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# THE IMPACT OF THE COVID-19 PANDEMIC ON THE CROATIAN FINANCIAL SYSTEM

#### ABSTRACT

The outbreak of the pandemic COVID -19 caused a shock to the economic supply and demand and, with great uncertainty, led to a decline in the activity of the financial system. The financial system of the Republic of Croatia faces demanding challenges under these unfavourable conditions and the prospect of growth in the future. The negative impact of this crisis on the domestic financial system manifested itself in deflationary pressure on the domestic currency and a reduction in the assets of institutional investors due to price corrections on the capital markets and outflows from investment funds. The Croatian economy can be assessed as small and open, dependent on developments in the international market and highly sensitive to external shocks and crises. Nevertheless, the financial system is expected to recover thanks to historically low financing conditions and the highly liquid and capitalised domestic financial system. A prominent role in overcoming the crisis is played by economic policymakers and financial system regulators and supervisors. The aim of this paper is to examine the extent of contraction of investment activity of financial institutions in Croatia and to highlight the measures taken and implications of Croatian National Bank and Croatian Financial Services Supervisory Agency to ensure financial stability and liquidity. The conducted research is based on secondary data collected from the databases of relevant Croatian supervisory institutions. We applied statistical techniques to provide an overview of the course and characteristics of the Croatian financial system and, in particular, institutional investors, as well as the response of the supervisory authorities to mitigate the impact of the pandemic on the economy. These measures maintained the stability of the exchange rate, ensured the systemic stability of the national financial system and the efficient functioning of the economy.

*Keywords:* COVID-19 pandemic, financial crisis, financial institutions, CNB, Croatian economy.

#### 1. Introduction

The 2019 global pandemic of coronavirus disease (COVID -19) had serious consequences for the European economy in a short period of time and required timely and decisive

macroeconomic measures. In line with coping with this "new normal" environment and the unique nature of the expected recession, governments and regulators took action to prevent a financial crisis. Financial system regulators implemented a number of different traditional measures, as well as some new and unconventional measures and decisions, to ensure economic and financial stability. Central banks responded by lowering their policy rates and providing liquidity to banks and non-bank financial institutions, which in turn eased the burden on firms and individuals affected by the severe disruptions (World Bank, 2020 a, b).

The Croatian economy was significantly affected by COVID -19, which threatened to trigger an economic crisis, as Croatia is a small and open economy with an overdependence on tourism. The implementation of the epidemiological measures restricted freedom of movement and free labor activity and caused a major negative impact on the real sector and financial development. The Croatian financial system suffered many losses and declines in assets, returns and loss of consumer confidence. Therefore, the Croatian government, Croatian National Bank (CNB) and Croatian Financial Services Supervisory Agency (Hanfa) took coordinated measures to mitigate the negative economic impact of the pandemic and maintain the stability of the domestic financial market. The Croatian government quickly adopted 63 different economic measures announced in early April 2020 to preserve jobs and mitigate the impact of COVID -19 (IMF 2020). A very big responsibility was on the side of the CNB, which, under conditions of great uncertainty and reduced liquidity, created the conditions to fight the consequences of extremely reduced economic activity. The measures provided additional liquidity, supported the government bond market and temporarily eased the regulatory burden on banks.

This article reviews recent macroeconomic and financial developments related to systemic risks, the deterioration of which can lead to significant losses for investors and, in extreme cases, threaten the stability of the entire financial system. The purpose of this article is to assess the timeliness, justification and appropriateness of the stimulus measures taken by the regulatory authorities in Croatia, i.e. CNB and Hanfa, to limit the economic impact of the pandemic COVID -19 after March 2020. Moreover, the problem of this paper is the actuality of the research topic and the insufficient examination of the corrected authority measures. These results constitute a valuable contribution to the re-examination of the proper implementation of monetary policy in the conditions of the new and surprising circumstances.

The paper is organized as follows. The introductory remarks provide an insight into the topic and the research problem. The second part summarizes the main characteristics of the Croatian financial system and describes the implications of the emergence of COVID -19. The third part reviews the measures taken by Croatian National Bank to keep the financial system stable and liquid due to the pandemic threats. The fourth part of the paper focuses on regulatory policy responses for the non-deposit financial sector in Croatia. Finally, the last section offers a conclusion.

# 2. Overview of Croatian financial system in awakening of pandemic crisis

The main features characterising the Croatian financial system are:

- 1. bank-centralised financial system,
- 2. underdeveloped but rapidly growing non-deposit financial intermediation,
- 3. underdeveloped and illiquid capital market.

Banks are the most important financial institutions, despite slower growth rates compared to other financial intermediaries. Non-deposit financial intermediaries account for more than a quarter of the domestic market, reflecting the rapid growth of mandatory pension funds, the volatile movements of open-end investment funds, and the stable but slow growth of insurance companies.

The three largest banking groups dominate pension and investment funds market, infiltrate in the area of insurance market and capital market and thus creating a problem of formal or informal financial groups. Moreover, the financial system is constrained by the low risk tolerance of investors, which is reinforced by the lack of tradition and culture of investing in the capital market and saving through non-depository financial intermediaries (Olgić Draženović, Maradin, Buterin 2016). This implies increased responsibility of regulatory and supervisory institutions, especially in times of crisis and uncertainty, such as the pandemic crisis COVID -19.

Croatia is a small, open, post-transition economy with a large impact of foreign shocks and crises on its performance. Nonetheless, macroeconomic stability and moderate inflation, substantial (and even idle) liquidity, historically low interest rates, and a stable exchange rate are factors that favour the possibilities of mitigating the impact of the pandemic.

The initial shock of the pandemic outbreak spread across financial markets and was marked by negative investor sentiment that affected all asset classes and all markets equally (Graph 1). Nonetheless, the shock to financial markets was less than that experienced during the 2007/2008 global financial crisis and less than that experienced during severe contractions in the economy. In fact, in 2009 the CROBEX index (the official share index of the Zagreb Stock Exchange) fell to the level at the beginning of the global financial crisis. This correction was followed by a small recovery of the CROBEX, although its average value was still two times lower than before the onset of the global financial crisis. On the other hand, the CROBIS index (the official Zagreb Stock Exchange bond index) remained relatively stable despite a small correction after the outbreak of the pandemic. The CROBIS remained at a higher level than during the 2007/2008 global financial crisis, reflecting the positive effects of expansionary monetary policy (CNB 2020, 12).



Graph 1: Changes in the CROBEX and CROBIS indices (2008-2020)

Source: CNB (2020, 11)

#### 2.1. The impact of the pandemic on the credit institutions

Although the Croatian banking sector was stable and well capitalized at the time the pandemic occurred, the operations of the banks affected by the pandemic were at significant risk. This led to a significant deterioration in the banks' business results. The net profit of banks in 2020 was reduced by 53.3% (HRK 2.7 billion) compared to the previous year. Out of a total of 20 banks, 16 operated at a profit (mainly the large and systemically important banks) (CNB 2021c). The banks' profits decreased due to a decrease in almost all operating revenues as well as rising costs caused by an increase in credit risk. Nevertheless, the banks operated positively and safely, and stability and liquidity were not at risk at any time. Croatian banks proved to be well capitalized, with a total capital ratio of 24.9% for 2020, which allowed for loan and deposit growth and low interest rates. The strong resilience of banks to shock and crisis situations was supported by the CNB's monetary policy response and the creation of additional liquidity in the system, as well as by the previously established strong capital and liquidity position of banks and targeted changes in the prudential regulatory framework. Banks' free money reserves reached their historically highest level in November, which helped keep most interest rates at their lowest levels ever, similar to pre-pandemic levels (CNB 2020).

#### 2.2. Pension funds

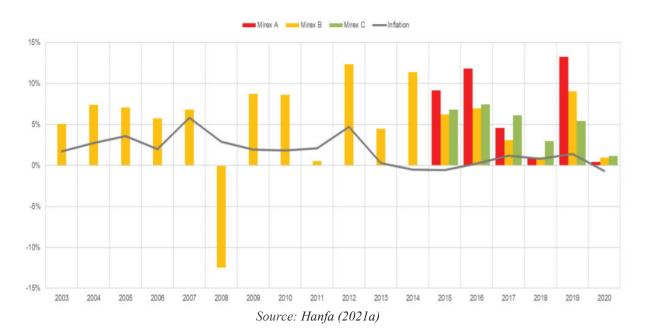
The systemic reform of the pension system in Croatia with the introduction of privately managed mandatory and voluntary pension funds in 2001 was the strongest trigger for the development of non-bank intermediation in Croatia (Olgić Draženović, Suljić, Prohaska 2015). In the following years, mandatory pension funds became the fastest growing and most influential institutional investors in terms of investment potential in the Croatian financial system, with 2.01 million members and total assets of HRK 112.60 billion at the end of 2019 (Hanfa 2021b). At the end of 2020, the assets of mandatory pension funds amounted to HRK 119 billion<sup>1</sup> (Hanfa 2021b)., which positions mandatory pension funds as the largest and most significant institutions in the non-deposit financial services sector.

Since the beginning of the activity of mandatory pension funds<sup>2</sup>, the average return in category A was 6.91%, in category B 5.41% and in category C 5.13% (Hanfa 2021a). The outbreak of the coronavirus pandemic in March and May 2020 caused a significant drop in returns and thereafter monthly returns fluctuated significantly. Nevertheless, mandatory pension funds ended 2020 with a positive annual yields of the Mirex<sup>3</sup> index for all three categories of funds, as shown in graph 2.

<sup>&</sup>lt;sup>1</sup> Asset of voluntary pension funds amounted to HRK 6.7 billion by the end of 2020.

 $<sup>^2</sup>$  Prior to 2014, there were four mandatory pension companies operating and managing one of the mandatory pension funds (and several voluntary pension funds). A change in the law in 2014 introduced the proxy lifecycle investment model. It allowed each of the management companies to offer three categories of funds to members, depending on their risk categories and preferred investment strategies: category A (aggressive), B (balanced) and C (conservative). Since then, the majority of members (96%) have still remained in the B category, as they are automatically placed in the B category unless otherwise selected (Hanfa 2021a).

<sup>&</sup>lt;sup>3</sup> The Mirex Index is a measure of the performance of all mandatory pension funds in Croatia, i.e. an official asset-weighted index of pension fund returns calculated by HANFA.



Graph 2: Annual rates of return yields of the Mirex index

Category A funds, in which 3.8% of insured persons save, ended the year with a positive average annual return of 0.43%. Category B funds, in which 94% of members invest at the end of 2020, recorded a positive return of 0.94%. Category C funds performed best, with an average annual returns of 1.15%, as they are almost entirely exposed to the bond market.

In the next period, pension fund management companies will continue to redefine portfolio structure as the period of very low interest rates continues and the problem of illiquid, shallow and narrow domestic capital market persists. Therefore, Hanfa encourages investment in alternative forms of assets (rather than predominantly in domestic government bonds) and the application of the principle of social responsibility to achieve higher returns while reducing risk.

# 2.3. Insurance companies

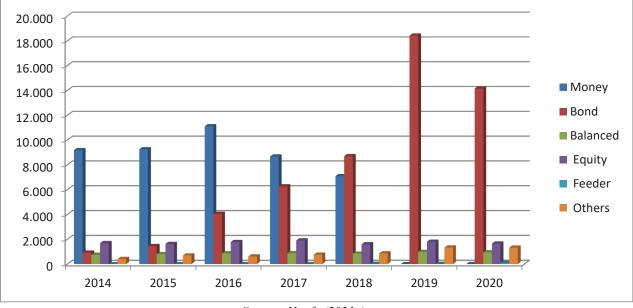
In the Republic of Croatia, insurance companies achieved an increase in total assets during the period of the pandemic caused by the coronavirus. According to Hanfa (2021b), total assets at the end of 2019 amounted to HRK 45.51 billion, while at the end of 2020 they amounted to HRK 47.48 billion. It is assumed that the increase in assets and the high level of digitalization prepared insurance companies for the crisis. In 2020, gross written premiums of Croatian insurance companies amounted to HRK 10.4 billion, a decrease of 0.7% compared to the previous year (HUO 2021).

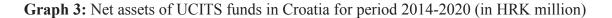
Compared to 2019, insurance companies on European markets achieved an increase in premiums by a full 49.3% (HUO 2021). In addition to COVID -19, the past year in Croatia was marked by numerous earthquakes, which led to a 30.9% increase in earthquake insurance. The structure of insurance premiums changed significantly due to a sharp decrease in the share of life insurance.

Insurance companies adapted very quickly to the new circumstances and requirements for intensive digitalisation and new technological solutions. They focused intensively on their digital channels with faster processes of evaluating and concluding services. As a result, a reduction in fees is expected in the coming periods. This will make insurance products much more acceptable to customers and is expected to increase customer interest through growth and the creation of new products.

#### 2.4. Investment funds

The value of net assets of UCITS<sup>4</sup> funds (Undertakings for the Collective Investment in Transferable Securities) recorded constant growth in 2019 (mainly in bond funds), which continued until February 2020 and amounted to HRK 23.1 billion (Hanfa 2021b). With the emergence of the COVID -19 pandemic in Croatia at the end of March and the subsequent sharp deterioration in volatility on financial markets, a sharp decline in the net assets of UCITS funds was recorded (-32.2% in just one month). The decline in net asset value was primarily due to increased redemptions of units and, to a lesser extent, the declining value of the assets in which the funds invest. However, by the end of 2020, the decline in UCITS assets had moderated with total net assets of HRK 18.2 billion, which is 19.3% or 4.4 billion less than at the end of 2019. Thus, the assets of Croatian UCITS funds returned to the level of 2018, compensating for the significant progress made by the investment fund industry in 2019 (Hanfa 2021b).

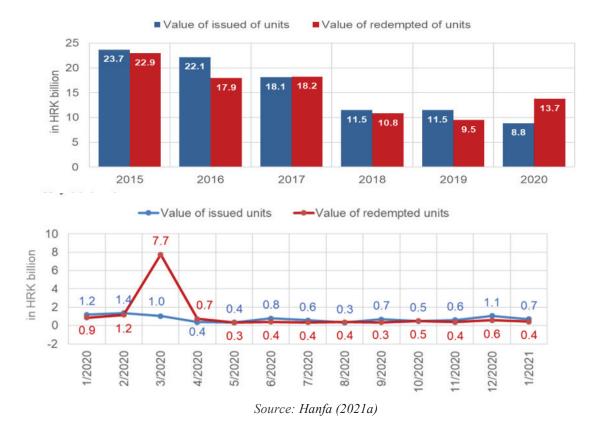




Source: Hanfa (2021c)

<sup>&</sup>lt;sup>4</sup> UCITS funds are open-end investment funds with a public offering operating on the principle of risk-spreading and investing collective assets of investors, raised through public offering of units in UCITS, in liquid financial assets. Units of UCITS are redeemed out of its assets at the request of investors and their operations are aligned with EU directives

The large redemption of units can be seen in Graph 4, which shows that in 2020 there was a 44.21% increase in UCITS units redeemed, while at the same time there was a 23.47% decrease in new units issued.





Annual returns on units in UCITS funds were strongly affected by the coronavirus spread. According to Hanfa (2021a) average returns of Croatian UCITS funds in 2020 were slightly negative (-0.1%). Bond investment funds achieved positive annual returns of 0.79% on average, while negative returns of -2.32% on average were mostly recorded by equity investment funds (wide range of returns, from -18.13% to +20.88%).

# 3. Croatian National Bank's response to liquidity and stability risks

Euroization of both deposits and credit euroization remained an enduring feature of the Croatian financial system. The domestic currency never fully assumed its account function, while the store of value function was mostly reserved for the Deutsche Mark and later Euro (Vizek 2006). Considering the large exposure of the financial system to currency risk due to euroization and taking into account that the primary objective of the CNB is exchange rate stability, i.e. price stability, the CNB mostly implements a countercyclical monetary policy.

Pegging the currency to the euro is the primary tool used by the central bank to achieve price stability. Croatia, as a small and open economy, enjoys full freedom of capital movements and has relatively high external debt. To ensure exchange rate stability and low and stable inflation rates, the CNB uses foreign exchange intervention as the main instrument of monetary policy. Foreign exchange interventions are conducted as auctions at the discretion of the CNB (Mance et al., 2019, 154). Benazić and Tomić (2014) argue that the main feature of the Croatian

monetary system is that the exchange rate peg to the euro is not used to influence the balance of payments or GDP, but only to try to maintain the stability of the exchange rate as a prerequisite for a stable economic environment, largely facing foreign currency liabilities.

In 2020, and especially after the outbreak of the pandemic, the CNB maintained a high level of monetary expansion, which ensured favourable domestic financing conditions and maintained the stability of the kuna exchange rate against the euro. The coronavirus pandemic led to a very sharp increase in systemic risks in the Croatian financial system (CNB 2020). As a result, the CNB took a number of monetary and supervisory measures to maintain financial stability in the economy and provide the necessary level of liquidity, as shown in Table 1.

OBJECTIVES		MEASURES	DESCRIPTION
	STABILISATION OF THE	FOREIGN	• 9 - 17 March - four foreign exchange
	FOREIGN EXCHANGE RATE AND PROVISION OF THE FOREIGN CURRENCY LIQUIDITY	EXCHANGE INTERVENTIONS	<ul> <li>9 - 17 Match - four foreign exchange interventions in which a total of EUR 1.625 billion was sold to banks.</li> <li>The exchange rate stabilised at around 7.57 EUR/HRK</li> <li>Level of international reserves (total reserves at EUR 16.9 billion, as of 16 March 2020) sufficient for further stabilisation</li> <li>31 March - CNB foreign exchange intervention by selling EUR 618.15mn of foreign exchange at average exchange rate of 7.608529 EUR/HRK.</li> </ul>
	PROVISION OF KUNA LIQUIDITY FOR THE ONGOING FINANCING OF THE ECONOMY	STRUCTURAL AND REGULAR OPERATIONS	<ul> <li>16<sup>th</sup> March – regular and structural operations; creation of HRK 750m of short-term liquidity and HRK 3.8bn of long-term liquidity (5-year maturity at a fixed interest rate of 0.25%)</li> <li>Daily liquidity surplus was HRK 32.8bn as at 16 March 2020</li> </ul>
		RESERVE	• 23 <sup>th</sup> March - reserve requirement rate
SZ	SUPPORTING THE	REQUIREMENTS PURCHASE OF	reduced from 12% to 9% • 13 March - the first auction for the direct
MAINTENANCE OF THE FAVOURABLE FINANCING CONDITIO	STABILITY OF THE GOVERNMENT BOND MARKET	GOVERNMENT BONDS	<ul> <li>purchase of bonds of the Republic of Croatia - HRK 211.2 million purchased.</li> <li>Following the decision of the CNB Council, the group of counterparties entitled to participate in the purchase and sale of securities was expanded to include pension funds, companies for the management of open-ended public offering (UCITS funds) and insurance companies</li> <li>18 March - as part of a fine-tuning operation, the CNB repurchased securities of the Republic of Croatia with a nominal value of HRK 4.075 billion.</li> <li>Announcement that auctions for the purchase of bonds will continue from 18 to 23 March, expected purchase of another HRK 1.6 billion</li> <li>28 April - in a fine-tuning operation, the CNB purchased securities of the Republic of Croatia with a nominal value of HRK 9.529 billion</li> <li>29-30 June - in a fine-tuning operation, the CNB purchased securities of the Republic of Croatia with a nominal value of HRK 4.069 billion</li> </ul>
	PROVISION OF EURO LIQUIDITY	CURRENCY SWAP LINE	• 15 <sup>th</sup> April - CNB agreed upon establishing a precautionary currency swap line with the ECB, to be activated if needed in the amount of EUR 2bn
I		Source: CNB (2021	

 Table 1: CNB's response to COVID-19 crisis

Source: CNB (2021b)

The CNB took a number of monetary policy measures in the first three months of the pandemic (in March, April, and May 2020) to (CNB 2021b):

- 1. maintain exchange rate stability and ensure sufficient foreign exchange liquidity to prevent the emergence of exchange rate risks to the banking system and the economy as a whole;
- 2. provide the banking market with sufficient kuna liquidity to maintain low interest rates and allow banks to continue lending;
- 3. support the stability of the market for government securities by purchasing government bonds on the secondary market, thereby creating additional liquidity and enabling funds to be raised on acceptable terms.

Following the stabilisation of financial conditions in domestic financial markets, there was no need for additional monetary policy measures in the second half of the year. In the second half of 2020, the liquidity surplus continued to increase, largely due to the operation of autonomous factors (CNB 2020, 41).

The CNB's first response to the outbreak of the Corona crisis in Croatia was on March 20, when it adjusted the regulatory framework for maintaining liquidity for financial institutions. On 23 March, the CNB lowered the reserve requirement ratio from 12% to 9%, increasing the liquidity of the banking sector by HRK 10.45 billion (~EUR 1.3 billion). Liquidity (HRK 3.8 billion) was also provided through the structural repo facility, which was used for the first time since December 2018. Regular weekly repos were also used by banks for the first time since December 2017 (although there were no bidders in the recent auctions), with the repo rate lowered from 0.3% to 0.05%.

Due to the high uncertainty and sharp depreciation, the CNB intervened heavily in the foreign exchange market, especially in mid-March and early April 2020. Through these activities, the CNB sold a total of EUR 2.7 billion to banks. As a result of the foreign exchange interventions, the gross foreign exchange reserves of the Republic of Croatia decreased by EUR 1.2 billion (6.7%) and stood at EUR 17.3 billion at the end of June. However, international reserves increased to a value of EUR 18.9 billion by the end of 2020, EUR 0.38 billion higher than a year earlier.

Exchange rate developments were further stabilised by the agreement between the CNB and European Central Bank to establish a currency swap line in April 2020. The euro liquidity line agreement allows the CNB to borrow up to EUR 2 billion from ECB in exchange for Croatian kuna.<sup>5</sup>

However, as the additional liquidity provided to banks did not reach other financial institutions and the government bond market was potentially at risk of freezing, which in turn would have had an unfavourable impact on funding conditions for all domestic sectors, further interventions were made. The CNB purchased HRK 4.3 billion worth of government bonds through two auctions, which was the first intervention of this kind for the CNB.

The government bond market in Croatia was supported by the CNB's decision to directly purchase government securities for the first time in Croatia's monetary history. Five auctions

<sup>&</sup>lt;sup>5</sup> The liquidity lines were established in 2020 to provide euro liquidity to financial institutions through the national central banks outside the euro area. These arrangements address potential euro liquidity needs in the event of market disruptions due to the COVID -19 pandemic. In addition, they aim to ensure a smooth transmission of ECB monetary policy by preventing potential spillback effects on euro area financial markets and economies. As of February 2021, the euro liquidity line has been extended until the end of March 2022 (CNB 2021a).

were held between March and June, during which the CNB purchased government bonds with a total market value of HRK 20.3 billion. In the second half of the year, there was no need for additional purchases of government bonds. In addition, the CNB decided to broaden the investor base in these activities, i.e. the list of potential participants in securities purchase and sale operations was expanded to include pension funds, investment funds and insurance companies. The measures taken resulted in an easing of tensions on the bond market and lowering of the financial stress index to the level recorded in 2019 (CNB 2020, 11). The importance of these measures lay in the increasing linkage between fiscal and monetary policy with the aim of creating additional liquidity needed to normalise the functioning of this segment of the financial market and maintain favourable financing conditions for all sectors (CNB 2020, 38).

In addition, the CNB temporarily adjusted its supervisory approach to credit institutions in line with the recommendations of European Banking Authority and European Central Bank. These activities were aimed at increasing the flexibility of the existing regulatory framework and supporting banks' focus on their core business. Thus, some of the supervisory activities were temporarily suspended and postponed (e.g. stress tests for credit institutions and direct supervision of business operations). Banks have been required to retain profits earned in 2019 and not to pay dividends.

Thanks to the CNB's timely and sharp response, kuna liquidity reached record levels, allowing the government and the private sector to continue borrowing from domestic banks. Nevertheless, the slowdown in economic activity and demand for credit has been reflected in the tightening of credit approval standards, which has led to a slowdown in retail lending. Under conditions of unfavourable economic conditions as well as high uncertainty due to the dynamics of economic recovery, the CNB will undoubtedly continue to pursue an expansionary monetary policy in the period ahead.

# 4. Ensuring stability of non-deposit financial sector

The Croatian Financial Services Supervisory has adopted a number of measures and recommendations to support the business continuity of the financial services sector, ensure the confidence of financial market participants and preserve the stability of the non-banking financial sector in Croatia (Hanfa 2021a), as shown in Table 2.

Hanfa's decisions and recommendations can be summarized as follows:

- Suspension of dividend payments by insurance companies,
- Establishment of Stability Fund,
- Decision to waive fees for issuers listed on the regulated market in 2020,
- Recommendation to grant a moratorium to customers of leasing companies.

One of the first initiatives of Hanfa and mandatory pension fund management companies was the creation of the Stability Fund. It is a publicly traded UCITS open-end investment fund, established for a fixed period of 3 years, primarily intended for institutional investors who are willing to invest at least one million HRK (which is also the starting price of a unit), and can bear moderate investment risk. The proclaimed objective of the new institution is to protect the value and increase the liquidity of transferable debt securities and money market instruments issued or guaranteed by the government bonds of the Republic of Croatia, preserve the value of its members' assets and support the Croatian economy (Hanfa 2021c). In 2020, the investment

return was 1.7%. The largest part of the portfolio (56.51%) was related to bonds of the Republic of Croatia, and the rest was placed in bank deposits (OTP Invest 2021).

OBJECTIVES	MEASURES	DESCRIPTION
Maintaining the stability of the financial system	Strengthening the liquidity of insurance companies	• 26 March- Ban on dividend distribution from realized profits for insurance companies and pension providers (until April 30, 2021)
Facilitating business to participants in the financial system	Reducing costs for issuers on regulated market	• 26 March- Exemption of issuers listed on the regulated market from the payment of fees for 2020 (total exemption from fees paid to Hanfa).
Maintaining of the liquidity in the bond market	Establishment of the Stability Fund	• 14 April - Hanfa issued an authorisation to establish Stability Fund (on behalf of OTP Invest fund management company).
Supervisory flexibility and business continuity support	Operational relief and simpler procedures	<ul> <li>Resolutions on:</li> <li>Signature of documentation by only one member of the board of a pension fund or investment company and extension of reporting deadlines by 30 days.</li> <li>Postponement of the change of status of insurance and/or reinsurance intermediaries due to failure to meet continuing education requirements.</li> <li>Granting a one-month delay in the submission of reports by insurance undertakings that are not related to the quantitative and qualitative reporting requirements under Solvency II</li> <li>Adjusting the prudential qualitative and reinsurance undertakings under Solvency II (allowing delays in reporting of one, two, four or eight weeks), extending the deadlines for supervisory reporting and public disclosure.</li> <li>Extending the deadline for submitting statements on complaints from financial services users from 8 to 15 days.</li> </ul>
Protecting investors	Suspension of trading in the	• 12 March - Decision to temporarily suspend trading in all financial instruments on the regulated market
	regulated markets	operated by the Zagreb Stock Exchange

Table 2: Hanfa's response to COVID-19 crisis in 2020

Source: Hanfa (2020 a; 2021 a)

# 5. Conclusion

The outbreak of the pandemic COVID -19 significantly affected the Croatian financial system. Due to deteriorating economic conditions, the economic downturn underscored the importance of proper monitoring of systemic risks and appropriate calibration of macroprudential policies to maintain the stability of the domestic financial services sector. Therefore, the government and financial system regulators and supervisors took a series of measures to deal with the unexpected crisis.

The CNB promptly adjusted its monetary policy and used all available means and measures to maintain exchange rate stability and favourable financing conditions for citizens, businesses, and the government. In the initial response to the crisis, the CNB demonstrated its ability to balance the need to create high liquidity with maintaining exchange rate stability. Kuna liquidity

was withdrawn through the sale of foreign currencies, but the CNB replaced it with other monetary policy measures, including structural and regular operations, reduction of reserve requirements and through the purchase of government bonds on the secondary market. Financial sector liquidity reached extremely high levels and interest rates remained low as before the crisis. Unfortunately, the unfavourable health outlook and uncertainty about the evolution of the pandemic led to a tightening of lending standards and a reduction in bank credit to the private and retail sectors. The CNB's monetary policy played an important role in maintaining financial and macroeconomic stability. Financial stability and the continuity of financial markets and the non-deposit financial sector were ensured through a series of measures and recommendations by Hanfa. These measures were appropriate and were imposed in a timely manner in order to prevent disruptions in the financial system, ensure the confidence of financial market participants and preserve the stability of the non-bank financial sector in Croatia.

Despite the fact that this research gives an overview of the impact of COVID -19 on the Croatian financial system so far, the unknown duration of the pandemic and its negative impact on the financial system as well as the economy in general could be the limitations of this paper. Regarding the mentioned above, further research should present the analysis of future activities of regulatory authorities, i.e. CNB and Hanfa to maintain financial stability affected by the crisis of COVID -19.

The crisis is an opportunity for the Croatian economy if the current growth model is reconsidered and economic policymakers focus on measures that increase resilience to exogenous shocks and boost growth potential.

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