The ECB’s close cooperation on supervising banks in Bulgaria and Croatia
Abstract
The close cooperation arrangement for Bulgaria and Croatia poses challenges for the ECB that we discuss in terms of existing and emerging risks and vulnerabilities in the two banking sectors. The focus is on three risk areas: money laundering, climate change risk, and geopolitical tensions related to the Russia-Ukraine conflict. The high political and economic uncertainty arising from this conflict requires a reassessment of existing risks (such as credit and sovereign risks) and sources of new risks. These risk drivers are intertwined and can affect supervised entities through existing vulnerabilities at the bank as well as at the country level, primarily poor asset quality and the weak institutional framework.

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LIST OF ABBREVIATIONS

AML/CFT  Anti-Money Laundering/Countering the Financing of Terrorism
BNB  Bulgarian National Bank
C&E  Climate and Environmental
CNC  Croatian National Bank
CPI  Corruption Perception Index
EC  European Commission
ECB  European Central Bank
ERM  European Exchange Rate Mechanism
EU  European Union
FOLTF  Failing or Likely To Fail
GDP  Gross Domestic Product
INCSR  International Narcotics Control Strategy Report
NPLs  Non-Performing Loans
ML  Money Laundering
ROA/ROE  Return on Assets/Return on Equity
RRF  Recovery and Resolution Facility
SREP  Supervisory Review and Evaluation Process
SSM  Single Supervisory Mechanism
TF  Terrorism Financing
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EXECUTIVE SUMMARY

The European Central Bank (ECB)’s close cooperation on supervising Bulgarian and Croatian banks is an important step in the process of promoting convergence within European Union (EU) and expanding the scope of countries adopting the euro currency. Crucially, the process will imply a change in supervisory and resolution framework of non-euro Member States as Croatia and Bulgaria.

From the supranational supervisor’s viewpoint, however, the close cooperation arrangement also poses challenges that we discuss in terms of existing and emerging risk and vulnerabilities in the two banking sectors.

Focusing on external (country specific) vulnerabilities, a major source of concern common to both countries is the relatively poor quality of the institutional framework. Although addressing this concern is beyond the scope of actions of national and supranational banking authorities, it is of utmost important for them to understand the repercussions on bank balance sheets triggered by poor institutional quality. The negative externalities are in fact multiple, ranging from more lengthy and costly procedures to resolve non-performing loans (NPLs), to the reinforcement of emerging risks such as money laundering (ML) and terrorism financing (TF). A relatively high public debt ratio in Croatia (but not in Bulgaria) is another vulnerability that needs to be taken into account, as it may reinforce the sovereign-bank nexus. In the future, monitoring local banks’ exposure to domestic government debt may be important to detect and mitigate adverse feedback loops, should public debt sustainability concerns emerge due to the uncertain, problematic outlook.

Focusing on internal (bank specific) risk, the ECB should pay particular attention onto emerging risks such as ML and climate and environmental (C&E) risks. As for the latter, there are symptoms that Croatia is better equipped to cope with climate change-related risks. For example, Croatia is steps ahead Bulgaria in the process of obtaining funds under the Recovery and Resilience Facility (RRF).

Another characteristic (common to both countries) that may raise supervisory concerns is the predominance of foreign subsidiaries. Along with several benefits, cross-border banking poses risks that need to be adequately monitored by supervisors. In particular, assessing the type and complexity of banking integration is important to not only understand the nature of risks faced by banks, but also the transmission mechanism by which those risks reverberate among supervised institutions and countries. In this respect, a close coordination among all the national and supranational authorities involved is key for more effective supervisory and resolutions procedures.

Finally, we attempt to identity the main channels through which the geopolitical tensions triggered by the Russia-Ukraine conflict are impacting the two countries. We envisage two main issues. First, trade shocks are bound to enhance uncertainty and slow economic growth and increase businesses’ defaults, which may lead to higher loan impairment and loan loss provisioning. In this context, Bulgaria is expected to be more impacted than Croatia due to the large energy dependency on Russia gas. In a sense, this is an example of how climate-related transition risks can materialize and be transmissible to the economy and the banking system. Second, bank balance sheets can be affected by direct and indirect exposures to Russian and Ukrainian counterparties. While the direct exposure of Bulgarian and Croatian banks seems to be negligible, the actual repercussions of indirect exposures (via, e.g., the exposure of the parent companies located in other EU Member States) is harder to predict. In addition, the actual impact depends on how dependent the local subsidiaries are from the parent companies.

The liquidation of the Sberbank Europe AG (fully owned by Public Joint-Stock Company Sberbank of Russia, whose majority shareholder is the Russian Federation) provides an example of the side-effects of cross-border integration when the local subsidiaries are not self-funded and liquidity issues emerge. It also points to the relevance of close coordination among national and supranational supervisory and resolution authorities.
1. INTRODUCTION

Bulgaria and Croatia have participated in the Single Supervisory Mechanism (SSM) since October 2020, following the ECB’s decision to establish close cooperation with Българска народна банка (Bulgarian National Bank, BNB) and Hrvatska narodna banka (Croatian National Bank, CNB). Since then, five banks in Bulgaria and eight banks in Croatia are directly supervised by the ECB, nearly all of them are subsidiaries of existing significant banking groups headquartered in Belgium, Greece, Italy and Austria.

Before taking responsibility for the direct supervision of those banks, the ECB carried out the usual Comprehensive Assessments, and it published the results for the Bulgarian banks in July 2019, according to which two of the six Bulgarian banks assessed had a capital shortfall and the results for the Croatian banks not revealing any capital shortfalls in June 2020. At the time, the ECB wrote that the Bulgarian authorities would follow up on the findings.

This paper gives an overview of the two banking systems. We first provide an overview of the macroeconomic and institutional environment Bulgarian and Croatian banks operate in. This is important to point to potential external (i.e., country specific) vulnerabilities that can negatively affect bank balance sheets by reinforcing key risk drivers. The main concerns arise from the overall quality of the legal and institutional framework.

We then compare their performance to two other banking systems of the region that are already in the Banking Union (due to having adopted the euro), namely Slovenia and Slovak Republic.

We show that overall both banking systems have performed well over the past years and the economies seen to have been less affected by the pandemic and its socio-economic fallout.

Finally, we discuss three specific near-term challenges for the Bulgarian and Croatian banking systems: money laundering, climate change and the invasion of Ukraine. Both countries’ banking systems face significant challenges in ML, related to the generally weak institutional framework and different physical and transitional risk related to climate change. One important area of concern to be likely the focus in the coming months, if not years, is the impact of the Russian invasion of Ukraine and multiple risks that arise from that.

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2 In fact, the number of Croatian banks under the ECB direct supervision are now seven. As discussed in section 4.3, as of early March 2022, one of the directly supervised banks in Croatia was resolved under the failing-or-likely to fail (FOLT) procedure.
2. THE BANKING SYSTEMS IN COMPARISON

2.1. Macroeconomic conditions

Bulgaria and Croatia are small open economies that are closely integrated with economies of the euro area, receiving a large share of their respective foreign direct investment from the euro area and economic cycles aligned with the euro area economy due to close economic integration.

Figure 1: Inflation in Bulgaria and Croatia over past 10 years

Both countries have a stable macroeconomic environment with low inflation, even though more volatile than most countries in the euro area (Figure 1). Both countries joined the European exchange rate mechanism (ERM II) as pre-condition for joining the euro, but have had stable exchange rates vis-à-vis the euro for many years, Bulgaria through a currency board introduced in the late 1990s and Croatia through a managed floating exchange rate regime under which the kuna fluctuates within a relatively narrow range around its average exchange rate against the euro.

Figure 2: GDP growth over past 5 years

Source: Trading Economics, 2021 data preliminary
Source: World Development Indicators
Both countries have seen stable GDP growth rates between two and four percent over the five years prior to the pandemic (Figure 2). While their economies shrank in 2020, this negative growth was less pronounced in Bulgaria than in other EU countries (average of -6.1%), but more pronounced in Croatia, most likely related to the drop in tourism, experienced during the pandemic.

Figure 3 shows the fiscal position of both countries. Croatia ran a fiscal balance of zero in the years leading up to the pandemic, while Bulgaria had a fiscal surplus. Both countries’ fiscal balance went into deficit in 2020, due to the pandemic, but not below the Maastricht criterion of 3%. Croatia has a relatively high government debt to GDP ratio, reaching over 80% in 2020, while Bulgaria’s debt to GDP ratio is below 30% and thus very low in comparisons to most euro area countries. Debt sustainability is thus not of immediate concern, given relatively low debt levels (especially for Bulgaria) and relatively less adverse growth performance during the pandemic, but is an important aspect to be monitored, especially in Croatia, where the higher public debt (associated with high NPL levels) make the sovereign – bank risk doom loop more likely.3

In terms of institutional quality, both countries are below the average for euro area countries, and more so Bulgaria than Croatia. Figure 4 shows the institutional quality indicators from the World Bank’s World Governance Indicator database for Bulgaria, Croatia and the average across the current 19 euro area countries.4 Focusing on the four (out of six) most relevant indicators for the banking sector, the reassuring message is that both countries are significantly but less than one standard deviation below the euro area average for regulatory quality. On the other hand, Bulgaria is below the global average in government effectiveness, rule of law and control of corruption, while Croatia is above the global average but well below the euro area average in these three dimensions. While these indicators do not relate directly to the banking sector or its supervision, they raise concerns about the quality of bank lending and the effectiveness of bank supervision. And while changes in the broader institutional framework are outside the scope of national or supranational supervisory authorities, the quality of the institutional framework has to be taken into account when assessing the medium- to long-term profitability, efficiency and stability prospects of banking systems.

3 See Altavilla et al. (2017) for an assessment of possible transmission channels from sovereign to banking risk, and vice versa.
4 These indicators are constructed on the basis of several underlying data sources and constructed in a way that in a given year, the mean across all countries is zero and the standard deviation one.
Considering variation over time (Figure 5 shows the variation over the past 20 years for regulatory quality), we can see a considerable improvement at the beginning of the century, but no further progress over the last 15 years. We will come back to this in section 4, when discussing some of the specific challenges faced by both banking systems in the near term.

Figure 6 presents a standard indicator of financial development over the past five years for Bulgaria, Croatia and two comparator countries, which are already part of the Banking Union, Slovak Republic and Slovenia. The data suggest that Croatia and Bulgaria have higher intermediation than Slovenia but lower than Slovak Republic. Importantly, their level of financial development is thus of similar magnitude as other countries in the region that are already part of the Banking Union.
Monitoring the level and evolution of private credit-to-GDP ratios is important, as high levels can indicate deep and efficient financial systems important for economic growth, but rapid growth of this indicator can imply multiple adverse effects on future economic outcomes. While moderate levels of private indebtedness help to smooth consumption and enhance economic growth, an excessive and rapid growth in private sector debt over the medium term can result in financial fragility and ultimately reduce capital accumulation and economic growth. It can also impair bank lending, as high private sector indebtedness is often associated with increasing non-performing loans, which tend to erode banks' capital buffers. There is also evidence that delays in coping with debt overhangs can delay the exit of non-viable firms and, hence, negatively affect capital and labour reallocation across firms and sectors. It is therefore important to monitor changes in private sector indebtedness, the risk of debt overhang and any consequence associated with high deleveraging needs (see ECB, 2017 and literature therein).

2.2. Banking market structure

Like most banking markets in Central and Eastern Europe, both the Bulgarian and Croatian banking systems are dominated by subsidiaries of EU-headquartered banks. In September 2020 Bulgaria’s banking system consisted of 75% EU banks, 22% Domestic banks, and 3% non-EU banks, in terms of assets. At the end-2020, Croatia’s banking system consisted of 90.5% foreign-owned banks, 6% domestic state-owned banks, and 3.5% privately-owned domestic banks. Supervisors in both countries have the advantage when entering the SSM that many of their largest banks have already been under SSM supervision over the past years, as they are subsidiaries of euro area parent banks and national supervisors have therefore also participated in supervisory colleges led by the SSM. In both countries, foreign branches play only a small role compared to foreign subsidiaries, despite the EU “passporting regime” allowing an institution that has been licensed as a bank in one member state to use the right of establishment and the freedom to provide services within other member states; this again is typical for the region and different from the Nordic-Baltic region where cross-border banking has increasingly involved establishment of branches rather than subsidiaries. This might reflect a certain supervisory tendency in Central and Eastern Europe towards ‘keeping control’ over the local banking sector, possibly informed by the experience in the late 2000s when Western European banks aimed to reduce their exposure in the region and the Vienna Initiative was established to counter these trends. This tendency is also reflected in the fact that several supervisory authorities in the region (including in
Croatia imposed pay-out restrictions on the subsidiary rather than group-level in 2020 and 2021, in defiance of ECB’s call to have such restrictions only on the group-level to maintain capital flows within the Single Market.

Bulgaria has seen important changes in ownership over the last years. National Bank of Greece and Piraeus Banks sold UBB and Piraeus Bank Bulgaria in 2017, respectively. Alpha Bank disposed of its subsidiary in 2016. Société Générale exited in recent years both from operations in Bulgaria and Croatia.

2.3. A short analysis of the state of the banking sectors.

The Croatian banking system, on the whole, has remained profitable, liquid, and well-capitalized over the past years. The sector has continued to consolidate from 30 credit institutions at end-2017 to 23 in early December 2019. Problem loans have further declined, mainly due to NPL sales. Unlike other countries in the region, Croatia did not suffer from a boom-bust-cycle and thus a banking crisis over the past decade, unlike other countries in South Eastern Europe. The banking sector is characterised by a high degree of eurorisation. Over the past year, 2021, according to CNB, the situation has been stable. Similarly, according to BNB reports, the Bulgarian banking system has weathered the pandemic crisis reasonably well.

Figure 7: ROA across countries and time

![Figure 7: ROA across countries and time](source: Bank Focus and own calculations)

Figure 8: ROE across countries and over time

![Figure 8: ROE across countries and over time](source: Bank Focus and own calculations)

Figure 7 shows that the Bulgarian banking system has had higher profitability than the two comparator countries as measured by return on average assets, while Croatia has underperformed, though not substantially so. Figure 8 confirms a similar picture for return on average equity. According to the EBA Risk Dashboard, as of 3rd quarter 2021, banks in both countries were above the average ROA and ROE in the EU.

Figure 9: Bank capitalisation across countries

![Figure 9: Bank capitalisation across countries](source: Bank Focus and own calculations)

Figure 10: NPL ratios across countries

![Figure 10: NPL ratios across countries](source: Bank Focus and own calculations)
Figure 9 shows that the median Tier 1 capital ratio is high across all four countries, well above 15% and thus the minimum capital requirements. The EBA Risk Dashboard shows that, as of 3rd quarter 2021, capitalisation across different measures was higher in Bulgaria and Croatia than the average for the EU. Figure 10 shows a continuously declining NPL ratio, with the decline being particularly pronounced for the median Bulgarian bank (from 18% in 2017). There has been a slight increase in 2021 in both Bulgaria and Croatia according to these data. It is important to note that the suspension of loan classification and provisioning requirements and ongoing government COVID-19 support programmes might make the health of banks’ borrowers and thus banks’ balance sheets more opaque. On the other hand, compared to other European countries, Bulgaria’s and Croatia’s support programmes have been rather limited (ESRB, 2021).

In the context of increasing NPLs, Figure 11 shows that the coverage of NPLs with loan loss reserves in Bulgaria and Croatia is below that of banks in the Slovak Republic and Slovenia. The EBA Risk Dashboard shows that, as of 3rd quarter 2021, non-performing exposures in both Bulgaria and Croatia were above the average for the EU, with only Cyprus and Greece within the euro area showing higher ratios. At the same time, however, the coverage ratio of NPLs is higher in both countries than the average for the EU, and steadily increasing in Bulgaria. This is important because adequate coverage ratios, by enhancing bank soundness, reducing balance sheet opacity, and favouring NPL disposal, may mitigate some negative externalities commonly associated with high NPLs.5

Figure 11: Loan loss reserves/NPL ratios across countries

Figure 12 shows that the different income sources (net interest, net fee and trading) are not too different in Bulgaria and Croatia than in Slovenia and Slovak Republic, with the exception of significantly higher trading income (as share of total income) in Croatia than in the other three countries. Cost-income ratios are similar across the four countries at around 60%, with only Croatia being slightly lower. According to the EBA Risk Dashboard, as of 3rd quarter 2021, cost-income ratios both for Bulgarian and Croatian banks were well below the EU average. In terms of loan loss provisions (flow) to income, Croatia is again an outlier with 2.6%, with the other three countries showing values of 10% or higher.

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5 As argued, what matters even more than the absolute amount of NPLs in a bank’s balance sheet is the level of loss coverage that is the amount of loan loss reserves, as this determines how losses originating from NPLs impact bank capital (Alessi et al., 2021). The coverage ratio measures the share of loan loss reserves over gross NPLs.
Figure 12: Revenue sources and cost structures

Source: Bank Focus and own calculations


3. SUPERVISORY STRUCTURE AND COOPERATION

Both countries have a long history of cooperation with other supervisory authorities in the EU and the euro area, given the dominance of both countries’ banking system with EU-headquartered banks. Given that the largest banks in both countries are subsidiaries of euro area banks, supervisory authorities in the two countries have participated in both supervisory and resolution colleges and these banks have been subject to EBA stress tests over the past years.

Officially, Bulgaria and Croatia both joined the SSM by requesting the establishment of close cooperation between the ECB and their national competent authority. Bulgaria was the first non-euro area Member State to request the establishment of such cooperation with the ECB (June 2018), followed by Croatia (July 2019). Since July 2020, close cooperation has been formally established between the ECB and the respective central banks. In operational terms, banking supervision under the SSM started on 1 October 2020, after a comprehensive assessment of banks falling under ECB’s direct supervision in both Croatia and Bulgaria.

The same day of the adoption of the close supervisory cooperation decisions, the Bulgarian lev and Croatian kuna entered in the ERM II, an important milestone on the road to adopting the euro as their national currency (expected by 2023). This ensured Bulgarian and Croatian national authorities full rights to join both the SSM and the Single Resolution Mechanism, with no say, however, in the ECB’s Governing Council until they are formally members of the euro area.

Joining ERM II has not per se entailed changes in the two countries’ macroeconomic policies, which have maintained their currency board arrangement and managed float, respectively, until the adoption of the euro. Joining the Banking Union, however, has strengthened financial supervisions, as the ECB has become responsible for directly supervising a) at an individual level all banks belonging to significant groups, and b) at least the three most significant banks in each country. With the sole exception of the Bulgarian DSK Bank AD (part of a non-eurozone Hungarian domiciled group), all the directly supervised entities in the two countries are subsidiaries of foreign significant groups headquartered in euro area countries, i.e., Belgium, Greece, Italy and Austria (Table 1). The ECB is also responsible for the oversight of the less significant institutions and in charge of the common procedures for all supervised entities in the two countries.

Overall, the expected benefits of the close cooperation arrangement and the following participation in the SSM appear numerous. First, the ECB’s close cooperation arrangement provides Bulgarian and Croatian national authorities with an important incentive to align their supervisory practices to the highest standards, as “indeed, the ECB can be considered de facto a standard setter” (Nieto and Singh, 2020).⁶

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⁶ As argued, the SSM is enough broad in scope and large in size to allow economies of scale with regard to expert knowledge (Nieto and Singh, 2020).
Table 1: The full list of directly supervised banks

<table>
<thead>
<tr>
<th>Bulgaria</th>
<th>Croatia</th>
</tr>
</thead>
<tbody>
<tr>
<td>UniCredit Bulbank AD (UCG, Italy)</td>
<td>Zagrebačka banka d.d. (UCG, Italy). This is Croatia’s largest credit institution</td>
</tr>
<tr>
<td>DSK Bank AD (among the three largest credit institutions in the Member State, owned by the Hungarian OTP bank)</td>
<td>Privredna banka Zagreb d.d. (ISP, Italy)</td>
</tr>
<tr>
<td>United Bulgarian Bank AD (KBC Group, Belgium)</td>
<td>Erste &amp; Steiermärkische Bank d.d. (Erste, Austria)</td>
</tr>
<tr>
<td>Eurobank Bulgaria AD (Eurobank Ergasias, Greece)</td>
<td>PBZ stambena štedionica d.d. (ISP, Italy)</td>
</tr>
<tr>
<td>Raiffeisenbank (Bulgaria) EAD (Raiffeisenbank, Austria)</td>
<td>Raiffeisenbank Austria d.d. and Raiffeisenstambena Štedionica d.d. (Raiffeisen, Austria)</td>
</tr>
<tr>
<td></td>
<td><em>Sberbank d.d. (Sberbank, Austria)</em></td>
</tr>
<tr>
<td></td>
<td>Addiko Bank d.d. Addiko Bank AG, Austria</td>
</tr>
</tbody>
</table>

As we will see in the following sections, improving national authorities’ supervisory culture is fundamental to address some country-specific fragilities, including corruption and ML concerns. Given the high cross-border penetration in both countries, SSM also deals effectively to limit the negative externalities of national supervision of cross-border banks (e.g., information asymmetries between the home and host countries and biased incentives of national supervisors). This is important to avoid the drawbacks of the so-called “financial trilemma”, by which the combination of cross-border banking and national supervision and resolution leads to a coordination failure between national authorities and ultimately financial instability. In this respect, supranational policies contribute to overcome this financial stability challenge (Hüttl and Schoenmaker, 2015). As argued, Joint Supervisory Teams are the vehicle for the exchange of information and coordination among national and supranational authorities both in the realms of prudential regulation and supervision (Dentons, 2020). Finally, intensified supervision may reassure investors and therefore improve the overall investment environment in both countries.

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*Sberbank d.d. has now been taken over by the Croatian Postbank, in the context of the “FOLT” procedure and related activities. See section 4.3.*
4. **OTHER RISKS**

European banks have been challenged by several emerging and evolving risks that can materialize both in the short and longer term. We follow the approach proposed by the SSM (Figure 13) and point in particular to three risk drivers that may affect Bulgarian and Croatian banks through their existing (internal and external) vulnerabilities:

- Money laundering,
- Climate and environmental risks,
- Geopolitical tensions.

Figure 13: SSM Risk Map and table of vulnerabilities

These risk drivers can potentially affect Bulgarian and Croatian banks through bank- and country-specific vulnerabilities associated in particular with weak governance and poor credit risk management, along with issues in the regulatory and legal frameworks.

4.1. Money laundering

4.1.1. Money laundering in a snapshot

ML is the process by which criminal proceeds are “cleaned” so that their illegal origins are concealed. It is a global phenomenon, whose scope can only be assessed roughly, with some estimates putting it in the range of 2 to 5 % of global GDP annually. According to Europol, almost 99 % of criminal profits in the EU escape confiscation (Bąkowski, 2021).

ML is commonly associated with types of organised crime generating large profits in cash, such as fraud or trafficking in drugs and weapons. According to the European court of auditors (ECA, 2021), over 75 % of suspicious transactions reported derive from banks located in more than half of EU Member States. This is because at some stage of the ML process, “launderers” use the banking system when converting and transferring illegal proceeds. A related threat is the financing of terrorism that entails the supply of funds to terrorist organisations. Since both activities involve illegal financial flows, they are generally dealt with by using the same policy instruments, referred to as anti-money laundering and countering the financing of terrorism (AML/CFT).

Preventive measures in the banking sector are among the tools for breaking the ML/TF cycle. Concerns about ML or TF are commonly considered in the prudential supervisory process, e.g., in the assessment of a supervised bank’s management body as well as in the context of the supervisory review and evaluation process (SREP), as part of the review of risks, business models, governance and internal risk management (Grigaitė et al., 2021). Close cooperation and increased information exchange between the ECB and national central authorities as well as among prudential supervisors and AML/CFT competent authorities at home and abroad are both important to make the policy action in this domain effective.

4.1.2. Anti-Money laundering in Bulgaria

There are a few factors exposing Bulgaria to ML and TF risks. Threats in this area emerge from Bulgaria’s geographical position as an entry point into Europe (the Balkan route) and shadow economy. As for the role played by banks, commonly smaller and domestic institutions (as opposed to foreign-owned, significant banks), tend to be more exposed to ML. These banks represent about one third of the banking system total assets. Other reasons are set out in Box 1 on the key findings of the US Department of State 2016 International Narcotics Control Strategy Report (INCSR) for Bulgaria. According to the Report, the country was deemed a jurisdiction of “concern” as for ML risk exposure.
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Box 1: The 2016 US Department of State Money Laundering assessment (INCSR) for Bulgaria

Bulgaria was deemed a Jurisdiction of Concern for several reasons. First, Bulgaria’s geo-strategic location as an entry point into Europe and persistent problems with the rule of law make the country a significant source of money laundering. Second, this is exacerbated by the large, cash-based grey economy. Other activities connected to money laundering in Bulgaria include tax and custom offenses; fraud; usury; cybercrime, especially ATM and credit card fraud, and increasingly, phishing and social engineering fraud; and the smuggling of migrants and contraband goods, such as cigarettes, alcohol, and fuel.

Industries that Bulgarian criminals use for money laundering include tourism, gaming, retail, construction, healthcare, and energy. Within these sectors, small businesses are created to hide laundered funds, increasingly in offshore territories where ownership is difficult to trace. The businesses most frequently used for this purpose are casinos, hotels, nightclubs, car dealerships, shopping centers, pawnshops, media outlets and metal scrap collectors. Investments in Bulgarian sovereign bonds are increasingly being used as a money laundering tool.

A significant facet of the grey economy in Bulgaria is large-scale tax evasion, particularly of value-added tax (VAT) and excise duties. Proceeds from VAT fraud are largely transferred to foreign accounts held by offshore companies in tax havens or in countries with tight bank secrecy regimes. They are then returned to Bulgaria and declared as loans, thus creating a legal origin for future use. Evasion of social security payments, through unreported income and informal employment arrangements, continues to be widespread. The six free trade zones in Bulgaria operate under outdated and permissive legislation, which allows firms to avoid paying customs fees on taxable goods, such as gas derivatives and cigarettes sold within Bulgaria. Finally, the flow of remittances sent home by Bulgarians working abroad is difficult to measure, but according to official statistics continues to increase.

Although subsequent versions of the INCSR do not list Bulgaria any longer as a jurisdiction of concern, the Council of Europe, in the 2018 Report on Bulgaria’s compliance to AML/CFT, stated that despite positive steps undertaken, some deficiencies with regard to criminalisation of TF and confiscation and provisional measures were still in place (CE, 2018). In a similar vein, more recently, the European Commission (EC)’s country report on Bulgaria (EC, 2020) claims that progress in ensuring effective supervision and the enforcement of the AML framework has been limited.

ML/TF risk is exacerbated by the level of corruption in the country that goes hand in hand with weak institutional framework. Figure 14 shows the evolution of the Corruption Perceptions Index (CPI) in Bulgaria over the decade 2012-2021. The CPI is the most widely-used global corruption ranking in the world, measuring how corrupt each country’s public sector is perceived to be, according to experts and businesspeople. The CPI ranks 180 countries and territories around the world; the results are given on a scale of 0 (highly corrupt) to 100 (very clean). In relative terms, Bulgaria in 2021 is placed 69 out of 180 countries under scrutiny, with no remarkable improvements over the time span considered. For comparison, Northern European countries such as Denmark and Finland rank 1 in the list with a score of 88. As for the quality of the institutional framework, the main World Bank governance indicators for Bulgaria show a weak legal and enforcement framework, with no major improvements over the last decades, as discussed in section 2.1.
4.1.3. Anti-Money Laundering in Croatia

According to the US Department of State 2016 INCSR, Croatia is a ‘monitored’ jurisdiction. The Report states that ML in the country is of domestic origin, involving the proceeds of illegal domestic narcotics sales and economic crimes (e.g., corruption, fraud, and tax evasion). Although Croatia is part of a transit route for drugs entering Europe, the evidence these networks have utilized Croatia’s financial system is limited. ML occurs primarily through non-resident accounts, transfers to offshore banks using counterfeit documents, and deposits in foreign currency accounts. It remains however that in October 2020 the Financial Inspectorate of the Republic of Croatia imposed a fine on Zagrebačka banka d.d. (the largest Croatian bank) that “failed to implement all of the necessary measures, actions and procedures as prescribed by the Anti-Money Laundering and Terrorist Financing Act (AMLTF Act)”.

More recently, the CE has recommended Croatian authorities to improve the regulatory framework and strengthen their efforts to tackle ML/TF more effectively (MONEYVAL, 2021). This includes needs for changes in (among others) the following areas: uniform and comprehensive understanding of ML and especially TF risks; improving supervisory efforts; strengthening implementation of ML/TF preventive measures by the private sector; establishing a national framework for implementation of TF related United Nations targeted financial sanctions.

As discussed, the evolution of corruption and the quality of the institutional framework are important dimensions to assess the ML risk. As in Bulgaria, in Croatia ML risk is associated with corruption and the overall perception of inefficient public institutions and regulatory systems. Figure 14 shows the evolution of the CPI over the decade 2012-2021 for Croatia.

In 2021 the country ranks 63 out of 180 countries under scrutiny. Based on the World Bank governance indicators (Figure 4) the main weakness in the institutional framework in Croatia are ascribed to poor regulatory quality, rule of law and control of corruption, all well below the euro area country average.

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8 The fine (corresponding to nearly 4.4 million euros) was “the highest misdemeanour fine so far imposed on a credit institution in Croatia, not only in the area of anti-money laundering and terrorist financing, but in all areas for which credit institutions’ misdemeanour responsibility is prescribed”. https://www.hnb.hr/en/-/financial-inspectorate-of-the-republic-of-croatia-imposes-a-hrk-33m-fine-on-zagreba%C4%8Dka-banka-d.d.

9 The Committee of Experts on the Evaluation of Anti-Money Laundering Measures and the Financing of Terrorism - MONEYVAL is a permanent monitoring body of the Council of Europe entrusted with the task of assessing compliance with the principal international standards to counter money laundering and the financing of terrorism and the effectiveness of their implementation.
4.2. Climate change risk in Bulgaria and Croatia

4.2.1. Climate change risk in a snapshot

As well known, climate change is among the biggest emerging risk banks face and has been among supervisory priorities for some years now, the main reason being that climate related and environmental (C&E) risks are likely to amplify existing risk categories and thus, potentially erode banks’ capital base. Climate risks are commonly classified into two main categories: physical and transition risks. Specifically:

- Physical risks are those affecting the premises and operations of the bank, its customers, and the wider economy. They include extreme weather events and long-term shifts in climate leading to the closing of retail branches or facilities, negatively impacting the creditworthiness of clients, and adversely affecting asset prices. Physical risks are easier to observe and to understand as they emerge from exposure to acute events or chronic transformation.

- Transition risks cover those that influence a bank’s products and services as a result of the move toward a lower carbon economy. They include the extent to which a bank funds or has stakes in companies that emit greenhouse gases, evolving stakeholder expectations, and associated legal or regulatory changes. For borrowing firms in particular, transition risks may increase the cost of doing business, undermine the viability of existing products or services and lead to stranded assets (EIB, 2020a and 2020b).

Figure 15 summarises the multiple transmission channels by which climate change risks can potentially affect the economy and financial system. The micro and macroeconomic impacts triggered by climate risks can affect bank balance sheets by increasing most if not all more “traditional” financial risk categories. This explains why the ECB expects supervised institutions to identify and quantify climate-related risks within the overall process of ensuring capital adequacy, so as to treat climate risk as any other prudential risk.

Over the last years, banking authorities’ initiatives in this context have been numerous. In particular, the ECB has been gradually integrating C&E risks into the regular supervisory methodology, so that the way banks manage these risks will ultimately impact their Pillar 2 capital requirements, as it emerges from measures undertaken since 2020 (Elderson, 2022):

- 2020: issuance of a guide on climate-related and environmental risks, which outlined supervisory expectations relating to the management and disclosure of C&E risks;
- 2021: release of a self-assessment benchmarking report, covering 112 directly supervised banks; the report was an unprecedented stocktaking of European banks’ preparedness to adequately manage and disclose their exposure to C&E risks;
- 2020, 2022: publication of two subsequent snapshots (as of November 2020 and March 2022) of the level of C&E disclosure among supervised entities.
The ECB’s supervisory actions on climate are part of broader efforts to enhance the supervisory and regulatory framework of C&E risks. At global level, the Basel Committee on Banking Supervision recently concluded a public consultation on draft supervisory principles for the prudential treatment of climate-related risks, the final goal being that of embedding climate-related financial risks in all pillars of the Basel framework.

Interestingly, despite the growing overall concerns about the physical and transition impacts of climate change, awareness of such risks differs geographically and depends on firms’ characteristics. For example, nearly 60% of European firms report a vulnerability to physical risks compared to 50% in the United States (Figure 16).

Source: Network for Greening the Financial System – NGFS (2020)
In Europe, Southern countries report higher physical risks to firms’ operations than other regions. This is followed by firms in Central and Eastern Europe, reporting a higher vulnerability to physical climate risks than firms in Western and Northern Europe. The relatively higher perception of physical risk in Southern Europe may be due to the rising threat of drought, limiting food production and potentially disrupting tourism in the area. In addition, firms with operations that are more vulnerable to extreme weather events — such as the infrastructure sectors, including electricity, utilities, transport, construction and services (most likely hospitality) — are also more likely to perceive higher physical risks. As shown in Figure 16, businesses’ perception of climate change risk in Croatia (HR) is as high as the average EU country, while Bulgarian firms’ perceive a lower climate change risk than the average. The next section will provides additional stylised facts on climate change risk in the two countries.

### 4.2.2. Bulgaria

According to the 2020 World Bank Country Profile, due to a combination of political, geographic, and social factors, Bulgaria is recognized as vulnerable to climate change impacts, ranked 49 out of 181 countries in the 2020 ND-GAIN Index. The ND-GAIN Index ranks 181 countries using a score, which calculates a country’s vulnerability to climate change and other global challenges as well as their readiness to improve resilience. This Index aims to help businesses and the public sector to better identify vulnerability and readiness in order to better prioritize investment for more efficient responses to global challenges. The more vulnerable a country is the lower the score, while the more ready a country is to improve its resilience the higher it will be. Norway has the highest score and is ranked 1st. Figure 17 is a time-series plot of the ND-GAIN Index showing Bulgaria’s progress over 1995-2019, while Box 2 summarises World Bank estimates on the climate change impact to key sectors in Bulgaria.

![Figure 17: ND Gain index for Bulgaria](image)

In its country report, the EC remarks that Bulgaria is among the Member States with the largest incidence of pollution-related deaths, with the number of years of life lost due to air pollution and urban population exposure to micro-particles the highest in the EU. There is limited progress in ensuring compliance with urban wastewater collection and treatment obligations. There is still no overarching circular economy programme even though the circular use of material is among the lowest in the EU and there are waste management challenges. In addition, Bulgaria is by large the most energy and greenhouse gas intensive economy in the EU, as shown in Figure 18. In the figure, the Greenhouse gas intensity represents the share of Member States’ emissions to GDP. Higher values of the index are associated with more carbon intensive economy.
Box 2: Physical risks: Climate change impacts to key sectors in Bulgaria

Bulgaria remains highly vulnerable to climate variability and change, particularly for the country's water resources, agriculture, public health, energy, and forestry sectors. Heavy rains, flooding, and soil erosion puts both urban and rural infrastructure at risk, particularly for poor and vulnerable groups. Increased risk and vulnerability to soil droughts are expected to increase in the occurrence, intensity, and level of impact of the soil droughts in Bulgaria through the end of the century. Soils with existing low capacity of moisture preservation such as the regions in southeastern areas of the country, which are most vulnerable to those changes. Furthermore, increased occurrences of aridity and drought conditions will impact agriculture, food security, energy generation, and human health.


Figure 18: Greenhouse gas intensity of EU Member States

Source: EC, Country Report Bulgaria 2020

Surprisingly, this evidence contrasts with the perceived risk by Bulgarian businesses, as shown in Figure 19. Just over half of firms say that climate change and related changes in weather patterns have had some impact on their business (19% a major impact, 31% a minor impact). This is below the EU average (58%). Firms in the construction and infrastructure sectors are more likely to say they have been impacted than manufacturing and services sectors and also that it is a major impact. Large firms are also more likely than small-medium enterprises (SMEs) to report being impacted. Firms in Bulgaria do not think the transition to a low-carbon future will have much effect on their business – the net balances being 9% effect on their reputation, 3% on market demand and -2% on their supply chain. Consistently, almost two-thirds of firms in Bulgaria have no investment plans to tackle climate change impact, well above the EU average (35%).

According to the EC, Bulgaria's inadequate response to environmental challenge represents an obstacle to long-term sustainable growth. Bulgaria’s abstention on the European Climate Law in June 2021 seems to confirm this view.
Figure 19: Firm assessment of climate risk in Bulgaria

Panel A: Climate change impact

Panel B: Reduction in carbon emission over next 5 yrs. (net impact %)

Panel C: Investment plans to tackle climate change impact

Panel D: Barriers to investing in activities to tackle climate change


On the positive side, in October 2021 Bulgaria submitted a document setting out the reforms and public investment projects that the country plans to implement with the support of the Recovery and Resilience Facility (RRF). This is the first step to (potentially) access the facility. According to the plan, Bulgaria requested a total of €6.6 billion in grants under the RRF. The Bulgarian plan is structured around four pillars, one dedicated to environmental issues (“Green Bulgaria”). Specifically, the plan includes measures in areas (among others) such as decarbonisation of the economy, research and innovation, energy efficiency, and sustainable agriculture. Projects in the plan cover the entire lifetime

10 At the heart of NextGenerationEU, the RRF makes available over €723 billion in loans and grants to support investments and reforms across the EU. As such, it will play a crucial role in helping EU countries not only to emerge stronger from the crisis, but also to secure the green and digital transitions throughout Europe.
of the RRF until 2026 and at least 37% of expenditure should be dedicated to investments and reforms that support climate objectives. Although encouraging, the assessment procedure by the EC is still ongoing (EC, 2022). Hence, nothing can be said at this stage on whether and the extent to which the plan will contribute to effectively addressing C&E challenges faced by Bulgaria.

4.2.3. Croatia

Croatia has been recognised as vulnerable to climate change impacts, ranked 51 out of 181 countries in the 2020 ND-GAIN Index (Figure 20). Box 3 summarises the main climate change impacts to key sectors according to the last WB climate risk country profile.

Figure 20: ND Gain index for Croatia

Box 3: Physical risks: Climate change impacts to key sectors in Croatia

Croatia is expected to experience a range of adverse impacts of climate change throughout the country and across all sectors, the most significant impacts being more frequent and intense droughts, changing precipitation patterns, prevalence of new disease vectors, increases in air and sea surface temperature, and increasing number of consecutive dry and hot days. Visible signs of climate change include annual variation in crop yields, sea level rise, a longertourism season and the potential development of new tourism destinations due to changes in local climates. Variable precipitation and increasing temperatures are resulting in an increasingly riskier agricultural and water availability environment. Furthermore, climate change and global temperature increases are impacting sea level rise, which will also have an impact in the country. Climate change is expected to impact major economic sectors of the country such as tourism and agriculture. Financial constraints and limited institutional capacity have limited adaptation capabilities and effective response to climatic hazards in the country. This further threatens future sustainable agricultural production as well as the opportunity to expand and sustain tourism.


Unlike Bulgarian firms, Croatian businesses seem to be more aware of climate change risks: over 60% of firms in Croatia feel their business has been impacted by climate change and the related changes in weather patterns, with around a quarter reporting that the change has had a major impact. This is in line with the EU average. Risk perception varies by firm’s sector and size: firms in the construction sector/large firms are more likely to have been impacted than firms in other sectors/SMEs. Firms in Croatia are expecting the transition to a low-carbon future to be positive for their reputation and for
market demand over the next five years but to have a negative impact on their supply chain. On balance, manufacturing firms, infrastructure firms and large firms are the most likely to expect the reduction in carbon emissions to have a positive impact on their reputation (Figure 21 Panel B and C). As for the investment plans to cope with climate change risk, 57% firms in Croatia have already invested or plan to invest in the next three years in measures to tackle the impact of weather events and reduction in carbon emissions. This is below the EU average (67%). Finally, uncertainty about the regulatory environment and taxation is the biggest barrier to investment in this area, particularly among firms in the services sector (Figure 21 Panel D).

Figure 21: Firm assessment of climate risk in Croatia
Panel A: Climate change impact
Panel B: Reduction in carbon emission over next 5 yrs. (net impact %)
Panel C: Investment plans to tackle climate change impact
Panel D: Barriers to investing in activities to tackle climate change

<table>
<thead>
<tr>
<th></th>
<th>Manufacturing</th>
<th>Construction</th>
<th>Services</th>
<th>Infrastructure</th>
<th>SME</th>
<th>Large</th>
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<td>Cost of investment</td>
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<td>8</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>3</td>
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<tr>
<td>Availability of finance</td>
<td>7</td>
<td>6</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Uncertainty about climate change impacts</td>
<td>6</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
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<td>Uncertainty about regulatory environment and taxation</td>
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<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
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<tr>
<td>Uncertainty about new technologies to help tackle the impact</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Availability of staff with the right skills to identify and implement investments related to climate change</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
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Croatia is expected to meet the targets in renewables (except in transport) and energy efficiency and is on track to reaching its short term target for lowering greenhouse gas emissions. Still, the Croatian economy faces important sustainability challenges, affecting its future competitiveness. As outlined by the EC country reports, further steps need to be taken to face both physical and transitional risks. In this respect it is worthy reminding that natural environment preservation is key for Croatia, also in light of the relevance of the tourism sector, generating approximately 20% GDP and 28% of total employment.

Against this background, the RRF represents a fundamental opportunity for Croatia to face C&E challenges. EC’s figures show that the process of obtaining funds under the RRF is more advanced in Croatia than in Bulgaria. Croatia submitted its recovery and resilience plan in May 2021. The plan entails investments and reforms, supported by €6.3 billion in grants. The size of the plan (relative to the size of Croatian economy) is astonishing, being equal to 11.6% of the country’s 2019 GDP. Over 40% of the plan will support climate objectives (and 20.4% of the plan will foster the digital transition).

As of September 2021 Croatia received over 800 million euros in a pre-financing payment under the Recovery and Resilience Facility (RRF). This is equivalent to 13% of the country’s total financial allocation under the RRF. The pre-financing payment will help to kick-start the implementation of the crucial investment and reform measures outlined in Croatia’s recovery and resilience plan (Figure 22).

Figure 22: Time line of Croatian recovery and resilience plan

Source: European Commission

### 4.3. Geopolitical risk: the Russia-Ukraine conflict and the challenges for Bulgarian and Croatian banks

This section aims to identify the potential implications for Bulgarian and Croatian banks stemming from the invasion of Ukraine by Russia, also in light of the economic and financial sanctions on Russia following its attack on Ukraine. Concerns for supervisors may arise for multiple reasons. In theory,
The ECB’s close cooperation on supervising banks in Bulgaria and Croatia

geopolitical tensions are bound to reignite trade disputes, increase uncertainty and hence, result in abrupt repricing in financial markets. More exposed sectors can suffer from reduced investments and growth. A weaker economic environment (although episodic and sectoral in nature) is likely to trigger defaults and hence, deterioration in asset quality.

Asset quality can also deteriorate due to exposures to Russian and Ukrainian counterparties. This can be directly or indirectly through foreign subsidiaries that are important in both Bulgarian and Croatian systems.

4.3.1. Trade disputes

A first area of concern deals with the repercussions on banks’ balance sheet of trade shocks due to reduced exports to or imports from Russia. This in turn may influence firms’ expansion in terms of employment, wages, and investment and determine shortages in supply and uncertainty for consumers and businesses. Reduced economic growth and increased uncertainty can affect banks’ balance sheets, the main channel being the soar of non-performing loans and loan loss provisions to offset increasing credit risk.

In this respect, the EU seems to have an advantage in its economic relationship, as Russia relies on European markets for more than half of its export, whereas the EU sends only five per cent of its exports to Russia. Within the EU, Bulgaria is (along with Estonia and Lithuania), the most exposed to trade shocks country, with exports to Russia accounting for three per cent of Bulgarian GDP (Poitiers et al., 2022).

A more relevant factor shaping the risk picture for supervisors deals with imports of energy. As is well known, energy (especially natural gas) has long been recognised as Russia’ most powerful lever in Europe. Table 2 shows the energy dependence of Euro area countries, i.e., the share of total energy needs of a country met by imports from other countries.11 It also shows the percentage of natural gas imported from Russia. While Croatia dependence on Russia is, in fact, nil, Bulgaria relies on Russia for the vast majority of its natural gas. In this respect, the energy shock induced by the Russian conflict is expected to have to severe economic implication in Bulgaria. Independent of direct dependence on Russian energy, however, globally rising energy prices will constitute challenges for firms across Europe, including in both Bulgaria and Croatia.

Table 2: Energy import dependency and share of natural gas imported from Russia (2015–20)

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<tr>
<td>Energy dependency</td>
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<td>65%</td>
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<tr>
<td>% imported from Russia</td>
<td>29%</td>
<td>35%</td>
<td>33%</td>
<td>33%</td>
<td>33%</td>
<td>34%</td>
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<tr>
<td>Energy dependency</td>
<td>36%</td>
<td>38%</td>
<td>39%</td>
<td>36%</td>
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<td>38%</td>
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<tr>
<td>% imported from Russia</td>
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<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>79%</td>
<td>75%</td>
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</tr>
<tr>
<td>Energy dependency</td>
<td>49%</td>
<td>48%</td>
<td>53%</td>
<td>53%</td>
<td>56%</td>
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<tr>
<td>% imported from Russia</td>
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Source: Eurostat

4.3.2. Direct and indirect exposures to Russian and Ukrainian counterparties

A second area of concern deals with banks’ exposures to Ukraine and Russia. Estimates from market analysts and rating agencies show that the direct exposure of European banks to Russian and Ukrainian clients is negligible, with a few exception. According to the Bank for International Settlements, claims

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11 The indicator is calculated as net imports divided by the gross available energy. Energy dependence = (imports – exports) / gross available energy.
on Russian counterparties from the major developed European countries’ banks amount to 0.7% of the European banks’ total claims reported to the BIS (as of September 2021).

Figure 23 reports the share of the exposures to Russia and Ukraine over equity. Although there is no evidence of significant exposures to Russia of Bulgarian and Croatian banking systems, a source of concern stems from the presence in both countries of subsidiaries of foreign banks which are directly and indirectly connected with Russia. This is the case, in particular, of Raiffeisen Bank International and, to a lower extent, UniCredit Group, whose exposures to Russia amount to, respectively, about 10% and 2% of total group exposures. Although both banks have declared their capacity to withstand potential loss emerging from their exposure to Russia, the nature of interlinkages between local subsidiaries and foreign parents is in an aspect that deserves further attention by the banking supervisor.

Figure 23: European banks’ Exposure to Russia and Ukraine

The liquidation of the Sberbank Europe AG (fully owned by Public Joint-Stock Company Sberbank of Russia, whose majority shareholder is the Russian Federation) provides an even more severe warning of the side-effects of cross-border integration when geopolitical tensions are high. Following significant deposit outflows, on February 28 the ECB assessed the Austrian-based parent company and its subsidiaries in Croatia and Slovenia as failing or likely to fail owing to a deterioration of their liquidity situation. On March 1, the Single Resolution Board, in cooperation with the Croatian National Bank as the national resolution authority, initiated the resolution proceedings of Sberbank d.d. Zagreb. The resolution was carried out by sale, the acquirer being Hrvatska poštanska banka d.d., the sixth largest, government–owned bank with nearly 6% of the assets of the Croatian banking system.

Self-funded subsidiaries may present different risk exposure than subsidiaries that are partly financed by the group. Understanding the nature and type of interconnections between local subsidiaries and parent company, and extending the risk assessment to multiple levels of the organization structure may help prevent the propagation of risk across banks and geographies.

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12 See also Magnus et al. (2022).
5. CONCLUDING REMARKS

This paper gave an overview of the current state of the Bulgarian and Croatian banking systems and risks going forward. There has been substantial progress in supervisory quality over the past decade and the close cooperation with the ECB has been preceded by several years of close cooperation in supervisory colleges led by the SSM. The broader institutional framework in both countries, however, still poses risks and requires attention.

The paper focused on three risk areas. First, there is the ongoing risk of ML/TF, which across the EU has been receiving increased attention but seems especially important for Bulgaria and Croatia, also given the weak institutional framework mentioned earlier. Second, there is the medium- to longer-term challenge of climate change; a challenge for all supervisors across the globe. Both national authorities can benefit from close cooperation with ECB in this area. Finally, there is the short-term challenge of economic and possibly financial distress from Russia’s invasion of Ukraine.

These three risks, however, are also intertwined. In the context of sanctions against Russia, attempts to circumvent these raise ML concerns. The energy transition in Europe might be accelerated due to Russian invasion, but this might further increase transition risks for banks. The high political and economic uncertainty arising from this conflict requires a reassessment of existing risks (e.g., credit and sovereign risks) and sources of new risks. These risk drivers can affect supervised entities through existing country- and bank-specific vulnerabilities, including high public debt (as in Croatia) and poor loan portfolio quality.

This will put an additional premium on banks’ risk management and on supervisory monitoring. It also requires close cooperation between national and supranational authorities and between supervisors and resolution authorities. While the Sberbank failure has been addressed swiftly and effectively, future bank failures might be significantly more complicated.
6. REFERENCES

- Dentons (2020). Bulgaria and Croatia join the EU’s ERM II and establish close-cooperation with the Banking Union, July 27.
- Elderson F. (2022). Full disclosure: coming to grips with an inconvenient truth. Keynote speech by Frank Elderson, Member of the Executive Board of the ECB and Vice-Chair of the Supervisory Board of the ECB, 14th European Bank Institute Policy Webinar on the ECB’s supervisory approach on climate-related and environmental risks, Frankfurt am Main, 14 March.
- Poitiers N. et al., The Kremlin’s gas war, 28 February, https://www.bruegel.org/2022/02/the-kremlins-gas-wars/
The close cooperation arrangement for Bulgaria and Croatia poses challenges for the ECB that we discuss in terms of existing and emerging risks and vulnerabilities in the two banking sectors. The focus is on three risk areas: money laundering, climate change risk, and geopolitical tensions related to the Russia-Ukraine conflict. The high political and economic uncertainty arising from this conflict requires a reassessment of existing risks (such as credit and sovereign risks) and sources of new risks. These risk drivers are intertwined and can affect supervised entities through existing vulnerabilities at the bank as well as at the country level, primarily poor asset quality and the weak institutional framework.

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