost non-existent, while loans for preservation of liquidity are being gradually repaid.

In 2020-2021, NFCs in Croatia mostly relied on moratoria and employee support. Most loan moratoria were used by *Accommodation and food service*, followed by *Manufacturing*, *Transport* and *ICT*. ([18]) Following the COVID-19 related measures, which largely expired, Croatian authorities are planning to implement some legislative changes that could affect the dynamics and indebtedness of NFCs. As per the RRP, the Croatian authorities are planning to amend the Bankruptcy Act by mid 2022, which should improve the early detection of financial instability and initiate internal restructuring of high-risk NFCs. This should reduce risks of defaults and the subsequent initiation of bankruptcy and liquidation procedures. In addition, new equity financial instrument expected to be set up in 2022 should reduce dependence of NFCs on bank lending. Implementation of measures in the Action Plans to alleviate the administrative burden on the economy 2018, 2019, 2020 should be finished by the end of 2022, with most of the red tape cuts already implemented over the course of 2020 and 2021. Reduction of administrative burden could support overall business dynamics.

The share of NPLs in corporate debt decreased in 2021 and it is expected to stay on a downward path. According to the CNB data, NPLs in the NFC sector in 2021 decreased by 2.6 pps., to 9.9%. Both the numerator (value of NPLs) and the denominator (total loans) supported the decline. Most NFC sub-sectors recorded a decline in NPLs, with the notable exceptions of *accommodation and food service activities* (see Box 3.1) as well as *transport*, i.e. sectors that were most affected by the pandemic. The biggest decline was recorded in *agriculture, forestry and fishing*, *manufacturing* and *construction* (see Graph 3.2 (c)). NPLs are highest in *transport*, and *manufacturing*, while *real estate activities* record the lowest NPL ratio of 5.9%. Given the decline in the share of Stage 2 loans in most large sectors, the NPL ratio can be expected to continue decreasing going forward. The notable exception is *accommodation and food service activities* (see Box 3.1 below), where the share of Stage 2 loans in total loans stood at 55%. As most government support measures were already phased out during, 2021 it is not expected that NPLs will start to increase in the future. According to CNB data, total NPL coverage ratio declined from 68% in 2019, to 64% in 2020 and 63% in 2021.

The share of so-called zombie firms increased in 2020 in many sectors, but the establishment and exits of firms have recently been increasing. In 2020, the share of zombie companies, defined as companies that are unable to cover interest expenses for three years in a row, in total sales by NFCs increased in all sectors, except for *Manufacturing* and *Wholesale and retail sale* sectors. ([19]) The share of zombie firms was highest in *transport*, in *accommodation and food service activities* and in *construction*, while it was lowest in the *ICT* sector (see Graph 3.2 (d)). In 2020 registrations of new business decreased to 83% of 2019 level, recovering only partially in 2021 – to 98%of 2019 level. Exits from the market in

([16]) Provided by Croatian Bank for Reconstruction and Development (HBOR) and Croatian Agency for SMEs, Innovations and Investments (HAMAG-BICRO).
([17]) CNB publication Macroprudential Diagnostics, No. 16
([18]) CNB publication *Financial stability*, No. 22
([19]) Data provided by CNB during the IDR mission.

2020 fell to 74% of the 2019 level, while in 2021 they exceeded the 2019 level by 8%. In 2021, there were similar number of sectors with registrations of new business and exits from the market above and below 2019 level (see Graph 3.2 (e)).

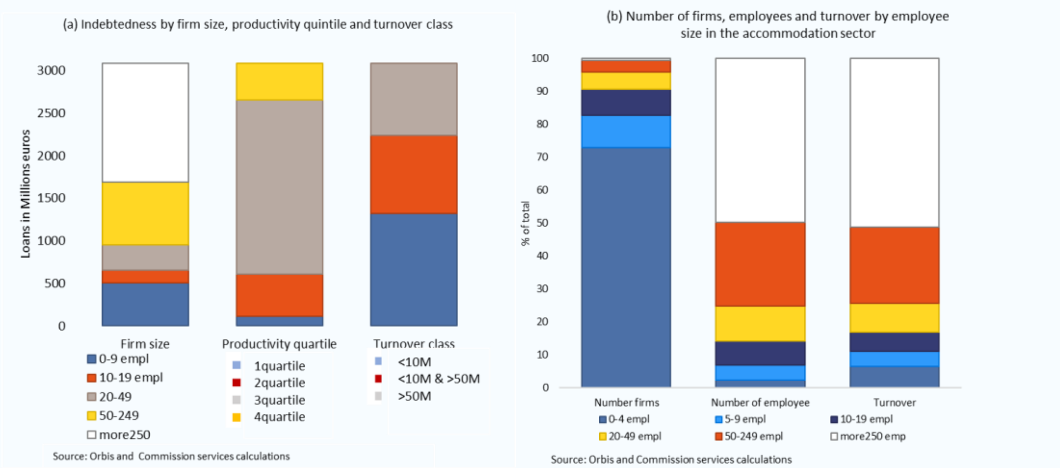
Box 3.1: NFCs debt in tourism sector

The accommodation sector is dominated by households and small firms, with around 82% of enterprises having less than 10 persons in employment (2019 data) (Graph 1 (b)). These micro-enterprises account for less than 10% of of total sectoral employment and slightly more than 10% of total sectoral turnover. Conversely, a small number of the largest companies account for around half of employment and total turnover in the sector. As for the indebtedness of the sector, group of large companies accounts for slightly less than half of the loans. Looking at the distribution of companies by productivity, dominant part of loans is concentrated in the 3rd quartile.

The tourism sector was hit hard by the pandemic, following a substantial growth in pre-pandemic years. Companies in the Accommodation and food service sector had the largest uptake of support measures in form of moratoria and loan restructuring (up to 31 March 2021). According to the CNB, the hotel industry was hit by the crisis more severely than sole proprietors. However, due to the strong tourist season in 2021, financial results of NFCs in Accommodation and food services sector have improved. Receipts in 2021 stood above 90% of 2019 level, compared to only 55% in 2020. Business registrations in the Accommodation and food services sector fell to 78% of the 2019 level in 2020 and further down to 76% in 2021, while exits fell to 76% in 2020 and returned to 2019 level in 2021.

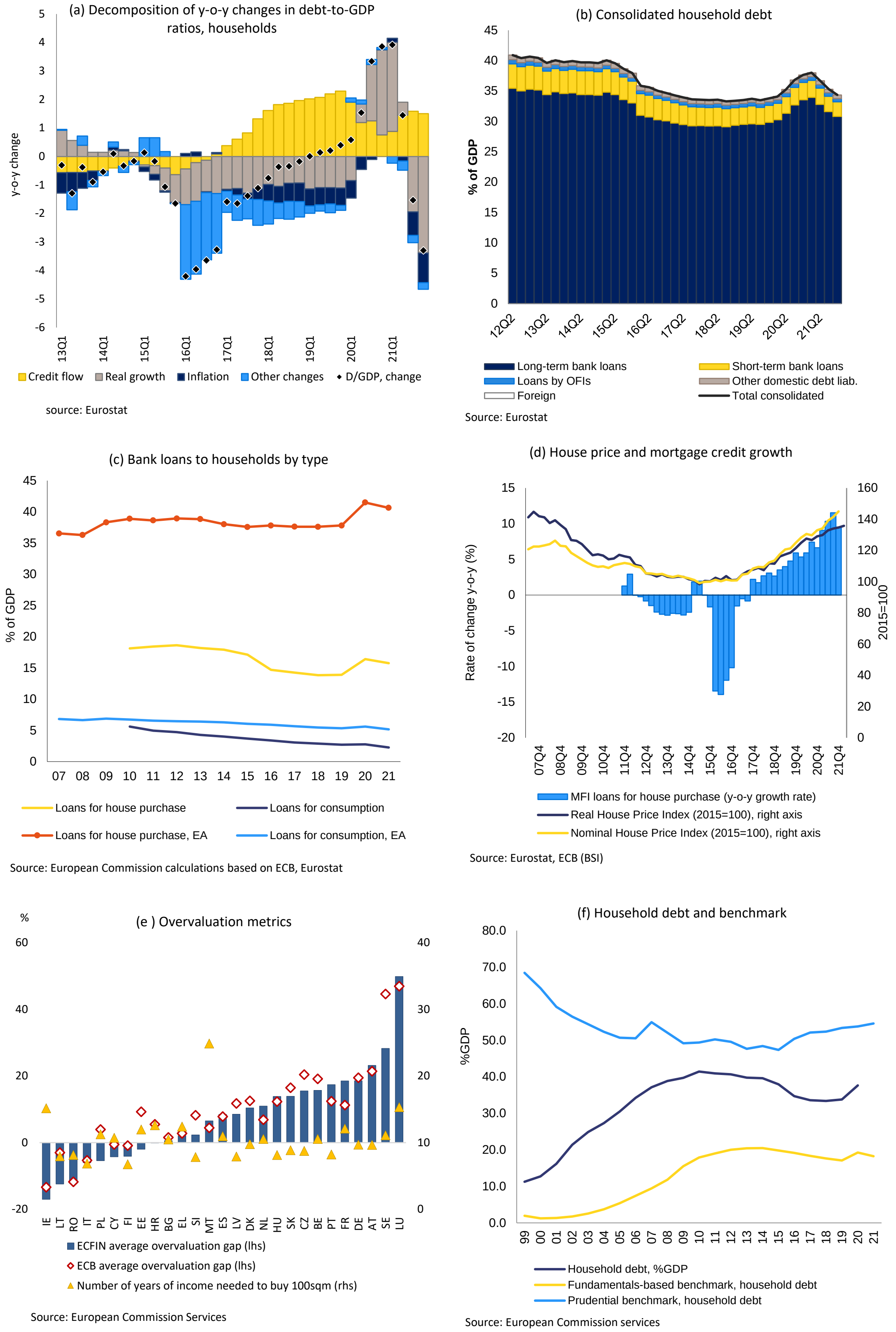
As a considerable share of moratoria expired before the end of 2021, some deterioration of loans' quality in the accommodation and food service sector could be observed, despite the strong tourism recovery in 2021. After the outbreak of the pandemic, the share of non-performing loans (NPLs) in total loans of the Accommodation and food service sector increased from 7.5% in 2019 to 8.3% in 2020 and 10% in 2021, reversing the downward trend in recent years (Graph 3.2. (c)). This was in contrast to the evolution of total NFC NPLs, and to developments in other important sectors. The accommodation and food services sector records the highest share of stage 2 loans in total loans. This indicator increased from 8% at the end of 2019 to 55% in mid-2021, after which it has been stagnating. Other large sectors recorded a steady decline.

Graph 1: Indebtedness and average size of firm in the accommodation sector



European Commission services. Turnover measures in million EUR. Productivity refers to labour productivity.

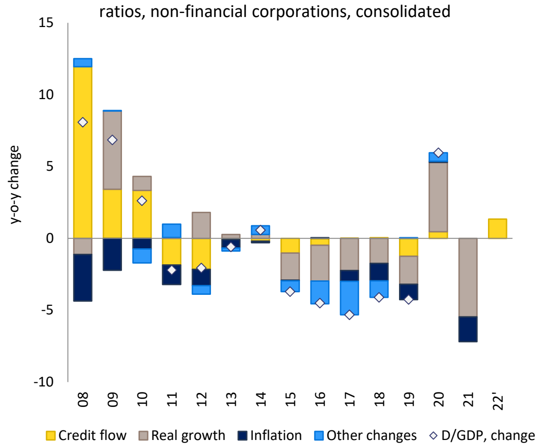
Graph 3.1: **Thematic Graphs: Households Debt**



Source: European Commission services

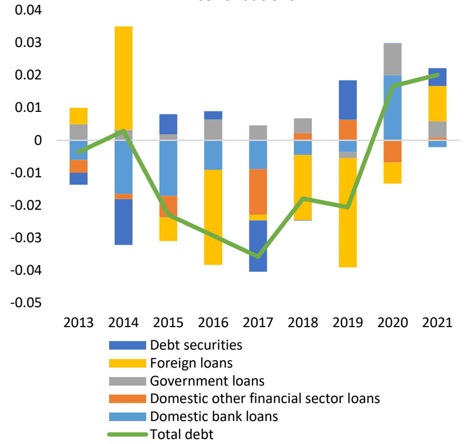
Graph 3.2: Thematic graphs: Non-financial corporations debt

(a) Decomposition of y-o-y changes in debt-to-GDP ratios, non-financial corporations, consolidated



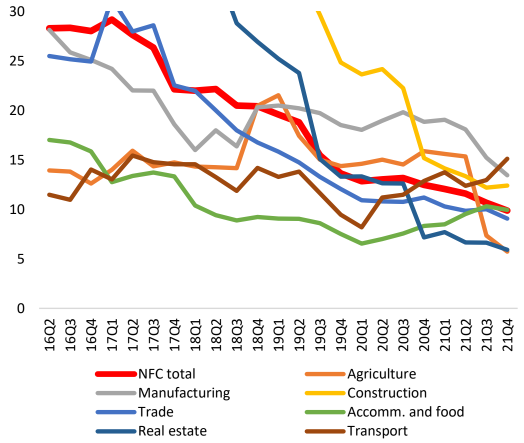
Source: B1 based on Eurostat (consolidated data).

(b) y-o-y changes of nominal stocks of NFC liabilities, contributions



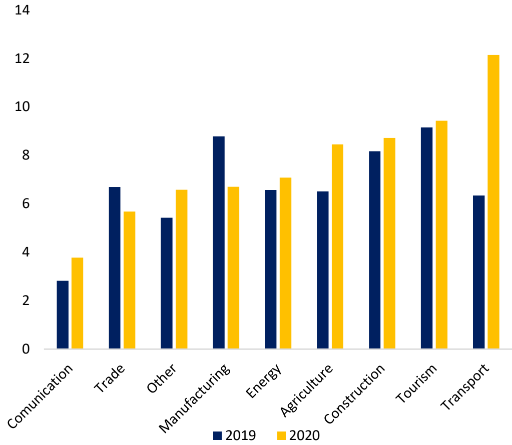
source: European Commission services

(c) NPL across sectors



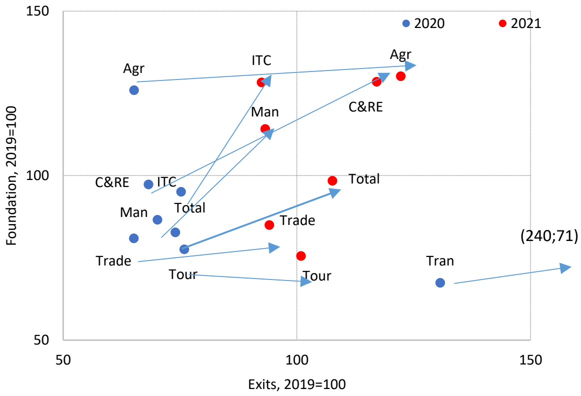
Source: Croatian National Bank

(d) Share of zombie firms by sector



Source: Croatian National Bank, based on FINA data

(e) Exit and registrations by sector



Note: En: Energy,C&RE: Construction & Real Estate,ITC: ITC,Agr: Agriculture,Man:Manufacturing,Tran: Transport,Trade: Trade,Tour: Accomodation and Food,Total: Total
Source: Croatian National Bank, based on FINA data

Source: European Commission services

Table 3.1: **Private debt indicators, Croatia**

	Source	2003-07	2008-12	2013-18	2019	2020	2021f	21Q1	21Q2	21Q3	21Q4
Total private sector											
(Households and Non-financial corporations)	Source										
Stocks											
Private debt level (% of GDP)(1)	*(a,d)*	82	117	105	88	98	91	133	128	121	118
Private debt level (% of potential GDP)(1)	*(a,b,d)*	85	117	104	91	92	91	122	121	119	118
Prudential threshold (% of GDP)	*(c)*	113	119	116	118	118	120				
Fundamental benchmark (% of GDP)	*(c)*	31	50	59	54	61	58				
Flows											
Private credit flows (transactions, % of GDP)(4)	*(a)*	13.9	3.6	0.2	1.1	1.3	3.0	5.3	7.3	-1.8	3.6
Private credit flows (transactions, % of potential (	*(a,b)*	14.4	3.8	0.2	1.2	1.2	3.0	4.9	7.0	-1.8	3.6
Benchmark for flows (% of GDP)	*(c)*										
Households (HH)											
Stocks											
HH debt level (% of GDP)	*(a,d)*	31	40	36	34	38	36	38	37	35	34
HH debt level (% of potential GDP)	*(a,b,d)*	32	40	36	35	35	36	35	35	35	34
Prudential threshold (% of GDP)	*(c)*	53	50	50	53	54	55				
Fundamental benchmark (% of GDP)	*(c)*	6	17	19	17	19	18				
Debt (% of gross disposable income)	*(a,b,d)*	48	64	59	56	57					
Interest paid (% of gross disposable income)	*(a,b)*	1.5	2.8	1.0	0.3	0.2					
Debt (% of gross financial assets)	*(a,d)*	38.7	42.1	31.2	27.7	26.5		26.2	26.0	25.7	25.2
Share of variable rate loans for house purchase (%	*(d)*		60.5	53.6	13.1	20.2	14.9				
Domestic loans in forex (% of dom. loans)	*(d)*		75.5	61.9	45.5	44.8	45.3				
Flows											
HH credit flows (transactions, % of GDP)(4)	*(a)*	5.4	0.6	0.3	2.3	0.8	1.5	1.4	2.3	2.0	0.7
HH credit flows (transactions, % of potential GDP)	*(a,b)*	5.5	0.7	0.4	2.4	0.7	1.5	1.3	2.2	2.0	0.7
Benchmark for flows (% of GDP)	*(c)*	1.9	2.2	0.1	0.4	0.6	0.9				
Savings rate (% gross disposable income)	*(b)*	6.6	6.8	8.5	9.5	13.4					
Investment rate (% gross disposable income)	*(b)*	5.4	5.9	5.2	6.7	6.4					
p.m. Bank HH NPLs (% of HH loans) (2)	*(d)*			9.5							
Non-financial corporations (NFC)											
Stocks											
NFC debt (% of GDP)(1)	*(a,d)*	52	77	69	55	60	55	95	91	86	84
NFC debt (% of potential GDP)(1)	*(a,b,d)*	53	77	68	56	56	55	87	87	84	84
Prudential threshold (% of GDP)	*(c)*	60	69	66	64	65	65				
Fundamental benchmark (% of GDP)	*(c)*	26	33	39	37	42	39				
Debt (% of value added)	*(a,b,d)*	107	154	139	108	124					
Interest paid (% of gross operating surplus)	*(a,b)*	15	18	13	5	6					
Debt (% of gross financial assets)	*(a,d)*	140	182	146	104	101					
Domestic loans in forex (% dom. Loans)	*(d)*		72.2	66.5	61.8	63.4	63.0	63.0	63.2	62.8	63.0
Flows											
NFC credit flows (transactions, % of GDP)(4)	*(a)*	8.6	2.9	-0.1	-1.2	0.6	1.5	3.9	5.1	-3.8	2.9
NFC credit flows (transactions, % of potential GDP	*(a,b)*	8.8	3.1	-0.1	-1.2	0.5	1.5	3.6	4.8	-3.8	2.9
Benchmark for flows (% of GDP)	*(c)*										
Investment (% of value added)	*(b)*	37.5	29.1	28.0	28.6	28.6					
Savings (% of value added)	*(b)*	23.2	25.2	27.8	25.6	27.3					
p.m. Banks NFC NPLs (% of NFC loans) (3)	*(d)*			25.0	12.0	11.4					

(f) European Commission forecast, . (1) Quarterly data is non-consolidated. (2) 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). (3) Gross non-performing bank loans and advances to Non-financial corporations (% of total gross bank loans and advances to Non-financial corporations). (4) Quarterly data is annualized.
Source: (a) Eurostat, (b) Ameco, (c) European Commission calculations, (d) ECB.