INTERNATIONAL MONETARY FUND

IMF Country Report No. 19/47

REPUBLIC OF CROATIA

SELECTED ISSUES

February 2019

This Selected Issues paper on the Republic of Croatia was prepared by a staff team of the International Monetary Fund as background documentation for the periodic consultation with the member country. It is based on the information available at the time it was completed on January 23, 2019.

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Price: $18.00 per printed copy

International Monetary Fund
Washington, D.C.

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January 23, 2019

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The European Department

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CROATIA: ASSESSING PROGRESS IN REDUCING FINANCIAL IMBALANCES

Almost a decade after the Global Financial Crisis (GFC), the economy's total indebtedness remains high. Public debt is above 70 percent, and the corporate sector's debt is concentrated in a few segments and remains high relative to the sectors' financial assets, which may indicate potential solvency risks. Heeding lessons from the Agrokor's debt crisis and Croatia's aspirations to join Euro area, further decline in the balance-sheet exposures is thus warranted to reduce potential pressure points and risk transmission channels in the event of a negative shock.

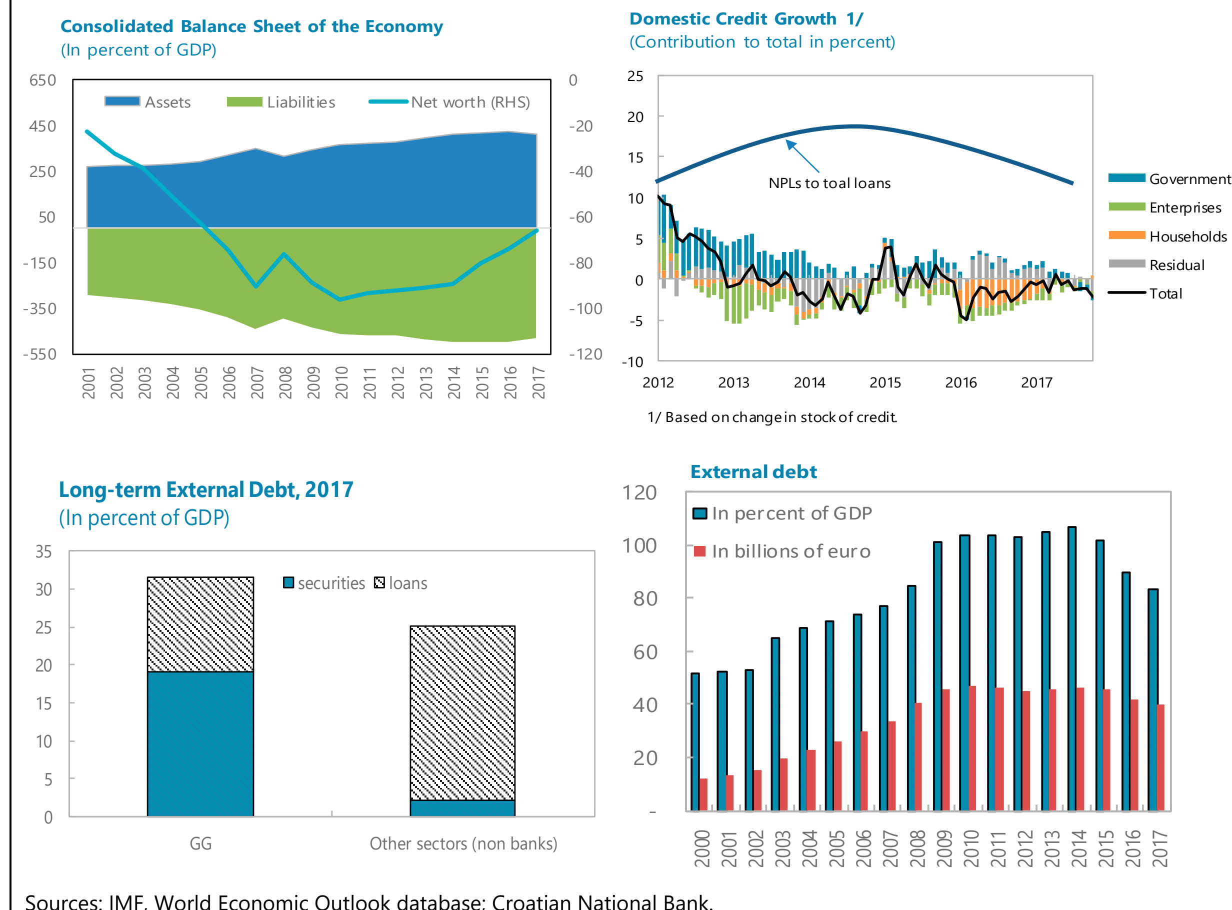
A. Introduction

1. **Croatia amassed serious imbalances in the private and public sectors' balance sheets in the wake of the GFC.** Persistent high large current account deficits contributed to external debt rising close to 80 percent by 2008 (IMF 2007). Therefore, as output collapsed, debt ballooned to over 100 percent, while the economy's net financial position (NFP), or net worth, fell to nearly -100 percent of GDP. Croatia's total indebtedness (on a consolidated basis) reached 217 percent of GDP by 2014.

2. **Given these imbalances amid the quasi-pegged exchange rate arrangement, policy adjustment options were largely lacking.** The monetary policy was relaxed, but given the high levels of debt, it had its limits. Absence of fiscal buffers constrained the extent of the fiscal response towards more growth-friendly policies. Significant structural reforms were politically challenging to implement, but modest and gradual steps offered some relief.

3. **After the GFC, Croatia experienced six years of recession**. Corporate sector was hit hard and had to adjust through deleveraging, resulting in credit-less recovery, while the banking system and households weathered the crisis better (Figure 1, CNB 2012, IMF 2016 and 2018). Growth finally ensued in end-2014, led mostly strong tourism, private consumption due to lower taxation and better job prospects, and the positive effect of the EU accession on trade. Sizable fiscal consolidation also took place; and the current account has been in substantial surpluses since 2013. NFP improved to -61.9 percent of GDP in 2017.

4. **This paper explores how intersectoral vulnerabilities and risks have shifted over 2001–17, and especially after the GFC**. Section B analyzes financial positions at the sectoral levels deposit taking institutions (banks) and non-financial corporations, households (HH), the public sector (GG), and the Croatian National Bank (CNB) by disaggregating them into instruments, currencies, and maturities. Section C employs balance sheet analysis (BSA) to gauge cross-sectional exposures and risks. Section D discusses policies to reduce the remaining vulnerabilities.



Sources: IMF, World Economic Outlook database; Croatian National Bank.

B. Sectoral Balance Sheets

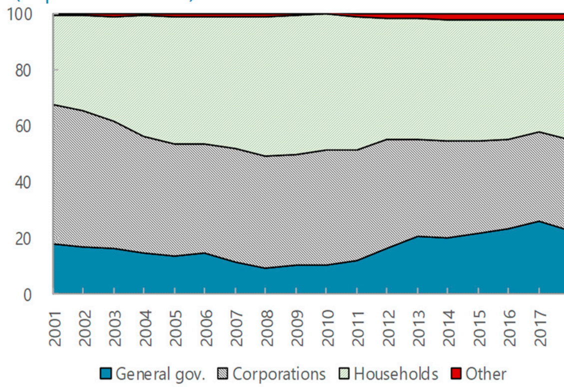
Deposit Taking Institutions (Banks)

5. The system's balance sheet grew substantially over the two decades. Assets and liabilities expanded close to 100 percent of GDP, but growth remained more subdued after the GFC (Figure 2). The sector had a small positive NFP in 2017. On the asset side, besides a growing loan portfolio, banks' holdings of securities have increased fivefold from 2001, and by 52 percent since 2010. Loans constitute about 58 percent of assets, with households accounting for 47.1 percent of total (end-July 2018). The liability side was driven by the steady growth of deposits, which as of 2017, account for 89 percent of total. Loan-to-deposit ratio of the consolidated monetary financial institutions declined from its peak of 104 percent in 2011 to 76 percent in 2017.

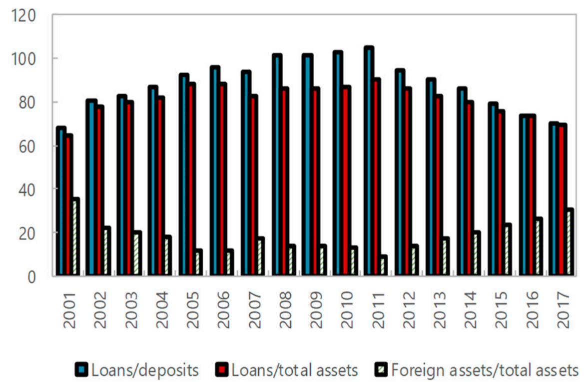
6. Not least due to the prudential buffers, the banking system withstood the GFC relatively well. The lending boom before the GFC was largely foreign-funded. Moreover, the bulk of

Figure 2. Banking Sector Indicators 1/

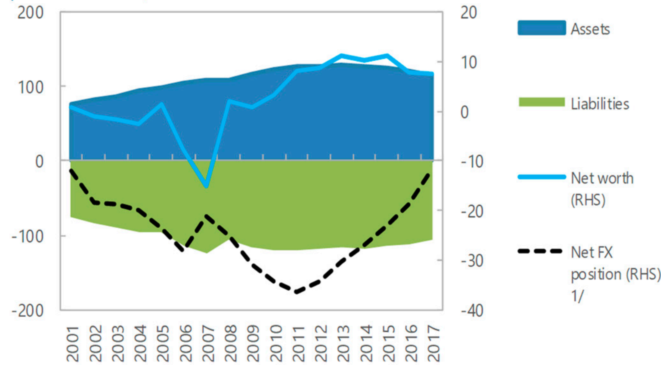
Bank Credit to the Economy
(In percent of total)



Selected Indicators

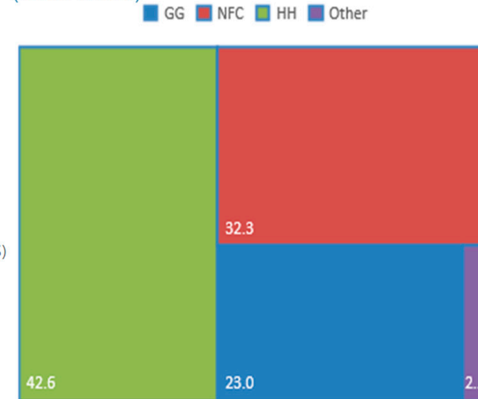


Financial Sector' Financial Position
(In percent of GDP)

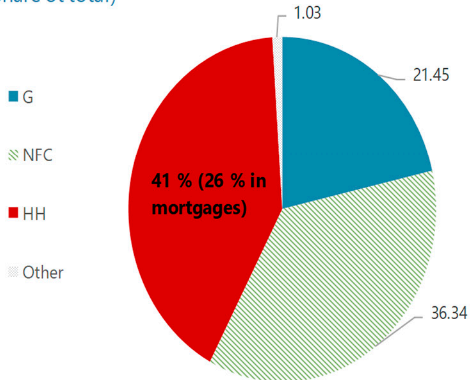


1/ Banks' NFX position= FX assets (net)/FX deposits.

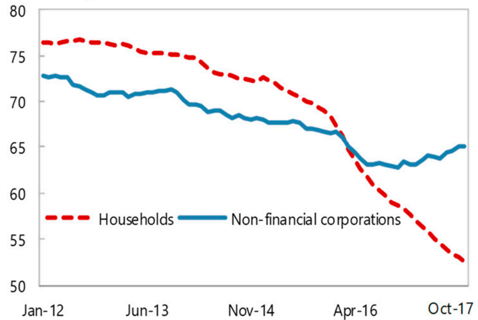
Lending Portfolio
(Share of total)



Banks' FX Loan Portfolio, 2017
(Share ot total)



Share of FX Loans to Total Loans
(Percent)



1/ Deposit taking corporations, excluding CNB.

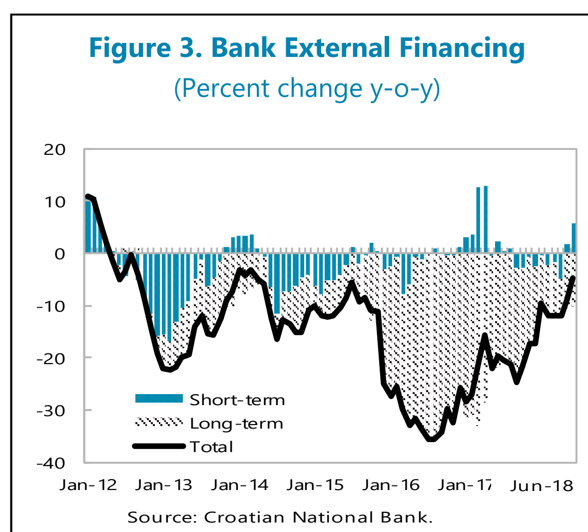
Sources: Croatian National Bank; and IMF staff calculations.

domestic deposits were denominated or indexed to FX, hence limiting the FX mismatch of banks but resulting in significant indirect FX risk from unhedged borrowers. On the domestic front, policy measures implemented by the CNB progressively in years before the crisis helped preserve macroeconomic stability. Stable exchange rate prevented large increases in debt servicing and a run on banks. A few years after the GFC, lending stagnated, especially to the corporate sector, as loan restructuring slowed down. Foreign assets also declined from 14.6 percent of GDP in 2011 to close 10 percent in 2017. Despite this and the increase in non-performing loans (NPLs), banks' profitability held up, with the exception of 2015, when it fell due to the mandated conversion of Swiss franc household loans into euros (at a cost to banks of about 2 percent of GDP).[1]

7. To compensate for reduced corporate lending, banks increased funding of the public sector, which was running high deficits. Claims on central government and social security funds (net) by deposit institutions have increased over time, from about 7 to 20 percent of total banks' outstanding credit over 2001–17 and since 2010 by 35 percent (Figure 2). In part because exposures to the state carried a zero risk-weight, the capital adequacy rate of the average banking system has increased since the GFC.

8. As foreign funding declined, the contagion risk also diminished but the level of euroization remains high. Bank own borrowing in FX declined from its peak of 28.4 percent of total liabilities to foreign financial institutions in 2006 to 7 percent in 2017 (Figure 3). Banks themselves currently have no *net* external debt, which reduces the risk of spillover of a possible banking crisis of parent banks to the domestic subsidiary banks. The sector's net FX position also improved from -34.3 percent of GDP in 2010 to below -11.6 percent in 2017 (Figure 2).[2] However, as a share of total bank lending, FX lending peaked at about 73 percent even after the crisis, and only started to come down in 2016, declining to 56 percent by end-September 2018. New lending to households increasingly has been made in kuna and with fixed interest rates (CNB 2017b).

Figure 3. Bank External Financing
(Percent change y-o-y)



Source: Croatian National Bank.

[1] Croatia's authorities have taken several steps to facilitate a resolution of NPLs through renegotiation and restructuring, collection, and sales and write-offs. The tax deduction for banks' income generated by non-performing debt write-offs effective only in 2017 facilitated the process only to some extent but debt sales were banks' preferred option. There may be merit raising provisions for non-performing receivables (CNB 2017c). A large share of corporate NPLs is to the construction sector.

[2] Net FX position is defined as Foreign assets (net) minus Foreign currency deposits (Table B1, CNB).

Non-Financial Corporations

9. As the GCF unfolded, corporations' already sizable negative NFP deteriorated drastically and improved only slightly thereafter. Over 2009–10, the NFP worsened some 20 percentage points to -130 percent of GDP, improving only by some 10 percent by 2017 predominantly thanks to the increase in GDP as in nominal terms liabilities continued to grow (Figure 4). In the first half of 2017, the consolidated corporate debt-to-GDP ratio decreased to below 65 percent of GDP from its peak of 83 percent in 2010.

10. There has been some shift in the composition of liabilities. Between 2010 and 2017, equity and investment fund shares continued to grow, implying a rise in the market value of the companies, while loan obligations declined, including due to some debt-to-equity swaps (Figure 4). There is now also greater dependence on financing through corporate paper, the value of which grew almost 70 percent during the period, although, together with loans, their share dropped from about 48 to 40 percent of total liabilities, implying some deleveraging, and lower borrowing from banks. Despite more intensive corporate deleveraging abroad and the increase in funding from domestic banks, FX debt is still high (Figure 4). New borrowing was equally divided between short- and long-term and was mostly in domestic currency. However, it was insufficient to offset the dominant impact of write-offs and sales of claims, and appreciation of the domestic currency on movements in the stock of debt to domestic banks, making credit growth subdued.

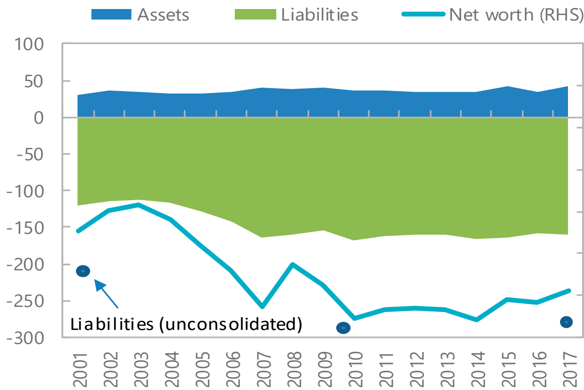
11. The level of NPLs rose drastically after the GFC, and only started to decline in 2015. It reached its high of 35 percent of total loans post the crisis, and then declined due to improvements in firm's financial positions, settlements and write-offs. Croatia was one of the most active markets for distressed debt in the Central and Eastern Europe over 2016–17 (Deloitte 2018). However, NPL ratio was still at 22 percent as at end-2017, while total NPL ratio was in low double digits (Figure 3).

12. Despite deleveraging, many corporations remain over-indebted. Corporate sector profitability has been relatively poor even before GFC, while the long recession worsened the negative trends. Vujčić (2014) assessed that the average profitability of Croatian companies was lower than in the majority of EU countries, resulting in a relatively high debt burden compared to profits. This has improved lately but only marginally (Figure 4). Part of the debt is even considered unsustainable by certain thresholds. Martinis and Ljubaj (CNB 2017c) estimate, based on firm-level data, that as of 2014, that the debt overhang (the difference between the total debt and the sustainable debt) is about a third of the corporate debt. It is considered unsustainable based on the ability of the companies to service their debt.[3]

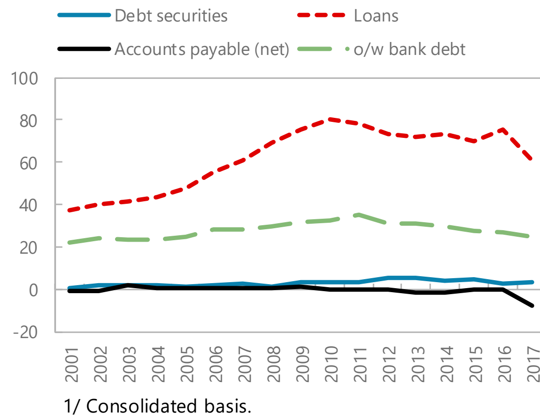
[3] This debt overhang is concentrated in about 2000 large companies (out of 36,000), particularly in construction. SOEs are less burdened with debt than private ones. Moreover, exporters are less indebted as they face tougher competition and are more sensitive to vulnerabilities caused by expensive debt service that cannot easily be passed on.

Figure 4. Selected Corporate Indicators

NFPS' Financial Position
(In percent of GDP)

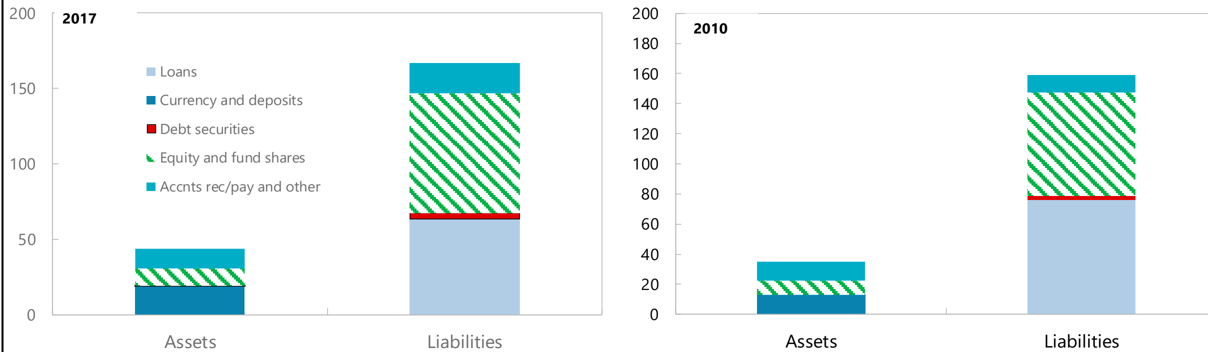


Corporate Debt 1/
(In percent of GDP)

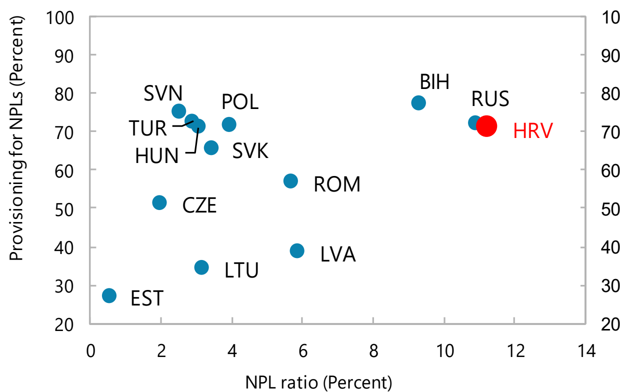


1/ Consolidated basis.

Nonfinancial Corporate Balance Sheet by Instrument, 2010 and 2017
(Consolidated, percent of GDP)

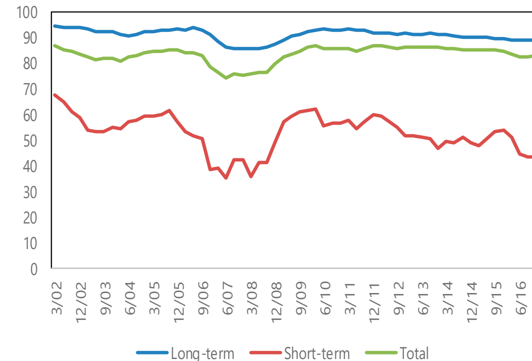


NPLs and Provisioning, 2018Q2 1/



1/ Latest available data for HRV 2018 Q1, and for LTU and POL 2017 Q4.

Share of NFPS FX Debt 1/



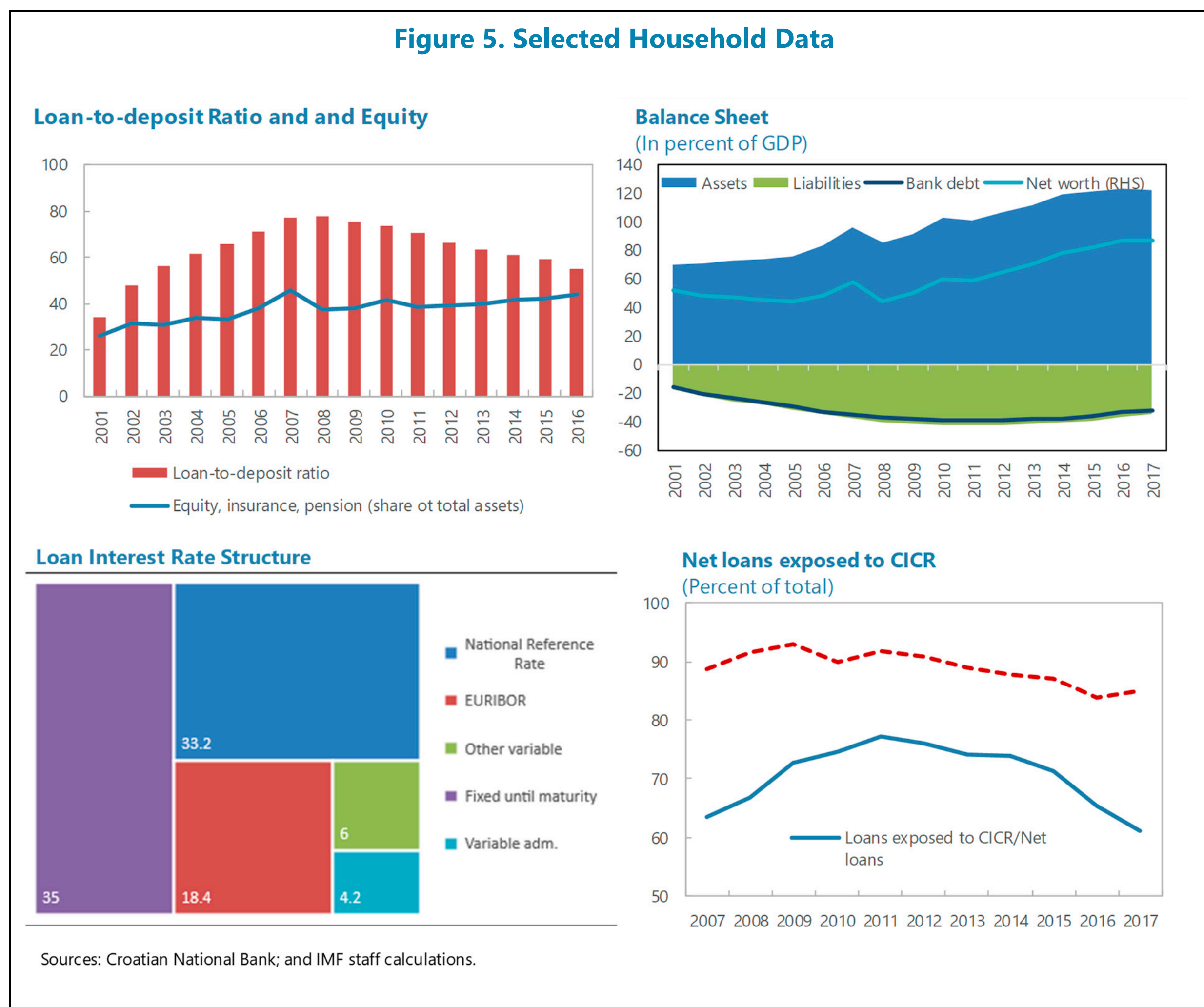
1/ It is assumed that total external debt is denominated in foreign currencies. Debt indexed to foreign currencies (a foreign currency clause) is also included.
Note: Presented is the share in total corporate debt (by maturity).

Sources: Croatian Central bank; IMF *Financial Soundness Indicators Database*.

Households

13. While households have also substantially borrowed during the pre-crisis years, the sector's financial net position remained strong. The sector's net worth, including pension assets, is close to 90 percent of GDP at end-2017. Assets are mostly in the form of euroized deposits. Most of liabilities are debt to banks, which as percent of GDP doubled since 2001, and averaged around 40 percent through 2010–17 (Figure 6).

Figure 5. Selected Household Data



Sources: Croatian National Bank; and IMF staff calculations.

14. A high share of household debt is in FX and at variable rates (Figure 5). While the share of FX loans has been declining since the crisis (along with the FX deposits) and is now below 48.6 percent as of April 2018 (from above 70 percent in previous years), this still makes Croatia a highly euroized economy. With respect to lending terms, over one third of loans are at a fixed interest rate, one third are tied to the National Reference Rate (NRR) and approximately 18 percent are tied to the EURIBOR. A little less than one half of housing loans are tied to the NRR, while almost 30 percent of them are tied to the EURIBOR and approximately 14 percent carry a fixed rate (CNB, 2018).

Public Sector

15. The government's net financial position has deteriorated dramatically post the crisis. Its NFP was about -35 percent of GDP percent of GDP in 2017—with financial assets of about 55 percent, covering a bit over half of its liabilities. Assets include equities (shares), which constitute more than half of total financial assets (Figure 6). Over 95 percent of liabilities are bonds and loans, with the bond issuance quadrupling between 2001–17. Debt hovered around 40 percent of GDP before the GFC, and it increased to over 85 percent by 2015 (Figures 1 and 6). Deficits doubled over 2009–11, averaging 6.7 percent of GDP, leading to a drastic increase in gross financing needs. As growth resumed and measures were taken to control spending, the fiscal position improved from a deficit of 7.8 percent of GDP in 2011 (including one-off factors) to a surplus of 0.9 percent in 2017.

16. To reduce debt service costs and risks, the government's debt strategy was targeted at securing debt on fixed terms on domestic markets. As a result, the share of external debt in central government debt declined from 64 of GDP in 2000 to 36 percent in 2017 (Figure 6). Maturity of debt has been extended, and now long-term debt constitutes 70 and 50 percent of domestic and external debt, respectively. The share of fixed-rate bonds is more than 85 percent. Consequently, public debt is now somewhat less vulnerable to sudden capital outflows and interest rate changes than a decade ago. Government guarantees also declined from 5.5 percent of GDP at their peak in 2002 to below 3 percent by end-2017.

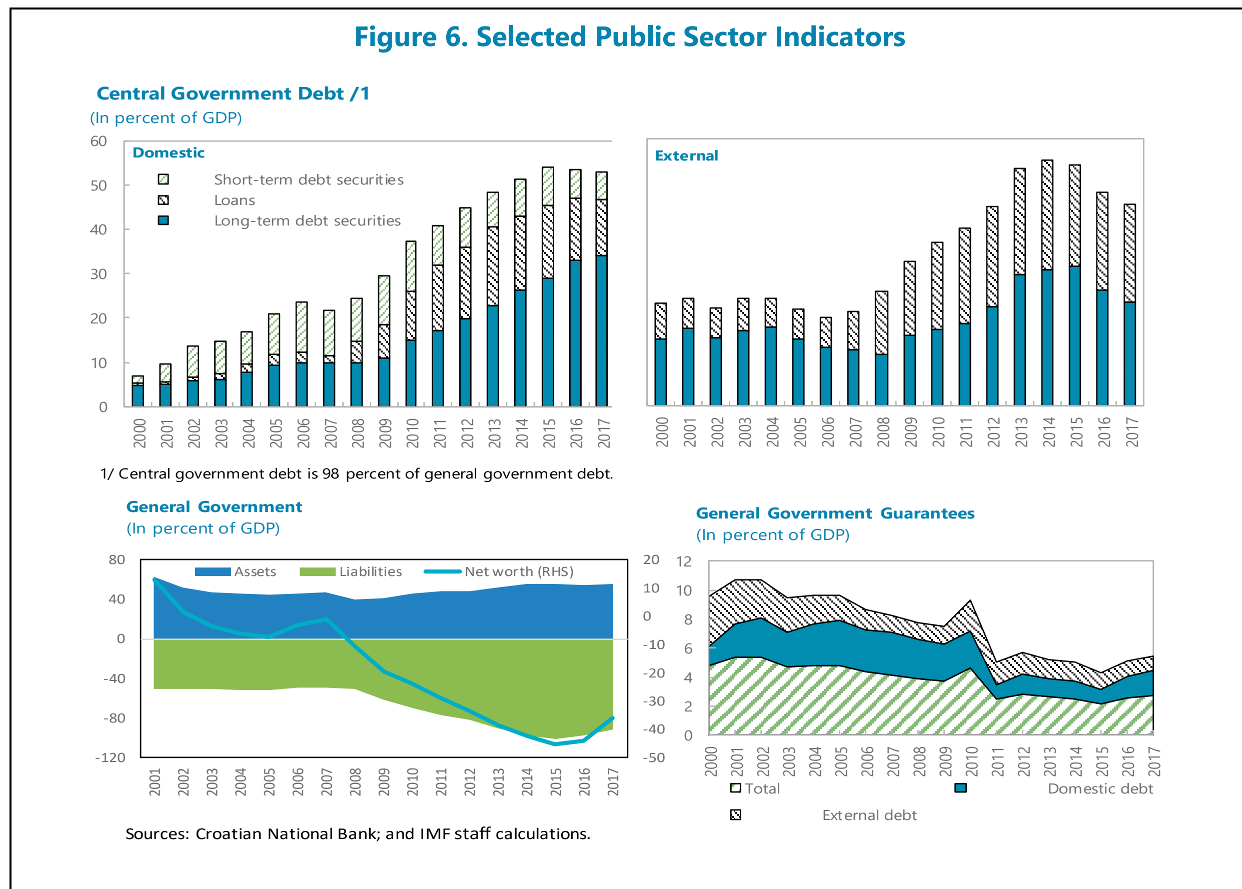


Figure 6. Selected Public Sector Indicators

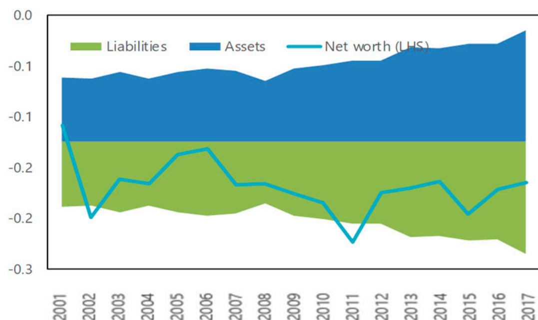
Central Bank

17. The central bank's balance sheet grew considerably post the crisis and is robust. Historically, the central bank has maintained a small negative NFP (Figure 7). Its balance sheet is straightforward and simple. Assets, most of which are FX deposits and securities, amounted to more than 35 percent of GDP in 2017, and are high-quality external sovereign bonds or deposit claims on other national central banks in the Euro system. Almost all of the liabilities consist of reserve money, foreign liabilities and equity.

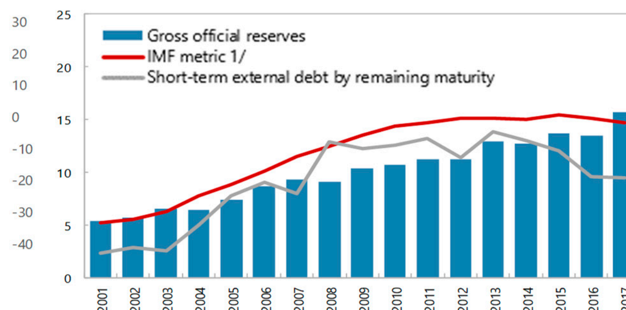
18. Reserves quadrupled between 2002–2017. There was a slight drop in 2016 in part due to abolishment of the requirement to maintain part of banks' required reserves in FX with CNB. Official reserves exceeded the metric starting in 2017, and there is a comfortable margin relative to the benchmark of 100 percent of short-term debt (Figure 7). Furthermore, the metric excludes banks' obligation to maintain liquid FX assets (minimum 17 percent of FX liabilities), which serve as an additional buffer, although these are not fully available to, or controlled by, the CNB. The reserve accumulation is driven by the strong current account surpluses and EU funds inflows.

Figure 7. Selected Central Bank Indicators

Financial Position
(In percent of GDP)

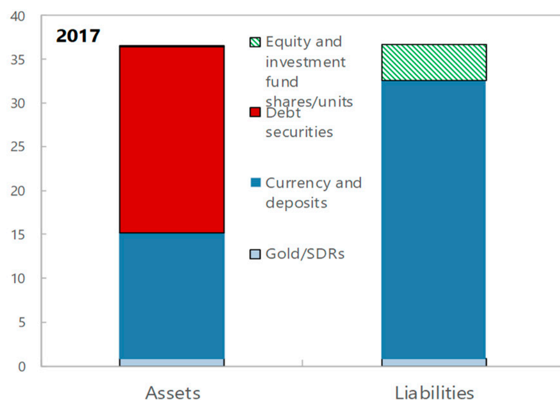


International Reserve Cover
(Billions of euros)



1/ IMF, 2015, "Assessing Reserve Adequacy-Specific Proposals" IMF Policy Paper.

Balance Sheet by Instrument, 2010 and 2017
(Percent of GDP)



Sources: Croatian National Bank; and Fund staff calculations.

C. Cross-Sectoral Assessment and Risks

19. The balance-sheet approach (BSA) is a method to analyze an economy as a system of interlinked sectoral balance sheets. The BSA that follows can provide important insights into balance-sheet mismatches which may exacerbate a country's vulnerability to shocks. The are some general caveats with regard to the BSA should be kept in mind however (IMF 2015). For instance, the asset and liability positions on consolidated and aggregated sectoral levels can mask important differences in the positions of individual entities (e.g., Agrokor). Thus, while the BSA is a useful tool for analyzing net exposures of the main economic sectors to specific financial shocks and the transmission of shocks across sectors, it is less useful for analyzing credit risk.

Table 1. Croatia: External Vulnerability Indicators

(Percent of GDP, unless otherwise indicated)

	2010	2017
External debt	103.9	82.5
External debt in percent of exports of goods and nonfactor services	275.8	159.5
Gross official reserves (billions of euro)	10.7	15.7
Percent of short-term debt by remaining maturity	84.5	156.2
Months of next year's imports of goods and nonfactor services	7.0	7.9
Foreign assets	53	70
Of which:		
Currency and deposits	13	15
Reserve assets	24	34
Foreign liabilities	146	136
Of which:		
Foreign direct investment in Croatia	53	62
Public and private sector bond issuance	14	21
Loans	64	39
General government	13	14
Banks	8	1
Other sectors	43	23
Net international investment position	-93	-66

Sources: Croatian Central Bureau of Statistics; Croatian National Bank; and IMF staff calculations.

20. Standard macroeconomic indicators demonstrate that Croatia's overall external vulnerabilities have declined since 2010 (Table 1). The net international investment position (NIIP) improved from -93 percent of GDP in 2010 to -67 percent in 2017, which largely reflected a large decline in intercompany loans. Gross external debt declined to 82.5 percent of GDP by end-2017, reflecting repayments of cross-border loans and lower foreign parent bank funding, and, more recently, a growing current account surplus, large EU funds, and positive GDP growth.

21. However, the balance sheet matrix shows little improvement in reduction of important cross-sectoral dependencies and liabilities to the rest of the world over 2010–17 (Tables 2a/b).

- Corporate sector (NFPS) retains a large negative FX exposure to the outside world and a moderate to the banking system.
- Banks are substantively exposed to sovereign FX and domestic debt.
- The government remains a sizable net debtor in FX to the rest of the world.

- Households are net creditors to banks.

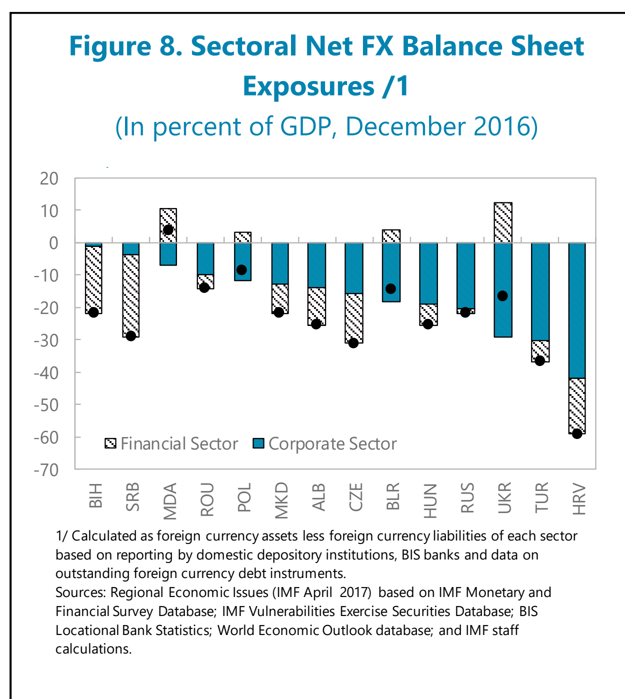
22. Given little change in positions, vulnerabilities and associated risks remain important:

- *A sudden tightening in global financial conditions*, could put pressure on public finances and borrowers with variable rate loans. The mitigating factor here is that 75 percent of gross external debt of largest debtors (government and NFPS), and all of securities, are long-term, which somewhat reduces the refinancing risks. The holders of variable rate loans, especially at the longer end of maturity, at the household level are much more exposed to the risk.

- The *currency risk* is still elevated given a high degree of euroization. Corporate balance sheet FX mismatches are the highest in the region (Figure 8, Box 1). Vulnerability, especially of unhedged borrowers, could, therefore be substantial in case of significant exchange rate volatility. At the end of 2017, about 60 percent of bank (net) loans were exposed to currency-induced credit risk (CICR) (CNB 2018). The share of loans not hedged against CICR, or loans to borrowers with mismatched currency position, was 85 percent (Figure 5). *Maturity mismatch risk* further amplifies currency risk as an increase in kuna lending is supported by household kuna deposits at shorter maturities.

Figure 8. Sectoral Net FX Balance Sheet Exposures /1

(In percent of GDP, December 2016)



1/ Calculated as foreign currency assets less foreign currency liabilities of each sector based on reporting by domestic depository institutions, BIS banks and data on outstanding foreign currency debt instruments.
Sources: Regional Economic Issues (IMF April 2017) based on IMF Monetary and Financial Survey Database; IMF Vulnerabilities Exercise Securities Database; BIS Locational Bank Statistics; World Economic Outlook database; and IMF staff calculations.

- *Banks' exposure to GG* could raise some concerns, including regarding crowding out. However, this exposure is mostly through government securities, which minimizes the risk, and crowding out concerns have so far been mitigated by the low demand for credit from the private sector due to its continued deleveraging.

- *High Accounts Payable (net) of NFPS:* Accounts payable (net) have almost increased from 1 to 8 percent over 2001–17, but remained constant as a percent of total liabilities, at about 12 percent (Figure 4). While these transactions are a usual part of business' interaction with their clients ("short-term lending"), the Agrokor's case (IMF 2018a) showed that there is a prevalence of a serious concern with intra-company payment delays. Therefore, part of these could become non-performing.

- *Growth-Investment nexus*. A decline in GDP growth will have a negative effect on the balance sheets through presumed decline in revenues and available cash for debt servicing.[4] However, given the still benign interest rate environment and continuation of economic growth, those risks are less damaging than the effect of debt overhang on corporate investment and a subsequent feedback into low growth or deceleration in growth. Damijan (EBRD 2016) finds for six Central and Eastern European countries (including Croatia) overleveraged firms have a negative impact on corporate performance, employment, investment and exports. Martinis and Ljubaj (CNB 2017c) confirm this for investment in Croatia.

Box 1. FX Stress Test Estimates

IMF external debt sustainability analysis demonstrates that under an (unlikely) assumption of 30 percent kuna depreciation in 2018, the economy's external debt would increase from 82.5 to 109 percent of GDP in the subsequent year. In its stress tests, the CNB's considers as an extreme adverse scenario a 10 percent kuna depreciation against the euro within the period of two years, constituting the key risk to financial stability (CNB 2017a). The outcomes of a stress test of sectoral balance sheets in Table 3 imply a shock of 20 percent depreciation. NFPS's debt net position to the rest of the world worsens by 11 percentage points to -106 percent.

Intersectoral Positions by Currency 1/

(In percent of GDP, 2017)

Assumption: 20 percent depreciation	**G**		**CNB**		**Banks**		**NFPS**		**HH**		**External**	
	Original	*Post-shock*	*Original*	*Post-shock*	*Original*	*Post-shock*	*Original*	*Post-shock*	*Original*	*Post-shock*	*Original*	*Post-shock*
G					17	20					32	39
-- in domestic					3	3					0	0
-- in FX					15	+17 ▲					32	+39 ▲
CNB					18	19					-30	-35
-- in domestic					16	16					-9	-9
-- in FX					2	+3 ▲					-21	-26 ▼
Banks	**-17**	-20	-18	-19			-7	-9	38	42	-3	-4
-- in domestic	-3	-3	-16	-16			1	1	17	17	1	1
-- in FX	-15	-17 ▼	-2	-3 ▼			-8	-10 ▼	20	+25 ▲	-4	-5 ▼
NFPS					7	9					88	106
-- in domestic					-1	-1					0	0
-- in FX					8	+10 ▲					88	+106 ▲
HH					-38	-42						
-- in domestic					-17	-17						
-- in FX					-20	-25 ▼						
External	**-32**	-39	21	26	3	4	-1	-106				
-- in domestic	0	0	0	0	-1	-1	0	0				
-- in FX	-32	-39 ▼	21	+26 ▲	4	+5 ▲	-88	-106 ▼				

1/ Cross exposure less than 1 percent and other financial corporations not shown due to small exposure.
Source: National authorities; and IMF staff calculations.

[4] This said, sensitivity tests of debt overhand conducted on interest rate increase by one percentage point annually in 2016 and 2017 and GDP decline by one standard deviation have a relative marginal effect, even if combined (CNB 2017c).

D. Takeaways and Recommendations

23. Despite recent improvements, both public and private balance sheets remain vulnerable. While cross-border financial exposures have declined, as borrowing slowed down and relied more on domestic sources, the economy remains exposed to several risks. To reduce fiscal vulnerabilities, consolidation should proceed as advised in the 2018 Article IV Country Report.

24. Maintaining adequate level of reserves is important given large balance sheet exposures to currency risks. As reserve accumulation is mostly tourism driven, increasing the volume of merchandise exports would be a good strategy to reduce this dependence. For that, it will be important to advance structural reforms that improve business environment and labor force participation, including a competitive wage policy which is likely to bring more FDI into tradable sectors.

25. Close monitoring and education about currency and interest rate risks needs to continue. Banks should keep enhancing internal monitoring of mismatched foreign exchange position and variable interest rate exposures, inducing on a household level. Concerted efforts by the CNB should continue through regular publications/directives and special information materials to increase the customer's awareness about these risks.

26. Addressing high corporate sector vulnerabilities should be a priority. As Agrokor case showed, it would be important to address any remaining gaps in corporate governance, including the role of supervisory boards, accounting and auditing standards, and insolvency and creditor rights. A high level of Accounts Payable (net) may point to deficiencies in the payment culture. Overleveraged state-owned companies also require special attention as they suffer from low efficiency and create substantial fiscal cost and contingent liabilities. Further strengthening of their governance, procurement rules, and establishing clear performance targets and evaluation tools would help instill financial discipline and derive efficiency gains.

27. Further deleveraging should be encouraged though specific policy options and strategies. The bankruptcy legislation for large corporates has been recently improved in response to the crisis, and the recent changes to the Bankruptcy Law should help facilitate orderly restructuring. Nonetheless, there is still room to make the bankruptcy procedures even more efficient, e.g., by facilitating out-of-court settlements, and providing more flexibility to deal with personal or corporate bankruptcy. Reducing time for insolvency proceedings and hiring experienced judges and insolvency administrators would also improve insolvency processes (IMF 2010). Efforts should continue to ease and simplify the process of writing off debt, and encourage banks to carry out loan restructuring, while respecting owners' rights and minimize moral hazard and potential fiscal costs.

Table 2a. Croatia: Balance Sheet Approach Matrix 1/

(In percent of GDP, 2010)

Debtor (net +)	GG			CNB			Banks			NFPS			HH			External			Total		
Creditor (net -)	A	L	Net	A	L	Net	A	L	Net	A	L	Net	A	L	Net	A	L	Net	A	L	Net
GG																					
Total				0	6	-6	30	7	23							34	4	30	64	17	47
In domestic currency				0	6	-6	10	7	3							0	0	0	10	13	-3
In foreign currency				0	0	0	20	0	20							34	4	30	54	4	50
CNB																					
Total	6	0	6				17	1	16				7	0	7	5	34	-29	35	35	0
In domestic currency	6	0	6				16	1	15				7	0	7	0	5	-5	29	6	23
In foreign currency	0	0	0				1	0	1				0	0	0	5	29	-24	6	29	-22
Banks																					
Total	7	30	-23	1	17	-16	5	5	0	18	28	-10	79	36	43	11	13	-3	124	132	-8
In domestic currency	7	10	-3	1	16	-15	5	4	1	11	12	-1	36	15	20	1	0	1	63	59	4
In foreign currency	0	20	-20	0	1	-1	0	1	-1	7	17	-9	43	21	22	9	13	-4	61	74	-12
NFPS																					
Total							28	18	10							97	22	76	126	40	86
In domestic currency							12	11	1							0	0	0	12	11	1
In foreign currency							17	7	9							97	22	76	114	29	85
HH																					
Total				0	7	-7	36	79	-43										36	85	-49
In domestic currency				0	7	-7	15	36	-20										15	42	-27
In foreign currency				0	0	0	21	43	-22										21	43	-22
External																					
Total	4	34	-30	34	5	29	13	11	3	22	97	-76							73	147	-74
In domestic currency	0	0	0	5	0	5	0	1	-1	0	0	0							6	1	4
In foreign currency	4	34	-30	29	5	24	13	9	4	22	97	-76							68	146	-79
Total	17	64	-47	35	35	0	132	124	7	40	126	-86	85	36	49	147	73	74			
In domestic currency	13	10	3	6	29	-23	59	62	-3	11	12	-1	42	15	27	1	6	-4			
In foreign currency	4	54	-50	29	6	22	72	63	10	29	114	-85	43	21	22	146	68	79			

1/ Cross exposure less than 1 percent and other financial corporations not shown due to small exposure.

Sources: National authorities; and IMF staff calculations.

Table 2b. Croatia: Balance Sheet Approach Matrix 1/

(In percent of GDP, 2017)

Debtor (net +)	GG			CNB			Banks			NFPS 1/			HH			External			Total		
Creditor (net -)	A	L	Net	A	L	Net	A	L	Net	A	L	Net	A	L	Net	A	L	Net	A	L	Net
GG																					
Total				0	5	-5	24	6	17							34	2	32	57	13	44
In domestic currency				0	5	-5	9	6	3							0	0	0	9	11	-2
In foreign currency				0	0	0	15	0	15							34	2	32	48	2	47
CNB																					
Total	5	0	5				19	1	18				7	0	7	4	35	-30	36	33	3
In domestic currency	5	0	5				17	1	16				7	0	7	0	9	-9	29	6	23
In foreign currency	0	0	0				2	0	2				0	0	0	4	25	-21	7	27	-20
Banks																					
Total	6	24	-17	1	19	-18	5	5	-1	18	25	-7	71	33	38	8	11	-3	112	119	-7
In domestic currency	6	9	-3	1	17	-16	5	5	0	11	10	1	33	16	17	1	0	1	59	58	2
In foreign currency	0	15	-15	0	2	-2	0	1	-1	7	15	-8	37	17	20	7	11	-4	52	61	-9
NFPS																					
Total							25	18	7							95	6	88	119	24	95
In domestic currency							10	11	-1							0	0	0	10	11	-1
In foreign currency							15	7	8							95	6	88	110	13	97
HH																					
Total				0	7	-7	33	71	-38										33	78	-45
In domestic currency				0	7	-7	16	33	-17										16	40	-24
In foreign currency				0	0	0	17	37	-20										17	37	-20
External																					
Total	2	34	-32	35	4	30	11	8	3	6	95	-88							51	141	-90
In domestic currency	0	0	0	9	0	9	0	1	-1	0	0	0							5	1	4
In foreign currency	2	34	-32	25	4	21	11	7	4	6	95	-88							46	140	-94
Total	13	57	-44	35	35	0	118	112	5	24	119	-95	78	33	45	142	60	82			
In domestic currency	11	9	2	10	29	-19	58	59	-2	11	10	1	40	16	24	1	9	-8			
In foreign currency	2	48	-47	25	6	19	60	53	7	13	110	-97	37	17	20	141	51	90			

1/ Cross exposure less than 1 percent and other financial corporations not shown due to small exposure. Importantly, Croatia has started to report full sectoral detail of portfolio investment from 2017. Therefore, the external position of "other sectors" is now split between NBFIs (or OFCs) and nonfinancial corporations (NFCs), while in perious years, "other sectors" were part of NFCs. Therefore a direct comparison of assest and liabilities is not possible for NFPS between 2010 and 2017. The decline in assests of NFPS is mainly due to this split.

Sources: National authorities; and IMF staff calculations.

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