REPUBLIC OF CROATIA

CONVERGENCE PROGRAMME OF THE REPUBLIC OF CROATIA FOR THE PERIOD 2022 - 2024

APRIL 2021

Foreword

At its session on April 29 2021, the Government of the Republic of Croatia adopted the Convergence Programme of the Republic of Croatia for the period 2022- 2024. This is the eighth Convergence Programme drafted by the Republic of Croatia as a Member State of the European Union (hereinafter referred to as: EU). This document is the result of a process in which all EU Member States are obliged to report and harmonize their economic policies with the jointly defined objectives and provisions of the EU. This harmonization and reporting are conducted as a part of annual cycles of the European Semester, within which Member States submit their its strategic documents to the European Commission (hereinafter referred to as: EC) by the end of April each year. This is followed by an economic dialogue, drafting and adoption of country-specific recommendations and the practical implementation thereof. This document was drafted by the Ministry of Finance.

Table of Contents

List of Tables

List of Charts

1. FRAMEWORK AND OBJECTIVES OF THE ECONOMIC POLICY

The successful management of responsible macroeconomic policy, which in the past period has led to a number of positive economic indicators, was faced at the beginning of 2020, with a significant challenge of the crisis caused by the COVID-19 pandemic. Recognizing the impending negative socio-economic consequences, the Government of the Republic of Croatia used the entire created fiscal space for fiscal support in order to preserve the life and health of citizens, but also to maintain employment and overall economic activity. The total financial effect of the corona crisis on the budget so far amounts to over HRK 32 billion. Of this, around HRK 13 billion relates to the decline in budget revenues, which includes tax and contribution write-off measures, while over HRK 19 billion relates to direct budget expenditures and expenses caused by the coronavirus pandemic. The largest part of direct expenditures is accounted for by job preservation measures, for which over HRK 10 billion has been paid so far, and over HRK 2.6 billion for additional healthcare costs.

Before the outbreak of the crisis, the policies of the Government of the Republic of Croatia were aimed at achieving macroeconomic stability through the creation of a foundation for sustainable economic growth and the stabilization of public finances. Prudential management of the economic policy framework has led to real growth in gross domestic product (hereinafter referred to as: GDP), growth in employment, wages, strong tax and non-tax relief along with the realization of budget surplus in the three-years period before the crisis, and a significant decline in public debt. This, in addition to fulfilling all measures agreed by the Republic of Croatia with euro area members, contributed to the successful accession to the European Exchange Rate Mechanism (hereinafter referred to as: ERM II) in July 2020, in spite of the ongoing negative global and domestic economic trends. Decisive measures, accompanied by clearly defined objectives and consistently implemented, have also contributed to reducing macroeconomic imbalances.

Such management of economic policy has been recognized by international financial institutions and rating agencies that have raised, and then maintained, the credit rating of the Republic of Croatia at the investment level, in spite of the negative consequences of the pandemic. Taking into account all the above, solid foundations have been laid with sufficient protective mechanisms by which the Republic of Croatia is successfully fighting and recovering from the negative consequences of the pandemic.

During the EU Presidency, the Republic of Croatia, led the process of responding to the consequences caused by COVID-19, which in mid-2020 resulted in an agreement among EU leaders on the Multiannual Financial Framework 2021-2027 and a new instrument Next Generation EU, the most important part of which is the Recovery and Resilience Facility (RRF). Within the RRF, the Republic of Croatia will have available grants in the approximate amount of EUR 6.3 billion, or HRK 47.5 billion, and loans in the approximate amount of EUR 3.6 billion, or HRK 27.1 billion, which puts it to the top of the EU member states in terms of the ratio of available funds and GDP. In total, taking into account all available instruments from the EU envelopes, the Republic of Croatia has almost EUR 30 billion at its disposal in the next ten years, since the absorption of additional EUR 5.3 billion from the previous Multiannual Financial Framework, which is to be implemented until 2023, is added to the total amount allocated from the forthcoming financial perspective of EUR 24.5 billion.

A prerequisite for the use of funds from the RRF is the National Recovery and Resilience Plan 2021-2026 (hereinafter referred to as: NRRP), which in accordance with the objectives of the RRF includes reforms and investments that will be implemented in the coming years, and no later than August 31, 2026. NRRP will also contribute to the fulfilment of obligations arising from the Country-specific recommendations (CSR) sent by the Council of the European Union to the Republic of Croatia within the European Semester for 2019 and 2020. The progress achieved in implementing the plan will be reported within the European Semester. The NRRP is based on the following strategic documents, programmes, recommendations and commitments: i) the Programme of the Government of the Republic of Croatia for 2020-2024; ii) the 2020 National Reform Programme; iii) Country-specific recommendations of the Council of the European Union; iv) the Action Plan for the participation of the Republic of Croatia in ERM II, and v) the National Development Strategy of the Republic of Croatia until 2030. The plan is structured in five components and one initiative. The first component is the economy, the second one is public administration, judiciary and state property, the third one is education, science and research, the fourth one is labour market and social protection, the fifth one is health, and the sixth one is the building renovation initiative, which is largely aimed at the complete renovation of buildings damaged in the earthquake.

The Croatian NRRP sets ambitious but achievable goals in terms of reforms and investments, crucial for long-term development, all in order to accelerate recovery and strengthen the country's ability to cope with future adverse shocks, with lower economic and social costs. This economic reform and transformation tool will serve for new and innovative policies through modernization and digital and green transition of the economy.

The estimated macroeconomic impact of the NRRP points to an acceleration of the GDP growth rate compared to the baseline scenario of 0.3 percentage points in 2021, and almost 1.5 percentage points in 2022 and 2023 when the effect is the strongest. Therefore, in 2026, GDP could be higher than the baseline scenario by almost HRK 17 billion. Taking this into account, real GDP growth of 5.2% is expected in 2021, followed by growth of 6.6% in 2022, 4.1% in 2023 and 3.4% in 2024.

In addition, the implementation of reform measures, which have not been quantified through the applied macroeconomic model, is expected to have a long-term favourable impact on potential growth. Reforms in the area of science, education, innovation and labour market will strengthen the quality of human capital in the long run. On the other hand, improving the policymakers administrative capacity, strengthening the judiciary and reducing the presence of the state in the economy should be reflected in increased mobility of factors of production and lead to a better allocative efficiency of the economy. Altogether, these reforms will lead to the strengthening of the overall factor productivity as the only long-term sustainable source of growth.

In the short term, challenges related to the coronavirus pandemic and the dynamics of economic recovery remain, and are manifested through predictions of overcoming the COVID-19, slowed vaccine delivery and vaccination of the population. Therefore, both international financial institutions and the EC consider it is important to continue with targeted temporary measures to support the economy and preserve jobs and human health, whereby the application of the general clause on derogations from budgetary rules in 2021, the continuation of which is also expected in 2022, will play an important role.

It is necessary to emphasize that in order to see the overall picture of the economy and fiscal indicators, the fact that the Republic of Croatia suffered two devastating earthquakes in the year of the pandemic, both of them in the central part of the Republic of Croatia - the most affected areas being the capital city of Zagreb and Banovina region and the surrounding area, should not be neglected.

Taking into account all of the above, a responsible public finance management policy will continue in the next medium term, which will contribute to the further reduction of macroeconomic imbalances, which is not only a precondition for the introduction of euro, but more importantly for a healthy and sustainable economic recovery and growth of the Republic of Croatia. Therefore, a gradual reduction of the budget deficit is expected, from 3.8% of GDP in 2021 to 2.6% in 2022, 1.9% of GDP in 2023 and 1.5% of GDP in 2024. At the same time, public debt will decrease from 86.6% of GDP in 2021 to 82.5% of GDP in 2022, 79.5% of GDP in 2023 and 76.8% of GDP in 2024.

2. MACROECONOMIC TRENDS

The macroeconomic framework described in the following chapters was drafted in April 2020.[1]. The external assumptions for the preparation of macroeconomic projections were taken from the latest projections of the International Monetary Fund [2] and EC[3].

The latest projections of the International Monetary Fund were revised upwards in relation to the previous projections from January. After a historic 3.3% drop caused by the outbreak of the COVID-19 pandemic in 2020, a strong recovery in global economic activity and growth at a rate of 6.0% are expected in 2021, while a growth of 4.4% is expected in 2022. The latest revisions are primarily the result of positive forecasts regarding the development of the COVID-19 pandemic, and above all the expected dynamics of vaccination of the population, and approved fiscal aid both in the USA and Japan, which had a positive effect on economic outlook. The EU economy suffered a sharp decline of 6.1% during 2020, with the southern member states being the most affected, since a significant share of their activity stems from services, primarily tourism. In 2021, growth in the EU is projected at a rate of 4.4%, with a geographically uneven economic recovery, which will largely depend on the existing structure of individual economies and the effectiveness of national recovery and resilience plans. After a sharp decline in world trade during the first half of 2020 caused by restrictions on movement and disruptions in supply chains caused by the pandemic, in the second half of 2020 there was a strong recovery, which is expected to continue in 2021. Thus, after a sharp decline of 8.5% in 2020, in 2021 global trade in goods and services is expected to recover at a rate of 8.4%, while in 2022 its growth will slow down to 6.5%.

Throughout the projection period, short-term interest rates are expected to remain low under the conditions of the continued accommodative policies of the major world central banks, and risk appetite in the financial markets to be maintained. It is thus announced that the monetary policy of the European Central Bank will remain accommodative until signs of a robust recovery of economic activity in the euro area are visible. The average exchange rate of the euro against the US dollar is projected at 1.19 USD/EUR throughout the projection period. As far as raw materials price developments on the global market are concerned, oil prices are expected to register a strong increase, from USD 43.4 per barrel in 2020 to USD 64.7 per barrel in 2021, while in the rest of the projection period they are projected to gradually decrease. Prices of primary raw materials excluding oil, after a significant increase of 16.1% in 2021, will register a slight decline in the remainder of the projection period.

[1] *Based on the data available by April 22, 2021*
[2] *World Economic Outlook April 2021*
[3] *Spring 2021 forecast assumptions*

2.1. Gross Domestic Product

As a consequence of the COVID-19 pandemic and the measures introduced to combat it, in 2020 the positive trends in economic activity recorded during the previous five years were halted. In 2020, the largest drop of Croatian real GDP in history of 8.0% was recorded. At the same time, both domestic and foreign demand strongly contributed to the trend in GDP in a negative way, while the pronounced positive contribution to the trend in GDP came from the category of changes in inventories. By observing the quarterly dynamics, weak economic growth was achieved in the first quarter of 2020, while in the following quarter the most pronounced decline in 2020 was registered, which then gradually slowed down in the second half of the year.

In the medium term, a strong recovery in economic activity is expected, which includes significant positive effects of the NRRP. In 2021, real GDP growth is projected at 5.2%, which will then accelerate to 6.6% in 2022, while in 2023 and 2024 real GDP growth will amount to 4.1% and 3.4%, respectively. Throughout the medium term, economic growth will be based on the positive contribution of domestic demand. Under the conditions of dynamic investment spending, despite a relatively strong recovery in exports, the contribution of net foreign demand will be negative and relatively stable throughout the period, and somewhat less pronounced only at the end of the projection period. A slightly positive contribution of changes in inventories to economic growth is also projected, somewhat higher in the first two years of the projection period, which are characterized by stronger economic growth rates. The contribution of investment to the growth of domestic demand will be higher than the contribution of personal consumption only in 2022, when it will be almost twice as high. The component of the expenditure side of GDP with by far the largest contribution to growth in all observed years, except the last one, is the export of goods and services. These trends primarily reflect the fact of increasing "openness" of the small Croatian economy, both in terms of exports and imports of goods and services. In addition, in spite of the strength of the forthcoming investment cycle, the domestic economy is characterized by a very modest initial share of real investment spending in the potential product. However, as a reflection of the relatively low capitalization of the economy, especially of the public sector, a significant impact of the projected investment cycle trajectory on the trajectory of the potential product is expected in the long run.

Table 2.1: Projection of Gross Domestic Product

	2020	2021 projection	2022 projection	2023 projection	2024 projection
GDP - real growth (%)	**-8,0**	**5,2**	**6,6**	**4,1**	**3,4**
Personal consumption	-6,2	5,1	4,0	3,7	3,6
Government consumption	3,4	2,7	2,2	2,2	2,3
Gross fixed capital formation	-2,9	9,9	18,0	8,5	4,5
Exports of goods and services	-25,0	12,5	15,8	6,1	3,9
Exports of goods	-0,8	4,3	4,9	4,0	3,6
Exports of services	-45,2	24,3	29,0	8,1	4,2
Imports of goods and services	-13,8	12,3	14,7	6,7	4,2
Imports of goods	-10,1	11,2	14,2	6,6	4,3
Imports of services	-31,2	19,0	17,2	6,7	3,9
Contribution to real GDP growth (percentage points)					
Final domestic demand	-3,5	5,8	7,0	4,8	3,8
Changes in inventories	1,3	0,1	0,2	0,1	0,0
External balance of goods and services	-5,8	-0,8	-0,7	-0,8	-0,5
Contribution to real GDP growth (percentage points)					
Personal consumption	-3,6	3,0	2,4	2,2	2,1
Government consumption	0,7	0,6	0,5	0,5	0,5
Gross fixed capital formation	-0,6	2,2	4,2	2,2	1,2
Exports of goods and services	-13,0	5,2	7,0	2,9	1,9
Imports of goods and services	7,2	-6,0	-7,7	-3,7	-2,4

Note: Data for 2020 are preliminary.
Source: Croatian Bureau of Statistics, Ministry of Finance

Personal consumption will be the main driver of domestic demand growth in the first and the last year of the projection period. Over the observed four years, it will be characterized by only slightly slowing dynamics, which primarily reflects the fact that the multiplicative effects of NRRP on personal consumption are most pronounced in the last two years (the basic channel of NRRP impact on the disposable income of the household sector is compensation of employees), but also the more significant use of the financial leverage of the household sector, which has undergone a pronounced deleveraging process in the past period. Thus, the savings rate of the household sector will be marked by a continuous decrease in the medium term, under the conditions of recovery of consumer sentiment, as well as the continuation of the period of low interest rates that further reduce the debt burden of the household sector. The slowing dynamics of the disposable income of the household sector, starting in 2022, will be generated primarily by compensations of employees, taking into account the expected slowdown in employment growth according to the national concept, which will be more pronounced than the domestic concept, as well as the expected recovery trajectory of non-taxable household income. We should also single out a milder positive impact of legal changes in income tax rates. The adverse impact on real disposable income growth over the period will come from the increased inflation rate.

In line with general government fiscal category projections, no significant contribution of government consumption to the economic growth is expected over the medium term. The largest contribution to the real growth of government consumption throughout the projection period will come from the growth of intermediate consumption. The contribution from compensations of employees during the observed period will also be positive and slightly slowing down, reflecting the expected dynamics of employment growth at the general government level, which will closely follow the trends of employment in the private sector. Lower positive and relatively stable contribution to the growth of government consumption is also expected from the category of social transfers in kind, while a negative contribution, characterized by pronounced negative values at the beginning and only slightly negative values at the end of the period, is expected from market output.[4]

In 2020, gross fixed capital formation registered a more favourable performance than expected, primarily due to general government investment activity, which has been achieving extremely high growth rates for the third year in a row. In the next medium-term period, strong investment activity is expected, supported by existing capital inflows from EU funds, as well as by new instruments financed primarily by funds from the Recovery and Resilience Facility. A stronger contribution to the growth of total investment will come from private investment throughout the projection period, whereby the dynamics of the growth thereof will gradually weaken after 2022. Significant contributions from public investment will be present in the first two years, while in the remaining years public investment will decline slightly, but will remain at historically high levels. It is projected that the utilization rate of capital funds from EU funds will increase throughout the projection period, especially in the general government sector. Regarding the structure of investments by type, in the short term, the favourable dynamics in the construction sector supported by autonomous factors is expected to continue, primarily due to the need to renew the fund of residential buildings after the 2020 earthquakes. As a result of the projected effects of the NRRP, but also of the favourable base effect due to the favourable achievements from the end of 2020, expectations were also significantly raised for the remaining types of investments. In addition, in the medium term, the investment climate is expected to further improve in the context of a recovery in the profitability of the corporate sector, positive trends in economic sentiment and the continuation of favourable foreign financing conditions, as well as of the country's credit rating. On the other hand, as a result of the corona crisis, the balance sheets of many companies, especially small and medium-sized ones, have been jeopardized. Thus, the corporate sector, which in the ten-year period after the great financial crisis in 2008 recorded relatively weaker deleveraging than other sectors, despite the relatively high profitability of recent years, will have to go through a further period of strengthening its balance sheets. By observing the latest projections of global growth, prices and prevailing financial conditions, and by taking into account the upcoming investment cycle in the domestic economy, the biggest challenge that the Croatian business sector is facing in the coming period will undoubtedly be the lack of labour force. In addition, long-term borrowing could become somewhat more expensive, and the favourable effect of exchange conditions could be less pronounced than in the previous period. Further implementation of reform measures should also have a favourable effect on facilitating business operations of entrepreneurs, primarily in terms of reducing the administrative and parafiscal burden on the economy. As a consequence of all the above, but also under the influence of the present geopolitical trends, a slight recovery in the inflow of foreign direct investment is predicted.

[4] *This category refers to the market output, output produced for own final use and payments for non-market output.*

Table 2.2: Gross Fixed Capital Formation by Sectors (Real Change Rates, in %)

	2020	2021 projection	2022 projection	2023 projection	2024 projection
Gross fixed capital formation	**-2,9**	**9,9**	**18,0**	**8,5**	**4,5**
General Government	18,7	15,5	31,7	-1,1	-4,4
Other[1]	-8,5	8,0	13,1	12,4	7,8

[1] Private sector and mixed ownership enterprises.

Note: Deflated by the deflator of total gross fixed capital formation.

Note: Preliminary data for 2020

Source: Croatian Bureau of Statistics, Ministry of Finance

Since 2013, exports of goods have become one of the main sources of economic growth, primarily as a result of the accession to the EU common market and the consequent favourable changes in the export structure due to better adjustment to market needs. However, since 2016, there has been a noticeable slowdown in the strong growth of the share of the export of goods in Croatian export markets, which has prevailed in recent years. The growth of foreign demand slowed down significantly in 2019, and then in 2020, under the influence of the outbreak of the COVID-19 pandemic, it recorded a large decline. Croatian export of goods overcame these two years of reduced demand in an extremely positive way, registering a significant increase in their share of foreign markets, especially in the 2020 recession. Such a favourable result of Croatian exports of goods in 2020, which is reflected in a much smaller decline compared to the European average, confirms the aforementioned structural progress of the export sector and more adequate involvement in global value chains compared to the period before the accession to the EU. Positive expectations of real growth in exports of goods in 2021 are influenced by the expected strong recovery of foreign demand, then a positive base effect due to unexpectedly favourable dynamics at the end of last year, as well as previous achievements of the export of goods and industrial production in the first two months of 2021. In addition, in the short term, the export of goods will be favourably affected by the still present global trend of substituting temporarily unavailable services with goods. However, throughout the projection period, a slight decrease in the share on Croatian export markets is expected, which will be somewhat more pronounced in 2021 and will then gradually decrease towards the end of the period. Although the dynamics of the export of goods will primarily depend on the economic recovery of the EU's main foreign trade partners, a positive impact is also expected from the increase in the share of the export of goods to faster growing non-traditional partners. Consequently, the export of goods will exceed its pre-crisis level already in 2021.

The comparison of tourism revenues with physical indicators in 2020 shows the surprising fact that the seemingly unfavourable change in the structure of tourists towards lower income categories and expected consumption did not result in a negative impact on (implicit) average consumption of foreign tourists, which realized even stronger increase than the record-breaking 2019. It should be noted that in 2020 the Republic of Croatia recorded a smaller decline in foreign tourist nights than expected initially after the outbreak of the COVID-19 crisis. In addition, this decline was smaller compared to other Mediterranean countries. Apart from the relatively favourable epidemiological situation in the Republic of Croatia, factors that are usually considered to be unfavourable structural features of Croatian tourism also contributed to this. First of all, there is its pronounced seasonality, since better epidemiological conditions during the summer months allowed the opening of borders and the arrival of foreign tourists. In addition, the previous season was favourably affected by the fact that foreign tourists mostly use cars as the main means of arrival in the Republic of Croatia, given that tourists avoided air and sea transport last year due to the increased possibility of infection. Furthermore, in the previous year, tourists preferred private accommodation and camps to hotel accommodation, which in the Republic of Croatia makes a smaller share in total accommodation capacities compared to other Mediterranean countries. It is expected that all these structural features will have a favourable effect on trends in the tourism sector in the coming period as well. In addition, in 2021, better preparation of the Croatian tourism sector for the upcoming season is expected. Among other things, this will include the expansion of the network of testing points and the priority vaccination of tourism workers[5]. In addition, at the end of February this year, the Ministry of Tourism and Sports and the Croatian National Tourist Board presented the *Safe stay in Croatia* project. The *Safe stay in Croatia* label is awarded to interested stakeholders from the Croatian tourism sector and others that are part of the travel chain, which guarantees compliance with and implementation of current health and safety recommendations of the Croatian Institute of Public Health[6]. However, the prospects for the tourism sector remain very uncertain and will depend on the epidemiological situation, the dynamics of vaccination and the lifting of travel restrictions in the EU, but also on the confidence of tourists and the economic situation. The macroeconomic scenario is based on a number of assumptions: progress in population vaccination and gradual improvement in the epidemiological situation, with expectations that the virus will retain its seasonal character this year, as well as favourable tourist confidence. In 2021, the increase in foreign tourists' nights is projected by about 40% compared to 2020, which will still amount to only 60% of their record level from 2019. The beginning of a more pronounced recovery of tourist nights is expected in June, followed by the acceleration of the dynamics of nights in the third quarter (with foreign tourist nights at a level slightly below 70% of the results from the third quarter of 2019) and slightly less favourable results in the last quarter. After record-breaking and statistically surprising achievements of average real consumption per foreign tourist in 2020, and especially in the second and the fourth quarter, in 2021 a partial correction of average tourist consumption is expected, so the year-on-year growth of tourism revenues in real terms in 2021 will be about 10 percentage points lower than the aforementioned growth of physical indicators. In 2022, in line with the further improvement of the epidemiological situation and the gradual return of the usual patterns of tourist spending, a somewhat more dynamic recovery of foreign tourists' nights is expected, which will thus reach 88% of the 2019 level. Towards the end of the projection period, in addition to the positive and moderately accelerating dynamics of average tourist spending, a further recovery in foreign tourist overnight stays is expected, although in 2024 it will remain slightly below the 2019 level. Exports of services excluding tourism, which will also benefit from the global recovery of the services sector in the medium term, will be characterized by a more dynamic recovery, so in 2024 it will surpass its level from 2019. However, due to the dominant share of tourism, exports of services will remain below the level achieved in 2019 throughout the projection period.

---

[5] *According to the survey carried out jointly by the Croatian Chamber of Commerce and the Croatian Tourism Association, 70% of surveyed tourism workers expressed interest to receive vaccine.*

[6] *The compliance with the measures is supervised through the system of the Ministry of Tourism and Sports, tourism vocational associations and users themselves.*

With regard to imports of goods and services, it should be noted that, unlike exports of goods and services, which are characterized by only mild effects of NRRP, these effects are strongly pronounced in imports of goods and services. They are largely concentrated in the first years of the projection period, and thus cause a relatively low level of elasticity of imports in relation to the final demand in the last projection year. The higher level of elasticity of imports compared to final demand in 2020 than previously expected was partly due to more favourable exports of goods and investment, a component characterized by a significant import component, compared to the previous expectations, and partly to a generally high level of import dependence of the economy. From 2022, in line with the projected trend in final demand, a gradual slowdown in real growth in imports of goods and services is expected. The increased level of elasticity of imports in the first two years of the observed period, in addition to the strong dynamics of final demand, also refers to its structure since the strengthened economic growth in those two years is based primarily on a strong recovery of exports and investment spending. We should also mention that it is expected that the import of goods in real terms in 2022 will be over 10% higher than in 2019, while the import of services will not exceed the level recorded in pre-crisis 2019 until 2023.

Last year's Convergence Programme projected a decline in economic activity of 9.4% in 2020, while the decline was 1.4 percentage points lower than expected. Of all the components of final demand, the largest deviation in the projection stems from the realization of exports of goods and services (by 2.4 percentage points more favourable contribution to GDP growth). The reason for this is a more favourable realization and only a slight decline in exports of goods, which registered the previously mentioned extremely strong growth of share in export markets, while exports of services are approximately accurately projected. In addition, a significant deviation (by 2.1 percentage point more favourable contribution to GDP growth) stems from the change in inventories, which registered strong growth. Gross fixed capital formation also recorded a more positive realization than expected (by 1.2 percentage points of contribution to GDP growth), solely due to a much more favourable result of general government investment, while private investment registered a slightly stronger decline than expected. Household consumption and government consumption also registered slightly more favourable trends than expected. On the other hand, the positive impact of the reduction in imports of goods and services on GDP growth (by 4.9 percentage points) was overestimated as a result of more favourable realization of final demand than expected.

2.2. Prices

Inflation, measured by the consumer price index, was at low levels in 2020 and registered an average rate of 0.1%, slowing down from 0.8% in 2019. The slowdown in inflation is primarily the result of a significant decline in energy prices, which decreased by 5.3% at year-on-year level, due to a sharp decline in crude oil prices on world markets. At the same time, food, beverage and tobacco price growth accelerated to 2.2% in the previous year, driven by increased food demand and supply disruptions associated with the COVID-19 pandemic in the first half of the year, as well as increases in tobacco excise duties in April 2020. The inflation of consumer prices excluding food and energy remained at a similar level in 2020 as in the previous year, with a slightly more pronounced decline in non-food industrial products compared to the previous year, while the growth of service prices accelerated slightly.

It is anticipated that the growth of consumer prices in 2021 will accelerate strongly and will amount to 2.0%, which will be most strongly contributed by a pronounced increase in energy prices, due to rising oil prices on the world market. To a lesser extent, the increase in energy prices will be affected by the increase in gas prices in April this year. Furthermore, a strong contribution to inflation will also come from the acceleration of growth in consumer prices excluding food and energy, which could accelerate in the context of demand recovery, as well as stronger growth in producer prices and inflation in the EU. In 2021, the growth of food, beverage and tobacco prices is expected to continue, but at a slower pace compared to the previous year. The positive contribution to inflation will come from the increase in excise duties on tobacco and tobacco products from March 2021, the year-round effect of which on consumer price growth will amount to 0.3 percentage points.

In 2022, the inflation is expected to slow to 1.7%, due to a lower contribution of energy prices, while the growth of consumer prices without energy will accelerate. In the rest of the projection period, the inflation is expected to gradually accelerate to 2.0% in 2023 and 2.3% in 2024, under the conditions of the expected growth in household consumption and rising inflation in the euro area, while raw material prices on the world market will be subdued. The projections include the effects of the NRRP, which indicate a slight effect on price growth in 2021 and 2022 and a more pronounced effect in the last two years of the projection period.

Table 2.3: Price Developments

	2020	2021 projection	2022 projection	2023 projection	2024 projection
GDP deflator, change (%)	**0,4**	**2,0**	**1,8**	**2,1**	**2,3**
Personal consumption	0,2	1,9	1,7	2,0	2,3
Government consumption	2,5	3,3	1,8	2,0	2,1
Gross fixed capital formation	0,7	1,5	1,5	1,8	2,0
Exports of goods and services	-1,7	2,3	1,8	1,9	2,1
Exports of goods	-4,1	2,8	1,7	1,8	2,0
Exports of services	1,9	1,7	1,9	2,0	2,2
Imports of goods and services	-0,1	2,5	1,6	1,7	1,9
Imports of goods	-0,3	2,7	1,5	1,6	1,8
Imports of services	1,3	1,3	1,8	2,0	2,1
Consumer price index, change (%)	**0,1**	**2,0**	**1,7**	**2,0**	**2,3**

Note: Data for 2020 are preliminary
Source: Croatian Bureau of Statistics, Ministry of Finance

Under the recession conditions in 2020, the GDP deflator increased by only 0.4%, primarily as a result of low performance of the personal consumption deflator and negative changes in terms of trade, namely a sharp decline in the deflator of exports of goods with only a slight decline in the deflator of imports of goods. In 2021, a pronounced acceleration of the GDP deflator to 2.0% is expected, mostly as a consequence of a significant acceleration of the personal consumption deflator, in line with the described trends in consumer prices. The expected acceleration of investment deflator growth, supported by the pronounced dynamics of costs in the construction industry and the dynamization of the growth of producer prices of capital goods, will also contribute to this projection of changes in GDP deflator in 2021. In addition, the acceleration of the government spending deflator will be realized under the influence of the increase of the base for salaries of employees in state and public services. As a result of a strong increase in raw material prices on world markets, accelerating price growth in the euro area, a strong global recovery in trade, but also certain disruptions in some global supply chains, a significant acceleration of the deflator of imports of goods is expected in 2021. On the other hand, the slow global recovery of the services sector due to epidemiological and psychological factors will keep the deflator of services imports at a low level. The pronounced growth of the deflator of exports of goods will be affected by the described acceleration of the growth of the deflator of imports, as well as a strong base effect. Still subdued demand in the tourism industry and globally suppressed trends in the services sector will keep the growth of the deflator of exports of services at a reduced level in 2021. It also expected that the change in the conditions of trade will keep a negative sign and realizes only a slight impact on the GDP deflator in relation to the previous year. After the slowdown in 2022, primarily under the influence of certain base effects, further dynamization of price developments and acceleration of GDP deflator growth up to 2.3% at the end of the projection period are expected in the continuation of the observed period. The most significant impact on this trend will again come from the personal consumption deflator, in line with the described dynamics of the consumer price index. In addition, the investment deflator will continue its cyclically conditioned acceleration, with further growth in equipment prices and construction costs, as well as rising real estate prices. The trends in the deflator of goods and services will be determined primarily by the expected dynamic global price developments in the markets of industrial inputs, as well as by the gradual recovery of the services sector, especially tourism. At the same time, maintaining price competitiveness under the conditions of suppressed tourist demand will keep changes in the conditions of trade in services at low levels. On the other hand, in spite of the gradual dynamization of import prices, slightly positive values in trade conditions will reflect a somewhat more pronounced spill over of cost pressures in the domestic economy to the deflator of exports of goods.

2.3. Labour Market

Although the labour market reacted relatively quickly after the outbreak of the pandemic, through an increase in the number of unemployed and a decrease in the number of employed persons, unfavourable trends were still less pronounced than initially expected. Thus, at the level of the entire 2020, the employment decreased by 1.2%. At the same time, the unemployment rate (ILO) increased from 6.6% in 2019 to 7.5% in 2020. In 2020, the labour force registered a decline of 0.4%, which is a slightly slower decline compared to the previous year. The introduction of the job preservation schemes by the Croatian Employment Service has significantly mitigated the impact of the crisis caused by the COVID-19 pandemic on the labour market. In the period between March and May 2020, the average number of employees covered by this measure reached almost 530 thousand, and then decreased to 67 thousand in the third quarter of the last year. However, even a significant reduction in the number of workers covered by this measure after May did not lead to the worsening of the labour market situation. After the outbreak of the second wave of the epidemic, the number of workers covered by this measure grew again and in the period between November 2020 and February 2021 it stabilized at a level of slightly above 150 thousand workers. At the same time, the data available for the first quarter of 2021 indicate favourable trends in the labour market. Namely, in the first quarter of 2021, the seasonally adjusted number of insured persons by the Croatian Pension Insurance Institute continued to grow, with a simultaneous decrease in the number of unemployed persons registered with the Croatian Employment Service. Furthermore, labour demand (measured using the OVI index[7]) increased significantly in the first quarter of this year, reaching, in March 2021, 95% of pre-pandemic levels from March 2019. Similar trends are indicated by company survey results suggesting a recovery in employment in the next months, which is especially pronounced in the industry and construction sectors.

Economic growth in the coming years is expected to lead to a strong recovery in the number of employees at a rate of 2.3% in 2021, which will then slow down to 1.6% in both 2022 and 2023 and 1.4% in the last year of the projection period. This employment growth projection includes the effects of the NRRP, which indicate a slight effect on employment growth in 2021 and a stronger effect in the remaining three years of the projection period, averaging 0.4 percentage points. In 2021, the unemployment rate is expected to decrease to 7.0%, after which it will continue to decrease continuously towards a rate of 5.7% at the end of the medium term. With the outbreak of the corona crisis, restrictions on the supply side of domestic labour force have only been temporarily suppressed, and indications of their re-escalation in the future are already visible today, especially in the construction sector. This macroeconomic scenario assumes further planned immigration through a system defined by new legal provisions on the import of workers, which introduced a labour market test instead of a quota system.

The growth of gross salaries in legal persons in 2021 reflects the slower dynamics of the growth of salaries in the private sector compared to the trends registered at the end of 2020. The effect of raising the base for salaries of employees in state and public services on the total growth of gross salaries in 2021 is estimated at 0.9 percentage points. The dynamic trends in salaries in the rest of the projection period reflects the fact that salaries are the main multiplicative channel of NRRP effects, then the previously described constraints on the labour supply side, but also the increased inflation rate. In line with the projected trends in compensations of employees and labour productivity, unit labour cost will remain low throughout the projection period.

[7] *The Online Vacancy Index (OVI) is a monthly index of online job vacancies developed at the Institute of Economics, Zagreb in cooperation with the MojPosao portal, with the aim of providing timely information on the current state of job demand.*

Table 2.4: Labour Market Developments

	2020	2020 Projection	2021 Projection	2022 Projection	2023 Projection
	change, %	change, %	change, %	change, %	change, %
Labour force (15+)[1]	-0.4	1.5	0.8	0.5	0.5
Unemployment rate, level (%)[1]	7.5	7.0	6.5	6.0	5.7
Employment[2]	-1.2	2.3	1.6	1.6	1.4
Labour productivity, persons[2]	-6.9	2.8	4.8	2.5	1.9
Unit labour cost[2]	9.7	-0.3	-0.7	0.8	1.4
Compensation per employee[2]	2.1	2.5	4.1	3.3	3.3
Gross earnings in legal entities[3]	2.5	2.8	2.5	2.7	3.0

[1]*According to the labour force survey*
[2]*According to the national accounts definition*
[3]*Administrative sources*
Source: Croatian Bureau of Statistics, Ministry of Finance

2.4. Monetary Developments

In 2020, the Croatian National Bank (hereinafter referred to as: CNB) adopted a series of monetary policy measures aimed at preserving the stability of the exchange rate of kuna against euro and maintaining kuna and foreign currency liquidity of the banking system, as well as preserving the stability of the entire banking system. In order to achieve this goal, CNB responded promptly and effectively to the strong depreciation pressures on the exchange rate of kuna against euro, which came from the adjustment of the level of banks' foreign exchange positions due to the issuance of three tranches of government bonds in February 2020, as well as from the adjustment of the expectations linked with the exchange rate of kuna against euro, arising from the emerging pandemic situation. Between March and June 2020, a total of five foreign exchange interventions were carried out, selling a total of EUR 2.2 billion to banks, which consequently reduced Croatia's international reserves. In order to reduce future pressure on international reserves, CNB has agreed upon establishing a swap line with the ECB in the amount of EUR 2 billion, and this possibility is in force until the end of March 2022, with the possibility of further extension if necessary. In addition, in 2020, two structural operations were held, whereby a total of HRK 4.3 billion was released to increase banking system liquidity. In March 2020, CNB reduced the reserve requirement rate from 12% to 9%, freeing up an additional HRK 6.3 billion liquidity for banking system. In order to provide additional support to the entire economy, CNB conducted an operation of purchasing bonds of the Republic of Croatia on the secondary market for the first time in history. Between March and June CNB purchased bonds of the Republic of Croatia in total nominal value of HRK 17.9 billion at five auctions.

The result of all these monetary measures is a historically high liquidity of the Croatian banking system, which is characterized by extreme stability and good capitalization, as well as resilience to shocks. In addition, on July 10, 2020, the Republic of Croatia acceded to the European Exchange Rate

Mechanism (ERM II), which is the last step before entering the euro area and introducing euro as a legal tender. In addition, the European Central Bank decided to establish close cooperation with CNB, making CNB part of a Single Supervisory Mechanism in which the European Central Bank takes over the supervision of Croatian banks.

The Croatian banking system has once again shown significant stability and resilience to shocks and in spite of all negative circumstances that the entire economy has had to face, it has remained extremely liquid and secure. A stable banking and financial system in general is a key precondition for a faster future economic recovery. The real consequences of the crisis caused by the coronavirus pandemic will be visible only after the expiration of all measures currently in force, which provide support to entities whose business are suffering from the COVID-19 crisis. Therefore, the full impact of the crisis on the banking sector will be visible only with a certain time lag. The biggest risk the banking sector is facing relates to the increase in non-performing loans after all moratoria on repayments currently in force expire, which may worsen banks' balance sheets and affect their liquidity and profitability. However, regardless of this risk, it is to be expected that banking operations will remain stable, as shown by all stress tests conducted by ECB in five leading Croatian banks. Expansionary monetary policy is expected to continue in the coming period, which will ensure favourable financing conditions and maintain the stability of the exchange rate of kuna against euro, while the banking system will continue to be characterized by extremely high liquidity and capitalization, as well as satisfactorily profitable.

2.5. Risks to the Macroeconomic Projections

As the extremely pronounced level of uncertainty, which arises from several sources, is still present, the described macroeconomic scenario is exposed to strong risks, among which negative risks dominate. The first part consists of risks related to the epidemiological situation, which primarily arise from the duration of the COVID-19 pandemic and the success of the vaccination programme. In spite of the available data suggesting that EU economies are coping better with restrictive measures than in the first wave of the epidemic, delaying vaccine rollout in the EU could shift economic recovery later in 2021. In addition to the difficulties in vaccination of population, a negative risk is also the possibility of the emergence of new strains of viruses resistant to existing vaccines. Epidemiological issues are primarily related to the risks to the projections of trends in the domestic tourism sector. Thus, it is estimated that the risks for the projection of tourist revenues, and thus for the projection of exports of services, are balanced. Namely, although potential disturbances in the epidemiological situation would directly worsen the short-term tourism prospects, if no risks to the prevailing epidemiological projections materialized, tourist results could be more favourable than projected, since, as previously described, tourist nights projections, as well as real average consumption per tourist, are projected relatively conservatory. Reasons for the caution, apart from the level of uncertainty brought by the global pandemic, also refer to the relative size of the tourism sector in the Republic of Croatia.

The second group of risks relates directly to the economy. Most of the risk to the recovery trajectory of a small open economy like Croatian one naturally stems from global trends. Uncertainty in the real economic sphere is primarily related to the dynamics of the recovery of the global services sector. Furthermore, the effects of the COVID-19 recession on world economies could be deeper and longer lasting than expected. This applies both to the goods and services markets, where the insolvency wave may still prove underestimated, and to labour markets, where it is still uncertain what the final impact of the COVID-19 crisis will be on labour trends in service activities. The adverse effect due to the need to improve the balance sheets of individual entities in all sectors can easily overcome the favourable effect of the cumulated deferred demand for services, and the duration of its impact will certainly be longer. In addition to the real economic flows, today's broader political-economic and financial situation offers a wide range of potential shocks. In principle, there are potential disturbances in the private and public debt markets, the dynamics and size of which pose a risk to the sustainability of balance sheets, primarily in the event of deteriorating global financial conditions. Then, a decade of unprecedented monetary and credit policies created the risk of a strong correction in some of the other classes of financial assets, or even all at once, as prices in almost all markets markedly deviate from fundamentals. The risk of accelerated de-globalization, with all technological, capital and cost consequences for global potential growth, which today's geopolitical trends create, should also be mentioned. Finally, in addition to the phenomena and risks already described, the current disturbances in global supply chains, associated with insufficient transport capacity, as well as certain inputs shortages in production, if more permanent, could lead to a more pronounced increase in inflation, especially with the current volume and dynamics of debt monetization.

Regarding some prominent risks of the domestic economy, it should be added that any premature lifting of the moratoria on loan repayments could lead to an increase in non-performing loans of domestic sectors and consequent deterioration of banks' balance sheets and thus jeopardize their profitability. Of the positive domestic risks, it is certainly worth noting the possible faster absorption of European funds than expected, which will further accelerate economic growth through a multiplicative effect.

ECONOMIC EFFECT OF THE NATIONAL RECOVERY AND RESILIENCE PLAN

Description of the model for assessing the effects of the National Recovery and Resilience Plan

The assessment of the short-term and medium-term macroeconomic effects of the National Recovery and Resilience Plan (up to 5 years) is based on the PACMAN model (Policy Analysis Croatian MAcroecoNometric Model). The assessment of long-term macroeconomic effects is based on the IMF's FSGM satellite model (Flexible System of Global Models) for European emerging markets countries (Emerging Europe model, EEUMOD).

The first model is suitable for the scenario analysis, simulation of the effects of economic policy measures and medium-term forecasting. PACMAN is a macroeconomic model based on a set of estimated error correction equations and basic macroeconomic and fiscal identities. Although highly aggregated and not based on micro data, the model is detailed enough to describe the most important relationships of the Croatian economy. It includes prices, aggregate demand, fiscal and financial variables, and labour market variables, whereby fiscal and monetary policy makers play an active role in the domestic economy. It also includes the explicit characteristics of a small open economy with a strong real, nominal and financial spill-over from trading partner countries to the domestic economy. PACMAN does not include agents with rational expectations and is therefore a model with adaptive expectations. The model shows long-term nominal neutrality, but also short-term nominal and real inertia, allowing economic policy makers to influence the business cycle. Long-term equilibrium is determined by neoclassical theory, while short and medium-term fluctuations are described by Keynesian theory along with the ad-hoc modifications needed to approximate the model to observed real-world data.

The expenditure side of PACMAN includes the main components of GDP: household consumption, investments (divided into housing investment and corporate and government investment), government spending, exports and imports, whereby government spending and investments are exogenous fiscal policy variables. The demand side of the model also includes a number of fiscal revenue variables with two-way real fiscal interactions. Fiscal policy variables (implicit tax rates and the above-mentioned government spending and investment) have a distorting impact on real and nominal variables with multipliers specific to each variable. On the other hand, fiscal revenues respond endogenously to changes in aggregate demand with different revenue elasticities for each tax category. The labour market is also associated with aggregate demand, including strong two-way interactions. The financial sector and prices include many specificities of the Croatian economy.

The IMF model used to assess long-term macroeconomic effects is an annual, multi-regional, general equilibrium model of the global economy that combines micro-based and reduced-form formulations of different economic sectors. In addition to Croatia, EEUMOD includes 12 other countries[8] and a total of 12 regions[9]. Real GDP in the long run is determined by the level of potential output.

[8] *China, Japan, USA, Bulgaria, Czech Republic, Hungary, Poland, Romania, Russia, Serbia, Turkey and Ukraine.*

[9] *Asian countries with emerging markets, CIS countries without Russia, euro area countries with emerging markets, core euro area, periphery of euro area, Eastern and South-Eastern Europe, other European Union, Latin America, other advanced economies, oil exporters and the rest of the world).*

Definition of shocks

The assessment of the impact of the NRRP on the Croatian economy is carried out through a series of shocks to exogenous government investments, as well as through additional shocks to private investments that are endogenous in the model. No other shocks have been modelled, such as technology shocks as well as the effects of structural reforms that could have an impact on overall factor productivity. For each year of the simulation horizon, two shocks have been calibrated: the private investment shock and the public investment shock. Each of these shocks represents an assessment of the impact of the NRRP on these categories of investments in the first round, while the model itself gives the overall effects (first round effect plus all second round effects). Both shocks are expressed as a percentage of GDP from the baseline scenario, and the results (overall effects) are interpreted as the percentage deviations of endogenous variables (GDP and employment) from their levels in the baseline scenario. Given the linearity of the model, each of the six components of the Plan is modelled separately, whereby the total response of endogenous variables is the simple sum of the shock responses of all six components.

Although the shock simulation in the IMF model used to assess long-term effects is similar to that in the PACMAN model, the assessment requires several assumptions to be made (e.g., whether companies expect additional grants after 2026, whether the state invests additional funds after 2026 to compensate for the depreciation of capital and how these investments are financed).

Description of results and main transmission channels

The overall performance (of first and second order) shown in Figure 1 indicates an acceleration of real GDP growth in relation to the baseline scenario of 0.3 percentage points in 2021, and 1.4 percentage points in 2022 and 2023 and beyond it gradually declines. Accordingly, the level of GDP in the last year of NRRP implementation is almost 4% higher than in the baseline scenario. Such dynamics, with a slightly lower intensity, has spilled over into the labour market and a gradual increase in employment is expected, so in 2026 the employment level could be about 1.11% higher than in the baseline scenario (Figure 2). In addition, the reforms that will be implemented, which have not been quantified through the macroeconomic model, are expected to have a long-term favourable impact on potential growth. Reforms in the area of science, education, innovation and the labour market will strengthen the quality of human capital in the long run. On the other hand, improving the administrative capacity of policy makers, strengthening the judiciary and reducing the country's presence in the economy should be reflected in increased mobility of factors of production and lead to better allocative efficiency of the economy. Together, these reforms will lead to the strengthening of total factor productivity as the only long-term sustainable source of growth. The mechanisms of transferring investments to the domestic economy are described below.

Given the mentioned implementation of the shock, the first impact on the Croatian economy works through the impact of the described shocks on private and public investments. These two variables make up the total investment, and thus enter directly into the accounting identity of GDP. As a consequence of generally positive economic developments, personal consumption also begins to grow continuously over the simulation horizon. These positive trends in GDP with the return, the effect of the accelerator, further increase private investment (public investment is exogenous). However, part of expenditure on consumption and investment relates to imported goods and services, which reduces the positive effect on GDP. Nevertheless, we expect the net effect on GDP to be positive and significant. Total employment (unemployment rate) consequently increases (decreases) with further positive secondary effects on GDP through the disposable income and wealth channel. It should be noted that the impact of the Plan on employment is relatively weaker compared to the effect on GDP, which is due to the rigidity on the labour market and the relatively weak ratio of GDP to employment in the model. During the simulation horizon, salary increases are also expected as a result of the increased labour demand. Moreover, the initial incentive to invest increases the company's profit in the model, which in the second step has additional wealth effects for the rest of the economy. The impact on fixed capital is also positive and has a longer-term impact on (potential) GDP. In interpreting the results, it should be borne in mind that the simulation over a five-year period does not address the impact of NRRP on productivity and TFP, which could suggest that the impact of the Plan on GDP and employment is underestimated in the medium term. It is also important to emphasize that this simulation does not include the transfer of recovery plans of other countries to domestic GDP through the foreign trade channel and therefore changes in exports are relatively mild and reflect only domestic price reactions and not changes in foreign demand for Croatian products and services. The fiscal balance is affected by the simulation through the budget revenue side, i.e. stronger aggregate demand increases the tax base, which, assuming unchanged tax rates and exogenous government expenditures, will lead to a reduction in the deficit.

Table: Cumulative effect of the NRRP on macroeconomic variables

	2021	2022	2023	2024
GDP	0,3	1,6	3,1	4,0
Employment	0,0	0,3	0,9	1,3
Personal consumption	0,1	0,7	1,9	3,1
Investment	2,3	12,3	18,4	20,1
Exports	0,0	0,2	0,3	0,2
Imports	0,6	3,3	4,8	4,9
Nominal gross salaries	0,1	0,5	1,3	2,3
Consumer price index	0,0	0,1	0,4	1,0

In the long-term model, an increase in investment results in a higher level of capital, which contributes to a sustained increase in real and potential GDP, with the latter adjusting slower. The model suggests that the shock to public investment in the long run (after 20 years) will increase the level of real GDP by 1.2 percent compared to the baseline scenario if the Government does not replace public capital that will depreciate over the years, i.e. by about 3 percent if the Government will finance, as of 2027, new investments to compensate for the depreciation of public capital. In both scenarios, investments through NRRP result in an employment level that is by 0.2- 0.3% higher than the baseline scenario.

3. GENERAL GOVERNMENT BUDGET AND PUBLIC DEBT

3.1. Fiscal Policy

In the period 2015-2019, significant efforts were made in the area of the consolidation of public finances. After the Republic of Croatia exited the excessive deficit procedure in June 2017, in the next three years there was a budget surplus registered, as well as a sharp decrease in the share of public debt in GDP by 11.5 percentage points compared to the end of 2015. Such fiscal results also had a significant impact on the reduction of interest expenses in the amount of HRK 2.8 billion. This created fiscal space for rapid and strong fiscal support to maintain employment and overall economic activity in response to the crisis caused by the coronavirus pandemic. In addition, positive fiscal results enabled the Republic of Croatia to return to the investment credit rating, and at the same time were a precondition for accelerating the process of the accession of the Republic of Croatia to ERM II.

However, the negative economic consequences of the coronavirus pandemic in 2020 were reflected in a significant decline in tax revenues and social contributions, but also in a strong increase in expenditures due to the financing of measures to preserve jobs and the health of citizens. Consequently, the budget deficit in 2020 registered a level of 7.4% of GDP, while public debt increased to 88.7% of GDP, or by 15.9 percentage points compared to 2019. At the same time, interest expenses decreased by HRK 1.5 billion compared to the previous year, primarily as a result of the active public debt management in line with financial market conditions.

However, even in such circumstances, the credit rating of the Republic of Croatia has not deteriorated. Namely, in March 2021, the rating agency S&P confirmed the BBB- investment rating of the Republic of Croatia with a stable outlook. In April 2020, the rating agency Fitch maintained the investment rating, but downgraded the outlook from positive to stable, and kept their rating unchanged in both June and December. In November 2020, the rating agency Moody's upgraded its credit rating by one notch, from Ba2 to Ba1, with a stable outlook. This shows that the Republic of Croatia is managing the crisis well and responsibly, and the rating agencies have high expectations for the recovery of the economy with the financial support of EU Next Generation funds, as well as for the entry of the Republic of Croatia into the Eurozone.

In July 2020, the Republic of Croatia entered ERM II, which represents the last transitional phase before entering the euro area and introducing euro as the official currency and legal tender. The Government of the Republic of Croatia has committed itself to further implementing reform measures related to the prevention of money laundering, further strengthening fiscal convergence, banking supervision, as well as increasing the overall stability and transparency of the financial market. The accession to the euro area will increase the credibility of the overall economic policy, ensure the availability of new sources of financing and liquidity, and eliminate the risk of exchange rate changes as an important risk for the economy and the population. Other forms of financial uncertainty, which have a stronger impact on less developed countries in times of crisis, will also be reduced, all of which will contribute to the resilience of the economy to future shocks and crises. In November 2020, the National Changeover Plan was adopted and it defines legislative, administrative and logistical activities related to the introduction of euro. The exchange rate at which the conversion will be performed will be 7.53450, with a maximum fluctuation allowed of 15%.

The positive effects of the Republic of Croatia's entry into ERM II, as well as the ratings of credit rating agencies, materialized during the Republic of Croatia's borrowing on the domestic and international markets. Historically low interest rates were achieved, investors' interest was higher than ever, while longer bond maturities show great confidence of domestic and international investors in the economic policy of the Government of the Republic of Croatia.

Following the outbreak of the COVID-19 crisis, in March 2020 the EU Council approved the full flexibility of the Stability and Growth Pact, i.e. the application of a general escape clause from the fiscal rules defined by the Stability and Growth Pact, giving Member States the option to provide fiscal incentives to their economies to mitigate the negative impacts of the epidemic. At the national level, the Fiscal Responsibility Act also allows for a temporary postponement of the application of fiscal rules in case of extraordinary circumstances, and the Government of the Republic of Croatia, following the recommendation of the Fiscal Policy Commission, adopted a Decision on temporary postponement of fiscal rules defined in Articles 6, 7 and 8 of the Fiscal Responsibility Act. Furthermore, Country-Specific Recommendations addressed to the Republic of Croatia in July 2020 recommended that all necessary measures be taken to respond effectively to the pandemic and support recovery, while in September 2020 EC confirmed that the escape clause will also remain in force in 2021.

On March 3, 2021, the EC published a Communication setting out general guidelines for conducting fiscal policy in the forthcoming period. Given the still present uncertainty regarding the dynamics of the economic recovery, it is important to continue to implement targeted temporary measures and provide fiscal support to the economy for as long as necessary, whereby the expected continuation of the application of general escape clause will play an important role in 2022. Once health risks are reduced, the existing fiscal measures to mitigate the short-term effects of the epidemic should be gradually translated into targeted measures to promote sustainable recovery, taking into account the impact of the Recovery and Resilience Facility, without compromising fiscal sustainability in the medium term.

Fiscal policy in the next medium-term period will be aimed at strengthening fiscal sustainability, recovery and strengthening the competitiveness and resilience of the economy, while ensuring adequate protection of all segments of the population. The Republic of Croatia will have at its disposal significant funds from EU funds, primarily from the current Multiannual Financial Framework 2014-2020, the new Multiannual Financial Framework 2021-2027, but also from the new EU instrument - Next Generation EU, which will be aimed primarily at strengthening recovery and resilience of the economy through development, strategic and reform projects, for which almost EUR 6.3 billion in grants and 3.6 billion euros in loans is anticipated by the end of 2026. Significant funds will also be directed to repairing the damage caused by the earthquake in the Zagreb and Petrinja area, both from national sources of financing and from the EU Solidarity Fund.

Fiscal developments on both the revenue and expenditure sides of the budget in the next medium-term period will result in a general budget deficit according to the ESA 2010 methodology of 3.8% of GDP in 2021. In 2022, the deficit is projected at 2.6% of GDP, in 2023 at 1.9% of GDP, while in 2024 the budget deficit will be 1.5% of GDP. The share of public debt in the nominal value of gross domestic product will decrease annually at an average rate of 3 percentage points, from 86.6% of GDP in 2021 to 82.5% of GDP in 2022, 79.5% of GDP in 2023, and to 76.8% of GDP in 2024.

3.2. General Government Budget in 2020

Recognizing that the coronavirus pandemic will lead to significant negative socio-economic consequences, the Government of the Republic of Croatia used the created fiscal space for fast and strong fiscal support to maintain employment and overall economic activity.

In this context, two packages of measures have been adopted, intended primarily to help the economy and citizens, with a number of measures aimed at mitigating the negative consequences in individual sectors. Thus, the amendments to tax regulations provided the entrepreneurs that had, or that estimated they would have, a drop in income of more than 20%, an interest-free deferral and instalment payment of direct taxes and contributions. In addition, the April package of economic measures strengthened this measure and entrepreneurs with an annual income of less than HRK 7.5 million (93% of entrepreneurs), with a drop in income of more than 50%, were completely exempted from paying direct taxes and contributions due in April, May and June 2020. In the same period, companies with revenues of more than HRK 7.5 million, with a drop in revenues of more than 50%, were partially exempted from paying these levies depending on the decline in revenues. During 2020, a total of HRK 3.1 billion in direct taxes and contributions were written off, for about 130 thousand taxpayers. Furthermore, the possibility of paying VAT on paid and collected invoices was introduced, all with the aim of ensuring additional liquidity of economic entities.

In order to preserve jobs in the most vulnerable sectors affected by coronavirus, a support measure was adopted in March to co-finance the cost of salaries in the amount of HRK 3,250 per employee, and then in April and May this amount was increased to HRK 4,000, with the cost of contributions for pension and health insurance borne by the state budget. This measure was extended until the end of the year, and a support measure to shorten working hours was introduced. In addition, a new measure of compensation of fixed costs was introduced in December last year, to entrepreneurs whose work was prevented by decisions of the National Crisis Management. These are rental costs, overhead and utility costs, costs of bookkeeping services and other costs that entrepreneurs have, regardless of the volume of business activity. The support for the preservation of jobs for this group of entrepreneurs amounts to HRK 4,000, i.e. between HRK 2,000 - 3,500, depending on the decline in income/receipts.

Table 0.1. Fiscal effects of the most significant measures due to the coronavirus pandemic

List of measures		ESA category	Fiscal effect, % of GDP	Fiscal effect, HRK 000
COVID-19 MEASURES IN 2020	**Writte-offs of direct taxes and contributions**			
	personal income tax	D.5R	0,0	115.296
	pension and healthcare insurance contributions	D.61R	0,8	2.884.219
	corporate income tax	D.5R	0,0	85.734
	COVID related subsidies to sectors of agriculture, transport, culture, sports and tourism	**D.3P**	**0,1**	**347.807**
	Subsidies to preserve employment	**D.3P**	**2,0**	**7.325.618**
		D.62P	**0,1**	**382.037**
	Remuneration due to temporary incapacity for work	**D.62P**	**0,0**	**111.712**
	Social transfers in kind in health sector	**D.632P**	**0,1**	**515.000**
	Capital injections treated as capital transfer to Croatia Airlines	**D.99P**	**0,2**	**600.000**
	Acquisition of medical and protective equipement to combat COVID-19	**P.2**	**0,5**	**1.737.813**
	TOTAL FISCAL EFFECTS OF COVID-19 MEASURES IN 2020		**3,8**	**14.105.235**
COVID-19 MEASURES IN 2021	**Writte-offs of direct taxes and contributions**			
	pension and healthcare insurance contributions	D.61R	0,4	1.448.213
	COVID related subsidies to sector of agriculture	**D.3P**	**0,0**	**150.000**
	Subsidies to preserve employment	**D.3P**	**0,9**	**3.678.057**
		D.62P	**0,1**	**221.943**
	Remuneration due to temporary incapacity for work	**D.62P**	**0,0**	**150.000**
	Supplement to pensions due to COVID-19 pandemic	**D.62P**	**0,2**	**600.000**
	Social transfers in kind in health sector	**D.632p**	**0,1**	**500.000**
	Acquisition of vaccine, medical and protective equipement to combat	**P.2 + P.52 + D.1P**	**0,5**	**1.823.527**
	TOTAL FISCAL EFFECTS OF COVID-19 MEASURES IN 2021		**2,2**	**8.571.740**

Source: Ministry of Finance

Consolidated General Government Revenues

Total general government budget revenues in 2020 register a level of 48% of GDP, as a result of negative macroeconomic developments, year-round fiscal effects of tax relief carried out in 2019, as well as the effects of tax amendments as of January 1, 2020, primarily in the VAT and income tax system, and in the system of excise duties. In addition, support measures for employment and overall economic activity had a major impact on the realization of budget revenues.

The most significant tax amendments were related to changes in value added taxation by reducing the VAT for food preparation and serving in catering sector from 25% to 13%. In addition, the new round of tax reform amended the corporate tax system, where the amount of income was increased from HRK 3 million to HRK 7.5 million, which a corporate income tax rate of 12% is paid at. Thus, a rate of 12% is applied to an additional 10,000 taxpayers, i.e. a total of 93% of corporate income taxpayers. The amendments in the system of special taxes and excise duties introduced the refund of part of the paid excise duty on diesel fuel used in railway transport of goods and passengers, and complete exemption from excise duty on electricity in railway transport of goods and passengers. In addition to the above, a change in the taxation of non-alcoholic beverages by the share of added sugar was carried out instead of the current linear quantitative taxation per hectolitre, as well as a further correction in the amount of excise duties on alcohol and tobacco. Furthermore, as of January

1, 2020, the basic personal deduction in the income tax system was increased from HRK 3,800 to HRK 4,000, which increased the disposable income of households.

Taxes on production and imports amounted to 19% of GDP and registered a year-on-year decline of 13%. Within the structure thereof, the most generous income is value added tax, which was by 13.4% lower than a year earlier. The collected VAT revenues are the result of reduced personal consumption and a weaker tourist season due to the coronavirus pandemic. Namely, the turnover in retail trade decreased in nominal amounts by 6% in 2020, and the tourist season was far worse than in the previous year. The collected revenues from excise duties were influenced by the reduction of the intensity of traffic and consumption of excise products and the previously mentioned tax amendments.

Revenues from social contributions also fell by 4.8% at a year-on-year level, amounting to 12.1% of GDP in 2020 and were primarily influenced by labour market developments, but also by approved deferral or write-off measures based on contributions.

Current taxes on income and wealth, which include income tax and corporate income tax, are reduced by 6%, due to labour market developments and tax amendments in the income tax system as well as the results of business operations of companies and banks in 2019, since the corporate income tax in the current year is paid based on the business operations of entrepreneurs from the previous year.

In addition to tax revenues, revenues from other current and capital transfers, which also include funds from EU funds, are also significant, and in 2020, they amounted to 5.1% of GDP, whereby the revenues from EU funds register an increase of 58.2% on at an annual level. These revenues are directly related to projects financed from the EU budget, but also to funds allocated to the Republic of Croatia from EU funds within the framework of aid in financing the consequences of coronavirus.

Consolidated General Government Expenditures

Total general government budget expenditures were executed at the level of 55.4% of GDP in 2020.

Compensations of employees amount to 13.6% of GDP. Compared to the last year, they registered an increase of 5.3%, and this is the result of an increase in the base for calculating salaries by 6% based on collective agreements for civil and public servants (2% as of January, 2% as of June and 2% as of October), increase in coefficients in primary and secondary education and for the police employees (3% as of December 2019, 1% as of June 2020), as well as corrections for years of service of 0.5%.

Intermediate consumption were executed at the level of 8.7% of GDP. This category includes material expenditures of all units of the general government sector, including, *inter alia*, the costs of healthcare institutions for medicines and medical and sanitary supplies, including those for the fight against the COVID-19 pandemic. Larger allocations were also registered in expenditures for materials and energy and in expenditures for services.

Expenditures for subsidies register a level of 3.8% of GDP, and compared to the last year, they register an increase of 130%. The reason for such a large increase is the generous fiscal support due to the coronavirus pandemic, primarily for the preservation of jobs in all those activities the doing business of which has been disrupted, as well as in the sectors of agriculture, culture, sports and tourism. A significant part of the subsidies of 0.8% of GDP also refers to HROTE (Croatian Energy Market Operator) subsidies for renewable energy producers, which are financed from the fee for incentives for electricity from renewable sources. This category also includes regular allocations for payments in agriculture from national sources, incentives for maritime and air transport, and allocations for the active labour market policy programme.

Property income expenditure, which are determined by the trends in interest expenditure, were executed with a share of 2% in GDP and decreased by 0.2 percentage points of GDP in relation to the previous year. Such trends are the result of the continuation of responsible fiscal policy management, accompanied by an active policy of public debt management, which also had an impact on the reduction of public debt service costs.

Social benefits and social transfers constitute the most significant category of total general government budget expenditures and they register a level of 17.4% of GDP. These expenditures are largely determined by the trends in expenditures for pensions, maternity benefits, social welfare benefits, child allowances, unemployment benefits, temporary incapacity benefits as well as social transfers in the healthcare system provided to the institutions outside the public sector. Expenditures for pensions and pension benefits amounted to 11.4% of GDP. Allocations for child allowance amount to 0.35% of GDP, and for maternity benefits 0.8% of GDP, which is a consequence of the increase in the maximum amount of salary compensation for employed and self-employed parents during parental leave to HRK 5,654.20 per month as of April 1, 2020. In addition, unemployment benefits amounted to 0.33% of GDP, and social welfare benefits to 0.35% of GDP. Social transfers through non-public sector institutions in the healthcare system accounted for 2.2% of GDP.

Other expenditures, mostly related to current and capital transfers, were executed at the level of 4.2% of GDP. They mostly refer to activities financed from EU funds as well as the payment of the Republic of Croatia's own contribution to the EU budget. This category of expenditures includes, *inter alia*, capital injections to Croatia Airlines due to a large drop in turnover due to the coronavirus pandemic, as well as commitments based on housing loan subsidies.

Gross fixed capital formation expenditures register a level of 5.6% of GDP and a year-on-year growth of 19.2%. This category of expenditures refers to the funds spent on the construction of road, communal and railway infrastructure, and in particular the increased investment activities of local and regional self-government units, whereby a significant part is financed by resources from EU funds.

Net Lending/Borrowing

Following the realized revenues and executed expenditures, the general government budget in 2020 registered a deficit of HRK 27.5 billion or 7.4% of GDP.

3.3. General Government Budget in 2021

Consolidated General Government Revenues

In 2021, total general government budget revenues are planned at the level of 50.5% of GDP. The revenue side of the budget is determined by the expected recovery of economic activity, taking into account the fiscal effects of the announced tax amendments within the system of corporate income tax, income tax, value added tax and excise regulations. Withdrawal of funds from EU funds, primarily from the current Multiannual Financial Framework 2014-2020, will also have a significant effect on budget revenues, but new funds from the Multiannual Financial Framework 2021-2027 are also envisaged. Furthermore, fiscal projections include the use of funds from the new EU instrument-Next Generation EU, which will be aimed at strengthening the recovery and resilience of the economy through development, strategic and reform projects, which, along with sustainable public finances, will enable a rapid economic recovery. In addition to the above, the budget also projects funds from the EU Solidarity Fund to finance part of the reconstruction of public infrastructure, primarily educational, health and cultural, damaged in the devastating earthquakes.

As of January 1, 2021, the corporate income tax rate for all companies with a turnover of up to HRK 7.5 million will be reduced from 12% to 10%, while the income tax rate will be reduced from 36% to 30%, and from 24% to 20%. Regarding the value added tax, as of July 1, 2021, the exemption from VAT on the import of small value goods is annulled.

Taxes on production and imports are the most important category of total revenues. They are projected at the level of 19.6% of GDP. Value added tax revenue is projected at 13.4% of GDP, based on macroeconomic projections, i.e. growth in personal consumption, tourism services, intermediate consumption, investment and social transfers in kind, and includes fiscal effects of the above mentioned tax amendments. In addition to VAT, revenues from excise duties and other consumption taxes are also included in the category of taxes on production and imports. Revenues from excise duties are projected at the level of 4.4% of GDP, and they include expected consumption of excise products, revenues from fees for incentives for the production of electricity from renewable sources, assessment of consumption tax and the effects of changes in regulations in the excise system, especially excise duties on tobacco.

The second most significant group of general government budget revenues are social contributions, which are projected at the level of 12.5% of GDP. Their dynamics is primarily determined by employment and salary growth trends.

In 2021, estimated revenues from current taxes on income and wealth will register a level of 6% of GDP. Income tax revenue is planned on the basis of expected labour market trends, taking into account the effects of tax amendments that entered into force in 2020 and 2021. We would like to point out that in 2021, for the first time, income tax will be refunded to young people in the amount of 100% for those under 25 and 50% for those under 30. Corporate income tax revenue is projected at the level of 2.1% of GDP, which takes into account the achieved business results of economic entities during 2020 and the measures adopted by the Government of the Republic of Croatia to mitigate the negative consequences of the coronavirus pandemic for the economy, and the effects of tax amendments.

The categories of other current and capital transfers, which are projected at the level of 7.2% of GDP, include revenues from from the aids of EU institutions and bodies, which are directly linked to the projects financed from EU funds, but also to funds allocated to the Republic of Croatia from EU funds as part of the aid in financing the consequences of coronavirus, funds allocated from the EU Solidarity Fund to finance part of the reconstruction of public infrastructure damaged in the earthquake, and funds from the new EU instrument- Next Generation EU, and the Recovery and Resilience Facility.

Consolidated General Government Expenditures

Total general government budget expenditures are planned at a level of 54.3% of GDP in 2021.

Compensations of employees are projected at the level of 13.6% of GDP based on the application, as of January 1, 2021, of an increased salary base of 4% in civil and public services, increased coefficients of 2% in primary and secondary education and for police employees, increases for regular years of service of 0.5% and an increase in the number of employees, especially in the education and healthcare sectors.

Intermediate consumption are planned at the level of 8.8% of GDP. The increase in this category of expenditures is primarily due to increased allocations for medicines and for consumables and sanitary material of state hospitals and healthcare institutions under the jurisdiction of the local and regional self-government units and for the procurement of COVID-19 vaccines. This category also includes the projected material costs of budgetary users as a consequence of repairing the damage caused by the Zagreb and Petrinja earthquakes.

In 2021, expenditures for subsidies are projected at the level of 2.8% of GDP, whereby subsidies to entrepreneurs for job preservation amount to HRK 3.9 billion or 1% of GDP. Furthermore, a significant part of subsidies of 0.9% of GDP refers to HROTE subsidies for renewable energy producers, and this includes regular subsidies and those related to the COVID-19 crisis in the agricultural sector, as well as those for incentives for maritime and air transport in the transport sector, and subsidies for active labour market policy measures.

Property income expenditure, which are mostly determined by the trends in interest expenditure and public debt service costs, register a level of 1.8% of GDP in 2021.

Social benefits and social transfers are planned at the level of 16.8% of GDP. Expenditures for pensions and pension benefits amount to 10.9% of GDP, and include a one-time COVID-19 pension supplement, which will be paid to those pensioners who have a pension of less than HRK 4,000, ranging from HRK 400 to 1,200, depending on the amount of the pension. In addition, pension expenditures are affected by the cumulative effect of changes in the number and structure of pension beneficiaries and the indexation of pensions according to general and special regulations. Maternity benefits are planned at the level of 0.7% of GDP, and they include the year-round effect of increased benefits for employed and self-employed parents during the use of parental leave. Allocations for child allowance amount to 0.4% of GDP, and unemployment benefits to 0.3% of GDP. Social welfare benefits are planned at the level of 0.7% of GDP. Social transfers in kind through institutions outside the public sector of all general government units are projected in the amount of 2.5% of GDP in 2021.

Other expenditures, mostly related to current and capital transfers, are planned at the level of 4.4% of GDP, and are largely determined by the payment of the Republic of Croatia's own contribution to the EU budget as well as projects financed from EU funds, especially in the water management and utility services sectors, and they include new activities to be funded by the Recovery and Resilience Facility. In addition, allocations for commitments on the basis of subsidizing housing loans are also anticipated this year.

Gross fixed capital formation expenditures are planned at the level of 6.1% of GDP. A large part of the investments will be financed from EU funds, and the most important project in 2021 is the continuation of the construction of the Pelješac Bridge. In addition, the delivery of 7 new electric trains to HŽ Passenger Transport is also planned. Investments in road, railway and water infrastructure continue. In addition, funds are also planned to repair the damage caused by the earthquake, which will be financed from the EU Solidarity Fund.

Net Lending/Borrowing

Following projected revenues and expenditures, the general government budget is expected to register a deficit of HRK 15.3 billion or 3.8% of GDP in 2021.

3.4. Medium-Term Budgetary Framework (2022-2024)

Consolidated General Government Revenues

In the period 2022-2024, general government budget revenues will be determined by projected trends in the economic activity, taking into account the fiscal effects of the implemented tax relief and the aid from EU institutions and bodies. This primarily refers to the funds from the previous and new Multiannual Financial Framework and from the Recovery and Resilience Facility, which will primarily strengthen the recovery and resilience of the economy, as well as the funds from the EU Solidarity Fund, which will focus on repairing damage caused by earthquake.

In 2022, consolidated general government revenues will register a level of 51% of GDP, in 2023 a level of 50.5% of GDP, and in 2024 a level of 48.9% of GDP. Taxes on production and imports are projected based on macroeconomic assumptions in the medium term and will register an average level of 20.1% of GDP. Revenues from value added tax and revenues from excise duties will be kept at an average level of 13.9% of GDP and 4.4% of GDP, respectively. Furthermore, revenues from current taxes on income and wealth will register a level of 5.7% of GDP in the observed period, and the share of revenues from social contributions will register an average level of 12% of GDP. Other current and capital revenues will be mainly determined by the absorption of funds from EU funds, but also from the new EU instrument of the EU –Next Generation EU and the Recovery and Resilience Facility.

Consolidated General Government Expenditures

In 2022, general government budget expenditures are projected at the level of 53.6% of GDP, in 2023 at 54.4% of GDP, and in 2024 at 50.5% of GDP.

Compensations of employees will register an average level of 12.8% of GDP due to the expected trends in the level of the number of employed civil and public servants and the rights arising from collective agreements.

Intermediate consumption expenditures will be at an average level of 8.5% of GDP, primarily due to the expected trends in material expenditures of budgetary users, as well as costs related to repairing damage caused by the earthquakes, which will be financed from the EU Solidarity Fund.

Expenditures for subsidies will reach the level of 1.6% of GDP as of 2022, which will be contributed by subsidies for the payment of incentives to privileged producers of renewable energy sources, as well as by regular subsidies to the agricultural, transport and labour market sectors.

Property income expenditure, which are largely determined by the trends in the interest expenditure, will register an average level of 1.3% of GDP in the medium term.

Social benefits and social transfers will be at an average level of 15.6% of GDP. The increase in the allocations for pensions is anticipated as a result of the indexation of pensions and the expected trends in the number of pensioners, while increased social transfers to institutions outside the public sector are also expected.

Other expenditures, which mainly relate to other current and capital transfers, will be at an average level of 5.3% of GDP until the end of the projection period.

Expenditures for gross fixed capital formation will register an average level of 7.1% of GDP until the end of 2024. They will be determined by the planned dynamics of investments of central government units and local and regional self-government units, and will be largely financed from the aforementioned EU funds. In addition, significant allocations for the reconstruction of public infrastructure in the areas affected by the Zagreb and Petrinja earthquakes have been projected.

Net Lending/Borrowing

In accordance with the projected trends in general government budget revenues and expenditures, a deficit of 2.6% of GDP is expected in 2022, a deficit of 1.9% of GDP in 2023, and a deficit of 1.5% in 2024. GDP.

3.5. Stock and Projection of Trends of Public Debt and Stock of Guarantees

Stock of Public Debt and Guarantees

According to the data of the Croatian National Bank, at the end of 2020 public debt amounted to HRK 329.7 billion, i.e. 88.7% of GDP, whereby its share in GDP increased by 15.9 percentage points compared to the previous year. This negative trends in public debt, after 5 years of downward trajectory, is a consequence of the decline in economic activity caused by the coronavirus pandemic and numerous and generous fiscal policy measures implemented by the Government of the Republic of Croatia to support the entire economy and citizens. Nominal public debt in 2020 compared to 2019 is higher by HRK 36.8 billion. This nominal increase in public debt is primarily a consequence of increased government borrowing needs, but also of a more pronounced depreciation of the kuna/euro exchange rate. Namely, on 31 December 2020, the exchange rate of kuna against euro was 7.5369, while on 31 December 2019 the exchange rate was 7.4426, which represents a depreciation of 1.27%, i.e. the nominal impact on public debt of almost HRK 3 billion. In addition, within the nominal increase in public debt there is also the amount of increase in deposits of central government units arising from borrowing in the amount of HRK 3.8 billion, which primarily refers to the EU SURE instrument[10].

Regardless of the sharp decline in economic activity in 2020, in an environment of high liquidity and low interest rates, borrowing conditions in the domestic and international financial markets have improved, which was also contributed by the entry of the Republic of Croatia into ERM II, and thus confirming responsible public finance management. The historically low levels of interest rates and longer maturities achieved, which the Republic of Croatia borrowed at in the midst of the crisis, are an indicator of the confidence of domestic and international investors in the fiscal policy of the Republic of Croatia, as well as of expectations that the Republic of Croatia will return to favourable trajectory of fiscal and macroeconomic variables in a relatively short term.

[10] SURE instrument - a European instrument for temporary support to reduce the risk of unemployment in an emergency situation after the outbreak of COVID-19, with the aim of providing additional financial aid to affected Member States in the amount of up to 100 billion euros in the form of EU loans. The Republic of Croatia has at its disposal an approved loan in the amount of a maximum of EUR 1.02 billion, and the financial support can be used through a maximum of 8 instalments, which can be paid through one or more tranches. The funds will be used for subsidies to preserve jobs in the sectors affected by COVID-19, as well as for aids for shortening working hours.

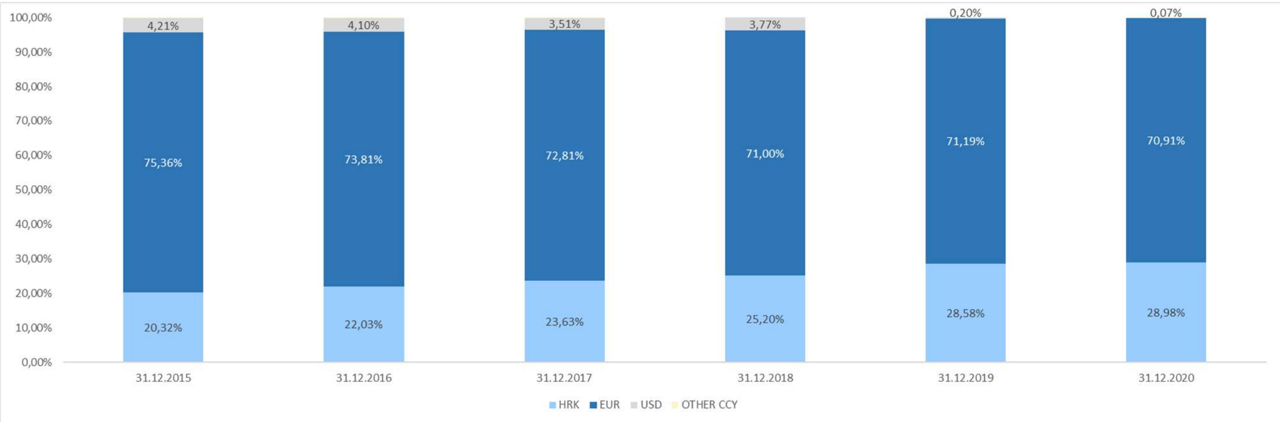
The domestic component of public debt increased by 13.2% compared to 2019 and it amounts to HRK 223.7 billion, thus accounting for 67.9% of total public debt, while the foreign component registers an increase of 11.3% and it amounts to HRK 106 billion, i.e. 32.1% of total public debt.

As observed by state government levels, the majority of public debt relates to the central government sector in the amount of HRK 319.1 billion, while the remaining debt of HRK 9.5 billion relates to the local government sector, and HRK 1.1 billion to the debt of social security funds.

Regarding the borrowing mechanisms, the largest part of public debt arose from borrowing via long-term securities, i.e. bonds (64.1%), and then by borrowing via loans (30.5%) and short-term securities (5.4%).

The currency structure of public debt shows that a significant part of the debt is denominated in a foreign currency, whereby the debt denominated in EUR accounts for 70.9% of public debt, the debt denominated in HRK for 29%, and the debt denominated in USD for 0.07% of total public debt. An insignificant part of the public debt of 0.04% is denominated in other foreign currencies. In 2020, the share of public debt denominated in EUR decreased, in spite of increased borrowing needs, as well as a more pronounced depreciation of kuna against the euro by 0.3 percentage points compared to 2019, which is a result of the orientation to the borrowing on the domestic market. This trend has consequently reduced the exposure of public debt to exchange rate risk.

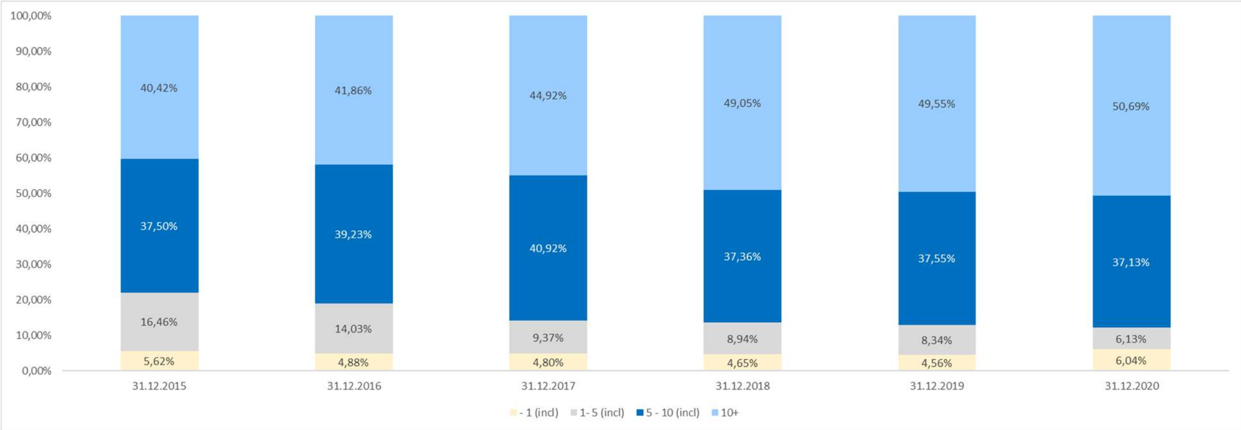
Chart 0.1. Currency Structure of Public Debt 2015-2020



Source: Ministry of Finance

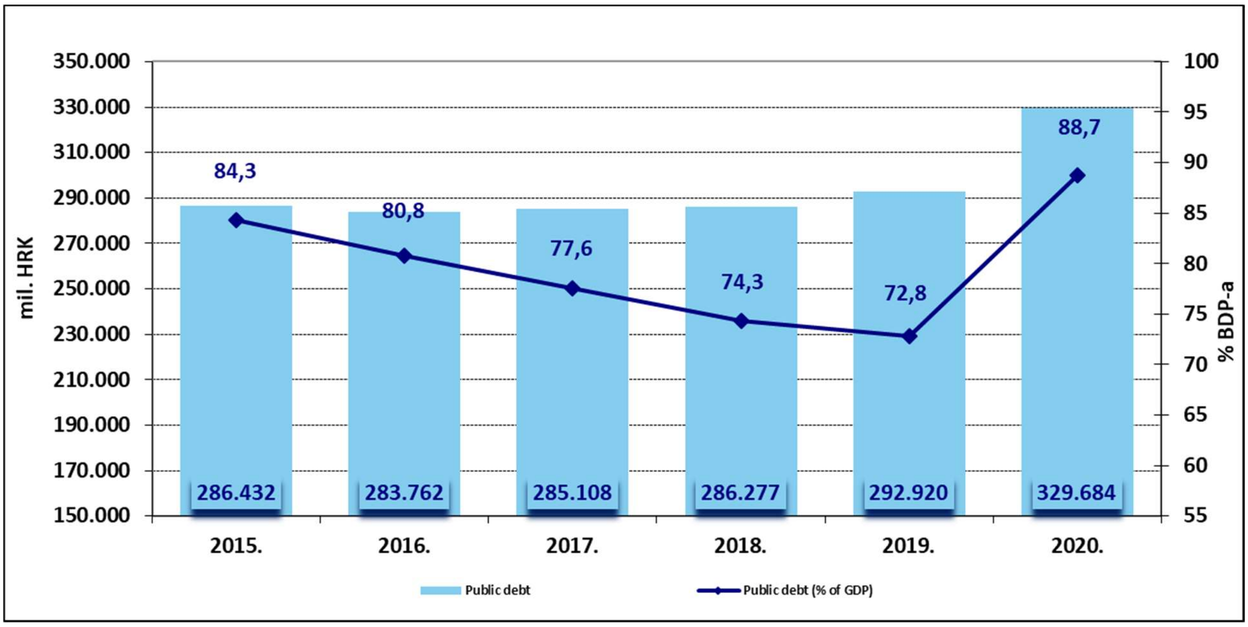
The maturity structure of public debt shows that at the end of 2020, the share of public debt with the maturity of up to 1 year amounted to 6% of total debt. The share of public debt with the maturity of 1 to 5 years amounted to 6.1%, while the share of debt with the maturity of 5 to 10 years amounted to 37.1%. The debt with the maturity of over 10 years accounted for 50.7% of total public debt. The debt with the maturity of over 10 years was by 1.14% higher in 2020 than in 2019, by which the negative exposure to interest rate risk was reduced and the advantage was taken of the favourable situation on financial markets in the form of historically low interest rates which the Republic of Croatia borrowed at with longer maturity.

Chart 0.2. Maturity Structure of Public Debt 2015 - 2020



Source: Ministry of Finance

Chart 0.3. Public Debt Trends 2015 - 2020



Source: HNB, CBS

Total guarantees issued by the Republic of Croatia at the end of 2020 amounted to HRK 6.7 billion, i.e. 1.8% of GDP, and compared to the end of 2019, they increased by HRK 2.3 billion.

During 2020 and 2021, the Government of the Republic of Croatia adopted the decisions on guarantee programmes due to the coronavirus pandemic, within which guarantees for loans to entrepreneurs in the field of culture and creative industries and in the maritime, transport and transport infrastructure sectors and related activities, are granted in the form of state aid measures to the economy. These guarantee programmes are financed from the state budget, and in order not to constitute unallowed state aid, the programmes have been approved by the EC. Implementing bodies approving state guarantees from these programmes, the Croatian Agency for SMEs, Innovations and Investments - HAMAG-BICRO and the Croatian Bank for Reconstruction and Development (HBOR), are obliged to report on the implementation of the programme to the guarantee programme holders and the Ministry of Finance.

Table 0.2. National guarantees within COVID-19 crisis

		Date of adoption	Maximum amount of contingent liabilities[1] (% of GDP)	Estimated take-up (% of GDP)
Measures in response to COVID-19	COVID-19 Programmes for the Portfolio Insurance of Liquidity Loans for Exporters and for the Individual Insurance Policy of Liquidity Loans for Exporters	4.2020.	0,77	0,18
	Working Capital COVID-19 Measure for SMEs in the Tourism Industry	4.2020.	0,01	0,01
	Working Capital COVID-19 Measure for Entrepreneurs in Wood Processing and Furniture Production Industry	6.2020.	n.a.	0,02
	State aid Scheme to support the maritime, transport, transport infrastructure and related sectors and related sectors impacted by the COVID-19 outbreak	7.2020.	0,27	0,04
	State aid Scheme to support tourism and sport sectors impacted by the COVID-19 outbreak	2.2021.	0,40	0,00
	Guarantees for loans in sectors culture and creative industries impacted by the COVID-19 outbreak	7.2020.	0,08	0,01
Total				**0,26**

Source: Ministry of Finance

According to the latest available data of the Central Bureau of Statistics on contingent liabilities of the general government sector in accordance with Council Directive 2011/85/EU on requirements for budgetary frameworks of the Member States, at the end of 2019 the liabilities of public enterprises controlled by the state but not included in the statistical scope of the general government, amounted to 8.4% of GDP, which puts the Republic of Croatia near the bottom in terms of the amount of these contingent liabilities compared to other EU Member States. Such a relatively low level of contingent liabilities is primarily the result of the continuous harmonization with the ESA 2010 methodology and of the reclassification of a large part of state-owned enterprises into the general government sector, i.e. into the public debt.

Financing the General Government Budget and Projection of Trends in the Public Debt

The total level of required financing will be determined by the trends in the fiscal balance, financial assets and general government budget liabilities that fall due in the observed medium-term period. The needs for financing the total budget deficit and due liabilities will be settled on the domestic and foreign financial markets, while in terms of borrowing instruments the focus will be on instruments with longer maturities, primarily on bonds. Borrowing by loans will be primarily focused on the domestic financial market, while foreign financing by loans refers to project loans of international financial institutions, as well as the planned issue of bonds on the international capital market.

The majority of maturing state budget liabilities, in the period 2021-2024, refers to eleven maturities of bonds, of which seven are domestic and four are foreign. Of the domestic bonds, three are denominated in EUR, amounting to EUR 2.9 billion, while four bonds are denominated in HRK in the total amount of HRK 23.8 billion. Foreign maturities refer to four Eurobonds. The first Eurobond in the amount of USD 1.5 billion matured in March this year, the second Eurobond in the amount of EUR 1.25 billion matures in May 2022, the third one in the amount of USD 1.5 billion matures in April 2023, while the fourth one in the amount of USD 1.75 billion matures in January 2024.

Table 3.3: Overview of the Bonds Maturity of the Republic of Croatia in the Period 2021-2024

Bonds	Issue date	Currency	Amount (in million)	Interest rate	Maturity
Bonds issued on domestic market					
Series 22 D-21 RHMF-O-217A	08.07.2016	HRK	6.000	2,750%	08.07.2021.
Series 28 D-22 RHMF-O-222E	05.02.2019	EUR	500	0,500%	05.02.2022
Series 23 D-22 RHMF-O-222A	07.02.2017	HRK	3.000	2,250%	07.02.2022
Series 17 D-22 RHMF-O-227E	22.07.2011	EUR	1.000	6,500%	22.07.2022
Series 26 D-23 RHMF-O-23BA	27.11.2017	HRK	11.300	1,750%	27.11.2023
Series 19 D-24 RHMF-O-247E	10.07.2013	EUR	1.400	5,750%	10.07.2024
Series 29 D-24 RHMF-O-24BA	27.11.2019	HRK	3.500	0,250%	27.11.2024
Bonds issued on foreign market					
Euro-USD bonds / III	24.03.2011	USD	1.500	6,375%	24.03.2021
Euro-EUR bonds / IX	29.05.2014	EUR	1.250	3,875%	30.05.2022
Euro-USD bonds / V	04.04.2013	USD	1.500	5,500%	04.04.2023
Euro-USD bonds / VI	26.11.2013	USD	1.750	6,000%	26.01.2024

Source: Ministry of Finance

On the loans side, most maturities in the observed period relate to loans issued on the domestic financial market and to loans from international financial institutions. Thus, the total maturities of state budget loans range from HRK 7.9 billion in 2021, HRK 6.5 billion in 2022, HRK 6 billion in 2023 and HRK 2.2 billion in 2024.

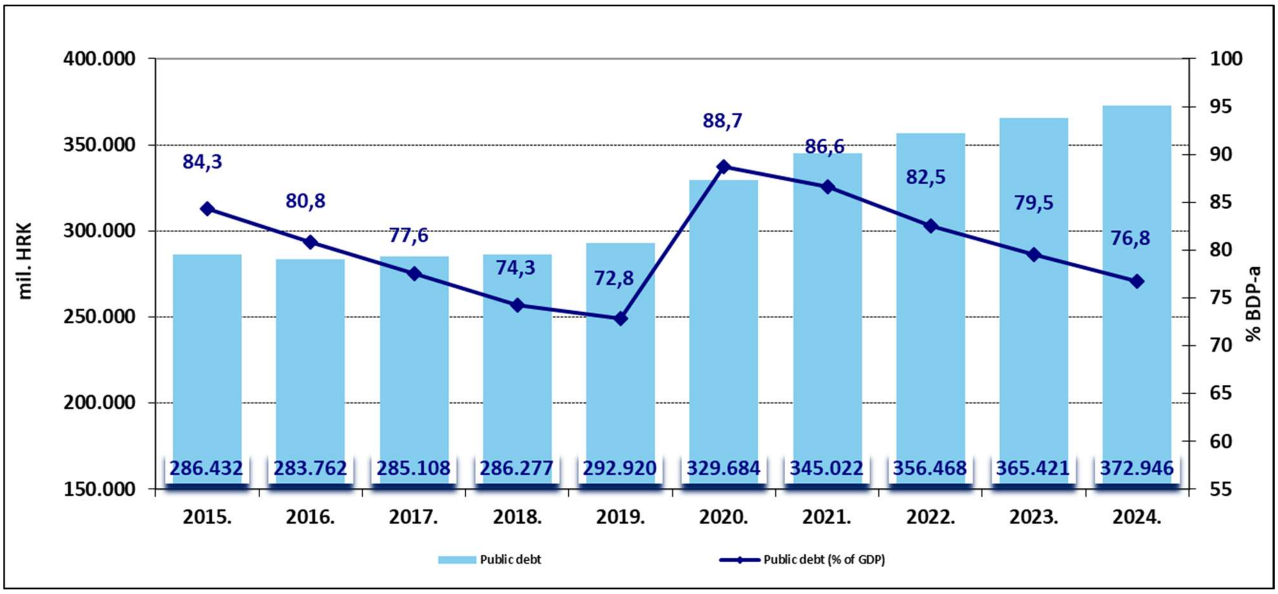
Table 0.4. Repayment of the principal of the debt paid directly from the state budget

	Total amount of debt at 31.12.2020.	2021.	2022.	2023.	2024.
Treasury bills	23.074	23.074	0	0	0
Domestic bonds	118.627	6.000	14.305	11.300	14.052
Foreign bonds	98.513	8.148	9.421	8.799	9.777
Loans on domestic markets	24.274	7.219	5.757	5.351	1.730
Loans on foreign markets	15.046	731	731	601	498
Ukupno	**279.534**	**45.172**	**30.214**	**26.050**	**26.058**

Source: Ministry of Finance

Based on the trends in the fiscal balance of the general government budget, in 2021 the share of public debt in GDP is expected to register a decrease by 2.2 percentage points and it will amount to 86.6% of GDP. Furthermore, in the medium term, the share of public debt in GDP will continue to decrease by an average of 3.3 percentage points per year, to 82.5% of GDP in 2022, 79.5% of GDP in 2023, while in 2024 it will amount to 76.8% of GDP.

Chart 3.4. Overview of Public Debt Trends 2015 – 2024



Source: Croatian Bureau of Statistics, HNB, Ministry of Finance

4. SENSITIVITY ANALYSIS AND COMPARISON WITH THE PREVIOUS PROGRAMME

4.1. Fiscal Risks and Public Debt Trend Sensitivity Analysis

Fiscal projections for the medium-term period are based on macroeconomic assumptions presented in this document. Risks associated with a lower level of economic activity in relation to the presented macroeconomic scenario would have significant implications on expected trends and results of fiscal values, especially tax and contribution revenues in the coming period, which would have a direct impact on the general government budget balance.

The pension system of the Republic of Croatia is facing very unfavourable demographic trends that primarily relate to the aging population and the decrease in the number of inhabitants of younger age groups, but also to the emigration pressures that the Republic of Croatia is facing. The continuation of such trends would create additional pressure on the generational solidarity system, which could have a negative impact on the long-term sustainability of public finances. Furthermore, the stock of matured due liabilities in the healthcare system represents an additional fiscal risk that needs to be addressed in as short term as possible by implementing structural measures aimed at the financial sustainability of the entire healthcare system.

Public debt was reduced by 11.5 percentage points between 2015 and 2019, but due to the unprecedented crisis caused by the coronavirus pandemic that led to high borrowing needs, in 2020 public debt increased by 15.9 percentage points compared to the previous year. Its high level of HRK 329.7 billion is a significant source of vulnerability for the Croatian economy. Namely, given the level of debt, a long-term increase in reference interest rates on financial markets would pose a significant threat to fiscal sustainability. An increase in the cost of financing would lead to high debt service costs, which would also put pressure on the financing of other government needs. Thus, in the scenario of increasing the average implicit interest rate on debt by 1 percentage point in the period 2021-2024, public debt would register an increase above the projected one and at the end of the projection period it would be higher by 6.8 percentage points than in the baseline scenario, i.e. it would reach the level of 83.6% of GDP.

Furthermore, the high share of public debt denominated in euro (70.9%) indicates that the trends in public debt are subject to the exchange rate risk. The sensitivity test shows that the depreciation of kuna against euro of 5% would raise the level of public debt to 89.7% of GDP in 2021, i.e. public debt would be higher by 3.1 percentage points compared to the baseline scenario, while the nominal increase in public debt would amount to HRK 12.2 billion.

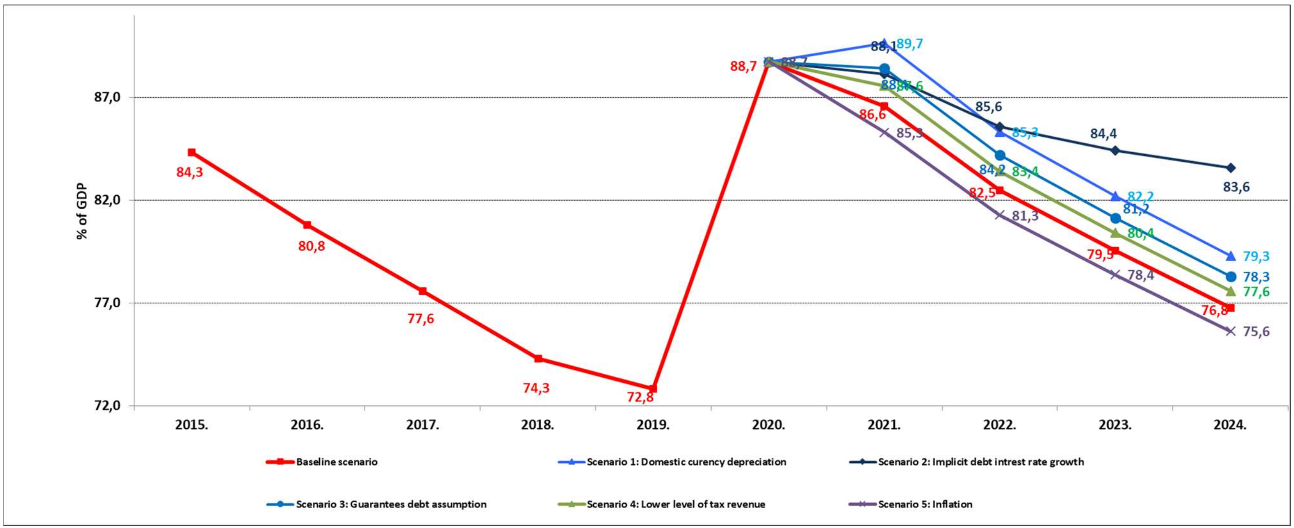
Although the Republic of Croatia is at the bottom in terms of the level of contingent liabilities compared to other EU Member States, such liabilities still pose a potentially high risk to public finances. Thus, under the suggested scenario of taking over all guarantees in the public debt, which in 2020 amounted to 1.8% of GDP, the public debt would reach the level of 88.4% of GDP in 2021, i.e.

public debt would be higher by 1.8 percentage points, while the nominal increase in public debt would amount to HRK 7.4 billion.

Lower tax and contribution revenues would lead to a larger general government budget deficit and consequently increased borrowing needs. From the conducted sensitivity test, in case the realization of tax and contribution revenues is 3% less than projected by the Programme, the public debt would amount to 87.6% of GDP in 2021, and would register an increase of 1 percentage point compared to the initial projection.

Nominal GDP also depends on the price level in a given year. In the scenario when in the projection period the inflation rate would be 1.5% higher than projected by the Programme, the realized nominal GDP would be higher by HRK 6 billion in 2021, and the share of public debt in GDP would be 85.3 %, or 1.3 percentage points less than initially projected.

Chart 0.1: Trends in Public Debt Share in GDP according to Specific Scenarios



Source: Ministry of Finance

4.2. Comparison with the Previous Programme

The comparison of total revenue, expenditure and deficit of the general government budget in the new Convergence Programme and the previous one (hereinafter referred to as: the Programme) shows some differences, which primarily arise from different levels of nominal gross domestic product as well as from different budgetary trends on both the revenue and the expenditure side in relation to the previously expected.

The Convergence Program for the period 2020-2021 was based on the assumption of a decline in real gross domestic product of 9.4% in 2020 and real GDP growth of 6.1% in 2021. In 2020, the realized decline in real GDP was 8%, which is a better result than previously projected by 1.4 percentage points. The planned GDP growth for 2021 is 5.2%, which is by 0.9 percentage points lower than projected in the previous Programme.

Furthermore, in 2020, the revenues and expenditures of the general government sector were higher by 1.6 percentage points and 2.1 percentage points, respectively, compared to the originally planned. Such trends affected the general government budget deficit by 0.6 percentage points. In 2021, new general government revenue projections are by 2.6 percentage points higher than in the last year's Programme. At the same time, expenditures are by 4.1 percentage points higher than in the previous Programme.

Table 0.1: Comparison of Revenue, Expenditure and Net Lending/Borrowing of the General Government

	2020.	2021.
CP RoC 2020-2021 (% of GDP)		
Total revenue	46,4	47,8
Total expenditure	53,3	50,2
Net lending/borrowing	**-6,8**	**-2,4**
CP RoC 2022-2024 (% of GDP)		
Total revenue	48,0	50,5
Total expenditure	55,4	54,3
Net lending/borrowing	**-7,4**	**-3,8**
Difference		
Total revenue	-1,6	-2,6
Total expenditure	-2,1	-4,1
Net lending/borrowing	**0,6**	**1,5**

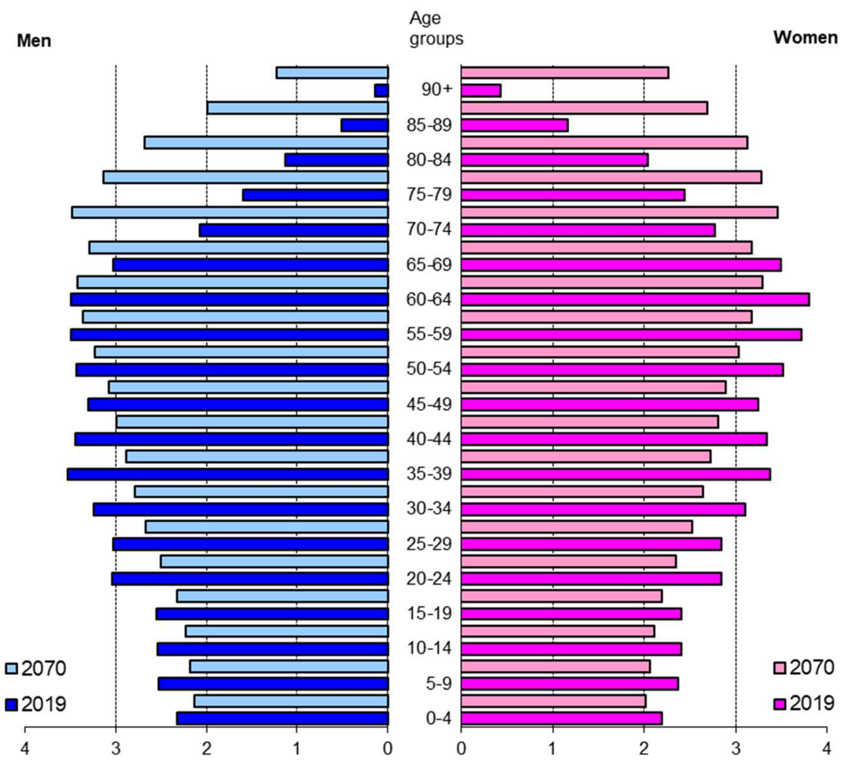
Source: Ministry of Finance

5. SUSTAINABILITY OF PUBLIC FINANCES

Aging is one of the biggest social, economic and health challenges of the 21st century, especially in Europe, which is the continent with the largest share of people over the age of 65 in the total population (15%). In most developed countries, the chronological age of 65 is accepted as the age limit in the definition of the elderly. Like most European countries, the Republic of Croatia belongs to countries with a very old population. The share of the elderly population became higher than 10% as early as in 1971, and the trend of progressive aging continued.

According to the EC 2021 Aging Report[11] (The Aging Report 2021) in the period 2019-2070, the population of the Republic of Croatia is projected to decrease from 4.1 to 3.0 million, whereby there will be major changes in the trends of the number of EU population, indicating negative demographic trends (Chart 5.1.). The working-age population group (15 – 64 cohort) will decrease significantly, and at the same time the population group of above the age of 65 (65+ cohort) will increase, or the number of people above the age of 75 and the number of 100-year-olds will increase.

Chart 0.2. Age-Sex Pyramid of Population of the Republic of Croatia as the share in total population

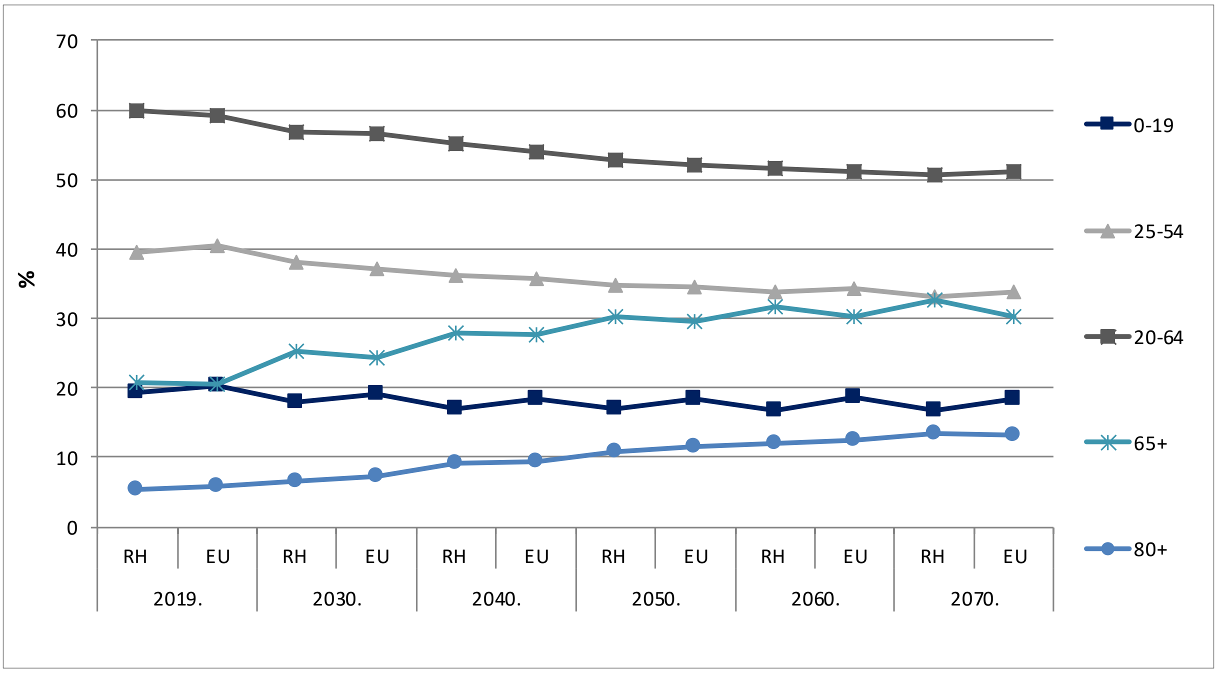


Source: European Commission

As can be seen in the Chart 5.2, in the period 2019-2070, the share of the population in both the Republic of Croatia and the EU in the younger and moderately active population is projected to decrease, while the age groups 65+ and 80+ are projected to increase.

[11] *The official publication of the Aging Report 2021 by the EC is expected in the first half of 2021.*

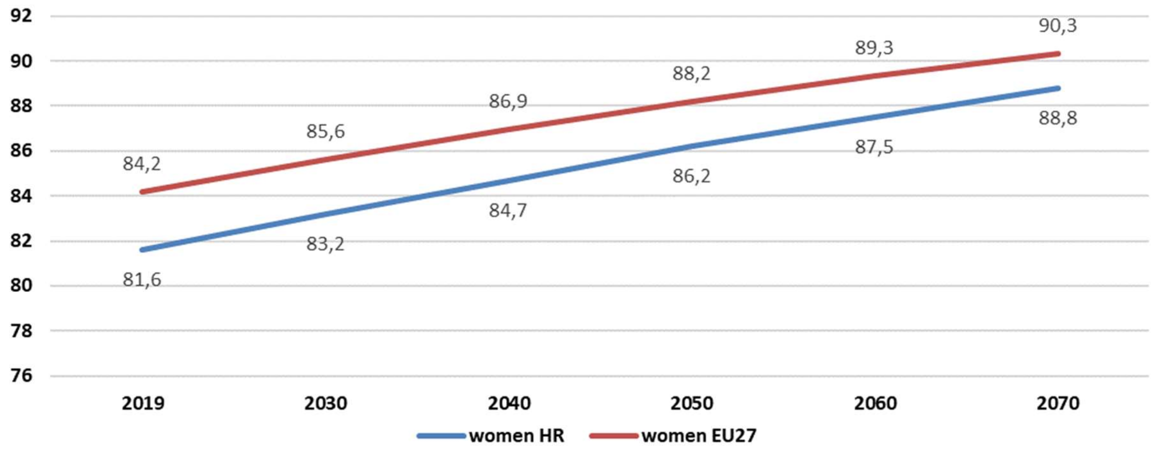
Chart 0.2: Trends in Number of Residents per Age Groups, Republic of Croatia and EU



Source: European Commission

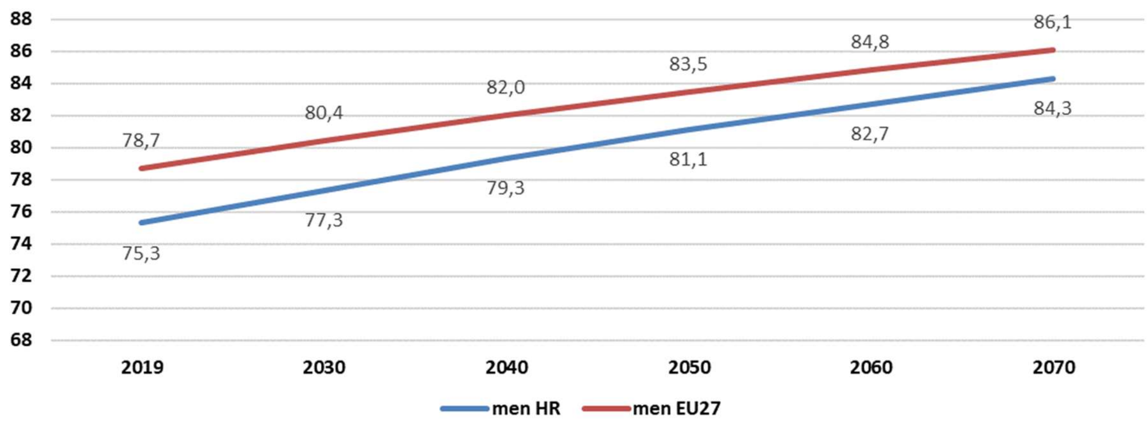
With the decrease in the number of residents, the Republic of Croatia continues to follow the European trend of increasing life expectancy. In 2019, life expectancy at birth was 81.6 years for women and 75.3 years for men. This is less than the EU average where life expectancy at birth was 84.2 years for women and 78.7 years for men. However, the data for the Republic of Croatia show a tendency of the increase in life expectancy by 2070 by 9.0 years for men and 7.2 years for women, while in the EU the increase in the age for men is expected by 7.4 years and 6.1 years for women.

Chart 0.3: Life Expectancy at Birth, women



Source: European Commission

Chart 0.4: Life Expectancy at Birth, men



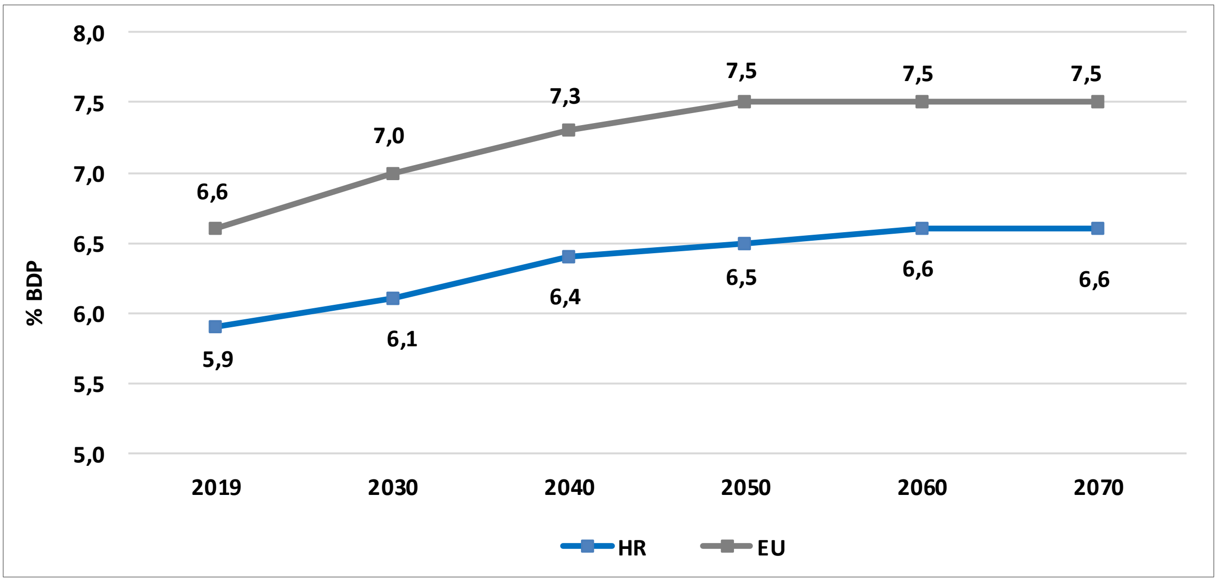
Source: European Commission

By comparing the EU and the Republic of Croatia in the period 2019-2070, the remaining life expectancy at the age 65 will be extended for both women and men, thus creating strong pressure on the sustainability of public finances, including the system of generational solidarity.

Healthcare System and Social Welfare

Demographic changes have a significant impact on the demand for healthcare services. According to the Aging Report 2021, in 2019 total healthcare expenditure in the Republic of Croatia amounted to 5.9% of GDP, which is by 0.7 percentage points lower than the EU average. It is projected to amount to 6.6% of GDP by 2070, while in the EU it will be at the level of 7.5% of GDP.

Chart 0.5: Spending for Healthcare (as % of GDP)



Source: European Commission

In order to maintain the healthcare system, the aim is to raise the quality of healthcare, optimize resources and financially stabilize the system. This is planned to be achieved by greater availability of healthcare services, reduction of multiple appointments and medical procedures, reduction of waiting lists, unified procurement of medicines and medical equipment, which will include as many healthcare institutions as possible and expand the number of public procurement categories. Furthermore, the aim is to standardize and optimize the criteria and procedures for diagnosis, treatment and monitoring of patients, as well as to functionally connect hospitals and to establish centres of excellence in individual hospitals, both at regional and national level. In this regard, the healthcare planning will be based on the three pillars of development defined under (i) primary, (ii) secondary and (iii) tertiary healthcare.

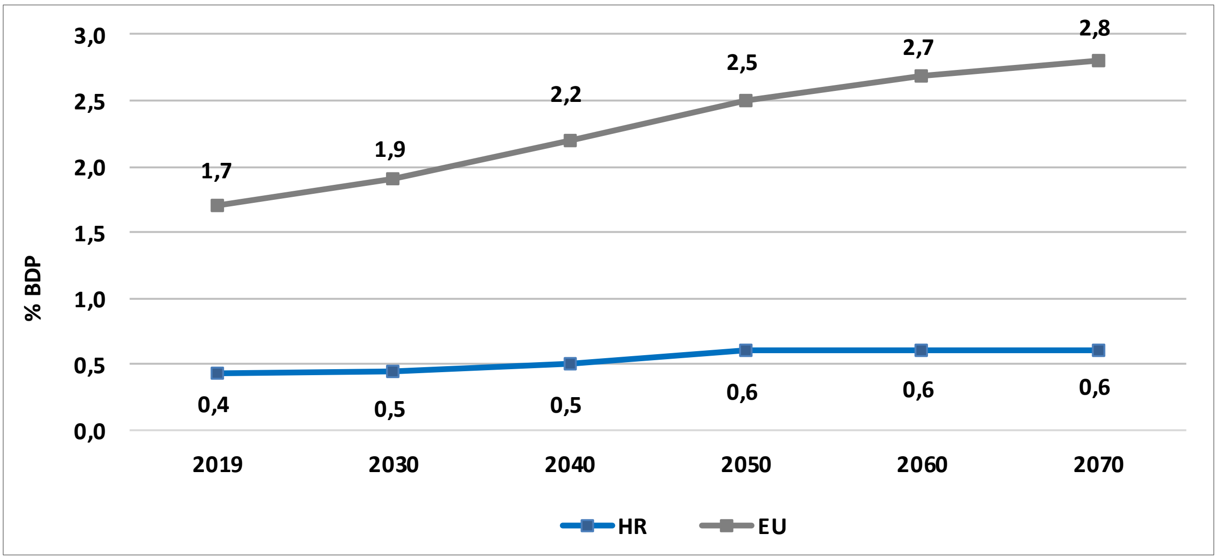
The primary healthcare system will focus on further strengthening the prevention and availability of basic access to healthcare throughout the Republic of Croatia with the aim of implementing all activities that should reduce the influx of patients into the secondary and tertiary healthcare system.

The secondary healthcare system will focus on the regional connection of healthcare institutions through functional integration, which will also enable further rationalization of institutional and administrative capacities in hospitals as well as the procurement of equipment.

The tertiary healthcare system will encourage the establishment of centres of excellence and the application of advanced technological and innovative methods of treatment through the strengthening of outpatient healthcare and monitoring future effects of treatment outcomes in the Republic of Croatia. Such an approach enables the application of a methodological framework by which it will be possible to monitor the efficiency and cost-effectiveness of the entire healthcare system through cost-utility and QUALY analyses. The intention is to introduce controlling and centralization of the hospital system through coordination of management and standardization of processes in all hospitals in the Republic of Croatia. Digitalization of medicine tracking through healthcare institutions at the secondary and tertiary levels of healthcare will contribute to fully transparent monitoring of medicine consumption and the creation of a pharmacoepidemiological database, which will enable more systematic planning, monitoring and evaluation of all healthcare processes.

In 2019, public spending in the Republic of Croatia on long-term care amounted to 0.4% of GDP, while at the EU level it amounted to 1.7% of GDP. It is projected to increase minimally to 0.6% of GDP by 2070, while at EU level it will amount to 2.8% of GDP.

Chart 0.6: Spending for Long-Term Care (as % of GDP)



Source: European Commission

In order to reduce the risk of poverty and social exclusion, special attention will be paid to the development and availability of social services for particularly vulnerable groups, as well as to the implementation of employment measures and the promotion of lifelong learning to adapt to labour market needs.

The consolidation of social benefits in the social welfare system is planned to be carried out by merging the existing social benefits aimed at mitigating the consequences of poverty into one benefit. The existing social benefits intended for the protection of persons with disabilities will be consolidated in the same way. This will enable more efficient use of public funds, reduction of inequalities, greater transparency, as well as administrative relief of the system.

For the purpose of the efficient use of funds for social benefits, mutual exchange of data on social benefits between the national and local level will be enabled. This will be achieved through the development of the IT social protection system through the exchange of data on social benefits at the national and local level, as well as by developing a web application that combines social benefits and conditions for the realization thereof in the social protection system. In addition, measures will be implemented in order to increase the inclusion of working-age beneficiaries of guaranteed minimum benefit into the labour market.

Pension System

The increase in life expectancy, with unfavourable expectations of natural increase and net migration, as well as the growth of the share of older people in the total population, has a negative impact on costs in the pension system.

Tables 5.1. and 5.2. show long-term projections of revenues and expenditures in the pension system based on the projections of the EC prepared for the needs of the Aging Report 2021, and supplemented in accordance with the realized revenues and expenditures for pensions in 2020 and the first GDP estimate for 2020 published by the Croatian Bureau of Statistics.

The results of long-term projections for the Republic of Croatia for the period 2020-2070 show that expenditures for pensions from the 1st pillar should be gradually reduced from 11.4% of GDP in 2020 to 9.5% of GDP in 2070. Given that in the projected period the share of pension insurance contributions paid in the first pillar is expected to gradually increase from 6.0% in 2020 to 7.1% by 2030, followed by a stable share until 2070, the transfers from the state budget for covering the deficit will gradually decrease from the current 5.4% to about 2.4% of GDP by 2070. The expenditures for pensions from the 2nd pillar should gradually increase to 0.4% by 2070, which means that total expenditures for the first and the second pillar pensions would decrease from 11.4% in 2020 to 9.8% of GDP in 2070.

Table 0.2: Expenditures for Pensions and Pension Contributions in the Period 2016-2070 (as % of GDP)

Pension expenditure	2020*	2030	2040	2050	2060	2070
Expenditures of first pension pillar	11,4	11,0	10,4	9,9	9,7	9,5
Expenditures of second pension pillar	0,0	0,2	0,3	0,3	0,3	0,4
Total pension system expenditure	**11,4**	**11,1**	**10,7**	**10,2**	**10,0**	**9,8**
Pension insurance contributions	**2020***	**2030**	**2040**	**2050**	**2060**	**2070**
Contributions paid into first pillar	6,0	7,1	7,2	7,1	7,1	7,1
Contributions paid into second pillar	1,9	1,7	1,7	1,8	1,8	1,8
Total paid contributions	**7,9**	**8,9**	**9,0**	**9,0**	**8,9**	**8,9**

**Note: Data for 2020 are presented in accordance with the realized revenues and expenditures for pensions in the State Budget of the Republic of Croatia for 2020 and the first estimate of GDP for 2020 published by the Croatian Bureau of Statistics, while the GDP growth rates from the Ageing Report 2021 were used for the period 2021-2070.*

Source: Ministry of Labour and Pension System

According to the projections of long-term trends in the pension system, a slight increase in the total number of insured persons can be expected in the next few years, primarily due to the expected growth in employment. In the long-term period, the impact of more unfavourable demographic trends and a reduced number of population in the younger age groups will prevail, which will cause a gradual decline in the total number of insured persons.

On the other hand, there are important factors that will reduce the expenses of the pension system in the future. Given the functioning of the mandatory second pillar pension since 2002, as of 2030 the number of pensioners who will receive a basic pension from the first pillar and a pension from the second pillar will increase significantly. This means that expenditures for pensions paid from the first pillar will gradually decrease. The pensions realized from the first and the second pension pillars were lower than pensions realized only from the first pension pillar with a pension supplement, and therefore the 2019 pension reform, among other things, introduced a pension supplement for first-pillar insured persons who are compulsorily insured in the second pension pillar as well. This reduces the difference in the amount of pension for beneficiaries from both mandatory pension pillars in relation to the pensions realized only in the first pillar, and, thus, it affects the adequacy of their pensions.

The key measure for the improvement of the efficiency of the pension system is the stimulation of longer years in service, which has been achieved by expanding the circle of beneficiaries who can work and receive a pension, and by equalizing the age for early retirement for women and men to 60 years and 65 years, respectively, as of 2030.

Table 5.2 shows the projected values of expenditures for certain types of pensions, according to which a slight increase in expenditures for statutory-age and early-age retirement pensions is expected by 2030, followed by their reduction due to a significant share of pension disbursements from the second pension pillar. The gradual reduction of the share of pension expenditures in GDP is also influenced by the valorisation and adjustment (indexation) of pensions from the first pillar to the growth of wages and consumer prices in the ratio of 70:30.

A significant reduction in the number of disability-pension beneficiaries is projected by 2070, which is the result of stricter criteria for exercising the right to a disability pension. The large share of disability pensions is a consequence of less strict criteria for acquiring disability pensions in the previous period, as well as of a relatively large number of disability pensions received by Homeland War veterans. Since 2015, disability pensions have been translated into statutory-age pensions when a beneficiary reaches the age for receiving a statutory-age pension, resulting in a decline in expenditures for disability pensions and in an increase in the expenditures for statutory-age pensions in relation to the previous period. The share of expenditure for family pensions will also gradually decrease, primarily due to demographic trends and the increase in the female employment rate.

Table 0.3.: Expenditures from the 1st Pension Pillar in the Period 2016-2070 (% of GDP)

Pension types	2020*	2030	2040	2050	2060	2070
Expenditures of first pension pillar	**11,4**	**11,0**	**10,4**	**9,9**	**9,7**	**9,5**
Old age and early retirement pensions	7,5	7,9	7,7	7,5	7,5	7,4
Disability pensions	2,0	1,4	1,1	0,8	0,7	0,7
Family pensions	1,9	1,7	1,6	1,5	1,5	1,4

**Note: Data for 2020 are presented in accordance with the realized revenues and expenditures for pensions in the State Budget of the Republic of Croatia for 2020 and the first estimate of GDP for 2020 published by the Croatian Bureau of Statistics, while the GDP growth rates from the Ageing Report 2021 were used for the period 2021-2070.*

Source: Ministry of Labour and Pension System

6. QUALITY OF PUBLIC FINANCES

6.1. Strategic Framework

In addition to the challenges of the economic recovery from the health and socio-economic consequences of the coronavirus pandemic, and of the reconstruction of the areas of Zagreb, Petrinja and its surroundings damaged in the earthquake, the Government of the Republic of Croatia will continue with reform measures to strengthen the quality and fiscal sustainability of public finances. In this regard, on the revenue side, special attention will be paid to further simplification of the tax system, increasing its fairness and reducing the overall tax and administrative burden on the population and the economy. This will open space for larger investments, increase production capacities and raise the level of their technological equipment, and create the potential for faster productivity growth, and ultimately the living standards of the population.

On the expenditure side, a detailed review of each budget expenditure item will continue in order to increase the justification and efficiency of budget spending. In addition, increasing public investment along with faster and more efficient use of European funds will be the most important task of all state institutions. The wave of public investments will facilitate the recovery of the Croatian economy, but also its resilience to future crises, and encourage a new investment cycle of the private sector.

6.2. Measures on the Revenue Side of the Budget

In the period 2022-2024, measures will be implemented aimed at fair and efficient collection of public revenues, cooperation and partnership of the Tax Administration with citizens and entrepreneurs, and the creation of conditions for further tax relief. Thus, the amendments to acts and regulations based on a comprehensive analysis of the tax system are aimed at reducing the overall tax burden and at simpler and more socially just tax system that adapts to market changes in order to successfully follow the challenges in the economy.

Changes in the Taxation by Value-Added Tax

As of January 1, 2021, the Value Added Tax Act[12] has been harmonized with the EU Council Directives[13] related to VAT exemptions for small consignments imported into the EU, the value of which is less than 22 euros, with effect as of July 1, 2021.

[12] *Official Gazette, nos. 73/2013, 99/2013, 148/2013, 153/2013, 143/2014, 115/2016, 106/2018, 121/19 and 138/20.*

[13] *Council Directive (EU) 2017/2455 of 5 December 2017, Council Directive (EU) 2019/1995 of 21 November 2019 and Council Directive (EU) 2019/2235 of 16 December 2019*

In addition, in order to facilitate business operations for taxpayers, the threshold for the application of the taxation procedure according to the collected fees has been increased to HRK 15 million. The possibility of applying the calculation category of VAT on imports to all goods, regardless of their type and value, has been extended to taxpayers that are in the VAT system and that can deduct input tax in full, all with the aim of facilitating business operations for taxpayers in terms of engaging financial resources for payment. In that sense, the Act prescribes that VAT is considered paid upon import, if the taxpayer states it as an obligation in the VAT return, and such way of calculating and paying VAT is requested by the taxpayer by filling in the customs declaration by which the goods are released for free circulation.

Changes in the Taxation by Corporate Income Tax

In the corporate income tax system, new provisions start to be applied, which came into force on January 1, 2021[14]. Namely, for taxpayers that realize the income of up to HRK 7.5 million, the tax rate was reduced from 12% to 10%. The withholding tax rate for the payment of dividends and profit shares was also reduced from 12% to 10%, and the withholding tax rate for the payment of performance fees for foreign performers (artists, entertainers and athletes) was reduced from 15% to 10%.

Credit institutions are allowed to tax deductible expenses for the amount of the written-off credit placement of a citizen or an entrepreneur, provided that the value of the write-off of the credit placement complies with special regulations of HNB and in the case of the write-off of receivables from unrelated parties.

Regarding the prices and contracts between related parties, there is an obligation prescribed to regularly adjust transfer prices before submitting the corporate income tax return. In addition, the scope of the application of the rules related to the mechanism of determining the authenticity of the arrangement has been expanded, i.e. the possibility that a transaction that could result in a lower tax or complete non-payment of tax is declared inauthentic, as well as in cases prescribed by international agreements.

Changes in the Taxation by Personal Income Tax

In order to increase the disposable income of taxpayers, as of January 1, 2021, the Income Tax Act [15] reduced income tax rates from 24% to 20% up to the amount of income of HRK 30,000, and from 36% to 30% on the income above HRK 30,000 per month. In addition, tax rates were reduced from 12% to 10% applicable to the taxation of annual and final income and to the flat-rate taxation of activities.

[14] *Official Gazette, nos. 177/04, 90/05, 57/06, 146/08, 80/10, 22/12, 148/13, 143/14, 50/16, 115/16, 106/18, 121/19, 32/20, 138/20.*

[15] *Official Gazette, nos. 115/16, 106/18, 121/19 and 138/20*

The annual calculation of income tax for all taxpayers is also standardized, thus simplifying the taxation system. Receipts on the basis of other income are taxed at new rates of 20% instead of the previous 24%, and the total realized second income at the level of the year is included in the annual calculation of income tax.

The new tax amendments also strengthen the institute of disproportion of property in such a way that income tax is now paid at a higher rate, on the difference between the determined value of property and the amount of funds which it was acquired with.

In order to reduce administrative burdens on taxpayers, since the beginning of this year, it has been possible for income from property on the basis of rent/lease to be considered reported by the delivery of documents from notaries public.

Regarding receipts, the possibility of payment of receipts in kind based on the allocation or optional purchase of own shares, which employers use as a way of rewarding and retaining employees, has been expanded. In addition, the scope of receipts that are not considered receipts from self-employment has been extended to the cost of vaccination against infectious diseases, which the employer provides to workers at his own expense.

Furthermore, the scope of income tax-free receipts and receipts that are not taken into account in determining the right to personal deduction for dependent members, has been increased by the introduction of a national benefit for the elderly.

The new legal amendments also define the exemption from taxation of digital nomads, i.e. entrepreneurs who perform their business through telecommunications technologies from the Republic of Croatia, i.e. from a distance, and who are mostly highly qualified foreigners, often IT experts with very specific knowledge.

Changes in Fiscalization

The Act on the Amendments to the Act on Fiscalization in Cash Transactions[16] stipulates that the amount of the cash maximum is no longer prescribed by legal provisions but by the Ordinance on fiscalization in cash transactions.[17]. This change significantly increased the cash maximums that an entity subject to fiscalization can determine depending on its size in accordance with the provisions of the act governing the development of small businesses. This significantly reduced the costs for taxpayers to transfer proceeds to a bank account, as so far they have usually hired security companies for this purpose.

As of January 1, 2021, the application of the provisions related to the fiscalization of sales through self-service devices and the display of QR codes on the invoice began.

Changes in the Tax Treatment of Excise Duties

[16] *Official Gazette, no. 138/2020*
[17] *Official Gazette, nos. 146/12, 46/17 and 70/20*

As of March 1, 2021, a new Regulation on the amount of excise duty on tobacco derivatives and tobacco products[18] entered into force, which changes the amount of excise duty on cigarettes so that the specific excise duty is now HRK 400 per 1,000 cigarettes, proportional excise duty 34% of the retail price of cigarettes, and a minimum excise duty on cigarettes of HRK 888 per 1,000 cigarettes.

The excise duty on fine-cut tobacco for rolling cigarettes, other smoking tobacco and new tobacco products now amounts to HRK 860 per kilogramme; excise duty on cigars and cigarillos amounts to HRK 860 per 1,000 pieces, and for heated tobacco products HRK 1,400 per kilogramme. The amount of excise duty for e-liquids is not changed and is still HRK 0 per 1 millilitre. This amendment reduced the significant difference in the amount of excise duty on cigarettes and heated tobacco products.

6.3. Measures to Improve the Efficiency of Budget Expenditures

More Efficient System of Financial and Statistical Planning and Reporting By Extra-Budgetary Users

By adopting the 2020 State Budget of the Republic of Croatia and Projections for 2022 and 2023, the scope of the previous six extra-budgetary users was increased by four more companies from the transport sector, in order to bring, in accordance with the provisions of the Budget Act,[19] the scope of the general budget according to the national methodology closer to the sectoral scope of the general government according to the ESA 2010 methodology. In line with the above, extra-budgetary users according to the national methodology now include: Croatian Health Insurance Institute, *Hrvatske vode*, *Hrvatske ceste d.o..o*, Restructuring and Sale Centre, Environmental Protection and Energy Efficiency Fund, State Agency for Deposit Insurance and Bank Resolution, Croatian Motorways Ltd. (*Hrvatske autoceste d.o.o.)*, *Autocesta Rijeka-Zagreb* d.d., *Hrvatske željeznice Infrastruktura d.o.o.* and HŽ Passenger Transport Limited Liability Company (*Hrvatske željeznice Putnički prijevoz d.o.o.*).

Along with the increase in the scope of extra-budgetary users, there is a need to modernize and harmonize the methods of preparation of financial plans and reports on the implementation thereof, and consequently to improve financial planning and allocation of public funds. Therefore, the development of an application solution for financial planning of extra-budgetary users and improvement of the processing of entered data is in progress. The first use of the application is expected with the preparation of financial plans of extra-budgetary users for the period 2022-2024.

Ex-Post Evaluation of the Effects of Selected Activities in the Sectors of Water Management and Environmental Protection

In 2019, the Ministry of Finance conducted an *ex post* evaluation procedure of selected programmes, activities and projects in the field of water management and environmental protection, namely regular maintenance and restoration of watercourses, water structures and water resources, and of

---

[18] *Official Gazette, No. 20/2021*

[19] *Official Gazette nos. 87/2008, 136/2012, 15/2015*

the activities of managing special waste categories, in accordance with the methodology which was used, until then, in the implementation of controls during the execution of the state budget. In addition, in 2020, external experts were engaged in the project "Review of expenditures in the areas of water and waste management", funded by the EC Structural Reform Support Programme (SRSP), who will, now in 2021, conduct a more comprehensive *ex post* evaluation of the results of the aforementioned analysis of selected activities in the field of water management and environmental protection. In doing so, special attention will be paid to the justification of the implementation, cost-effectiveness, optimization and sustainability of results, i.e. their efficiency and validity. As part of the project, external experts in cooperation with the Ministry of Finance will prepare a document that will define the methodology for conducting the *ex post* evaluation. In addition, as part of the project, the necessary appropriate training of employees of the Ministry of Finance and other ministries will be organized for the purpose of conducting *ex post* evaluations of the impact of programmes, activities and projects of budgetary and extra-budgetary users of the state budget.

As of 2022, the implementation of the procedure of *ex post* evaluation of fiscally significant programmes, activities and projects of the state budget, and financial plans of extra-budgetary users will become an integral part of the budget process in order to continuously improve the budget planning system, more efficiently control public funds and rationalize costs. Furthermore, with the help of the results of the *ex post* evaluation, it will be easier to identify potential risks, which will open additional space for better implementation of individual programmes, activities and projects.

Public Investment Management Assessment – PIMA

Pursuant to the provisions of the Budget Act, budgetary users of the state budget and the budgets of local and regional self-government units can start with investment projects only after the expert evaluation and the assessed justification and effectiveness of the project. However, in the Republic of Croatia there is currently no specific, unique and comprehensive (sub)legal act that would regulate this area, which is why the management of investment projects and the quality thereof varies from sector to sector. In this sense, it is necessary to define the format and criteria for expert evaluation and assessment of the justification and effectiveness of the investment project, depending on its size at the state level.

The aim is to establish an effective system of evaluation and approval of investment projects in the state budget and the budgets of local and regional self-government units, in order to ensure an increase in the share of quality investment projects that are economically justified and financially sustainable, especially in the context of defined investment activities within the framework of the National Recovery and Resilience Facility. Therefore, the Ministry of Finance has initiated the cooperation with the International Monetary Fund through technical support in the implementation of the Public Investment Management Assessment (PIMA).

7. INSTITUTIONAL FEATURES OF PUBLIC FINANCES

7.1. Budget Act

In order to further improve the fiscal framework in the Republic of Croatia, a new Budget Act (hereinafter: the Act) is being drafted, the adoption of which is expected by the end of 2021, which will regulate the planning, drafting, adoption and execution of the budget, as well as liabilities and deadlines arising from euro area membership, asset and debt management, public debt management, borrowing and guarantees of the Republic of Croatia and local and regional self-government units, accounting, budget supervision, as well as some other issues related to the public financial management such as spending review and strengthening the capacity to act in times of crisis. In other words, the new Act will prescribe the process and key documents for drafting, adopting and executing the state budget and the budgets of local and regional self-government units and their extra-budgetary users, the framework for borrowing of local and regional self-government units, monitoring of the use of earmarked and own revenues, forecasting and control of future spending including multi-annual liabilities. It will also allow for greater flexibility in the execution of EU projects, as well as the alignment with Council Directive 2011/85/EU on requirements for budgetary frameworks of the Member States.

a) *Macroeconomic framework*: In terms of improving the quality of key documents of the budget cycle, the macroeconomic and fiscal framework will be further improved to include assumptions and parameters on the basis of which macroeconomic projections are made, indicating their sources and a note on the methodology used in calculations, explanation of significant differences between macroeconomic and budgetary projections and the latest available European Commission projections, multi-annual budgetary targets expressed by indicators of the general budget deficit or surplus, public debt and the level of general budget revenues and expenditures, projections by types of general budget revenues and expenditures based on fiscal effects of non-amended acts , other regulations and planning acts, and a description of the envisaged amendments to acts, other regulations and planning acts with fiscal effect in the medium-term budget period, as well as fiscal risks and the sensitivity analysis of trends in the general budget deficit or surplus, and public debt based on various assumptions of economic growth and the level of interest rates, and other variables that could affect the trends in these fiscal indicators. In this way, the contents in the part of the macroeconomic and fiscal framework will be elaborated and thus harmonized with Council Directive 2011/85/EU.

b) *Budget planning*: The new Act will prescribe an obligation on ministries to prepare instructions, which are more detailed, for budgetary and extra-budgetary users within their competence, in which, among other things, they assign limits to their budgetary users, including the third level of users. Based on the established limits, budgetary users will prepare draft financial plans and submit them to the competent ministry, which will then prepare a harmonized draft financial plan. This will lead to a better quality of the consolidated financial plans of the ministry with a large number of budgetary users and ensure a smooth process of the execution thereof.

In addition, the new Budget Act will prescribe that the financial plan of extra-budgetary users consists of a plan of revenues and receipts and expenditures and expenses expressed by sources of financing. This will contribute to greater transparency of financial plans of extra-budgetary users, as well as to the improvement of planning and monitoring of the use of budget funds at all levels of government.

According to the current Act, the budget, as the most important public finance document, consists exclusively of a general and a special part. The new Act will supplement the contents of the budget so that the justification becomes an integral part of the budget, both at the state and at the level of local and regional self-government units.

In order to further strengthen the stability of public finances, the new Act will introduce the obligation for budgetary and extra-budgetary users and for local and regional self-government units and their users to develop a multi-annual balancing plan, as a separate document to be adopted along with the budget, i.e. financial plan, if these users cannot settle due liabilities by the end of the budget year, i.e. to cover the transferred deficit in full from the revenues and receipts of the budget year.

c) *Spending review*: In order to improve the budget planning system and to control in a better way the purposefulness and justification of the use of funds from public sources, the new Budget Act will prescribe the obligation to prepare a continuous analysis of public policies, programmes, activities/projects, i.e. individual types of expenditures of budgetary and extra-budgetary users by levels of public spending. In other words, the Act will prescribe the obligation to prepare a report on the results of the spending review of specific expenditures (programmes, activities/projects), which will contain recommendations for improving the efficiency of budget funds spending and which will identify potential improvements in the allocation of existing expenditures, the transparency thereof and necessary additional analyses of the effectiveness of individual programmes.

d) *Implementation of EU-funded projects*: In order to prepare and later more efficiently implement EU-funded projects, the new Act will allow more flexibility in the implementation thereof and introduce clearer rules for the reallocation of budget funds, depending on the sources of financing.

Forecasting and controlling future spending is one of the basic instruments for improving the budget preparation process, but also for maintaining and reducing the level of public expenditure in the projected macroeconomic framework. Therefore, the current Budget Act introduced monitoring of the creation of multi-annual contractual obligations.

For the sake of uniform treatment, the new Act will stipulate that the ordinance, i.e. the general act will prescribe the conditions for giving consent to budgetary users to assume such obligations.

In addition, according to the current Budget Act, the consent of the Government, i.e. the Minister of Finance is not required for obligations related to government borrowing and public debt management and for obligations assumed on the basis of international agreements and projects financed from EU funds. However, as EU funds are an increasingly important source of financing, and thus the part required for co-financing from national sources is increased, it is necessary to introduce better control over the creation of multi-annual contractual obligations arising from the implementation of projects financed from these sources, in a way that will not slow down the contracting and implementation thereof, which will be provided by the new Act. In particular, the obligation to obtain the consent of the Government, i.e. the Minister of Finance, for assuming the obligations under multi-annual contracts for EU projects above a certain amount will be introduced as well.

e) *Budget transparency*: A transparent budget contributes to better management of budget funds and strengthens the citizens' trust in political processes. The new Act will prescribe a provision that will expand the obligation to publish budget documents (in a machine-readable format) in order to increase the transparency of the state budget and financial plans of extra-budgetary users. The local and regional self-government units will also be required to publish the information on budget funds spending on their websites so that this information is easily accessible and searchable. In addition, the obligation to publish medium-term budget documents will be introduced as well.

Given the increasingly significant amount of funds withdrawn from EU funds and the high stages of the implementation of projects financed from these funds, it is important to keep citizens informed of the way of spending these funds. Therefore, the new Budget Act will stipulate that the report on the use of EU funds is an integral part of the annual execution report.

Furthermore, in addition to the introduction of the multi-annual balancing plan, the new Act will prescribe for budgetary and extra-budgetary users of the state budget and for local and regional self-government units and their budgetary and extra-budgetary users, the obligation to prepare an annual report on the implementation of the multi-annual balancing plan.

The financial statements of the local and regional self-government units will be clearly separated from the report on the execution of the budgets of local and regional self-government units, and due to this, the obligation to prepare a report on the execution of the financial plan will be introduced for all budgetary users.

f) *Realization and use of own revenues and donations*: Regarding earmarked and own revenues generated by budgetary users within the competence of individual ministries, but also local and regional self-government units, the importance of monitoring them is also recognized in the system of fiscal responsibility. Therefore, the new Act will introduce an obligation for ministries and local and regional self-government units to adopt acts that will formally regulate the realization and use of donations the purpose of which is not regulated, and the own revenues of their users.

g) *Borrowing of local and regional self-government units*: The new Budget Act will also improve the framework of borrowing of local and regional self-government units. Namely, the Minister of Finance has so far been approving the borrowing for the needs of implementing EU projects and there have been no restrictions. This will remain the case, but only if local and regional self-government units borrow the amount not exceeding the total eligible cost of the project reduced by the advances received. In addition, the situations will be prescribed in which it is not necessary to seek the consent of the Government again if the terms of the loan change, so that they are more favourable for a local and regional self-government unit, or that the burden of borrowing for a local and regional self-government units is reduced.

h) *State guarantees*: The new Budget Act will consolidate the provisions on state guarantees, which are now contained in various regulations and acts, which will contribute to a clearer regulation of this area and improve the system of monitoring thereof. Namely, the new Act will prescribe in detail the provisions for the procedure of issuing state guarantees, amendments to the state guarantee and supervision and monitoring of the implementation of credit or loan agreements with state guarantees, including the assessment of the impact on public finances. Furthermore, the adoption of secondary legal acts (Regulations) will be arranged, which will prescribe more detailed criteria, procedures for approving state guarantees, as well as supervision over the use and implementation of funds and conditions under which the state guarantee may be amended.

j) *Strengthening the capacity to act in times of crisis*: Disasters (crises) are a serious disruption in the functioning of the community or society as a whole that causes extensive human, material and economic losses. They occur as a consequence caused by natural forces (floods, fires, earthquakes) or human activity (impact on environment, terrorism, etc.). In order to ensure timely and adequate action in times of crisis and to provide assistance to victims and repair the damage as soon as possible, the new Budget Act will establish a special procedure for dealing with crisis situations related to the budget planning and execution process, which will allow greater flexibility in terms of redistribution and spending of budget funds.

7.2. More Effective Financial and Statistical Reporting System

The state budget, budgets of local and regional self-government units, and budgetary and extra-budgetary users determined by the Register of budgetary and extra-budgetary users, are obliged to submit financial statements in accordance with the Budget Act and the Ordinance on Financial Reporting in Budget Accounting.

Currently, these financial statements are collected in an electronic form in Excel format; they have built-in logical and mathematical controls, and are stored and processed in the MS Access database. The financial statements are submitted to the Financial Agency as the institution authorized to process the data. Given the need for direct access to data from financial statements, especially in the context of increasingly complex requirements by EUROSTAT and other institutions at EU level, the project "More effective financial and statistical reporting system" has been launched, within which a new application for collecting and analysing financial statements will be developed. This application will provide budgets, budgetary and extra-budgetary users with a simpler way of submitting financial statements and enable better and faster data analysis, i.e. greatly improve the effectiveness of financial and statistical reporting.

7.3. Development of Structural Macroeconomic Model of the Croatian Economy

Medium-term forecasts of macroeconomic and fiscal aggregates are contained in numerous strategic documents of the Government of the Republic of Croatia, whereby the Ministry of Finance, as the state administration body responsible for drafting forecasts of macroeconomic and budgetary aggregates, actively participates in the policy formulation and preparation of such documents. In addition, the Republic of Croatia intends to implement a number of structural reforms in the next period, as a result of which the need for a model that can simulate the effects of such reforms is growing.

Reliable macroeconomic and fiscal forecasts are extremely important in the context of the European Semester, and also play an important role in the calculation of indicators under the Stability and Growth Pact. The scope and complexity of requirements related to macroeconomic planning have greatly increased with Croatia's EU membership, which also leads to the need to improve the procedure of preparing macroeconomic forecasts, which would enable the assessment of the effects of shocks and economic policies of the Government of the Republic of Croatia on the economy. Furthermore, within the process of Croatia's accession to the euro area, high-quality draft budget plans are becoming even more relevant in the context of the Fiscal Agreement. Finally, during the implementation phase of the National Recovery and Resilience Plan, it will be extremely important to ensure adequate monitoring of investments and assessment of their macroeconomic and fiscal effects.

Taking into account these challenges, more advanced approaches to preparing macroeconomic projections are needed. To this end, a macroeconomic model will be developed that will include all key macroeconomic variables of the domestic economy and with which it will be possible to assess the impact of individual proposed economic policy measures and/or external shocks on the trends in them. The planned project thus follows specific recommendations for the Republic of Croatia because it will support the strengthening of the budget framework, given that the budget preparation procedure begins with the preparation of macroeconomic forecasts that are the basis for preparing the revenue side of the budget. Accordingly, the results of the model will be used to prepare budget documents, thus improving the quality of medium-term budget forecasts and, consequently, the sustainability of public finances.

ANNEXES

Annex 1a. Macroeconomic Outlook

	ESA Code	2020 (level)	2020 (rate of change)	2021 (rate of change)	2022 (rate of change)	2023 (rate of change)	2024 (rate of change)
1. Real GDP	B1*g	370.030	-8,0	5,2	6,6	4,1	3,4
2. Nominal GDP	B1*g	371.517	-7,7	7,3	8,4	6,3	5,8
Components of real GDP							
3. Private consumption expenditure[1]	P.3	218.270	-6,2	5,1	4,0	3,7	3,6
4. Government consumption expenditure	P.3	82.191	3,4	2,7	2,2	2,2	2,3
5. Gross fixed capital formation	P.51	82.087	-2,9	9,9	18,0	8,5	4,5
6. Changes in inventories and net acquisition of valuables (% of GDP)	P.52 + P.53	11.666	3,2	3,4	3,3	3,3	3,3
7. Exports of goods and services	P.6	156.893	-25,0	12,5	15,8	6,1	3,9
- of which goods	*P.61*	94.622	-0,8	4,3	4,9	4,0	3,6
- of which services	*P.62*	62.270	-45,2	24,3	29,0	8,1	4,2
8. Imports of goods and services	P.7	181.078	-13,8	12,3	14,7	6,7	4,2
- of which goods	*P.71*	155.499	-10,1	11,2	14,0	6,6	4,3
- of which services	*P.72*	25.579	-31,2	19,0	18,8	7,2	3,9
Contribution to real GDP growth							
9. Final domestic demand	P.3 + P.51	382.548	-3,5	5,8	7,0	4,8	3,8
10. Changes in inventories and net acquisition of valuables	P.52 + P.53	11.666	1,3	0,1	0,2	0,1	0,0
11. External balance of goods and services	B.11	-24.185	-5,8	-0,8	-0,7	-0,8	-0,5

Note: GDP and its components expressed in real terms are in constant prices, previous year prices, in HRK million

[1]Including the spending of non-profit institutions that serve households.

Note: Data for 2020 are preliminary

Source: CBS, MF

Annex 1b. Price Developments

	2020 (level)	2020 (rate of change)	2021 (rate of change)	2022 (rate of change)	2023 (rate of change)	2024 (rate of change)
1. GDP deflator	105,1	0,4	2,0	1,8	2,1	2,3
2. Private consumption deflator[1]	102,2	0,2	1,9	1,7	2,0	2,3
3. CPI[2]	102,4	0,2	2,0	1,7	2,0	2,3
4. Public consumption deflator	109,6	2,5	3,3	1,8	2,0	2,1
5. Investment deflator	100,6	0,7	1,5	1,5	1,8	2,0
6. Export price deflator (goods and services)	103,0	-1,7	2,3	1,8	1,9	2,1
- of which goods	95,2	-4,1	2,8	1,7	1,8	2,0
- of which services	112,1	1,9	1,7	1,9	2,0	2,2
7. Import price deflator (goods and services)	101,5	-0,1	2,5	1,6	1,7	1,9
- of which goods	101,1	-0,3	2,7	1,5	1,6	1,8
- of which services	103,4	1,3	1,3	1,8	2,0	2,1

[1]Including the spending of non-profit institutions that serve households.

[2]Inflation is measured by the consumer price index.

Note: Levels are expressed as index 2015=100.

Source: CBS, MF

Annex 1c. Labour Market Developments

	ESA Code	2020 (level)	2020 (rate of change)	2021 (rate of change)	2022 (rate of change)	2023 (rate of change)	2024 (rate of change)
1. Employment, persons[1]		1.676	-1,2	2,3	1,6	1,6	1,4
- of which, employees		1.460	-1,3	2,3	1,6	1,6	1,4
- of which, self-employed		215	-0,7	1,7	1,7	1,8	1,6
2. Employment, hours worked		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3. Unemployment rate (%)[2]			7,5	7,0	6,5	6,0	5,7
4. Labour productivity, persons[3]			-6,9	2,8	4,8	2,5	1,9
5. Labour productivity, hours worked		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6. Unit labour cost			9,7	0,1	-1,2	0,8	1,3
7. Compensation of employees[4]	D.1	190.568	0,9	5,3	5,2	5,0	4,7
8. Compensation per employee[5]		10.876	2,1	2,9	3,5	3,3	3,2

1 According to the national accounts definition
2 According to the ILO methodology.
3 Real GDP in constant prices, previous year prices, per person employed.
4 Data for 2020 level is in HRK million.
5 Data for 2020 level is an average monthly compensation of employee per head in HRK
Note: Data for 2020 are preliminary
Source: CBS, Eurostat, MF

Annex 2a. General Government Budget

	ESA Code	2020 (level, HRK billion)	2020 (% of GDP)	2021 (% of GDP)	2022 (% of GDP)	2023 (% of GDP)	2024 (% of GDP)
Net lending (EDP B.9) by sub-sector							
1. General government	S.13	-27,5	-7,4	-3,8	-2,6	-1,9	-1,5
2. Central government	S.1311	-24,0	-6,4	-3,2	-2,2	-1,5	-1,1
3. State government	S.1312	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4. Local government	S.1313	-3,7	-1,0	-0,7	-0,6	-0,5	-0,5
5. Social security funds	S.1314	0,2	0,0	0,1	0,1	0,1	0,1
General government (S13)							
6. Total revenue	TR	178,5	48,0	50,5	51,0	50,5	48,9
7. Total expenditure	TE	206,0	55,4	54,3	53,6	52,4	50,5
8. Net lending/borrowing	EDP B.9	-27,5	-7,4	-3,8	-2,6	-1,9	-1,5
9. Interest expenditure	EDP D.41	7,4	2,0	1,8	1,6	1,3	1,0
10. Primary balance		-20,1	-5,4	-2,1	-1,0	-0,7	-0,5
11. One-off and other temporary measures[1]		0,3	0,1	0,1	0,2	0,2	0,4
Selected components of revenue							
12. Total taxes (12=12a+12b+12c)		95,8	25,8	25,6	25,8	25,7	25,7
12a. Taxes on production and imports	D.2	70,7	19,0	19,6	20,1	20,0	20,0
12b. Current taxes on income, wealth, etc	D.5	25,1	6,7	6,0	5,7	5,7	5,6
12c. Capital taxes	D.91	0,0	0,0	0,0	0,0	0,0	0,0
13. Social contributions	D.61	45,1	12,1	12,5	12,1	12,0	12,0
14. Property income	D.4	3,1	0,8	0,8	0,8	0,7	0,7
15. Other		34,5	9,3	11,5	12,3	12,0	10,6
16=6. Total revenue	TR	178,5	48,0	50,5	51,0	50,5	48,9
p.m.: Tax burden (D.2+D.5+D.61+D.91-D.995)		140,9	37,9	38,1	38,0	37,7	37,6
Selected components of expenditure							
17. Compensation of employees + intermediate consumption	D.1+P.2	82,8	22,3	22,3	21,6	21,3	21,1
17a. Compensation of employees	D.1	50,4	13,6	13,6	13,1	12,8	12,6
17b. Intermediate consumption	P.2	32,4	8,7	8,8	8,6	8,5	8,5
18. Social payments (18=18a+18b)		64,6	17,4	16,8	16,0	15,5	15,2
of which **Unemployment benefits**		1,2	0,3	0,3	0,2	0,2	0,2
18a. Social transfers in kind supplied via market producers	D632	9,3	2,5	2,5	2,4	2,4	2,3
18b. Social transfers other than in kind	D.62	55,3	14,9	14,3	13,6	13,2	12,8
19=9. Interest expenditure	EDP D.41	7,4	2,0	1,8	1,6	1,3	1,0
20. Subsidies	D.3	14,2	3,8	2,8	1,6	1,6	1,5
21. Gross fixed capital formation	P.51	20,7	5,6	6,1	7,5	7,1	6,6
22. Capital transfers	D.9	7,6	2,0	2,2	2,7	3,2	2,8
23. Other		8,6	2,3	2,3	2,5	2,4	2,4
24=7. Total expenditure	TE	206,0	55,4	54,3	53,6	52,4	50,5
p.m.: Government consumption (nominal)	P.3	84,2	22,7	22,4	21,5	21,1	20,8

[1] *plus sign means a deficit-reducing one-off measure.*

Source: CBS, MF

Annex 2b. Amounts to be excluded from the Expenditure Benchmark

	2020 (level, HRK billion)	2020 (% of GDP)	2021 (% of GDP)	2022 (% of GDP)	2023 (% of GDP)	2024 (% of GDP)
1. Expenditure on EU programmes fully matched by EU funds revenue	10,3	2,8	4,8	5,6	5,6	4,3
1.a Of which investment expenditure fully matched by EU funds revenue	1,5	0,4	1,0	2,4	2,3	1,9
2. Cyclical unemployment benefit expenditure	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3. Effect of discretionary revenue measures	-4,4	-1,2	-0,1	0,4	-	-
4. Revenue increases mandated by law	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Source: CBS, MF

Annex 3. General Government Debt

	ESA Code	2020 (% of GDP)	2021 (% of GDP)	2022 (% of GDP)	2023 (% of GDP)	2024 (% of GDP)
1. Gross debt		88,7	86,6	82,5	79,5	76,8
2. Change in gross debt ratio		15,9	-2,2	-4,1	-3,0	-2,8
Contributions to changes in gross debt						
3. Primary balance		-5,4	-2,1	-1,0	-0,7	-0,5
4. Interest expenditure	EDP D.41	2,0	1,8	1,6	1,3	1,0
5. Stock-flow adjustment		2,5	0,0	0,0	0,0	0,0
of which:						
- Differences between cash and accruals						
- Net accumulation of financial assets		1,0	-1,0	0,0	0,0	0,0
of which:						
- privatisation proceeds						
- Valuation effects and other		1,0	-1,0			
p.m.: Implicit interest rate on debt		2,5	2,2	2,0	1,6	1,4
Other relevant variables						
6. Liquid financial assets						
7. Net financial debt (7=1-6)		88,7	86,6	82,5	79,5	76,8
8. Debt amortization (existing bonds) since the end of the previous year		5,6	4,0	5,5	4,6	5,3
9. Percentage of debt denominated in foreign currency		70,9	-	-	-	-
10. Average maturity		-	-	-	-	-

Source: HNB, CBS, MF

Annex 4. Divergence from the Previous Programme

	ESA Code	2020	2021	2022	2023	2024
Real GDP growth (%)						
Previous update		-9,4	6,1	n.a.	n.a.	n.a.
Current update		-8,0	5,2	6,6	4,1	3,4
Difference		1,4	-0,9	n.a.	n.a.	n.a.
General government net lending (% of GDP)	B.9					
Previous update		-6,8	-2,4	n.a.	n.a.	n.a.
Current update		-7,4	-3,8	-2,6	-1,9	-1,5
Difference		-0,6	-1,5	n.a.	n.a.	n.a.
General government gross debt (% of GDP)						
Previous update		86,7	83,2	n.a.	n.a.	n.a.
Current update		88,7	86,6	82,5	79,5	76,8
Difference		2,0	3,3	n.a.	n.a.	n.a.

** Previous Programme is the 2020 Programme*

Source: CBS, MF

Annex 5. Long-Term Sustainability of Public Finance

	2020 (% of GDP)	2030 (% of GDP)	2040 (% of GDP)	2050 (% of GDP)	2060 (% of GDP)	2070 (% of GDP)
Total expenditure						
Of which: **age-related expenditures**						
Pension expenditure	11,4	11,0	10,4	9,9	9,7	9,5
Social security pension						
Old-age and early pensions	7,5	7,9	7,7	7,5	7,5	7,4
Other pensions (disability, survivors)	3,9	3,1	2,7	2,4	2,2	2,1
Occupational pensions (if in general government)						
Health care	6,5	6,1	6,4	6,5	6,6	6,6
Long-term care (*this was earlier included in the health care*)	0,5	0,5	0,5	0,6	0,6	0,6
Education expenditure	4,9	4,6	4,4	4,4	4,5	4,6
Other age-related expenditures						
Interest expenditure						
Total revenue						
Of which: property income						
Of which: from pensions contributions (or social contributions if appropriate)	6,0	7,1	7,2	7,1	7,1	7,1
Pension reserve fund assets						
Of which: consolidated public pension fund assets (assets other than government liabilities)						
Systemic pension reforms[1]						
Social contributions diverted to mandatory private scheme[2]	1,9	1,7	1,7	1,8	1,8	1,8
Pension expenditure paid by mandatory private scheme[3]	0,0	0,2	0,3	0,3	0,3	0,4
Assumptions						
Labour productivity growth	0,7	1,4	2,3	2,2	1,9	1,5
Real GDP growth	-8,1	0,7	1,5	1,2	1,0	0,9
Participation rate males (aged 20-64)	77,1	78,2	78,4	78,4	78,1	78,3
Participation rates females (aged 20-64)	66,7	69,4	70,2	70,6	70,5	70,6
Total participation rates (aged 20-64)	72,0	73,9	74,5	74,6	74,4	74,6
Unemployment rate (aged 20-64)	9,7	7,7	7,2	6,7	6,7	6,7
Population aged 65+ over total population	21,3	25,3	27,8	30,3	31,7	32,7

[1] The reform of the pension system refers to the introduction of three pillars that include a mandatory private pillar.

[2] Social contributions or other revenues from the mandatory private pillar, which cover the liabilities arising from the reform of the system.

[3] Expenditures for pensions or other social benefits paid from the mandatory private pillar related to the reform of the pension system.

Source: Ministry of Labour and Pension System, Croatian Health Insurance Fund, AWG

Annex 6. Contingent Liabilities

	2019 (% of GDP)	2020 (% of GDP)	2021 (% of GDP)
Public guarantees	1,1	1,8	n.a.
Of which: linked to the financial sector	n.a.	n.a.	n.a.

Source: HNB, MF

Annex 7. Impact of the Recovery and Resistance Facility

Revenue from RRF grants (% of GDP)							
	2020	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**
RRF GRANTS as included in the revenue projections	-	*0,4*	*1,9*	*2,4*	*2,3*	*1,7*	*1,0*
Cash disbursements of RRF GRANTS from EU		*1,5*	*1,9*	*1,8*	*1,7*	*1,6*	*1,5*

Expenditure financed by RRF grants (% of GDP)							
	2020	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**
TOTAL CURRENT EXPENDITURE	**-**	***0,0***	***0,2***	***0,2***	***0,2***	***0,2***	***0,1***
Gross fixed capital formation P.51g	-	*0,2*	*1,2*	*1,5*	*1,5*	*1,1*	*0,7*
Capital transfers D.9	-	*0,1*	*0,6*	*0,7*	*0,6*	*0,4*	*0,3*
TOTAL CAPITAL EXPENDITURE	**-**	***0,4***	***1,7***	***2,2***	***2,1***	***1,5***	***1,0***

Other costs financed by RRF grants (% of GDP)[1]							
	2020	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**
Reduction in tax revenue	-	-	-	-	-	-	-
Other costs with impact on revenue	-	-	-	-	-	-	-
Financial transactions	-	*0,0*	*0,2*	*0,2*	*0,1*	*0,1*	*0,0*

[1] It refers to the costs that are not recorded in national accounts as expenditures
Source: MF