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Country Report Croatia 2016

**Including an In-Depth Review on the prevention
and correction of macroeconomic imbalances**

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EXECUTIVE SUMMARY

This country report assesses Croatia's economy in the light of the European Commission's Annual Growth Survey published on 26 November 2015. The survey recommends three priorities for the EU's economic and social policy in 2016: re-launching investment, pursuing structural reforms to modernise Member States' economies, and responsible fiscal policies. At the same time, the Commission published the Alert Mechanism Report that initiated the fifth annual round of the macroeconomic imbalance procedure. The Alert Mechanism Report identified Croatia as warranting a further in-depth review.

In 2015, Croatia finally came out of its six-years-long recession. The sustained growth in the pre-crisis years was based on unsustainable drivers. The credit-driven consumption and investment boom resulted in the accumulation of sizeable domestic and external liabilities – mostly foreign currency denominated, while public finances maintained a broadly pro-cyclical stance. Croatia therefore entered the crisis with little room for manoeuvre and adjustment mainly relied on internal devaluation. The benefits of increased competitiveness were hampered by Croatia's limited export base and the simultaneous economic slowdown in its main trading partners. Between 2008 and 2014, GDP shrunk by more than 12 % in real terms and unemployment surged from below 9 % to more than 17 %. The situation started to improve at the end of 2014, and in the course of 2015 real GDP growth surpassed expectations. Economic activity is currently expected to have expanded by 1.8 % in 2015. The external sector performed strongly, and Croatia recovered some of the lost market shares. Growth was however mainly driven by the rebound in consumption and — to some extent — investment.

The recovery is set to strengthen over the next couple of years, but risks remain. By 2017, GDP growth is forecast to attain 2.1 % and unemployment to contract to under 14 %, while the current account surplus should stabilise at around 3 % of GDP. The external sector is expected to continue to contribute to this positive performance, but the main driver of growth will be internal demand. Investments, in particular, are set to start growing more robustly, on the back of an increased absorption of EU structural and investment funds. Nevertheless, growth is projected to remain subdued for a catching up

economy and it will take several years before output returns to pre-crisis levels. In a low inflation environment, high government and private debt, jointly representing more than 200 % of GDP in 2014, will continue to constrain public and private investment as well as household consumption. These growth projections do not factor in fiscal consolidation needs, and (on a no-policy-change basis) the government deficit is projected to remain above 3 % in both 2016 and 2017. The outlook may develop less positively in a context of increased volatility in the financial markets and a slowdown in global trade.

In the long-run, Croatia faces the challenge of lifting its low potential growth. Given the depth and length of the recession, Croatia is currently expected to grow above its potential over the next two years. Eventually, however, the economy is set to return to its long-term potential growth, currently estimated at below 1 %. This low rate weighs on the convergence process and slows down the unwinding of macroeconomic imbalances. Lifting potential growth requires sustained investments and deep structural reforms in labour and especially product markets in view of fostering full utilisation of the labour force, while ensuring robust productivity growth.

With the run-up to the parliamentary elections, the reform agenda has suffered from delays, resulting in limited progress in addressing the 2015 country-specific recommendations. During the past year, Croatia has undertaken some reforms aimed at reducing the administrative burden on businesses and removing parafiscal charges. New and revised legislation in the field of personal and corporate insolvency is expected to speed up the deleveraging process and support the resolution of non-performing loans. Moreover, recent measures in support of youth employment are starting to show results. On the other hand, progress in several areas has been insufficient. Policy action aimed at encouraging some categories of workers to stay longer in employment has been put on hold. Limited progress was registered also in the area of fiscal governance, including the reform of the public administration and the adoption of a public debt management strategy. Some of the saving measures identified in the spending review are being implemented, notably in healthcare and the rationalisation of state agencies, but at a slow pace. In a few areas, preparatory work has not been

followed by concrete measures: this includes the reform of wage-setting in the public sector and state-owned enterprises and the reform of the social protection system. The procedure for selecting board members of state-owned enterprises has been made more transparent. However, other measures in the field of the public corporate sector were put on hold in the run-up to the elections. Despite some improvements, lengthy court proceedings, sizeable backlogs and still limited use of information and communication technology still hamper the efficiency and quality of the justice system.

Under the Europe 2020 Strategy, Croatia is performing well relative to some of its national targets, while more effort is needed with others.

Croatia is performing well on the employment rate, reducing greenhouse gas emissions, renewable energy except transport, early school leaving, tertiary education attainment, and reducing poverty and social exclusion, but more effort is needed in R&D investment, renewable energy in transport, and energy efficiency.

The main findings of the in-depth review contained in this country report, and the related policy challenges, are as follows:

- **The high and still rising public debt is a heavy burden for the economy and a source of vulnerability.** Government debt more than doubled during the 2008-2014 recession, from 38.9 % of GDP to 85.1 % of GDP. The increase was mainly driven by high deficits and costs induced by state-owned enterprises. A high debt ratio is a major burden for the economy, as the increasing cost of servicing it constrains the ability of fiscal policy to respond to cyclical downturns. Furthermore, the large stock of government debt increases the country's vulnerability to changes in markets' sentiment. While sustainability risks appear contained in the short run, in the medium term they remain high and are aggravated by weaknesses in fiscal governance including in target setting, strategic planning, the debt management framework and the limited autonomy of the Fiscal Policy Commission. Putting the public finances on a more sustainable path is a pre-condition for sustainable growth. The main policy challenge in this respect is to achieve a sustained

improvement in the primary balance in order to stabilise the debt to GDP ratio, without harming growth.

- **Private sector debt is at a high level and is not declining and the high stock of non-performing loans remains a challenge for the financial sector.** So far, Croatia has experienced rather limited deleveraging and private debt has remained at high levels. This is especially true for the corporate sector, which in 2014 stood at around 80 % of GDP, while household debt represented some 40 % of GDP. High corporate debt is concentrated in sectors with low profitability and is reflected in the deterioration of banks' portfolio. Almost 31 % of total corporate outstanding loans in 2014 and 2015 were non-performing. Furthermore, the capacity of the banking sector to support the recovery may be constrained by the impact of the legislation adopted in September 2015 which allows for the conversion of household CHF loans to EUR, as it implies losses for the banks. Finally, domestic borrowers remain exposed to currency risk, in turn implying high exposure of the financial sector to currency-induced credit risk. However, a high degree of euroisation in the economy, on both assets and liabilities, together with the tightly managed float of the domestic currency to EUR mitigates this risk.
- **The sizeable external debt is an additional constraint on the economy.** Net external liabilities amount to almost 80 % of GDP and are dominated by foreign-currency denominated debt, with only a small share of liabilities represented by equity. This implies a high repayment burden, irrespective of the business cycle, and exposure to currency risk. Moreover, almost one third of external debt is government debt, which implies sustainability risks. Since accession to the EU, Croatia has been recovering much of the losses in export market shares accumulated in the previous years. The manufacturing sector, however, still features limited integration in global supply chains, while the performance of the tourism sector appears to be excessively reliant on a low cost strategy. Moreover, the import content of exports, especially services, remains high,

most likely on account of the high seasonality of tourism. The current account surplus appears nevertheless to be partially underpinned by structural improvements and external debt is projected to decrease in the medium-run.

- **The unemployment rate remains very high, especially for youth and the low skilled.** More responsive wage dynamics and flexible contracts contribute to labour market adjustment, but high unemployment and low activity rates weigh on the economy's potential. Long term unemployment rates are still about twice as high as the EU average. Labour utilisation remains low also due to a widespread use of early retirement, as financial incentives for longer working lives remain weak. The 2013 and 2014 labour market reforms have significantly reduced the gap with other EU economies in terms of employment protection legislation, with a positive impact on employment growth but also leading to a significant increase in the use of temporary contracts. Over recent years, wages have moderated and unit labour costs sharply decreased, but inefficient wage determination in the public sector still hampers government's control over the public wage bill and may hinder wage responsiveness.

Other key economic issues analysed in this report which point to particular challenges facing Croatia's economy are the following:

- **High corporate debt and a cumbersome business environment weigh on private investment, but public investment is set to grow as absorption of European structural and investment funds improves.** Both public and private investment experienced a sharp decline during the crisis. Investment started to recover in 2015, but bottlenecks to private investment persist mostly in the shape of administrative barriers to business activity, burdensome, complex and often changing regulation, and weaknesses in public administration (see below) Limited access to finance especially for small and medium enterprises, high interest rates and a legacy of excessive indebtedness further constrain firms' investment capacity. European structural and investment funds are set to contribute

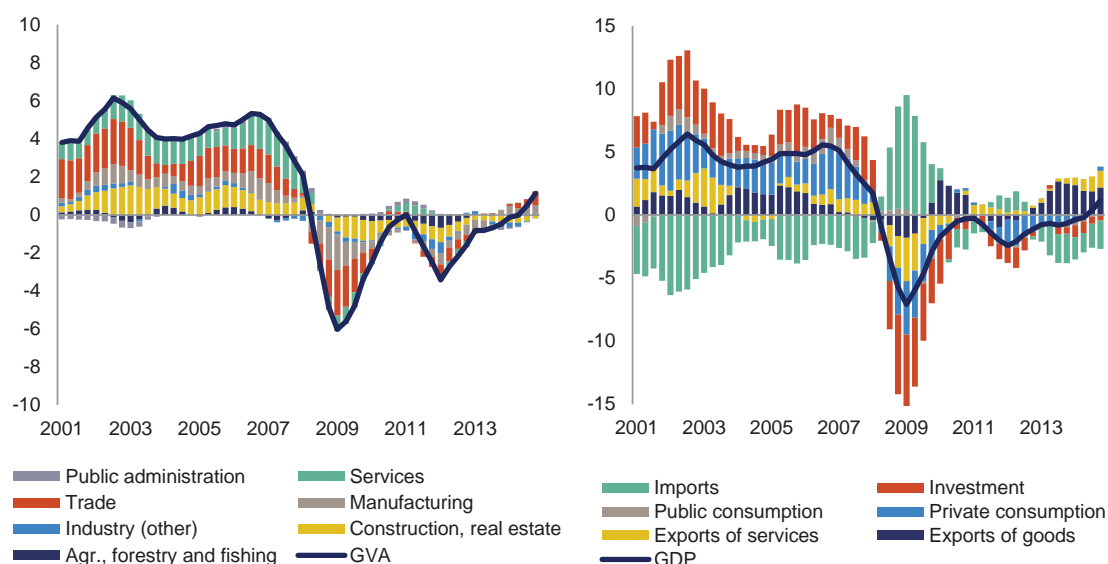
substantially to public investment as absorption capacity increases.

- **A weak and fragmented public administration weighs on service delivery and penalises business, while inefficiencies in state-owned enterprises slow down the adjustment process.** The high fragmentation of public administration translates into a multiplication of functions and public bodies. The decentralisation of functions to sub-central levels of government in the 2000s went beyond their fiscal capacity, generating strong reliance on central government transfers. At the same time, disparities in the fiscal capacity of local units result in regional inequalities in the services provided. Moreover, Croatia administers a large portfolio of public enterprises which play an important role in the economy. Although the accountability and transparency in state-owned enterprises has improved, they markedly underperform private companies and continue to weigh on public finances. Despite some improvements, the business environment remains unfavourable to growth. Steps have been taken to reduce the high level of administrative burden and parafiscal charges, but they remain prominent. Furthermore, the regulatory environment for service providers and the regulated professions remains very restrictive. So far these restrictions have not been addressed; in some cases, even additional requirements are being imposed.
- **The education and social protection systems still suffer from structural weaknesses.** Although ambitious measures are being taken to improve the quality of education, shortcomings in the education system make it difficult for graduates to make the transition to the labour market and for adults to re-enter it. Enhancing the skills of adults and unemployed is not being prioritised, despite the direct link to productivity and employment. The active labour market policies targeting young people have started to show good results but activation of the long-term unemployed is still unsatisfactory. Inefficiencies in the design of the social protection system result in high levels of poverty and social exclusion, leaving the most vulnerable with inadequate protection.

Both the current and future adequacy of pensions is low and creates high risks of poverty in old age, especially for those with short working lives.

1. SCENE SETTER: ECONOMIC SITUATION AND OUTLOOK

Graph 1.1: Real gross value added (GVA) growth by industry (left panel) and real GDP by demand component (right panel)



(1) Year-on-year contributions are obtained as the moving average of four quarters GVA and GDP component compared to the moving average of the respective components in the same quarters of previous year.

Source: European Commission

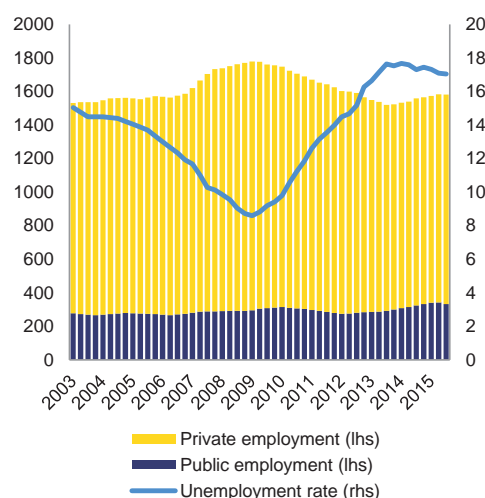
Following a period of sustained growth in the pre-crisis years, Croatia was mired in a six-year recession until 2014. The robust growth up to the 2008 global financial crisis was underpinned by strong capital inflows — partly channelled through the largely foreign-owned banking sector. The investment-led internal demand contributed to rapid import penetration and a rise in prices and wages. In a context of a tightly managed exchange rate, Croatia quickly lost competitiveness and accumulated external liabilities. Having maintained a largely pro-cyclical fiscal stance, the country entered the recession with limited fiscal and monetary policy space to respond to the downturn. The prolonged recession reduced real GDP by about 12.5 % between 2009 and 2014. Investment activity was hit first and hardest: from a peak of 28 % of GDP in 2008, investment plummeted to 21 % in 2010, with a particularly steep drop in construction activity (see box 1.1). The deterioration of the labour market affected consumption, which, in the same period, fell by almost 13.5 percentage points of GDP. Throughout the six-year recession, net external demand cushioned the fall of internal demand. However with a small export base, Croatia benefited only marginally from the rebound in global trade.

In 2015 Croatia entered a phase of sustained recovery, though potential growth remains subdued. Internal demand finally rebounded at the end of 2014. Lower energy prices, a reduction in personal income tax and the halt in job destruction boosted private consumption. Investment also showed signs of recovery on the back of increased absorption of EU funds (see box 1.2). All in all, GDP growth is expected to have attained 1.8 % in 2015 and is projected to further accelerate in 2016 and 2017, with the main driver of the recovery shifting from external to internal demand. This projection, however, is based on a no-policy-change scenario; fiscal consolidation measures for 2016 and 2017 still to be specified may detract from growth in the short term. Besides, for an economy with considerable scope for convergence, potential growth remains comparatively low on the back of historically weak productivity gains.

Job creation is set to accelerate on the back of important structural reforms and contained salary increases. Relatively rigid labour market institutions and delays in wage adjustment exacerbated the impact of the crisis on the labour market. Intense labour shedding in the private sector resulted in a sharp increase in unemployment, from 8.9 % in 2008 to 17.0 % in 2014. Between 2013 and 2014, several reforms

were implemented to enhance the flexibility of the labour market, while wage growth slowed down markedly. The rate of job destruction bottomed out at the end of 2014, and 2015 registered a slight increase in employment (0.6 %). This, combined with a further decline in the labour force (mainly driven by population ageing) reduced the unemployment rate to 16.6 % in seasonally adjusted terms. Nominal wages increased at a moderate rate of about 1.3 % in 2015, after broadly stagnating in 2014. Going forward, it is expected that, as the recovery gains strength, employment will expand at a more sustained pace on the back of greater labour market flexibility. Wage pressures are set to remain subdued, also due to limited wage growth in the public sector. All in all, unemployment is set to progressively contract to about 14 % by the end of 2017.

Graph 1.2: Total employment (in thousands) and unemployment rate (% of labour force)



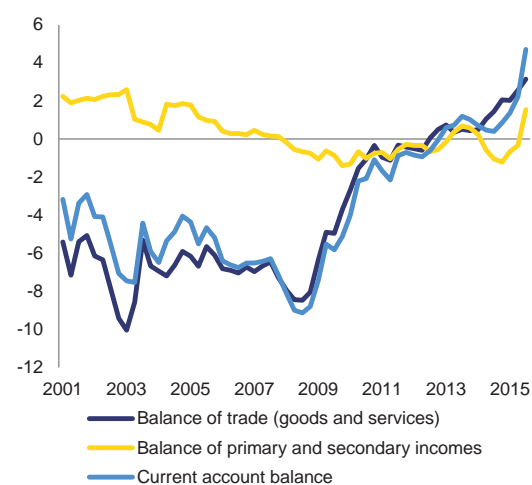
(1) Four quarters moving averages. Public employment is approximated by NACE codes O,P,Q.

Source: Eurostat

The rebalancing of the external sector has progressed rapidly, and Croatia is now posting a comfortable current account surplus. In 2009, imports contracted sharply due to the fall of investment and external demand. Goods exports have grown buoyantly ever since EU accession in July 2013. In the first three quarters of 2015 the volume of goods exports was over 10 % higher than in the previous year. This strong increase followed the good performance recorded already in 2014 (11 % year-on-year) and signals that Croatia

is benefiting from access to the EU Single Market. Revenues from tourism were also heavily hit by the 2009 recession, but started to recover already in 2010, though more slowly. As a result, the trade balance turned into a mild surplus in 2012. With oil prices declining and record high arrivals of tourists, the balance of goods and services is set to improve to 3.2 % of GDP in 2015. The current account is projected to register a record surplus of 4.4 % of GDP as temporary effects related to the conversion of CHF loans influence the repatriation of the largely foreign-owned banking sector profits. ⁽¹⁾ Thereafter, the current account surplus is set to stabilise at around 3 % of GDP, while net lending can be expected to be even higher on account of significant capital inflows related to EU funds.

Graph 1.3: Current account balance and main components (% of GDP)



(1) Four quarters moving averages.

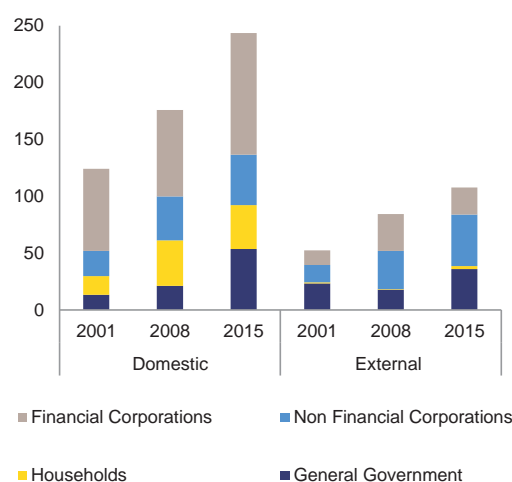
Source: HNB

The turnaround in the current account is slowly reducing Croatia's net external liabilities. After the trough of -99 % of GDP in the first quarter of 2011, the net international investment position (NIIP) improved slightly, mainly due to the reduction in the value of outstanding foreign-owned assets (i.e. negative valuation effects). In the context of a broadly stable exchange rate (both with respect to the euro and in terms of nominal

⁽¹⁾ Specifically, losses suffered by the mainly foreign-owned banking sector will result in a negative flow of retained earnings of about HRK 5 bn, i.e. 1.5 % of GDP.

effective exchange rate), these reductions reflected a deterioration of confidence in the Croatian economy. The NIIP to GDP ratio has since stabilised at around -90 % of GDP. Falling output and subdued increases in prices hampered a larger reduction through the denominator effect. By contrast, gross external debt continued to rise, due to increasing government borrowing on external markets.⁽²⁾ The accumulation of current account surpluses is only recently helping reduce both the NIIP and external debt, which stood at 77 % and 107 % of GDP, respectively in the third quarter of 2015.

Graph 1.4: Domestic and external debt by institutional sector in 2001, 2008 and 2015 (% of GDP)



Source: Eurostat

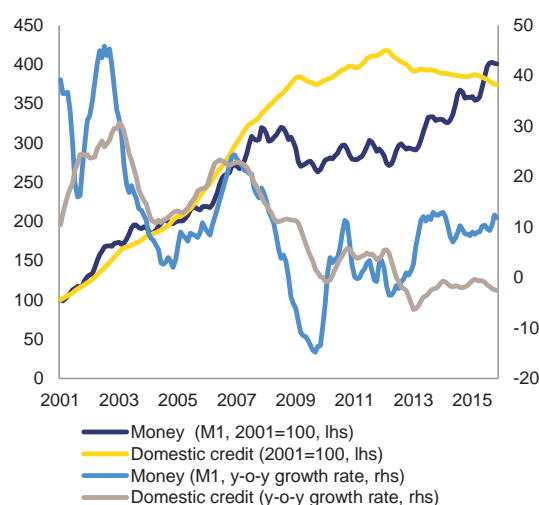
Private debt has stabilised, while general government debt is still rising, though at much slower pace than before. Up to the bursting of the financial bubble, debt had accumulated rapidly in the private sector. Non-financial corporations, in particular, substantially increased their leverage ratios, also benefiting from cheaper cross-border financing, while households also increased their indebtedness, albeit from low levels. When the bubble burst, credit growth started to contract but debt levels in the private sector stabilised only after 2010.

⁽²⁾ Gross external debt reached 112 % of GDP in the second quarter of 2015, up from 107 % in the same quarter of the previous year.

Meanwhile, the slowdown in economic activity took a toll on public finances.

The general government deficit increased to 5.8 % of GDP in 2009 and remained above 5 % until 2014. Supported by revenue windfalls due to higher-than-expected growth and some containment of expenditure growth, the general government deficit in 2015 is expected to have improved to 4.2 % of GDP. The impact of the refugee crisis on public finances in 2015 has been contained, since up until now Croatia has primarily remained a transit country. General government debt is set to have increased from 85.1 % of GDP in 2014 to 86.0 % in 2015 and is projected to continue rising (albeit moderately) in 2016 and 2017 as a result of the underlying deficit trends.

Graph 1.5: Evolution of money and credit (levels and growth rates)



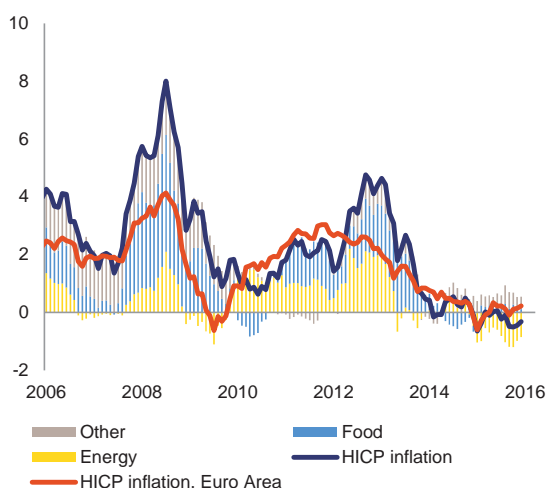
(1) Money correspond to M1, domestic credit is in Kuna and discounts also valuation effects

Source: HNB

The financial sector has proven robust, despite the high share of non-performing loans and policy measures have reduced its profitability. Domestic credit growth, which was buoyant up to 2009, started to slow in the wake of the crisis. Despite a relaxation of monetary policy at the end of 2012, credit started to contract, mainly on the back of demand factors. The financial sector withstood the crisis, though profitability was hampered by accumulation of impaired assets. In September 2015, the non-performing loans (NPL) ratio was 17 %. For the corporate sector, particularly affected by the crisis, the NPL ratio

reached 30 %, with the household sector being around 12 %. Although high capital levels and the review of the banking sector's asset quality have provided reassurance about the sector's stability, administrative measures governing the conversion of CHF household loans into EUR will substantially reduce banks' profitability. On the other hand, the banking sector continues to benefit from abundant liquidity, so credit may soon start growing again and finance the nascent recovery.

Graph 1.6: Inflation in Croatia and in the Euro Area



(1) Year on year growth rates
Source: Eurostat

Falling prices are boosting competitiveness but slowing debt reduction. After remaining above the EU average for a long period, inflation slowed in 2013, and in 2015 Croatia registered a mild contraction of price levels. Whereas falling energy — and in general commodity prices — are affecting prices in the wider EU, core inflation remains low, on the back of the prevailing slack conditions. Deflationary pressures in the economy are boosting both competitiveness and disposable income, and showing how wage moderation is spreading to all sectors of the economy. On the other hand, low inflation, both in Croatia and her main trading partners, is slowing the rate of debt reduction in the economy. Going forward, energy prices are projected to further contract in the first half of 2016, while core inflation should progressively pick up. With a rebound in commodity prices in 2017, inflation is set to progressively converge towards 2 %.

The protracted economic crisis has taken a toll on social cohesion. In Croatia the share of persons at risk of poverty and social exclusion was at 29.3 % in 2014, well above the EU average of 24.5 %. The unemployed, inactive and single persons are particularly at high risk, together with the elderly. The situation of young people neither in employment nor in education and training (NEET) also remains worrying, with the NEET rate at 22.2 % in 2014, compared to the 16.6 % EU average.

A firm recovery appears to be under way and accumulated imbalances have started to be resolved – but in the short-run high levels of legacy debt still represent a source of vulnerability. With growth picking up, unemployment is set to progressively contract, while the current account should continue to post a comfortable surplus. The still rising public debt is a burden for the economy and a source of vulnerability. Debt in the private sector has stabilised, but is still holding back investment and consumption, and high leverage ratios will need time to adjust in a context of low inflation. The high level of external debt coupled with foreign-currency-denominated domestic debt exposes Croatia to internal and external shocks.

In the medium run Croatia still faces the challenge of raising its potential growth in order to sustain the convergence process. The rebound in internal demand is currently pushing GDP growth above potential output growth. This is to be expected given the length and the depth of the recession. In the long-run, however, output growth is set to converge to its potential, which is currently estimated at below 1 %. The low potential growth partly reflects the fall in investment, though in the future the main obstacles to a more sustained potential growth are represented by the historically low productivity growth and – to a lesser extent – the shrinking labour force. Reversing this trend will entail boosting the economy's allocative efficiency through structural reforms.

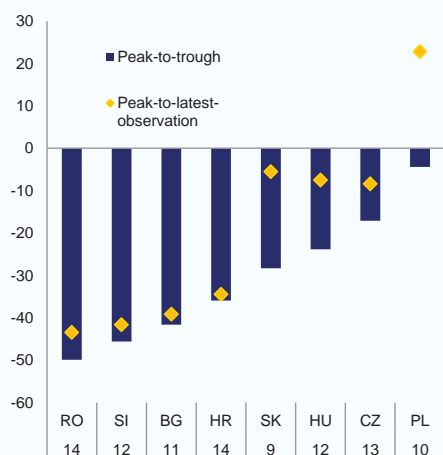
Box 1.1: Investment challenges

Section 1. Macroeconomic perspective

Between 2002 and 2008, investment (measured as gross fixed capital formation) grew at an average rate of almost 10.5 % per year, slightly above the average rate of the peer EU countries from South and Eastern Europe. After a sharp decline in 2009 and 2010, the pace of contraction of investment abated, but its recovery only started towards the end of 2014. Most EU peers experienced more contained contractions (e.g. Poland, Slovakia, Hungary and Czech Republic), although Bulgaria, Romania and Slovenia also featured similar drops in investments, followed by slow recoveries.

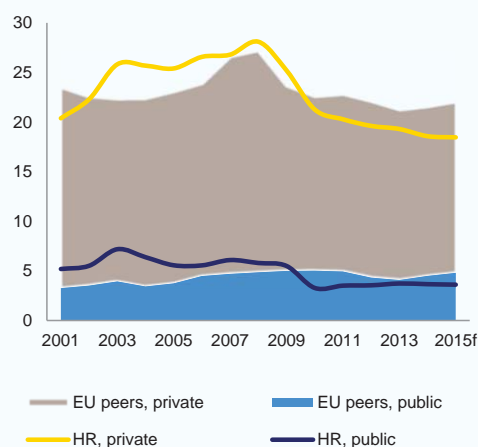
Public investment had grown vigorously in the pre-crisis expansionary phase, but was cut by 41 % in 2010, increasing only moderately thereafter. This was a result of an attempt to contain public spending in the face of a soaring general government deficit. In 2014, public investment-to-GDP ratio stood at 3.7 % of GDP, one of the lowest among the peers. Projects in transportation and general administration, which stood out in the pre-crisis period, experienced the largest contraction. While the decline affected broadly equally investment projects at central and local level, the recovery came much later (in 2014) at the level of the credit-constrained local and regional units.

Graph 1: Contraction of investment in Croatia and in the EU peer countries (% of GDP)



(1) Year in which through was attained under the country name on the x axis.
Source: Eurostat

Graph 2: Private and public investment in Croatia and in the EU peer countries (% of GDP)



(1) 2015 based on forecast.
Source: Eurostat

Private investment decreased by 33 % since 2008, to reach 3.7 % of GDP in 2014. Pre-crisis investment, both domestic and foreign financed, was skewed towards the non-tradable sectors. The contraction of internal demand therefore had a profound and enduring impact on investment activity. Weak demand, high corporate debt and weak profitability, as well as high borrowing costs all contributed to the weak investment of Croatian companies, and will continue to hamper a more sustained recovery in the short term.

Section 2. Assessment of barriers to investment and ongoing reforms

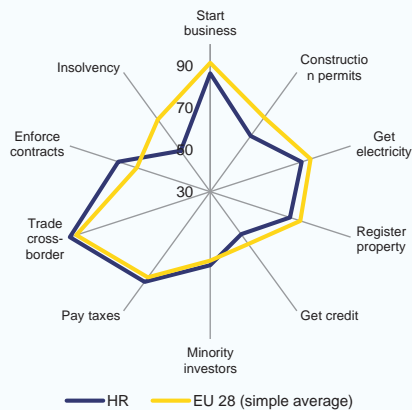
The slow absorption of the 2007-2013 ESI funds is partly due to a limited number of ready-to-implement projects and the long period needed for their design and tendering. As absorption capacity improves, however, public investment could improve by 1.5 - 2 pp of GDP in the coming years. Private investment is

(Continued on the next page)

Box (continued)

not set to benefit as extensively at aggregate levels, although agriculture and fisheries could benefit from sector-specific funding opportunities. Public investment is constrained by inefficiencies in public procurement that slow down the absorption of EU funds and contribute to lengthy implementation lags (see Public procurement).

Graph 3: Distance to frontier in World Bank's Doing Business Indicators: Croatia and EU



(1) Frontier represents the best performance observed on each of the indicators across all economies in the Doing Business sample since 2005. Distance to frontier is reflected on a scale from 0 to 100, where 0 is the lowest performance and 100 is the frontier.

Source: World Bank

However, while better use of Funds may help spur investment in the medium term, there are substantial systemic barriers to private investment in Croatia. These include legislative-administrative barriers on one hand and structural on the other. Legislative-administrative barriers most notably include frequent changes of legislation and lack of regulatory impact assessment, over-regulation of sectors and professions, many non-tax (parafiscal) charges, lengthy judicial proceedings and lack of consistent case law. Section 3.2 deals with these issues in detail. Structural issues include infrastructure gaps and problems with access to finance. Moreover, the large public corporate sector is marked by inefficiencies, lower productivity and underinvestment compared to the private sector. These features are exacerbated through lock-in effects at play which often secure SOEs' dominance on the market, thus lowering overall competitiveness, distorting competition and hindering private investment.

Deleveraging is progressing slowly as the low profits and subdued price dynamics constrain firms' loan repayment capacities. On the supply side, banks are reluctant to increase lending to highly indebted firms and have little incentive to write off debt. The issue is particularly serious for the highly leveraged construction sector, which is still overburdened with large stocks of unsold dwellings.

Box 1.2: Contribution of the EU Budget to structural change

Croatia is an important beneficiary of the European Structural and Investment Funds (ESIF) in the period 2014-2020 with a financial allocation of EUR 10.7 billion. This is equivalent to 3.3% of GDP on an annual basis and represents 73% of the expected national public investment in the areas supported – the highest rate in the European Union. The ESIF constitute the main financial levers to the implementation of the national reform programme and to the strengthening of economic competitiveness and employment.

Ex-ante conditionalities apply to each of the areas supported by the ESI Funds, to be met before end of 2016. Conditions include compliance with relevant EU regulations and directives, adoption of strategies and implementation plans, and creating necessary investment conditions in relevant sectors. Where ex-ante conditionalities are not fulfilled by end 2016, the Commission may suspend interim payment to the priorities of the programme concerned.

A set of strategies and implementation plans referred to in the 2015 national reform programme (part of the European Semester) have been adopted in this context, e.g. the Strategy for Education, Science and Technology 2014-20, the Active Labour Market Policy 2015-17, the Strategy for Development of Public Administration 2015-20. A "smart specialisation strategy" has also been prepared, which aims at investing ESI Funds effectively in research and innovation. Croatia also benefits from EUR 66 million under the Youth Employment Initiative (matched by the same amount from the European Social Fund) to support young people to find their way to the labour market, get involved into traineeship projects or continue their education. Regular monitoring of implementation includes reporting in mid-2017 on the contribution of the funds to Europe 2020 objectives and progress in addressing relevant structural reforms to maximise the use of EU financing.

Financing under the new European Fund for Strategic Investments (EFSI), Horizon 2020, the Connecting Europe Facility and other directly managed EU funds would be additional to the ESI Funds. Following the first rounds of calls for projects under the Connecting Europe Facility, Croatia has signed agreements for EUR 8 million in the energy field and EUR 44 million for transport projects. For more information on the use of ESIF in Croatia, see: <https://cohesiondata.ec.europa.eu/countries/HR>.

Table 1.1: Key economic, financial and social indicators

	2003-2007	2008	2009	2010	2011	2012	2013	2014	forecast		
									2015	2016	2017
Real GDP (y-o-y)	4.7	2.1	-7.4	-1.7	-0.3	-2.2	-1.1	-0.4	1.8	2.1	2.1
Private consumption (y-o-y)	5.1	1.3	-7.4	-1.5	0.3	-3.0	-1.8	-0.7	1.0	1.8	1.9
Public consumption (y-o-y)	4.0	-0.7	2.1	-1.6	-0.3	-1.0	0.3	-1.9	0.6	1.1	1.7
Gross fixed capital formation (y-o-y)	10.0	9.2	-14.4	-15.2	-2.7	-3.3	1.4	-3.6	1.7	2.6	2.7
Exports of goods and services (y-o-y)	6.1	0.8	-14.1	6.2	2.2	-0.1	3.1	7.3	8.1	5.0	5.3
Imports of goods and services (y-o-y)	7.3	4.0	-20.4	-2.5	2.5	-3.0	3.1	4.3	7.9	4.6	5.3
Output gap	2.9	7.1	-0.7	-1.6	-1.5	-3.1	-4.0	-4.3	-3.0	-1.4	0.2
Potential growth (y-o-y)	3.1	1.8	-0.1	-0.8	-0.4	-0.6	-0.2	0.0	0.5	0.4	0.5
Contribution to GDP growth:											
Domestic demand (y-o-y)	5.7	3.1	-7.9	-5.0	-0.4	-2.7	-0.7	-1.5	1.0	1.7	2.0
Inventories (y-o-y)	0.0	0.5	-3.5	0.2	0.3	-0.7	-0.3	-0.2	0.5	0.1	-0.1
Net exports (y-o-y)	-1.0	-1.5	4.1	3.1	-0.1	1.2	0.0	1.3	0.2	0.3	0.2
Contribution to potential GDP growth:											
Total Labour (hours) (y-o-y)	0.6	0.4	-0.1	-0.6	-0.4	-0.6	-0.5	-0.3	-0.2	-0.3	-0.3
Capital accumulation (y-o-y)	1.9	2.4	1.5	0.8	0.7	0.6	0.7	0.6	0.6	0.6	0.6
Total factor productivity (y-o-y)	0.6	-1.0	-1.4	-1.0	-0.7	-0.5	-0.3	-0.3	0.0	0.1	0.2
Current account balance (% of GDP), balance of payments	-5.9	-8.9	-5.1	-1.2	-0.8	-0.2	0.9	0.8	.	.	.
Trade balance (% of GDP), balance of payments	-6.6	-8.0	-3.7	-0.4	-0.4	0.5	0.4	2.0	.	.	.
Terms of trade of goods and services (y-o-y)	1.5	1.2	1.2	0.6	0.2	-0.6	-0.1	0.6	0.7	1.3	-0.6
Capital account balance (% of GDP)	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	.	.	.
Net international investment position (% of GDP)	-61.5	-74.9	-87.6	-95.6	-92.3	-90.2	-88.7	-88.8	.	.	.
Net marketable external debt (% of GDP)1	-24.7*	-35.1*	-40.6*	-43.9*	-46.6*	-43.9*	-42.7*	.	.	.	.
Gross marketable external debt (% of GDP)1	64.4*	73.1*	82.6*	86.2*	88.2*	85.9*	88.0*	.	.	.	.
Export performance vs. advanced countries (% change over 5 years)	37.3	5.0	2.8	-6.0	-8.4	-15.0	-16.0	-12.21	.	.	.
Export market share, goods and services (y-o-y)	2.9	1.3	-0.7	-12.8	-5.6	-7.7	2.7	5.4	.	.	.
Net FDI flows (% of GDP)	-4.7	-5.5	-2.9	-2.0	-2.7	-2.7	-1.9	-3.0	.	.	.
Savings rate of households (net saving as percentage of net disposable income)	2.5	1.4	6.7	7.4	7.0	7.4	6.1	7.3	.	.	.
Private credit flow (consolidated, % of GDP)	14.2	16.1	2.9	5.6	-2.1	-3.0	-0.6	0.4	.	.	.
Private sector debt, consolidated (% of GDP)	82.7	111.1	119.6	126.5	124.0	121.1	119.6	120.5	.	.	.
of which household debt, consolidated (% of GDP)	31.1	39.0	40.0	42.0	41.5	41.2	40.4	40.3	.	.	.
of which non-financial corporate debt, consolidated (% of GDP)	51.6	72.1	79.6	84.5	82.5	79.9	79.2	80.2	.	.	.
Corporations, net lending (+) or net borrowing (-) (% of GDP)	-3.6	-5.2	-3.0	0.2	2.3	0.7	3.4	1.0	1.8	2.3	2.2
Corporations, gross operating surplus (% of GDP)	19.7	21.7	19.2	18.1	19.3	18.6	18.6	17.5	17.2	17.9	18.0
Households, net lending (+) or net borrowing (-) (% of GDP)	1.4	-0.8	3.9	4.8	4.6	5.1	3.7	5.1	6.1	4.8	4.5
Deflated house price index (y-o-y)	8.0	-2.0	-6.8	-9.4	-5.9	-2.1	-18.1	-2.0	.	.	.
Residential investment (% of GDP)	.	.	.	.	.	.	.	.	.	.	.
GDP deflator (y-o-y)	3.9	5.7	2.8	0.8	1.7	1.6	0.8	0.0	0.4	1.2	1.2
Harmonised index of consumer prices (HICP, y-o-y)	2.7	5.8	2.2	1.1	2.2	3.4	2.3	0.2	-0.3	0.3	1.6
Nominal compensation per employee (y-o-y)	5.6	3.5	-0.3	2.3	4.3	0.3	-0.6	-5.4	1.4	1.5	2.0
Labour productivity (real, person employed, y-o-y)	0.9	-1.6	-6.7	2.2	3.7	1.5	1.6	-3.0	.	.	.
Unit labour costs (ULC, whole economy, y-o-y)	3.1	5.2	6.9	0.1	0.6	-1.3	-2.2	-2.4	0.1	0.7	1.4
Real unit labour costs (y-o-y)	-0.8	-0.5	4.0	-0.7	-1.1	-2.8	-3.0	-2.5	-0.2	-0.5	0.3
Real effective exchange rate (ULC, y-o-y)	2.3	3.5	1.7	-1.0	-1.7	-5.8	-2.6	-3.6	-2.8	-0.8	.
Real effective exchange rate (HICP, y-o-y)	0.8	3.9	1.5	-3.4	-2.7	-2.5	1.2	0.5	-1.4	1.0	-0.9
Tax wedge on labour for a single person earning the average wage (%)	.	.	.	.	.	.	30.3	30.3	.	.	.
Tax wedge on labour for a single person earning 50% of the average wage (%)	.	.	.	.	.	.	23.1	23.1	.	.	.
Total Financial Sector Liabilities, non-consolidated (y-o-y)	20.2	-10.3	5.3	3.8	1.6	1.5	3.5	1.1	.	.	.
Tier 1 ratio (%)2	.	.	.	.	.	.	12.5	10.2	.	.	.
Return on equity (%)3	.	.	.	.	.	.	-6.6	-31.2	.	.	.
Gross non-performing debt (% of total debt instruments and total loans and advances) (4)	.	.	.	.	.	.	11.8	12.9	.	.	.

(1) Sum of portfolio debt instruments, other investment and reserve assets.

(2,3) Domestic banking groups and stand-alone banks.

(4) Domestic banking groups and stand-alone banks, foreign (EU and non-EU) controlled subsidiaries and foreign (EU and non-EU) controlled branches.

(*) Indicates BPM5 and/or ESA95

Source: European Commission, winter forecast 2016; ECB

2. IMBALANCES, RISKS, AND ADJUSTMENT ISSUES

This section provides the in-depth review foreseen under the macroeconomic imbalance procedure (MIP) ⁽³⁾. It focuses on the risks and vulnerabilities flagged in the Alert Mechanism Report 2016. The section first analyses the structural drivers of the rapid increase in general government debt and assesses its long term sustainability and sensitivity to internal and external shocks. Second, it explores the drivers of the accumulation of debt in the households and in the corporate sector, and assesses residual deleveraging needs. The section further considers the sustainability of the external position and assesses to what extent the improved current account balance is underpinned by structural developments. Finally, the section assesses the adjustment capacity of the labour market to support a more balanced growth model going forward. The section concludes with the MIP assessment matrix which summarises the main findings.

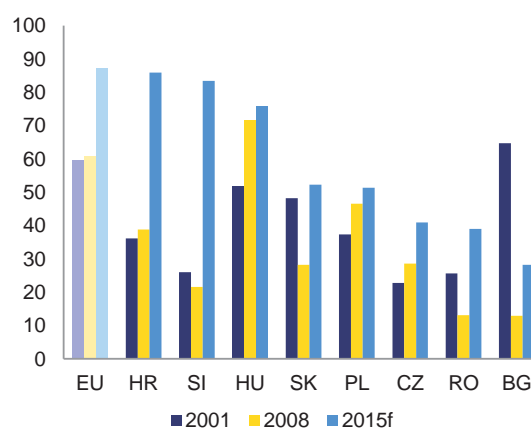
2.1 GENERAL GOVERNMENT DEBT AND PUBLIC FINANCES

Croatia came out of the 2008-2014 recession with high general government debt, which is a heavy burden for the economy and a source of vulnerability. Between 2008 and 2014, general government debt rose from 38.9 % to 85.1 % of GDP and is forecast to have increased further to 86.0 % of GDP in 2015. This is substantially above the 60 % of GDP threshold in the Treaty and higher than in any of the peer EU countries (see graph 2.1.1) ⁽⁴⁾. Admittedly, government debt was increasing in an environment of protracted recession that undermined revenue growth and put pressure on public expenditure. However, the high debt is a burden for the economy, as the increasing cost of servicing it squeezes out other government expenditure and constrains the ability of fiscal policy to respond to cyclical downturns. Furthermore, the large stock of government debt is a source of vulnerability for the economy as it exposes Croatia to financial market volatility in periods of increased risk aversion.

⁽³⁾ According to Article 5 of Regulation (EU) No. 1176/2011.

⁽⁴⁾ In this and the following sections, performance will be compared with peer economies from central and south-eastern Europe. The group includes Bulgaria, the Czech Republic, Hungary, Poland, Romania, Slovakia and Slovenia.

Graph 2.1.1: General government debt (% of GDP)



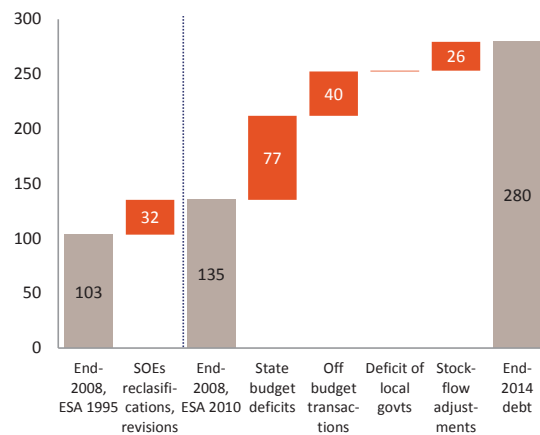
(1) The EU aggregate represents a weighted average.
Source: Eurostat, Commission 2016 winter forecast

Drivers of indebtedness

The rise in general government debt since 2008 has been driven by state budget deficits and an factors mostly related to state-owned enterprises. The two most important factors behind the rapid increase in the general government debt-to-GDP ratio were the state budget deficits and costs related to the materialisation of contingent risks in state-owned enterprises (SOEs) (see graph 2.1.2: the latter are included under the 'off-budget transactions' in the graph). The level of general government debt was also substantially affected by the reclassification of several highly-indebted SOEs inside the general government sector, which was triggered by the changeover to the European System of National and Regional Accounts (ESA2010). The latter has, however, led to a revision of the whole series of

general government debt and is therefore shown as a separate item in graph 2.1.2.

Graph 2.1.2: Drivers of debt in 2008-2014 (bn HRK)

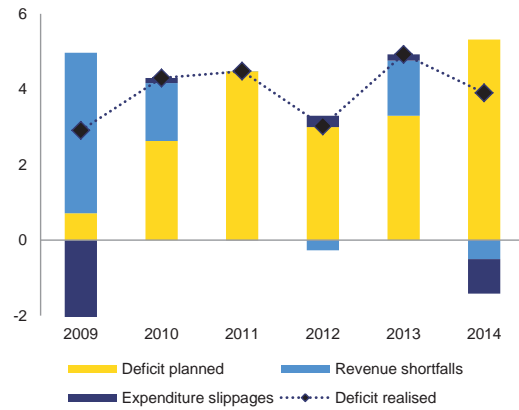


(1) Data for reclassifications of SOEs refer to their impact on general government debt in 2008. All other columns represent cumulative changes between the end of 2008 and 2014.

Source: European Commission, Croatian Ministry of Finance

The high state budget deficits, the most important factor behind the increase in general government debt in the past years, were affected by revenue shortfalls and expenditure pressures. The state budget deficit averaged 3.9 % of GDP in 2009-2014 and is expected to have improved to 2.7 % of GDP in 2015 based on preliminary data. Fiscal consolidation efforts to some extent limited the increase in the deficit but they were not strong enough to counter the increase in social security benefits and the rising burden of interest payments, which emerged as a new fiscal drag during the crisis. The high deficits were also affected by revenue shortfalls and expenditure pressures, compounded by the difficulties faced by the authorities in addressing the emerging fiscal gap. The revenue shortfalls were largely unanticipated, on account of optimistic macroeconomic assumptions underpinning the initial budgets, and they explain why the budgetary outcomes at state level have been worse than initially planned in 2009 and 2010, and then again in 2013. Efforts to contain expenditure pressures resulted in sizeable savings (compared with initial plans) only in 2009 and 2014, while in other years expenditure developed broadly in line with the initial plans.

Graph 2.1.3: State budget deficits: outcomes and initial plans (% of GDP)



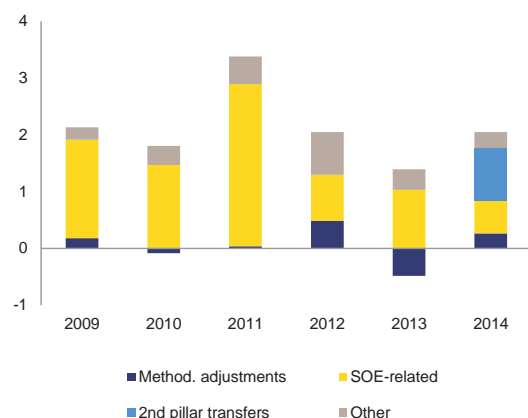
(1) Planned outcomes refer to figures presented in the first budget adopted for a given year (without revisions).

Source: Ministry of Finance

The second most important driver of debt increases have been costs related to the materialisation of contingent risks in state-owned enterprises (SOEs). A number of adjustments need to be made to convert the (cash) deficit of the state budget into the ESA2010 net lending or borrowing of the central government. These adjustments are referred to in graph 2.1.2 as ‘off-budget transactions’ and shown in detail in graph 2.1.4. In 2009-2014, their annual contribution to the general government deficit averaged 2 % of GDP. Among these, the biggest part (1.4 pps.) was related to SOEs, and included debt taken by the state upon repeated calls on guarantees granted to public corporations and the rising (until 2013) net borrowing by SOEs classified in the general government sector. The remaining part (0.6 pp.) was accounted for by other transfers and adjustments to ensure a delineation of the general government sector in line with ESA2010 and to convert the cash-based state budget to accrual terms, some of which had a sizeable impact in specific years ⁽⁵⁾.

⁽⁵⁾ This includes in particular a substantial correction for the impact of a cash transfer from the funded pension pillar to the first pillar in 2014, which was considered as (cash) revenue in the state budget, but is recorded as a financial transaction without impact on the deficit under ESA2010 rules. In addition, some investments carried out in the context of a PPP project (outside the state budget), were brought back to the government balance following a review of the underlying risks, in line with ESA2010 accounting

Graph 2.1.4: Off-budget transactions by the central government (% of GDP)



(1) The figure shows adjustments explaining the transition from the working balance of the central government (state budget) to central government net borrowing. A positive sign indicates a positive contribution to the central government deficit.

Source: European Commission

The contribution of other factors to general government debt was rather limited. Average net borrowing by local governments (and by social security funds) was negligible in 2009-2014 because the amount of debt local governments can take is constrained⁽⁶⁾. The impact of the 'stock-flow adjustments' (reconciling the changes in the stock of debt with the budgetary outcome) was relatively large in 2013, reflecting a large bond issuance by the government in the last months of the year, but contained in other years. Other noteworthy adjustments included valuation changes due to the gradual depreciation of the kuna against the euro (the currency to which most of the general government debt is linked) and borrowings, in particular in 2010 and 2013, for the repayment of trade credits.

rules. As regards the cash-accrual adjustments, note that a part of these are also reflected in the stock-flow adjustment, which is discussed below.

⁽⁶⁾ Firstly, there is a cap for new borrowing by the local government sector as a whole, set by Parliament every year (3 % of total local revenues in 2015). Secondly, total short-term liabilities of each local unit are constrained by a limit on annual repayments of the principal and interest (20 % of last-year revenues). Finally, long-term debt is limited to investment purposes and subject to explicit approval by the government. Further discussion of the fiscal relations across government levels is presented in section 3.2.

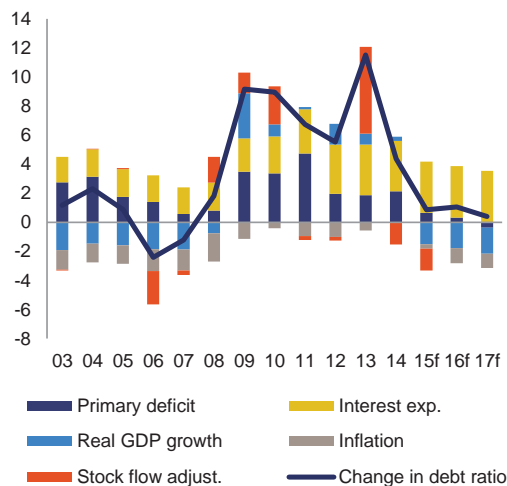
The reclassification of several companies to the government sector according to ESA2010 further added to government debt. The incorporation of three entities has so far had the biggest impact on general government debt: Croatian Motorways and Motorway Rijeka Zagreb in 2014, and the Croatian Bank for Reconstruction and Development (HBOR) in 2015. The impact of this revision on general government debt in Croatia (around HRK 32 bn, shown in graph 2.1.2), was the highest in the European Union, on account of the pronounced indebtedness of the companies in question⁽⁷⁾.

Near-term prospects and scope for adjustment

Largely on the back of a high cost of borrowing, the Commission forecasts debt to continue rising in the near term. General government debt is projected to continue rising moderately in the short term, to 87.4 % of GDP in 2017, up from 86.0 % of GDP expected for 2015. As shown in graph 2.1.5, the main factor preventing the debt ratio from declining in the near term are rising interest payments. Despite overall favourable conditions in global financial markets at present, Croatia's effective interest rate (4.2 %) is expected to have been among the highest in the European Union in 2015. The difference between the effective interest rate on general government debt and nominal GDP growth remains positive over the forecast horizon, which means that in the absence of a sufficient primary surplus, the debt ratio will continue rising (see graph 2.1.5).

⁽⁷⁾ See ESTAT (2014): Revisions to government deficit and debt of EU Member States for 2010-2013. A special note prepared due to the introduction of ESA 2010 and accompanying the Eurostat Press Release 158/2014, released on 21 October 2014.

Graph 2.1.5: Contributions to the change in the debt ratio (pps. of GDP)



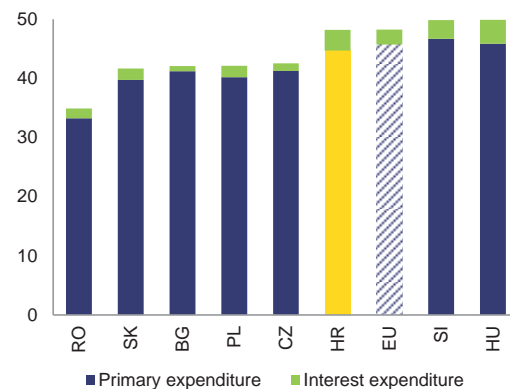
Source: Eurostat, Commission 2015 winter forecast

Higher nominal growth will help contain the growth in the debt-to-GDP ratio, but a sustained improvement in the primary balance will not be ensured without consolidation effort. Higher growth should help to bring down the debt-to-GDP ratio, both through the denominator effect and by supporting revenues and containing expenditure pressure. Consolidation efforts could address the revenue or the expenditure side. Although the choice on the size of the government sector is political, a comparative analysis suggests that Croatia's overall tax-to-GDP ratio (36.6 % of GDP) and the general government expenditure ratio (48.2 % of GDP) in 2014 was among the higher ones compared to peer EU economies (see graph 2.1.6) ⁽⁸⁾. However, Croatia's expenditure ratio has been strongly affected by the long recession and increasing interest payments. Primary expenditure actually decreased in both nominal and real terms (deflated by the GDP deflator) between 2008 and 2014, while they continued growing in the peer economies. When expressed in terms of potential output, which better reflects the country's long-term capacity to finance its spending, the gap of Croatia's public

⁽⁸⁾ The tax-to-GDP ratio in the peer economies was at 32.5 % of GDP in 2014 (simple average). The peers' expenditure ratio was 43.3 % of GDP (simple average). For the European Union as a whole (weighted averages), the ratios stood at 39.1 % of GDP and 48.2 % of GDP, respectively.

expenditure to the peer countries somewhat decreases, but remains significant (3.8 pps.).

Graph 2.1.6: General government expenditure (2014, % of GDP)



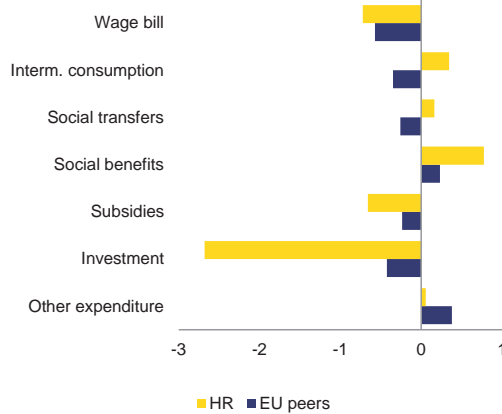
(1) The EU aggregate represents a weighted average.

Source: Eurostat, European Commission

Primary spending was curbed mainly by cutting investment expenditure, which will be difficult to sustain. The adjustment in primary expenditure in 2008-2014 focused predominantly on investment cuts, although some savings were achieved also in the wage bill and subsidies (see graph 2.1.7). While, to some extent, savings in investment expenditure represented a correction of the spending boom before 2008, the investment-to-GDP ratio is currently one of the lowest among peer economies (see section 3.1). If maintained in the long run, this will weigh on Croatia's growth prospects and limit the absorption of EU funds. In contrast, expenditure on intermediate consumption and social benefits outpaced potential GDP. While the increase in social benefits may be partly accounted for by a higher increase in unemployment ⁽⁹⁾, the increase in intermediate consumption, at both central and local government levels, is indicative of difficulties in making swift and effective operational adjustments. Refocusing the consolidation effort towards measures less detrimental to long-term growth is therefore a challenge for fiscal policy in the near term.

⁽⁹⁾ The relatively loose eligibility conditions for early exits from the labour force could have also been a factor, as analysed in the 2015 country report.

Graph 2.1.7: **Adjustment in primary expenditure by economic category as a proportion of potential GDP (2008-2014, change in pps.)**

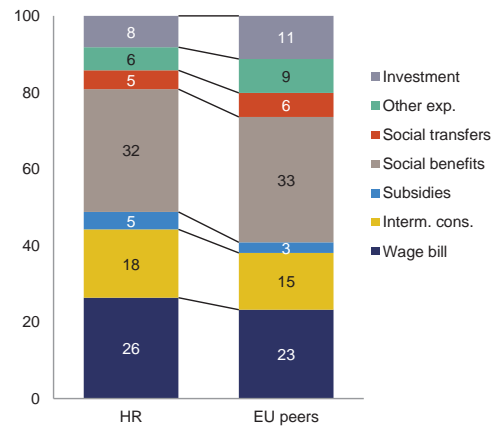


(1) Social transfers refer to social transfers in kind supplied to households via market producers.

(2) The 'EU peers' aggregate refers to a simple average of BG, CZ, HU, PL, RO, SI and SK.

Source: European Commission

Graph 2.1.8: **Primary expenditure by economic category (2014, total primary expenditure = 100)**



(1) Social transfers refer to social transfers in kind supplied to households via market producers. Other expenditure includes other current transfers and capital transfers. Social protection excludes pensions (shown separately).

(2) The 'EU peers' aggregate refers to a simple average of BG, CZ, HU, PL, RO, SI and SK.

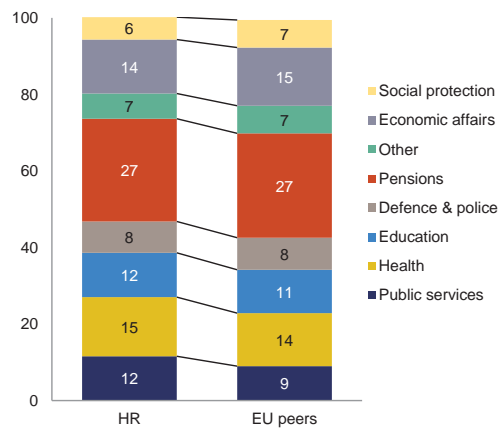
Source: Eurostat, European Commission

A cross-country comparison of the structure of public spending signals scope for efficiency gains. Breaking down government expenditure by broad economic categories and functions sheds light on the main factors that explain Croatia's high primary expenditure ratio relative to its peers (see graphs 2.1.8 and 2.1.9). Intermediate consumption, subsidies and the wage bill accounted for relatively high proportions in primary spending in terms of economic categories (2014 data). However, in terms of the functional split (2013 data) the high spending was mostly related to general public services and healthcare expenditure, in particular in hospitals. It appears that while operating costs (intermediate consumption) and subsidies are the main factors behind the high costs of provision of general public services, the wage bill explains the excess spending in healthcare in comparison to EU peers. While higher spending levels could reflect higher quality of provided services, available evidence, in particular on the performance of the public administration does not corroborate this conclusion: it thus appears that there is scope for efficiency gains ⁽¹⁰⁾.

The authorities concluded an expenditure review in early 2015 but did not release its findings. The review focused on four expenditure categories (healthcare, operational expenditure of public agencies, wages in the state budget and subsidies except for agriculture) and tax expenditure, totalling almost half of total general government expenditure in 2014. The review aimed at identifying packages of measures potentially delivering 10 % savings in each category relative to 2014. While some of the identified saving measures are being implemented, namely in healthcare and rationalisation of public agencies, the timeline and scope for implementing the selected packages of measures was not specified. The findings of the review in terms of diagnosis, identified saving measures and estimated impact have not been published nor presented to Parliament.

stable value of the index compared with 2013). See section 3.2 for a discussion of the fragmentation in public administration and the 2015 country report for a detailed analysis of healthcare.

⁽¹⁰⁾ For instance, Croatia scored unfavourably in the World Bank Government Effectiveness Index in 2014 (with a

Graph 2.1.9: **Primary expenditure by economic function (2013, total primary expenditure = 100)**

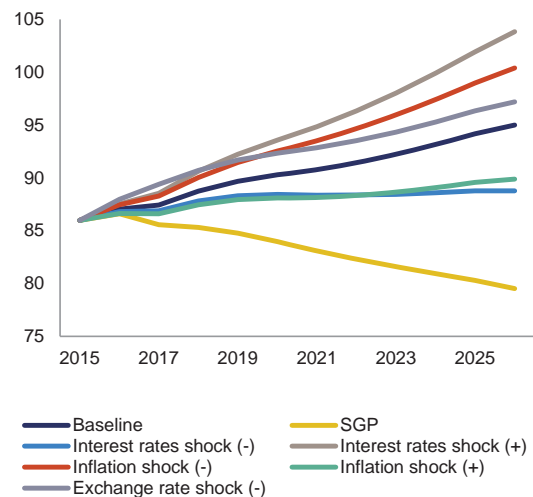
(1) Other expenditure includes environment protection, housing and community amenities, recreation, culture and religion.

(2) The 'EU peers' aggregate refers to a simple average of BG, CZ, HU, PL, RO, SI and SK.

Source: Eurostat, European Commission

Debt sustainability and short- to medium-term risks

The government borrowing requirements are high, but current financial market conditions and strong domestic liquidity mitigate the refinancing risks in the short term. The need for financing the budget deficit and maturing government debt amounted to 19.5 % of GDP in 2015, including 9 % of GDP of short-term bills. Ample liquidity in the financial sector and the current low interest rate environment implies no major refinancing risks in the short term. In spite of the decreasing trend in the share of short-term debt, it is still high as compared to the other EU countries (see graph 2.1.11). Even though a large share of government debt is held domestically, 78.5 % of it in 2014 was denominated in or indexed to foreign currency (mostly euros), reflecting the high degree of euroisation in Croatia. This exposes government debt to exchange rate risk, which is however mitigated by the tightly managed float of HRK to EUR implemented by the Croatian National Bank.

Graph 2.1.10: **Debt ratio as a % of GDP under different scenarios**

(1) Baseline: Baseline no-policy change scenario
 SGP: Stability and Growth Pact (SGP) institutional scenario
 Interest rate shock (-): Standardised (permanent) negative shock (-1p.p.) to the short- and long-term interest rates on newly issued and rolled over debt
 Interest rate shock (+): Enhanced (permanent) positive shock (+2p.p./+1p.p.) to the short- and long-term interest rates on newly issued and rolled over debt
 Inflation shock (-): Standardised (permanent) negative shock (-0.5p.p.) on inflation
 Inflation shock (+): Standardised (permanent) positive shock (+0.5p.p.) on inflation
 Exchange rate shock (-): Enhanced sensitivity test on the HRK exchange rate depreciation vis-à-vis EUR (-5% in 2016 and 2017)

Source: European Commission

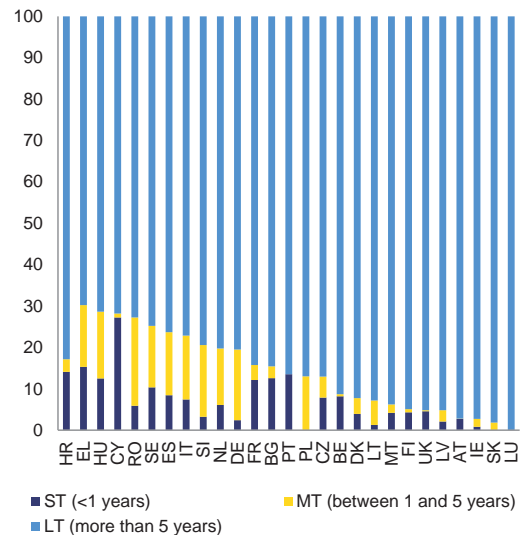
The general government debt trajectory has been simulated under various scenarios, indicating fiscal consolidation needs. The baseline scenario is based on the Commission 2016 winter forecast, where short- and long-term interest rates are set in line with the forecast implicit interest rate, the proportions of short- and long-term debt, and data on maturing debt. This scenario incorporates a number of technical assumptions. The simulations show that general government debt is likely to keep increasing in the absence of consolidation measures. Favourable assumptions on interest rates would bring the debt ratio somewhat down, to just below 90 % of GDP by the end of the projection horizon. By contrast, under unfavourable interest rate scenario, debt would reach around 104 % of GDP. The 'Stability and Growth Pact (SGP) scenario' in the graph assumes adjustments in the structural primary balance in 2016 in compliance with the fiscal effort recommended by the Council and

convergence to a structural balance of -1.5 % thereafter. Under this scenario, the debt ratio would start to gradually fall after 2016, to just below 80 % of GDP in 2026.

The debt sustainability analysis indicates high risks in the medium term. The already high level of debt increases sensitivity to possibly adverse nominal growth and increases in interest rates on new and rolled-over debt. Debt sustainability analysis shows that, under certain economic conditions⁽¹¹⁾ and an unchanged fiscal policy setting, general government debt would continue increasing to 90.3 % of GDP by 2020 and further to 95 % of GDP by 2026 (last projection year). These developments are driven by the fact that the fiscal effort underpinning this scenario (a constant structural primary balance at -0.1 % of GDP) is unlikely to be sufficient to compensate for the relatively high interest expenditure during the projection period. The analysis indicates that Croatia needs strong fiscal consolidation to stabilise government debt and eventually bring it on a downward path.

⁽¹¹⁾ The output gap closing by 2018, real long-term interest rate on government bonds converging to 3 % by 2026, inflation rate converging to 2 % by 2021.

Graph 2.1.11: **Term structure of debt in 2014 (% of total general government debt)**



Source: European Commission

The projected decrease in pension spending reduces sustainability risks in the long term, but at the cost of low future benefits. Assuming that the structural primary balance remains constant in the long run at the level projected for 2017 (at -0.1 % of GDP), risks to the sustainability of public finances in the long term appear low. This is due to the projected decrease in pension expenditures, which offsets the unfavourable initial budgetary position. However, there is a high risk to pension system adequacy (see section 3.3).

The high level and continuous rise in general government debt call for active debt management policies. The government's high financing needs and the high exposure of sovereign debt to currency risk highlight the importance of developing and maintaining reliable financing sources, subject to a prudent risk management and consistent with maintaining debt sustainability.

To date, the authorities have not set out a medium to long-term debt strategy. The last strategy was published for the period 2011-2013. It discussed the institutional framework, the analysis of the debt in the previous five-year period and the outstanding debt in terms of instruments, interest rates, currencies and term structure. It sets out guidelines for the upcoming two-year period but

without precise assumptions about the debt of some of the state-owned enterprises. Finally, no significant steps have been taken to strengthen the debt management function within the Ministry of Finance.

The healthcare sector tends to accumulate arrears. These necessitate periodic cash injections from the state budget and are a source of fiscal risk. While, by convention, trade arrears with original maturity of less than a year do not enter general government debt as such, the cash injections from the state budget do imply additional funding needs for the general government. Moreover, the accumulation of arrears indicates a decoupling of expenditure from the available resources and may point to some weaknesses in budgetary planning or expenditure control. In the national reform programme, the authorities committed to reduce arrears in the health sector by 25 % in 2015 (from 0.8 % of GDP at the end of 2014). However, in September 2015, the stock of arrears remained broadly unchanged as a result of their decrease on the part of the Health Insurance Fund and continued accumulation in hospitals. According to the authorities, the slower-than-planned reduction in arrears is mainly caused by the revenue side of the healthcare system, but they remain confident that the ambitious end-2015 target will have been met.

Fiscal framework

Despite recent upgrades, linkages between the multiannual budget framework and annual budgets remain incomplete. Multiannual budgeting applies to both deficit and expenditure targets. Concerning the former, the Budget Law as amended in 2015 stipulates that Parliament or a local representative body cannot endorse a budget for the following year with a higher planned deficit than what was projected for that same year when the previous budget was adopted. This rule may also be difficult to implement, because the legislation does not provide an adjustment mechanism for situations when its application would be extremely costly, e.g. in times of a sudden economic downturn. In contrast, there appears to be no link between multiannual expenditure limits and the budgeted expenditure for the following year. In effect, the multiannual expenditure framework is one of the least binding in the European Union. Moreover, the ceilings can

be changed at the discretion of the government without providing public explanation ⁽¹²⁾.

The potential of the strategic and financial plans for individual budgetary units is not fully exploited. The aim of strategic planning is to align policy priorities with medium-term fiscal targets. Strategic planning starts with budgetary entities outlining their policy goals and financing needs for the following three years. These plans provide the input for the multiannual Economic and Fiscal Policy Guidelines, and the annual budgets. However, the financial projections underpinning the individual plans are usually not made public, which weighs on the quality of its outcomes. At the same time, the Ministry of Finance exercises only limited scrutiny over the expenditure projections of individual budgetary entities. This, together with the soft constraints on the resulting budgetary limits (see above), undermines the credibility of budgetary planning overall and gives rise to revisions.

Table 2.1.1: **Revisions of the state budget**

	1 st revision	2 nd revision	3 rd revision
2009	Apr	Jul	Jul
2010	Aug		
2011			
2012	Jan (*)	Nov	
2013	Apr	Dec	
2014	Mar	Nov	
2015	Sept		

(*) The January 2012 revision concerned a temporary budget for the first quarter of the year.

Note: In 2009, the deficit was revised twice within a month.

Source: Ministry of Finance

The limits and allocations in the annual budget are subject to frequent revisions throughout the year. The current budgetary framework specifies that a revision is due when a temporary suspension of the execution of the state budget is not sufficient to offset unanticipated increases in expenditures or revenue shortfalls. The government therefore enjoys considerable discretion in changing budgetary plans. In addition, there is no mechanism ensuring that the revised budget would need to be in line with multiannual planning. As a

⁽¹²⁾ See EC (2015): *Medium-Term Budgetary Frameworks in the EU Member States*, Discussion Paper N°21, M. Sherwood, European Commission, Directorate-General for Economic and Financial Affairs, p. 29.

result, in the seven years starting in 2009, the initial budgets have been revised ten times, i.e. more than once on average each year (see table 2.1.1). This practice has the undesirable consequence that the initial budget plans are perceived as tentative and subject to change. Some of the revisions were due to policy changes adopted in the previous year but not fully reflected in the budget. In addition, revisions also affected budget items that are relatively easy to plan, such as interest payments, wages and pension expenditure, which weighs on the credibility of financial planning. The 2015 revision of the Budget Act, which will be applied for the first time to the 2016 budget, introduced a requirement that financial limits are divided between the costs of existing and new programmes. This is expected to increase the transparency of financial planning.

The budgetary process gives little consideration to the sizeable off-budget transactions and accounting adjustments. While the budget documentation consolidates the planned state budget deficit with the balances of extra-budgetary users and local governments, an estimate of the general government deficit in national accounting terms is not included in the documentation. Such estimates are presented in the April's convergence programme and the Economic and Financial Guidelines released in July each year (typically without further adjustments). However, the key budgetary debate later in the year is not conducted with reference to the general government. Producing budgetary estimates for the whole general government sector is, arguably, challenging, especially given the contingent nature of some of the off-budget transactions. However, considering the large contribution of these transactions for the general government debt and given that they to some extent represent costs of government policies, the absence of consolidated general government projections in the budget documentation decreases the transparency of fiscal policy and creates a gap between the ESA-based budget planning and the monitoring of budgetary developments ⁽¹³⁾.

⁽¹³⁾ The incomplete coverage of all entities classified inside the general government in the budgetary planning process is likely to be an additional source of difficulties for proper ESA-based budget planning. Currently the register of budgetary and extra-budgetary entities maintained by

The political and functional independence of the Fiscal Policy Commission is not yet fully guaranteed. Given the highlighted weaknesses in the budgetary framework, the role of the Fiscal Policy Commission of Croatia is important. The Croatian fiscal monitoring body was established in 2011, reformed at the end of 2013 as the Fiscal Policy Commission, via a parliamentary decision, and is expected to be grounded in law in the to-be-amended Fiscal Responsibility Act. Its mandate includes monitoring national numerical fiscal rules and assessing national macroeconomic and budgetary forecasts, including in comparison to the Commission's forecasts. The Fiscal Policy Commission is currently hosted within the Parliament, which also appoints its board members. It is chaired by the head of the Finance and State Budget Committee, and the other six members are non-politically affiliated experts with a five-year mandate. Under these conditions, the autonomy of the Fiscal Policy Commission is not ensured and its capacity to deliver on its mandate is limited by lack of dedicated staff.

The authorities have recently taken some steps to improve the accuracy of budgetary planning and tighten control over expenditure. In October 2015, the government adopted a new standard form for fiscal impact assessments on new legislation, which may help overcome the formalistic approach to the costing of new legislation that has been used in the past. The Public Internal Control System Act adopted in July 2015 subjected public companies, including those owned at local level, to the internal audit rules applicable in the public sector. This is expected to increase transparency in the use of public funds. Finally, the authorities secured additional funding for the State Audit Office (SAO) and are considering introducing penalties for non-compliance with SAO's recommendations.

Ministry of Finance for the purposes of budgetary planning, execution and reporting is not consistent with the list of entities classified inside the general government sector according to ESA standards. According to the 2015 convergence programme, the discrepancy was most pronounced in the category of extra-budgetary users. The new Budget Act stipulates the alignment of the two registers to ensure full coverage of all classified inside the general government sector, but this has not yet been done.

Taxation

The tax burden is relatively high in Croatia, but a large share of revenue stems from growth-friendly bases. As mentioned before, Croatia's overall tax-to-GDP ratio is lower than the weighted EU average but higher than its EU peers except Slovenia and Hungary (see above). With 51 % of total tax revenue, the share of indirect taxation — considered less distortive to growth — is among the highest in the European Union, while revenues from current taxes on income and wealth are the lowest in the European Union (17 % of total tax revenues). The remaining part (32 %) is accounted for by social contributions, which represents an average share in the European Union but a fairly low share compared with Croatia's peers.

The tax system does not pose major challenges with respect to key areas of tax policy. Consistent with the low proportion of direct taxation, the implicit tax rate on labour is relatively low (31.0 % in 2014 compared with the weighted EU average of 36.4 %). Moreover, the labour-supply disincentives stemming from the interplay of taxes and social benefits, as gauged by the marginal effective rates, are broadly aligned with the EU average, although some challenges remain with respect to specific groups (see section 2.4). Investment decisions for households and corporates do not appear to be biased towards debt financing.

The structure of property taxation suggests scope for efficiency-improving adjustment. Overall revenue from property taxation (0.5 % of GDP in 2014) is lower than the weighted EU average (2.5 % of GDP) and Croatia's peers (0.9 % of GDP), in particular due to very low revenues from recurrent property taxes. At the same time, revenue from communal charges, which are also levied on property, was around 0.5 % of GDP in 2014. A reform of communal charges, presented as a step in broader property taxation reform, has recently been initiated (see section 3.2). The property transfer tax, levied at a 5 % rate, is not exceptionally high but is higher than in all EU peers, although a number of exceptions apply that erode the tax base (the yield of non-recurrent property taxation, which largely consists of property transaction taxes, is 0.5 % of GDP, above the EU peers average of 0.3 % of

GDP but below the weighted EU average of 0.9 % of GDP). Property transaction taxes appear sub-optimal from an economic perspective, because they tend to discourage property transfers. This can lead to a thinner market for immovable property, and negatively affect labour mobility.

Tax arrears, VAT evasion and the hidden economy are key challenges for tax compliance. The lack of an advanced risk management framework that would allow the identification and assessment of compliance risks continues to be an issue. While no robust evidence is available on the scale of VAT fraud, under-reporting and the hidden economy, all are, according to the Croatian Tax Administration (CTA), major compliance risks⁽¹⁴⁾. Moreover, the share of tax debt in total net tax revenues (35.3 % in 2013) was one of the highest in the European Union and above the median value of 15 %.

Efforts were made to improve tax compliance and modernise the tax administration; evidence on their effectiveness is still limited. In 2014 and 2015, Croatia continued steps to reduce compliance risks related to VAT refunds and the application of the reverse charge mechanism. It adopted and started implementing a VAT fraud action plan, and progressed on the introduction of the Compliance Risk Management System. Besides, it conducted several targeted audits to detect under-reporting of tax liabilities, introduced lottery-based awards to improve tax compliance and increased cooperation with foreign tax authorities. In the absence of specific, up-to-date information from CTA, it is difficult to unambiguously isolate the effect of the measures from other factors. Unlike in most other Member States, the annual report by the tax administration is not made public as such but only as part of a consolidated report of the Ministry of Finance. The amount of information in the consolidated report is rather limited, which reduces the transparency of CTA's operation.

⁽¹⁴⁾ See OECD (2015), *Tax Administration 2015: Comparative Information on OECD and Other Advanced and Emerging Economies*, OECD Publishing, Paris.

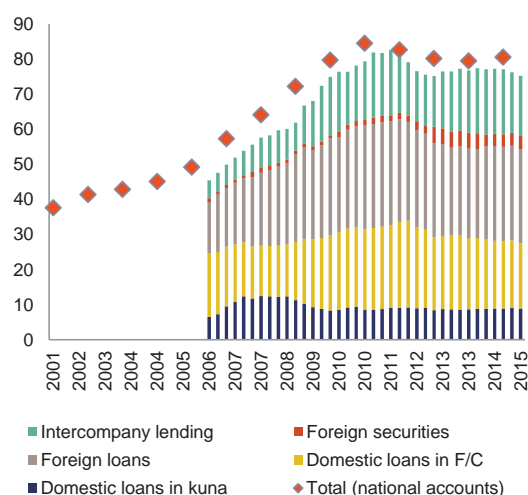
2.2. CORPORATE AND HOUSEHOLD DEBT AND THE FINANCIAL SECTOR

Private sector debt increased rapidly in the years before the crisis, albeit from a relatively low base. In the pre-crisis expansionary phase, Croatia benefited from an investment-led boom. Significant capital inflows were driven by high global liquidity, over-optimistic expectations and strong risk appetite for emerging markets investments. They were partially channelled also through the predominantly foreign-owned banking sector. Non-financial corporations largely resorted to cross-border loans from foreign banks and parent companies for their funding. In the meantime, the real estate boom led to a significant increase in household debt, mainly in foreign currency.

Deleveraging is progressing, but slowly. The slow-down of foreign capital inflows initiated a process of deleveraging, which was partially offset by a relaxation of the macro-prudential policies that characterised the pre-crisis expansionary cycle. The accumulation of debt in the private sector therefore continued in 2010 and 2011. Eventually credit started to contract on the back of both demand and supply factors, but deleveraging progressed relatively slowly.

The recession, non-performing loans and the conversion of Swiss franc into euro loans have weakened the profitability of the financial sector, but it remains well capitalised. Currency stability and the resilience of the financial system was underpinned throughout the recession by the build-up of buffers in international reserves and banks' capital and foreign currency liquidity. Although the recent asset quality review of major banks' balance sheets confirmed the resilience of the financial sector, the high level of non-performing loans remains a source of concern. The legislation on the conversion of household CHF loans adopted in September 2015 has taken a toll on financial sector profitability. However, thanks to the central bank's liquidity provisions, there is enough liquidity in the banking sector to finance the nascent recovery.

Graph 2.2.1: Consolidated corporate debt (% of GDP)



(1) No breakdown of domestic loan by currency before 2006. The bars correspond to total claims of domestic credit institutions and external debt of corporations (BOP statistics). Total debt is derived from national accounts.

Source: CNB, Eurostat

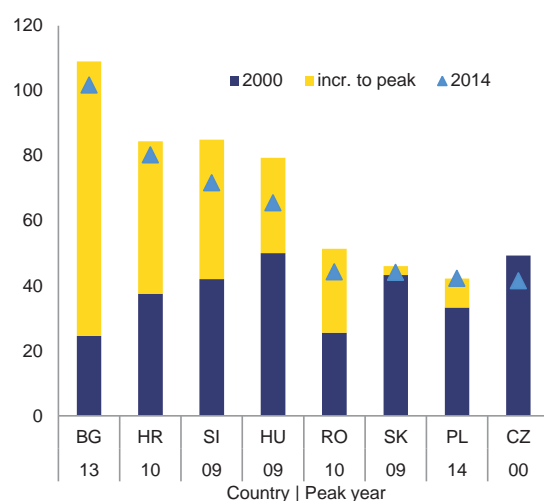
Corporate sector

High investment rates in the pre-crisis years resulted in rapid accumulation of corporate debt. With investment growing at an average rate of over 10 % between 2002 and 2008, aggregate indebtedness of non-financial corporations (NFCs) — measured as the consolidated debt-to-GDP ratio — rose sharply until 2010, when it peaked at 84.5 % of GDP. Domestic companies often bypassed the domestic banking sector to obtain cross-border loans from foreign banks and, to a lesser extent, from parent companies. Therefore, by 2010 almost 60 % of the NFCs total debt was external debt, mostly in euro area countries. Moreover, two thirds of domestic loans were denominated in foreign currency.

Deleveraging in non-financial corporations has progressed slowly, on the back of low nominal growth. The slowdown in foreign capital inflows due to the global financial crisis initiated a process of deleveraging, but this was somewhat counterbalanced by a relaxation of certain macro-prudential policies that were put in place during expansionary cycle to slow down credit growth. The accumulation of debt in the private sector continued even during 2010 and 2011. It was in 2012 that credit started to contract on the back of

both demand and supply factors. As a result, the consolidated corporate sector debt-to-GDP ratio reached 80.4 % by the end of 2014. The reduction in the leverage ratio by 4.3 pp. from its peak of 84.5 % in 2010 is the lowest among peer economies.

Graph 2.2.2: **Corporate debt Croatia and EU peers in 2000, 2014 and a peak year (% of GDP)**



Source: Eurostat

The build-up and subsequent stabilisation of corporate debt went hand in hand with its reallocation across sectors. The distribution of debt across sectors varied markedly in the expansionary phase that preceded the financial crisis and in the subsequent adjustment phase (see graph 2.2.3). Based on data from the ORBIS database, between 2005 and 2009, the increase in corporate debt was particularly pronounced in construction, wholesale and retail trade, whereas utilities saw their share of total debt decrease. Between 2009 and 2014, debt shifted away from the non-tradable sectors of energy, utilities and wholesale and retail trade towards the manufacturing sector. Significant increases in debt were also registered in transport and storage, food and accommodation and other services. Moreover, the construction and real estate sector has not considerably deleveraged, it still holds 14 % of total debt, i.e. slightly above 11 % of GDP.

Private sector debt is highly concentrated in a few companies, most of which are state-owned enterprises (SOEs). Private corporations' debt is concentrated in capital-intensive industries

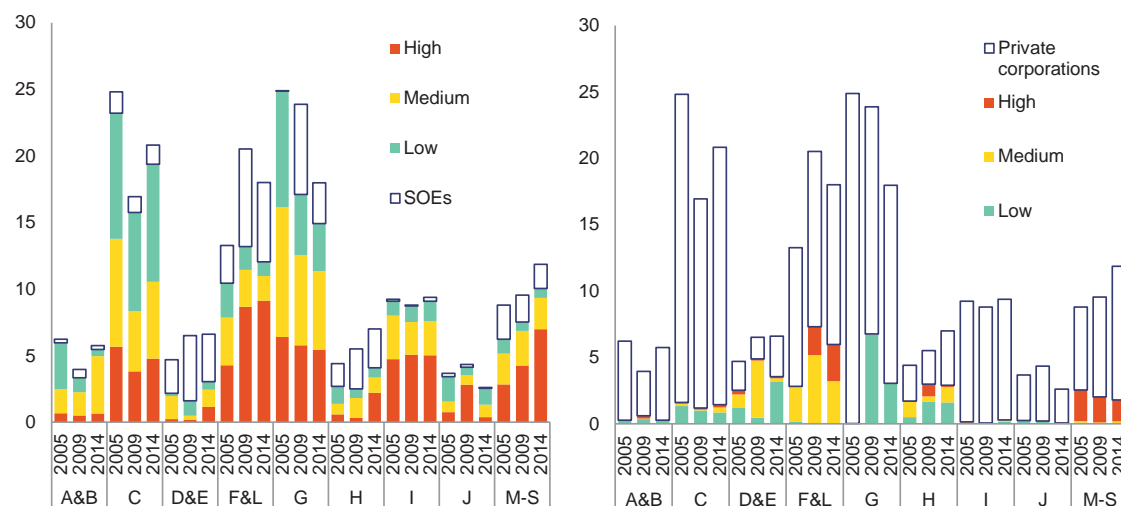
(construction and manufacturing) and in the wholesale and retail sector. There is also a relatively high concentration in each sector: over 50 % of the total debt in each sector is held by the top 5 % of companies by size of debt in that sector. Debt concentration is particularly high (around 75 %) in network industries (transportation and storage, and information and communication) and slightly less in the service sector. SOE debt (excluding corporations classified in the general government sector and financial companies) represents around 17 % of GDP in 2014, down by 2 pp. since the peak in 2011⁽¹⁵⁾. The overall riskiness of SOE corporate debt has improved significantly (see graph 2.2.3, right panel). Nevertheless, debt remains concentrated in a few sectors linked to utilities and energy, construction and wholesale. Moreover, it is concentrated within a handful of companies — especially in the construction and retail sector (oil distribution).

In recent years, corporate debt has evolved towards less risky debt. Corporate debt can be qualified in terms of a risk profile (low, medium and high) by looking at the combined ratios of debt to earnings and to assets⁽¹⁶⁾. Evidence from balance sheets at firm level suggests that although aggregate debt levels broadly stabilised in 2010, corporate solvency deteriorated up to 2012, when the share of high and medium quality risk reached a peak of almost 75 % of total debt. In 2013 and 2014, the aggregate risk level of total corporate debt went down, in particular as regards the share of high level risk (from 45 % to 39 %). However, in the private corporate sector, risk levels have not decreased substantially, since the reduction in the risk level mainly occurred among state-owned companies.

⁽¹⁵⁾ We rely on a broad definition of non-financial SOEs which includes (i) companies with a majority public share owned by the central government, (ii) minority-owned companies of strategic or special importance owned by the central government, (iii) companies statistically treated as public corporations owned locally, and (iv) other companies identified as majority publicly owned using ownership links reported in the Orbis database.

⁽¹⁶⁾ For details on the definitions of risk class, please refer to the analysis already performed in last year's country report. See European Commission, Macroeconomic Imbalances. Country Report — Croatia 2015, European Economy. Occasional Papers, 218. June 2015.

Graph 2.2.3: Distribution of total corporate debt by sector and risk level in private corporations (left panel) and SOEs (right panel) in 2005, 2009 and 2014 (% of total corporate debt in each year).



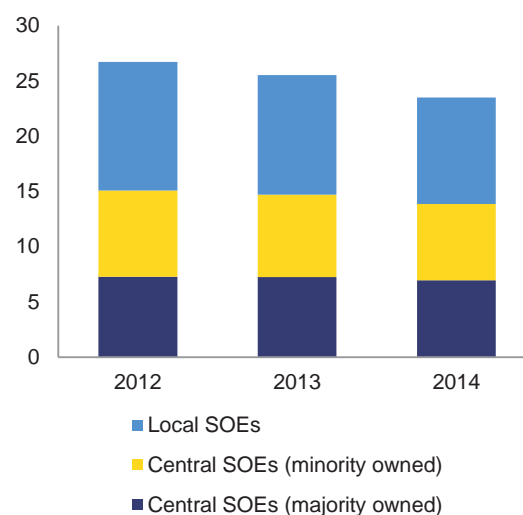
(1) Debt is distributed in risk levels. Coloured histograms represent the share of debt of private corporations (left panel) and SOEs (right panel). Non-coloured histograms represent the share of debt of SOEs (left panel) and private corporations (right panel). Debt in each sector and year is normalised with respect to total debt.

Sectors: A - Agriculture, forestry and fishing; B - Mining and quarrying; C - Manufacturing; D - Electricity, gas, steam and air conditioning supply; E - Water supply; sewerage, waste management and remediation activities; F - Construction; L - Real estate activities; G - Wholesale and retail trade; repair of motor vehicles and motorcycles; H - Transportation and storage; I - Accommodation and food service activities; M - Professional, scientific and technical activities; N - Administrative and support service activities; S - Other service activities.

Source: Orbis, European Commission

Currency risk exposure resulting from foreign-currency-denominated debt is a source of vulnerability. Due to a low sovereign credit rating, Croatian companies encounter 2-3 pp. higher costs for long-term loans than their euro area peers. Larger private corporations continue to borrow directly from abroad, and their borrowings from domestic credit institutions are also often denominated in foreign currency. By end 2014, 73.3 % of total corporate loans were denominated in foreign currency, exposing the corporate sector to currency risk. The share of non-kuna denominated loans is unevenly distributed across sectors: above average in construction and real estate, but lower in trade retail and manufacturing. The limited share of export (non-kuna) revenues from abroad amplifies the currency risk in the construction sector, whereas the risk is mitigated in the hotel and restaurant industry, which generate foreign currency revenues.

Graph 2.2.4: Liabilities of non-financial SOEs classified outside general government (% of GDP)



(1) Data for 2012-2014 from the ORBIS database. Companies selected based on the list of companies owned by central/local government and, for other companies, based on their sector classification (public corporations) in national accounts.

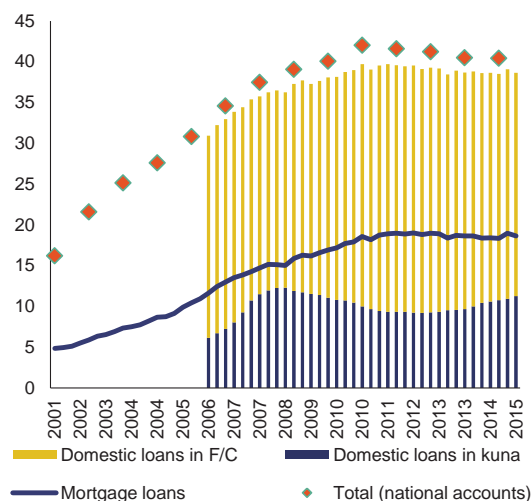
Source: Orbis, Eurostat

Deleveraging pressures in the corporate sector are set to relax, though the high indebtedness of the construction sector is a reason for concern. With the pick-up of growth in 2015 and an improved economic outlook, the need for further deleveraging in general appears limited. Low profitability in the construction sector due to stalled sales is detrimental as this sector is one of the most important drivers of non-performing loans in the economy. The real estate market remains characterised by low liquidity, as the indicator such as ‘time on the market’, adjusted for changes in the supply of dwellings, continues to be above the pre-crisis period and increasing.

Household sector

Households deleveraging started in 2011, but progressed slowly on the back of long loan maturities and increasing debt repayment burden. In the pre-crisis period, the housing boom supported sustained demand for real estate loans. As real estate prices started to adjust, credit growth to the household sector fell sharply. As almost half of the loans were granted for real estate purchases, the average duration of the outstanding household debt remains high. A sharp deterioration of labour market conditions and decreasing disposable income have hindered a swift repayment of household debt and increased its burden. Aggregate household debt therefore contracted by only 1.7 pp. of GDP between 2010 and 2014 (Graph 2.2.5) and is now the highest among peer countries (see graph 2.2.6).

Graph 2.2.5: Household debt (% of GDP)



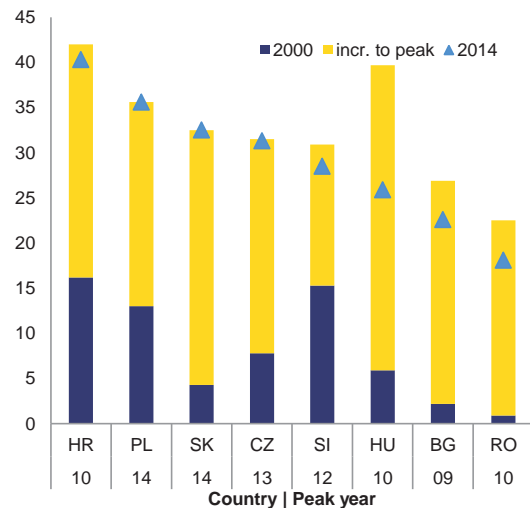
(1) No breakdown of domestic loan by currency before 2006. Bars correspond to total claims of domestic financial institutions. Total household debt is derived from National Accounts.

Source: CNB, Eurostat

Pressures to reduce household debt are subsiding as the situation on the labour market improves and real estate prices stabilise. According to estimates by the Croatian National Bank, household debt is broadly in line with the fundamentals (unemployment, real estate prices, GDP, interest rates, rate of ownership). So far, contained increases in wages and slight improvements in unemployment have failed to boost the demand for new housing loans. As the situation on the labour market improves and real estate prices show sign of bottoming out, residual pressure to reduce debt levels appears contained (¹⁷).

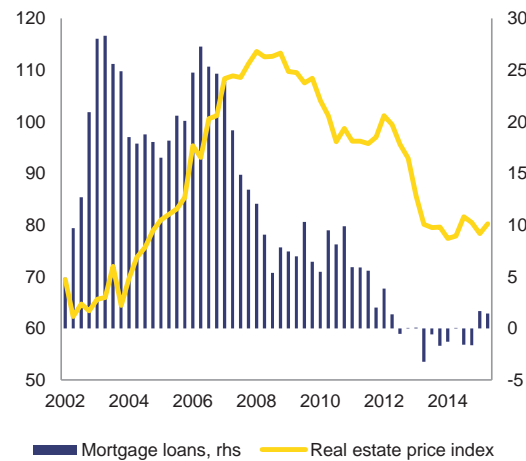
(¹⁷) CNB (2014), "Financial Stability Report", Vol (7), 13, pp. 27-30

Graph 2.2.6: Household debt in Croatia and EU peers in 2000, 2014 and peak year (% of GDP)



Source: Eurostat

Graph 2.2.7: Growth of mortgage loans (%) and real estate prices index (2010=100)

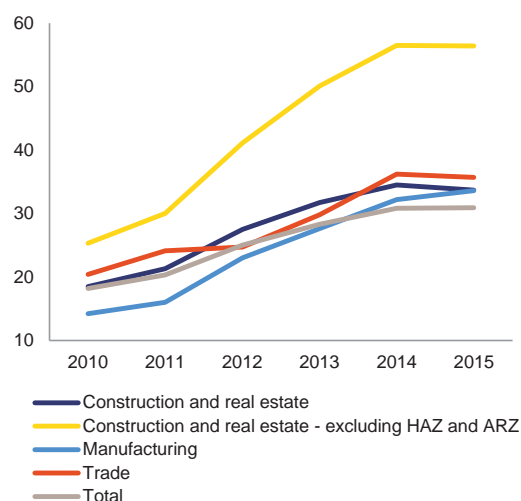
(1) Annual change in the ratio of mortgage loans to GDP
Source: CNB

Interest rate and exchange rate risk nevertheless continue to weigh on households' debt repayment. Household indebtedness is coupled with currency risk exposure due to the banks' practice of extending EUR and CHF long-term loans. By end 2014, 71.4 % of total household loans were denominated in foreign currency, of which over 53 pp. in EUR and over 17 pp. in CHF (predominantly mortgage loans). The appreciation of the Swiss Franc in January 2015 had a substantial impact on households that had contracted mortgages in that currency and prompted government intervention (see following sub-section). Moreover, the share of loans with variable interest rate (variable within a one year period) is still very high. The risk of rises in the repayment burden imposes a drag on household credit demand ⁽¹⁸⁾.

⁽¹⁸⁾ The Croatian National Bank estimates that an increase of interest rates by 2 pp. would trigger an increase of 0.3 pps. in the share of NPLs in housing loans, and 3.2 pp. in the share of NPLs in consumer loans. CNB (2015), "Financial Stability Report", Vol (8), 15, pp. 26-28.

Financial sector developments

The asset quality review and portfolio screening in early 2015 confirmed the robustness of the banking sector; weaknesses in some smaller banks have been addressed. In 2014, the four largest Croatian banks participated in the comprehensive assessment exercise organised by ECB. Mid-size and smaller Croatian banks (which were not included in the comprehensive assessment) were scrutinised by the Croatian National Bank — through the so-called Portfolio Screening Exercise. With the exception of one state-owned bank, the largest institutions came out as being well capitalised, while some weaknesses in governance and risk management practices were uncovered in a small number of mid-size and smaller institutions. They have been mostly addressed in the meantime, whereas the state bank has been successfully recapitalised.

Graph 2.2.8: **Non-performing loans by sectors (% of total corporate loans in each sector)**

(1) HAC and ARZ were reclassified within the general government in 2014; by excluding them the expansion of NPLs becomes more obvious

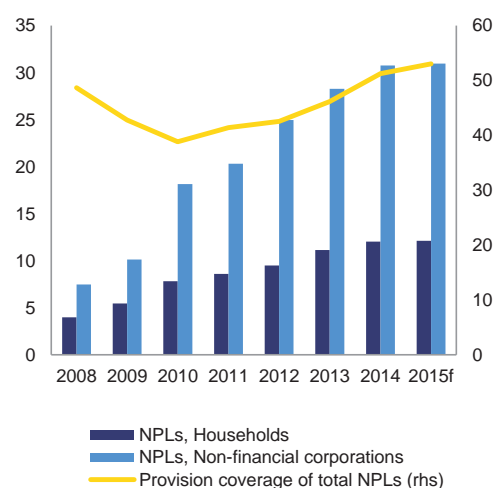
Source: CNB

Albeit well-provisioned, non-performing loans (NPLs) continue to weigh on the performance of the banking sector. The ratio of NPLs to total loans has recently stabilised around 17 %. In the corporate sector, the ratio stood at 31 % in September 2015, with the highest ratio in the sectors most affected by the crisis: construction and real estate, and wholesale and retail trade sector (see above, discussion of corporate debt). For households, the ratio stood at 12 %, with significant differences between EUR, CHF and kuna loans. For housing loans, which account for the largest share of household NPLs, in June 2015 the NPL ratio was 6 %, 14 % and 11 % for EUR, CHF and HRK loans, respectively. The adequate provision coverage for NPLs helps mitigate the credit risk stemming from the NPL portfolio. The coverage ratio reached 54 % in September 2015, up from 39 % in 2010. This increasing trend is partially due to the automatic mechanism for ageing loans, put in place by the CNB in 2013.

Slow resolution of non-performing loans ties up banking capital and the resources needed for investment projects. The current tax regulation related to NPLs write-offs allows for tax deductions but leaves room for interpretation, entailing legal risks for banks. Specialised NPLs investors have until recently shown limited interest

in Croatian NPLs, possibly due to the small size of individual banks' portfolios. However, higher NPL sale activity was registered during 2015, especially in the retail segment (for about 1 % of the total non-performing loans).

The implementation of the amended corporate insolvency legislation should contribute to the faster resolution of corporate NPLs, albeit with a lag. The new rules, which brought pre-insolvency proceedings under stronger control of commercial courts, also require the state payment agency (FINA) to initiate liquidation for thousands of companies with blocked accounts, most of which have no assets. By the end 2015, around 16 876 such proceedings had been launched before commercial courts, involving nearly EUR 2.5 billion of unpaid debt. In 2015, liquidation and pre-insolvency proceedings remained long and on average took 327 and 216 days from initiation until final resolution, respectively. Evaluating the impact of the new framework requires detailed monitoring (e.g. of recovery rates, length of proceedings and amount of restructured debt).

Graph 2.2.9: **Non performing loans and provisions (%)**

(1) 2015 figures refer to the first half of the year

Source: CNB

The resolution of household NPLs will benefit from the new personal insolvency legislation, although its implementation could prove challenging. In January 2016, the Personal Insolvency Act has come into force. The triggers for the automatic start of the procedure are

enshrined in the law, but there is also a possibility to start the procedure even without fulfilling the criteria. In those cases, a judge would have discretionary power to allow access to the procedure or deny it. The period after which the borrower can be relieved will be determined by the judge, and it will vary between one and five years. Lack of experience in this area by the municipal courts may hamper the efficiency of proceedings.

Various interest rate ceilings are regulated by many legislative pieces. Interest rate ceilings are set in legislation for various interest rates, various contractual parties and contractual relationships. They are determined as the sum of a reference rate and a spread. Caps apply to: late payment interest rates, contractual rates, effective interest rates and interest rates for variable-rate loans. The reference rate is taken from the previous reporting period as the average interest rate relevant for the contractual relationship concerned. It is not obvious how the adopted spreads were determined, and the interest rate caps are governed by a plethora of laws, which contribute to the complexity in the legal framework.

Legislation adopted in September 2015 requires banks to propose to the household borrowers the conversion of their outstanding CHF loans into EUR loans. The loans are converted using the exchange rates and interest rates that were applied to corresponding EUR loans in the period from the origination of the loan until the date of its conversion⁽¹⁹⁾. The sudden appreciation of the CHF in January 2015⁽²⁰⁾ triggered a public intervention to reduce the financial stress faced by many households, placing most of the burden of the conversion on the banks.

⁽¹⁹⁾ If after conversion, the total amount that a debtor with a CHF loan paid exceeds the total amount they would have paid on the corresponding EUR loan, this excess (overpayment) will decrease the debtor's future instalments by up to 50 % per month, until the excess is used up. The new repayment plan could also result in under-payment, if the total amount repaid so far on the CHF loan is lower than the amount that would have been repaid if the loan had been denominated in EUR. However, borrowers are not obliged to accept the conversion.

⁽²⁰⁾ In January 2015, the kuna depreciated by about 15% against the CHF, following the decision by the Swiss National Bank to scrap the ceiling on the CHF/EUR exchange rate. On 23 January 2015 the Croatian Parliament adopted a law to freeze the exchange rate at HRK 6.39/CHF for one year in CHF loan contracts (mostly housing loans) to help borrowers.

The banking sector and the economy more broadly will be affected by the conversion of CHF loans. The conversion will hit banks' profitability and capital base: according to estimates by the Croatian National Bank⁽²¹⁾, the losses will amount to around HRK 8 billion, corresponding to around three years of banks' profit before taxes. The banking sector is expected to withstand these losses⁽²²⁾, but the measure increases unpredictability in the business environment, and risks discouraging foreign investment. Moreover, it will put further strain on Croatia's international reserves (see following section 2.3), and public finances, as the losses incurred by the banks will be tax deductible and work through as lower revenues for the government.

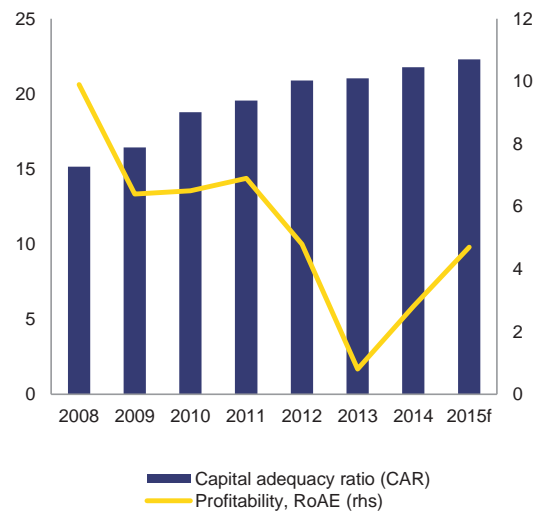
The currency risk exposure of the private sector is an indirect risk for the banks. With the full conversion of CHF loans into EUR loans, most real estate loans are now denominated in or indexed to the euro. While the banking sector on aggregate appears well hedged against direct currency risk, it is exposed to currency-induced credit risk, as losses incurred by borrowers as a result of unanticipated exchange rate movements could cause losses to the lenders as well. The extent to which borrowers are exposed to exchange rate risk is however unclear, given the high level of euroisation of both assets and liabilities in all institutional sectors⁽²³⁾.

⁽²¹⁾ CNB (2015): "Izvjescje o problematici zaduzenosti gradana kreditima u svicarskim francima I prijedlozima mjera za olaksavanje položaja duznika u svicarskim francima na temelju zaključka Odbora za financije I drzavni proracun Hrvatskog Sabora", September 2015

⁽²²⁾ The capital adequacy ratio is estimated to decrease from 23.5 % (at the end of June 2015) to 19.7 %, still above the levels in many other EU countries and well above the minimum regulatory requirements.

⁽²³⁾ According to the CNB, the share of unhedged loans in total loans exposed to the currency-induced credit risk was close to 67% in March 2015 (CNB (2015), 'Financial Stability Report', Vol (8), 15, p.47). However, the definition used might be misleading, as all loans denominated in foreign currency are considered unhedged, unless they are explicitly collateralised with a deposit that matches them in maturity and currency.

Graph 2.2.10: Capital adequacy ratio and profitability (%)



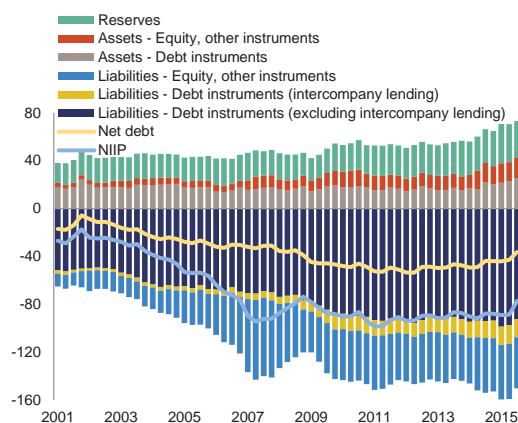
(1) 2015 figures refer to the first half of the year

Source: CNB

2.3. EXTERNAL LIABILITIES AND TRADE PERFORMANCE

After a record deficit in 2008, the current account balance turned into a small surplus in 2013, with further improvements in 2014 and 2015. The competitiveness losses accumulated in the years before the global financial crisis resulted in the deterioration of the current account balance and the build-up of large external liabilities. By 2008 the current account registered a record deficit of 8.9 % of GDP, where net external liabilities (measured by the net international investment position, NIIP) amounted to over 75 % of GDP. The current account deficit narrowed in the years following the financial crisis, turned positive in 2013, and is set to have reached a record surplus of over 4.2 % in 2015. Low energy prices are set to reduce Croatia's energy bill by about 1 pp. of GDP, as cheaper imports are partly offset by a fall in export revenues. Furthermore the government decision on the conversion of CHF loans will lead to a temporary turnaround in the balance of primary incomes⁽²⁴⁾. Net of these temporary effects, the current account would have registered a more contained surplus (but still above 2 % of GDP).

Graph 2.3.1: Main components of the net international investment position (% of GDP)



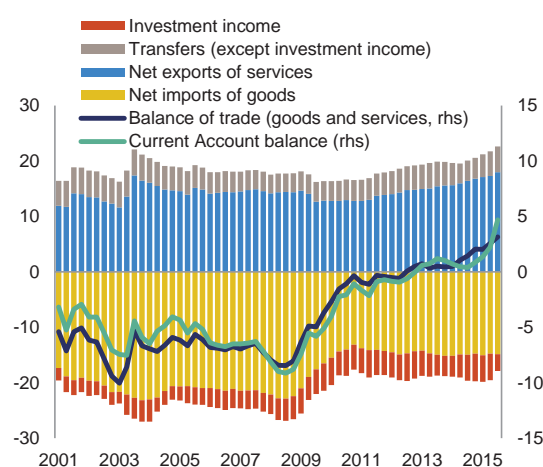
Source: BOP, Croatian National Bank

The economy will have to maintain significant trade surpluses in order to reduce the external

⁽²⁴⁾ This resulted in significant losses for the largely foreign-owned banking sector (see section 2.2), which impacted the outflow of earnings (via negative retained earnings) and boosted the current account by an estimated 8 bn kuna, i.e. 2.4 % of GDP.

debt. The recent turnaround in the current account has only recently delivered a reduction in the NIIP (see graph 2.3.1), which however remains by far the largest in the region and indeed one in the highest in the EU. Despite still being a converging economy, Croatia will have to generate sizeable trade surpluses to maintain the sustainability of its external debt, or boost FDI.

Graph 2.3.2: Main components of the current account balance (% of GDP)



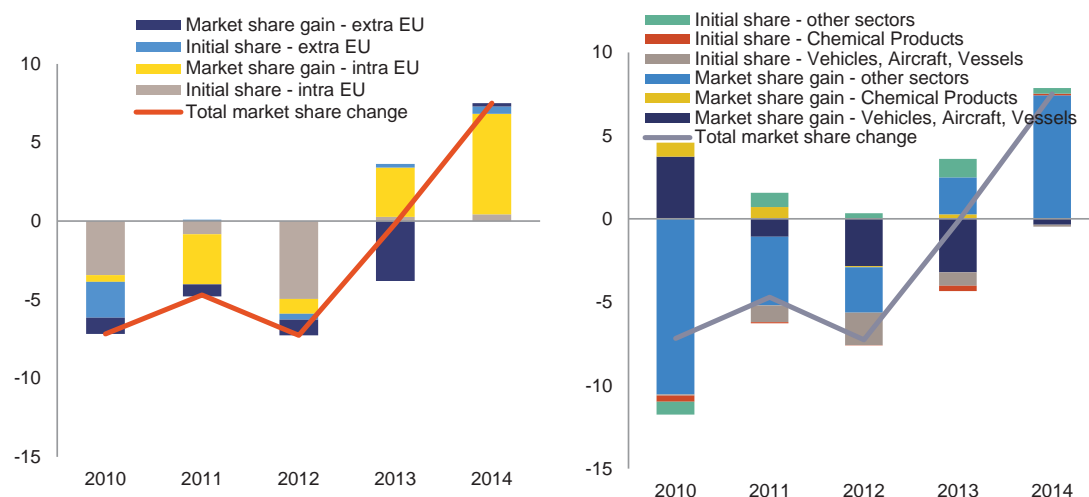
Source: BOP, Croatian National Bank

Exports and imports of goods and services

The Croatian current account is characterised by large merchandise and service balances that broadly offset each other. The Croatian current account can be characterised by three main features: (i) a large and persistent deficit in merchandise trade (ii) a large and persistent surplus in export of services (i.e. revenues from tourism) and (iii) broadly offsetting balances in investment income and income from remittances and frontier workers (graph 2.3.2). At 22.5 % of GDP in 2014, Croatia's export base is small compared to regional EU peers (71.6 % of GDP on average). Imports of goods and services are also significantly lower: 46 % of GDP in 2014, as opposed to 67.8 % of GDP on average in the peers.

The high share of imports (essentially goods) in peer economies is the counterpart of the large export base, since the production process is internationally integrated and goods exports

Graph 2.3.3: Change in market shares of exports of goods by destination and sector



(1) The shift-share analysis allows to break down the change in market shares of exports of goods into the contribution linked to the initial share in a specific geographical market / sector and in the gain in market shares in the specific geographical market / sector.

Source: Comtrade, European Commission

feature high import content. As a consequence, the merchandise trade balances tend to be contained. Tourism, however, also features relatively high import content (see box 2.3.2). As a result Croatia, like other tourism-dependent economies, tends to combine the large surplus in services with large deficits in merchandise trade.

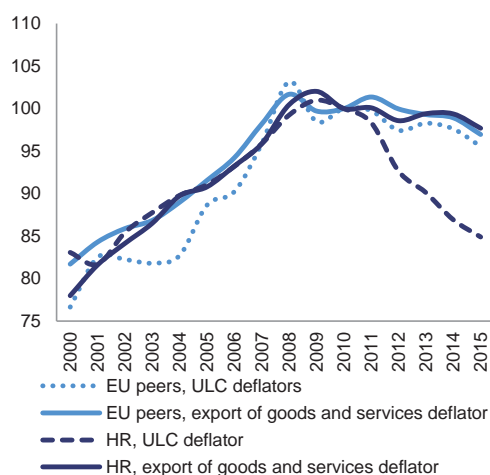
Croatia's goods exports have suffered from lost competitiveness, adverse shocks and delayed integration in the EU. Croatia's export performance has been affected by geographic and sector-specific shocks ⁽²⁵⁾ and adverse dynamics in cost competitiveness. The sustained growth in real effective exchange rates (deflated by unit labour costs) combined with an exports structure biased towards lower quality and labour- and raw material-intensive goods. Late accession to the EU Single Market prevented Croatia so far from

leveraging the benefits of integration into global value chains similar to peers.

Over the past two years Croatia recovered some of its lost market share. Goods exports grew at double-digit figures in 2014 and 2015. Subsiding negative temporary factors (i.e. renewed access to markets covered by the Central European Free Trade Agreement (CEFTA) and the improving situation in depressed EU markets) partially contributed to this performance. This resulted in a stabilisation of export market shares in 2013 and significant gains in 2014 (7.5 %). At industry level, the crisis in the shipbuilding industry continued to detract from export performance in 2014, whereas chemical products stagnated. The strong performance of exports in 2014 was essentially driven by smaller, dynamic sectors such as textiles, wood and cork and foodstuffs (see graph 2.3.3). Data for 2015 suggest that Croatia further increased its share of these markets, though it is still early to assess the drivers of the gains.

⁽²⁵⁾ See last year's country report. The traditional markets for Croatian exports, both in the EU (Italy and Slovenia) and outside (the Balkans) have been significantly affected by the economic and financial crisis. Temporary loss to CEFTA markets (Albania, Bosnia and Herzegovina, Former Yugoslavian Republic of Macedonia, Moldova, Montenegro, Serbia, and Kosovo) further contributed to the loss of market shares, as did the restructuring of the shipbuilding industry (exports went down from 2.7 % of GD in 2008 to 0.5 % in 2014).

Graph 2.3.4: ULC and export prices deflated real effective exchange rates in Croatia and EU peers (2010=100)

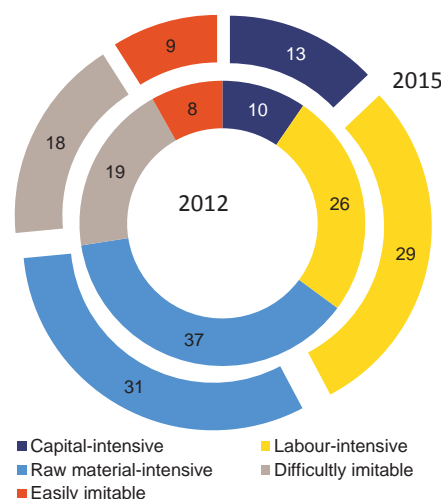


(1) Simple average of EU peers (BG, CZ, HU, PL, RO, SI, SK)
Source: European Commission

Gains in market share cannot be attributed to improvements in cost competitiveness only. Weak export market performance could not be entirely explained by worsening cost competitiveness indicators, but also resulted from delayed quality enhancement ⁽²⁶⁾. Whereas improvements in competitiveness indicators since 2012 have been substantial, as reflected in the sharp improvement in ULC deflated real effective exchange rates (see graph 2.3.4), they were only partially transposed into lower export prices. Exporting companies may have used margins freed up by lower labour costs to scale up the quality of exports (and also improve profit margins). It is therefore unlikely that lower production costs have been the main driver behind gains in market share.

⁽²⁶⁾ European Commission, 2015, Country Report: Croatia, p. 30.

Graph 2.3.5: Goods exports by broad category (% of total exports)



Source: Comtrade, European Commission

The structure of goods exports appears to have shifted away from more price sensitive production. Exported goods can be divided into five broad categories: (i) raw material-intensive (ii) labour-intensive (iii) capital-intensive (iv) easily-imitable and (v) difficultly-imitable (research-oriented) ⁽²⁷⁾. According to this classification, the share raw-material intensive decreased between 2012 and 2014, whereas the share of labour-intensive and capital-intensive exports increased. This positive trend was offset by a decrease in exports of ‘difficultly-imitable, research-oriented goods’, although this was partly driven by the fall in exports from shipyards. Net of the shipbuilding industry, aggregate data suggests a move towards less price-elastic goods — and probably higher unit values — although in comparative perspective they remain relatively skewed towards raw material- and labour-intensive goods. This suggests significant potential to move away from reliance mainly on labour cost competitiveness.

⁽²⁷⁾ Bahri Y., Turkey’s competitiveness in the European Union: A comparison with five candidate countries — Bulgaria, the Czech Republic, Hungary, Poland, Romania — and the EU-15, Ezonplus Working Paper No 12, 2003.

Box 2.3.1: Croatia's integration in global value chains in comparative perspective

The production of goods and services is increasingly taking place across the globe, with the different stages of the production process - from the production of parts to assembly, design and research and development – being located across different countries. Such increasing fragmentation of production comes with an increasing volume of trade of intermediate goods — i.e. input that has itself been produced and is used up in production. Integration in global value chains is particularly relevant for small open economies, as it allows them to leverage the full potential of their comparative advantage.

Generally, participation in Global Value Chains (GVCs) is considered to have a beneficial impact on trade performance and growth, through the gains that firms achieve from specialisation and thanks to improved access to new technology and knowledge spill-overs. Benefits, moreover, tend to be greater for those industries or firms that are able to position themselves in the final stages of production process, where the share in value added is typically larger. In contrast, industries and firms in the initial stages of the GVCs are considered to capture a smaller share of value added, due to the higher substitutability and ultimately price elasticity of their output.

This Box replicates a recent study by the OECD on integration in GVC for the Central European Free Trade Agreement (CEFTA) countries, focussing on the differences between Croatia and its EU peers ⁽¹⁾. OECD data on bilateral trade broken down by industry ⁽²⁾ are used to calculate measures of revealed comparative advantage (RCA) for exports and imports. Being expressed as the share of a certain industry in a country's total exports/imports, relative to its share in world exports/imports, the RCA index captures a country's relative specialisation or import intensity, in a given product or industry. Input-output tables are used to identify for each industry the main supplying industry, thus allowing to link exports in a specific industry to imported inputs. On this basis, an industry in which the RCA index for the relevant imports is greater than one is considered to be integrated.

OECD trade data was also disaggregated in terms of intermediate and final goods: this allows not only to determine whether an industry is integrated in a GVC or not, but also its likely position in the different stages of the GVC. For example, an industry with a high RCA index for exports in intermediary goods, but a weak RCA index in related imports, is typically positioned in the first stage of the global value chains (lower left quadrant in the graph below), as it is using its domestic production to produce intermediary goods. An industry with a RCA index greater than one for exports in intermediary goods and a RCA index greater than one for related imports in intermediary goods is positioned in the intermediate stage of the GVC (lower left quadrant). Finally an industry where the RCA index for exports is greater than one in the category of final goods, which relies on imported intermediary goods, is considered to be in the final stage of the GVC (upper right quadrant), whereas if it does not rely on imported goods (the RCA for imports from the supplying industry is lower than one), the industry is considered to be non-integrated (upper left quadrant).

Bubbles represent industries; the position of each industry in each quadrant depends on its score on the RCA index for export of intermediate goods (upper y axis), RCA index for export of intermediate goods (lower y axis) and RCA index for relative imports (x axis), while the size of the bubble corresponds to the size of the exporting industries (in values). Only industries where Croatia or EU peers feature a relative comparative advantage are considered – i.e. only if the RCA for exports in either intermediate or final goods is greater than one. Note that a same industry may have a double position in the quadrants, if it features at a same time a RCA index greater than one for both intermediate and final goods.

EU peer economies featured a relatively high degree of integration in GVC already in 2004. Integration was particularly strong in the intermediate stages of production of motor vehicles, trailers and semi-trailers and to a lesser extent in other non-metallic mineral products, electrical machinery and pulp, paper products, and publishing. In a few industries, EU peer economies were also present in the final stage of production

⁽¹⁾ OECD Trade in Intermediate Goods and International Supply Chains in CEFTA, CEFTA Issue Paper, 6, 2013.

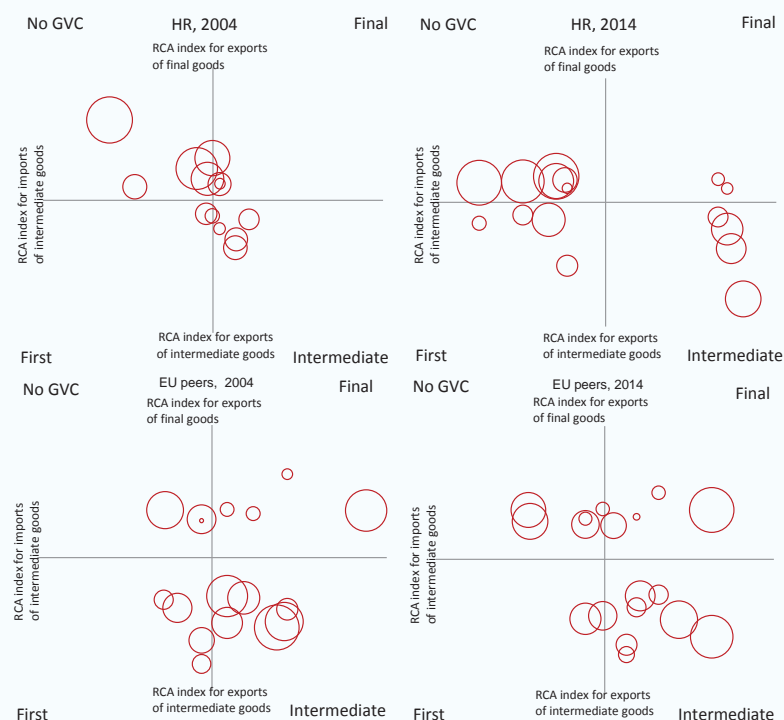
⁽²⁾ OECD STAN Bilateral Trade Database by Industry and End-use, based on the International Standard Industrial Classification, Revision 3 (ISIC Rev.3).

(Continued on the next page)

Box (continued)

(namely machinery and equipment and textile, leather and footwear). The industries of chemicals and chemical products and rubber and plastics products featured mainly in the first stage of integration. By 2014, these countries also started showing a comparative advantage in non-integrated industries such as chemicals and chemical products and food products, beverages and tobacco. Most notable, however, are the shift from the first stage of integration and the shift of the large motor vehicles, trailers and semi-trailers industry from the intermediate to the final stage of the GVC, showing the capacity of this industry to move beyond the simple production of intermediate components. The industry of office, accounting and computing machinery moved rapidly from being a non-integrated industry to the last stage of integration.

Graph: Integration in Global Value Chains (GVC) in Croatia and in EU peer in 2004 and 2014, by industry.



Source: OECD STAN Bilateral Trade Database by Industry and End-use, European Commission.

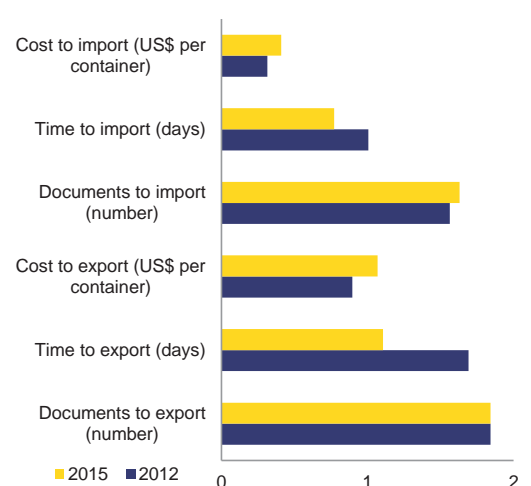
The picture for Croatia reflects the more close nature of its economy, but also the relative strength of its production base in some primary sectors (agriculture, fishing, forestry and extractive industries). These translate in a much larger share of exports that are not integrated in GVC. It is also interesting to note that the share of integrated exporting industries is concentrated in the intermediate stages of production. In a period of 10 years Croatia appears to have moved towards a higher degree of integration. The share of exports not featuring any integration dropped from 46 to 37% - also due to the collapse in exports of the shipping industry. The share of exports integrated in GVC increased by almost 15%, mainly due to an expansion of exports in the first stage of supply chain (especially machinery and equipment and electrical machinery and apparatus). In the intermediate stages the core of exports are represented by fabricated metal products except machinery and equipment and other non-metallic mineral products. Also pulp, paper products, and publishing remained in the final stage of the supply chain, while the industry of fabricated metal products moved up from intermediate stage towards the final stage of integration. Whereas the value of exports in the final stage of integration increased, the share decreased due to the more sustained increase of exports in other stages of integration.

Access to the Single Market has enhanced trade linkages with the EU, by fostering Croatia's

integration in EU supply chains. In 2013, the loss of market share outside the EU (i.e. mainly

CEFTA countries) was broadly compensated by increased market share in the EU (see graph 2.3.3), and in 2014 most of the gains in export market share were registered in the EU region. The strong increase in exports (and imports) post-EU accession has been sometimes attributed to the so-called Rotterdam effect: i.e. a surge in transit trade (from the EU to outside the EU and vice versa) related to Croatia's geographical position on the outer edge of the European Union. Disaggregated analysis of trade flows, however, suggests that transit trade is likely to have played a very minor role in explaining the surge of exports⁽²⁸⁾. The more likely factor is the reduction of transaction costs in exporting to the EU, which is likely to have facilitated Croatia's export penetration and re-oriented its integration into EU supply chains — as indeed witnessed by the sharp drop in imports of intermediate goods from the CEFTA area.

Graph 2.3.6: **Barriers to trade in Croatia (variation from EU average)**



(1) Variation from EU average is expressed in terms of standard deviation.

Source: European Commission

Croatia is still not fully leveraging the potential benefits of specialisation. The degree of Croatian

⁽²⁸⁾ Econometric analysis shows that the link between imports from the EU (non-EU region) and exports towards the non-EU region of goods in the same broad category (i.e. based on the Broad Economic Category (BEC) classification) appears relatively weak in Croatia (when compared of that of countries typically affected by a large share of transit trade) and did not significantly strengthen in the post-accession period.

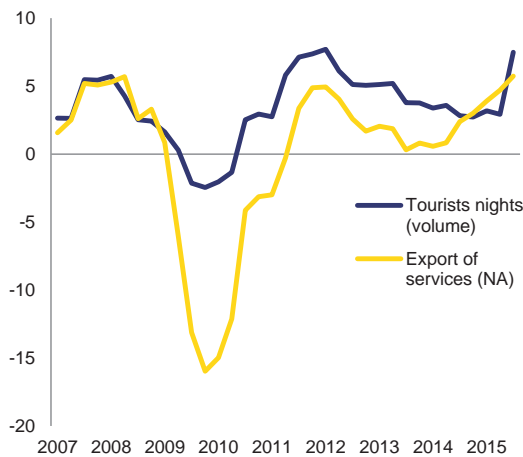
integration in global value chains has increased in the last decade, but is still limited when compared with other countries in the region, and skewed towards the intermediate steps of the production chain, where the share of value added is lower. Moreover, in a large number of industries, Croatia still relies exclusively on domestic inputs. In some cases this is a consequence of the strong production basis in primary sectors and extractive industries — though in other industries it appears that Croatia is not fully exploiting the benefits of specialisation in areas where it enjoys a proven comparative advantage (see box 2.3.1).

Import/export administrative procedures have been simplified, but Croatian companies are still penalised by a weak business environment.

In recent years, policy measures to support exports have been introduced. An 'Action Plan on Export Support 2014-2015' coordinated by the Ministry of Foreign and European Affairs addresses crucial issues such as small capacity, production fragmentation, and insufficient competitiveness of Croatian firms. The Croatian government launched a new portal for exporters in June 2015. The function of the portal is to consolidate all relevant and updated information that could be of interest to potential Croatian exporters. The costs and time for SMEs to both export and import are higher than in the EU and the number of documents required is almost double. Since 2012, Croatia's relative performance on the time required to export and import has improved but it has deteriorated on cost (see graph 2.3.6). Furthermore, challenges affect rail cargo (see section 3.1) and thus penalise external trade.

Cost competitiveness continues to be a key driver of tourism. Typically featuring high income elasticity, exports of services were severely hit by the 2008 financial crisis. Contrary to export of goods, which in volume terms are now well beyond pre-crisis levels, services have not yet recovered the peak value reached in 2008. Croatia's natural heritage makes it a very attractive tourist destination, Croatia has been struggling to improve the quality of its tourism sector. Compared with the massive surge in the number of nights spent in tourist accommodations, the increase in tourism revenues has been relatively modest, suggesting that increases in volumes are being achieved by lowering the average price of the services (see graph 2.3.7).

Graph 2.3.7: **Exports of services volumes and tourist nights**
(four quarters moving average, y-o-y change in pps.)



Source: Eurostat, Croatian Bureau of Statistics

Increasing the value added of the tourism sector will require significant private and public investment. Whereas the natural beauty of the Croatian landscape is the main driver of its competitiveness as a tourism destination, the quality of services ranks poorly vis-à-vis its competitors. The weaknesses of the tourism industry include outdated products and tourist infrastructure, leading to high seasonality and limited value added of tourism services. Scaling-up the quality of services will involve significant structural changes, but also a change in the target group, moving away from large-group-based, seasonal, price-conscious tourists to value-conscious smaller groups and families seeking higher quality.

The expansion of tourism has both a direct and indirect impact on the environment, but Croatian authorities have adopted an environmentally responsible development strategy. Croatia's Tourism strategy 2020 (adopted in 2013) presents environmentally responsible development as one of its main principles. The Strategy plans total investment of around EUR 7 billion by 2020 and the potential to employ around 30 000 people. It is estimated that eco-tourism will grow annually between 10 % and 20 %. The intrinsic link between the environment and tourism was highlighted in the Partnership Agreement for the use of European Structural and

Investment Funds which included a specific objective on increasing attractiveness, educational capacity and sustainable management of natural heritage sites.

The high import dependence of the Croatian economy is explained by the strong link between imports of goods and tourism. Import elasticity with respect to domestic income and relative prices are typically used as measures of import dependence. In Croatia the link between imports and exports is relatively high, but all in all comparable to that of other EU peer economies. Whereas in the latter group of countries, import elasticity is mainly driven by high levels of intra-industry exports and imports, in Croatia imports of goods are mainly linked to export of services, i.e. tourism (see box 2.3.2). The strong link between imports and tourism also explains other structural characteristics of goods imports in Croatia: its higher and partially different seasonality profile (imports are typically higher in the tourism months) and the higher weight of consumption goods (which — unlike EU peer economies — also shows a marked seasonality profile). An additional finding is that the elasticity of imports with respect to domestic consumption is relatively high only in the short term, whereas in the long run imports are not needed to satisfy domestic consumption. This implies that domestic producers are able to satisfy a permanent increase in consumption levels, whereas temporary increases and seasonal peaks generated by tourists tend to be addressed through higher imports.

The energy bill has decreased, thanks to favourable price developments, but energy efficiency remains low. The negative balance in export and imports of energy prices has recently decreased from about 5.5 % of GDP in 2012 to about 4 % of GDP in 2014. Favourable price dynamics in 2015 are likely to further reduce the energy deficit. The corresponding deficit for the EU peers was 4.4 % and 3.4 % in 2012 and 2014 respectively. Croatia has a high-carbon-intensity economy, about 70 % higher than the EU average. On the energy intensity of companies Croatia comes 11th within the EU. Energy intensity declined by 9 % from 2005 to 2012, while final energy consumption dropped by 7 % from 2005 to 2012, with the reductions coming mainly from the industrial sector and partly from the residential sector. Moreover there has been an increase in gas

Box 2.3.2: An analysis of drivers of imports

Empirical specifications of import demand functions typically relate the aggregate volume of imports to the aggregate volume of domestic demand and prices, both domestic and foreign. Reiniger (2007) estimates the responsiveness of imports in central and eastern European EU member states, including Croatia, with respect to different components of final demand, namely household consumption, investment and exports. The results of the analysis show that exports are the main driver of imports – with elasticities well above 0.4 and in some cases as high as 0.8– due to the high degree of integration of those economies in global value chains, which entails a high import content of exports. The link with private consumption is often much weaker or even negative, and in most cases not significant, whereas the elasticity with respect to investment is significant, but typically lower than the elasticity with regards to exports ⁽¹⁾.

The analysis in this Box applies a similar approach, but distinguishes between the responsiveness of imports to changes in components of final demand and/or relative prices in the short term, and the long-run equilibrium relationship. Imports of goods and services (and the relative deflator) are netted out of trade in energy products and ships, due to high volatility in prices and volumes respectively.

In the first step final demand is broken down into private consumption, investment and export. Results suggest that Croatia behaves in a similar way as its EU peers: in particular the long term elasticity w.r.t. consumption, investment and exports is estimated respectively at -.01, .30 and .80, with the elasticities w.r.t. investment and exports are highly significant, whereas the elasticity w.r.t. consumption is not significant.

Table (1): Estimated short and long term elasticities

Variable	Coefficients	Std. err.	t-Statistic	Prob.
Long run				
Consumption	-0.020	0.068	-0.290	0.774
Investment	0.247	0.043	5.808	0.000
Export of goods	0.250	0.031	7.991	0.000
Export of services	0.704	0.092	7.683	0.000
Relative price	-0.172	0.083	-2.072	0.045
Short run				
Error Correction term	-0.722	0.110	-6.570	0.000
Consumption	1.408	0.341	4.132	0.000
Investment	0.173	0.036	4.765	0.000
Export of goods	0.120	0.042	2.882	0.006
Export of services	0.389	0.076	5.153	0.000
Relative price	-0.530	0.163	-3.257	0.002

*Bold coefficients significant at 99% confidence level and *italic* coefficients significant at 95% confidence level.

(*) Estimates based on Error Correction Model specification.

Source: European Commission, based on Eurostat National Accounts

In a second step external demand is disaggregated into exports of goods and exports of services. In this specification, the link between imports and exports is mainly driven by the exports of services (with an elasticity estimated at .74). The elasticity w.r.t. exports of goods is in the same order as the elasticity w.r.t. investment (around .25). This is in contrast with other EU peer economies where the high elasticity of imports w.r.t. external demand, is essentially driven by exports of goods. It is also interesting to note that in the short-run, the elasticity with respect to consumption is high (above unity) and highly significant. As could be expected, shocks in consumption are compensated with imports, but longer term increases are met by domestic production.

Finally, consistently with evidence from other countries, the elasticity with respect to prices is negative and significant in the short run, but weakens and is less significant in the long run.

⁽¹⁾ According to Reiniger (2007), the fact that private consumption is not significant is not highly surprising for catching up economies, given that most people have low income levels that do not allow them to buy large quantities of imported goods or goods with a high import content. See Reiniger T., "Factors Driving Import Demand in Central and Eastern European EU Member States", Oesterreichische Nationalbank Workshops, No. 14, 2007.

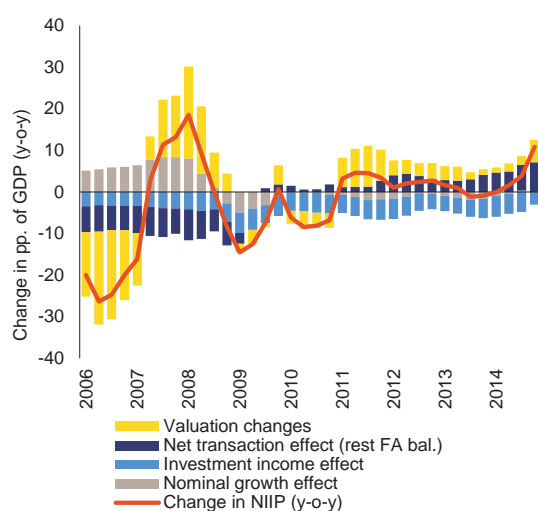
trade deficit as domestic gas production has been diminishing at a rapid pace over the last 8 years. While Croatia still has low import dependence for gas in absolute terms, the dramatic increase over the past years calls for appropriate measures to mitigate possible supply shocks.

External debt sustainability

The ratio of net external liabilities to GDP has stabilised, but further current account surpluses are needed to bring about a substantial reduction of external debt. Croatia's net external liabilities amounted to almost 78 % of GDP in the third quarter of 2015, one of the highest ratios in the EU. Since 2011, the net international investment position (NIIP) has

broadly stabilised at about -90 %, while in the third quarter of 2015 it improved by more than 11 pp. (see graph 2.3.8). Valuation effects have been quite modest in the recent past, but appear to have been more substantial in the third quarter. The recent improvement in the NIIP is related to the losses incurred in the foreign-owned banking sector, following the conversion of CHF loans, and also to a substantial external deleveraging of financial corporations (though this has mainly taken the form of increased assets, rather than reducing liabilities). Note however that the Croatian National Bank recently adopted a new methodology for compiling NIIP statistics, so it is possible that part of the valuation effects also reflect a break in the series. However, substantial current account surpluses will need to be maintained if the NIIP is to be reduced.

Graph 2.3.8: Rate of change of NIIP (y-o-y)



Source: Eurostat

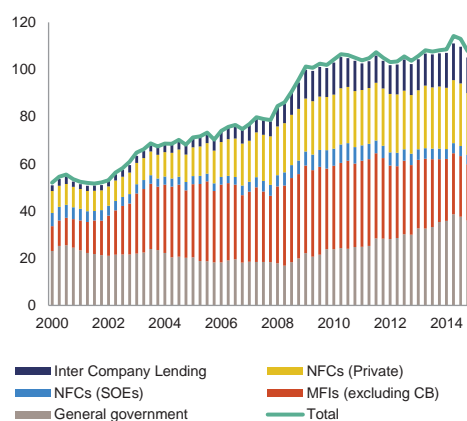
External debt has increased above GDP, but is mostly long-term and partly linked to inter-company lending. The remaining liabilities consist of debt instruments. Between 2008 and 2014, gross external debt has increased from 80.4 % of GDP to 108.9 % of GDP. The spread of returns with respect to debt instruments held by Croatian residents has abated somewhat following the peak in 2008 and 2009, but is still significant. Graph 2.3.9 highlights the external dimension of the debt accumulation dynamics analysed in the previous sections. Non-financial corporations broadly stabilised their external debt; MFIs

(excluding Central Bank) deleveraged vis-à-vis the external sector, while the rising external indebtedness is being driven by the General Government. The high share of gross external debt is a source of vulnerability, albeit mitigated by the fact that a significant share is represented by inter-company lending (about 15 % of GDP). Moreover almost 95 % of external debt has a maturity of more than a year. Finally, the increasing gross external debt has been compensated by increasing reserves, so that net debt has also been relatively stable (see graph 2.3.1).

According to medium-term projections, the external debt-to-GDP ratio is set to decrease significantly in the next few years, but risks related to interest rate shocks remain significant. According to projections based on the Commission forecast gross external debt is projected to fall to below 90 % of GDP by 2020 ⁽²⁹⁾. Sensitivity analysis suggests that there is a limited impact to changes in inflation and real growth. This is because in an environment of low nominal and real growth, the main driver of developments is the interest rate. According to simulations, even with an increase in 1 and 2 percentage points in the interest rate, gross external debt is set to decrease. Yet if the rate of return were to increase to about 7 % (an admittedly high, but not totally implausible rate), the debt-to-GDP would start to rise. All in all, this suggests that external risks for Croatia are progressively abating. However in the event of uncontrolled deficit developments, there is a marked risk of an increased interest rate, with negative consequences for the sustainability of external debt.

⁽²⁹⁾ This simulation is based on the Commission winter forecast up to 2017 and potential output growth thereafter. Long-term inflation is set at 2 %. The current account surplus has been fixed at 3 % of GDP, while it is assumed that other assets and liabilities would maintain their ratio to GDP.

Graph 2.3.9: External debt by sector (% of GDP)



Source: CNB

strong performance of exports of goods: (i) the integration in the Single Market, (ii) gains in cost-competitiveness and (iii) gains in non-cost competitiveness. The trade balance nevertheless remains negative, mainly due to the high import content of export of services. The current account however has turned to positive and with increasing absorption of EU funds, net financing is set to remain positive in the medium-run. A high share of external debt constraints Croatia's capability of running current account deficits and increase its vulnerability to internal and external shocks. Risks are mitigated by the current dynamics, which show a clear trend towards debt reduction.

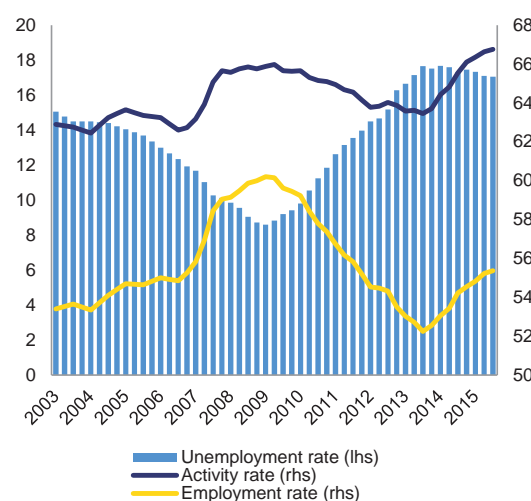
CNB's international reserve holdings are above or close to standard adequacy metrics. At EUR 13.5 bn by end-September 2015, Croatia's international reserves cover almost eight months of prospective imports, about 38 % of broad money (M2), more than 100 % of short-term external debt (excluding intercompany loans) and almost 30 % of total external debt. However, the high degree of euroisation in the economy complicates the assessment of reserve adequacy using standard metrics. In particular, the high share of foreign currency deposits held with the commercial banking sector (67 % in September 2015) represents a potential drain on international reserves that requires reserves above the standard adequacy metrics. For this reason, the regulatory framework obliges commercial banks to hold substantial foreign currency liquidity buffers. In addition to fulfilling the FX-denominated minimum-reserve requirements, in September 2015 commercial banks held almost EUR 4.5 bn in foreign currency and deposits with foreign banks (i.e. equivalent to about 1/3 of the Croatian National Bank's international reserves). The conversion of CHF loans necessitated foreign currency interventions by the CNB decreasing the international reserve level by about 5 bn (see also section 2.2).

The turnaround in export performance appears underpinned by structural drivers, but high external liabilities constraint Croatia's capacity to finance its growth and increase the economy's vulnerability to internal and external shocks. Three factors appear to underpin the

2.4. LABOUR MARKET ADJUSTMENT

Unemployment surged in the wake of the crisis, but started to decline in 2014. With the sharp contraction of economic activity in 2009, the private sector initiated a process of massive job shedding: between 2008 and 2013 over 240 000 jobs were lost and the unemployment rate reached a maximum of 18 % in 2013. But in 2014 the unemployment rate started falling and continued to do so in 2015. The registered unemployment rate (non-seasonally adjusted) fell to 17.2 % in October 2015, the lowest level since 2009. The Labour Force Survey (LFS) points to a similar trend, with a drop from 17.1 % in the first quarter to 15.4 % in the third quarter of 2015 (seasonally adjusted rates), largely driven by the shrinking number of jobless people.

Graph 2.4.1: Activity, employment and unemployment rates



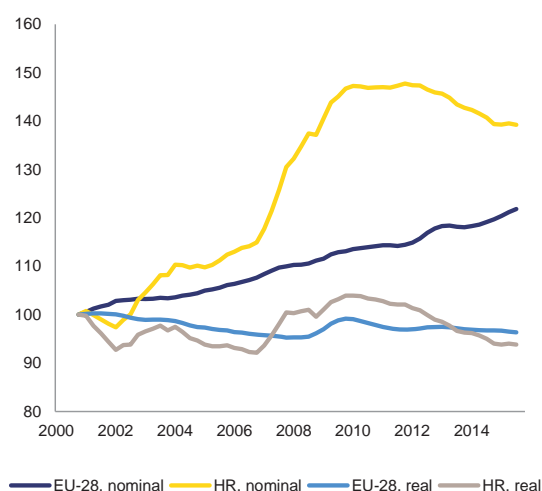
(1) Four quarters moving averages
 Source: Eurostat

After a prolonged period of continued growth, wages has been moderating more recently. The sustained wage growth of the pre-crisis cycle continued despite the turnaround in the macroeconomic cycle. However, in 2012 wages started to moderately decrease; both national accounts (compensation of employees) and gross earnings data from the survey of establishments show a broadly similar picture ⁽³⁰⁾. Unit labour

⁽³⁰⁾ The national accounts are nevertheless likely to overestimate the drop in 2014. This is linked to the large shift in the composition of employment that occurred with the revision of the LFS methodology in 2014. Specifically,

costs are expected to have remained largely stable in 2015, thanks to marginal increases in productivity. After the strong decrease registered between 2010 and 2014, real unit labour costs (ULC) are set to broadly stabilise.

Graph 2.4.2: Nominal and real gross earnings and compensation per employee (2010=100)

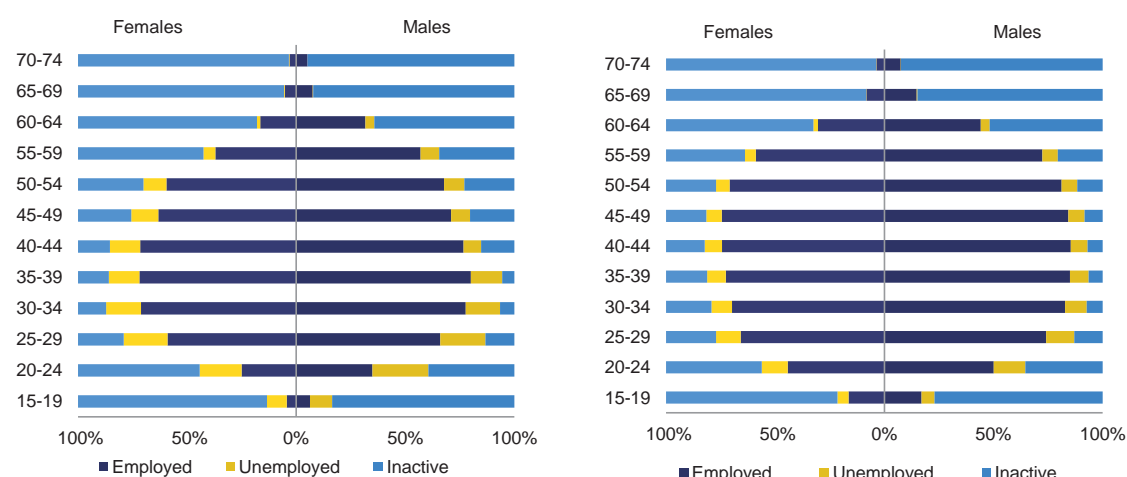


(1) Real wages are deflated by HCIP
 Source: CBS, Eurostat

Utilisation of labour potential remains low, holding back growth and hampering the unwinding of imbalances. Growth in the pre-crisis years had relied to a large extent on growing use of labour inputs from rather low levels, with limited contributions from gains in Total Factor Productivity (TFP). High job losses during the prolonged recession resulted in a 15 % decline in employment. Yet at the same time, economic restructuring was modest, resulting in delayed and limited gains in TFP. Going forward, high inactivity rates are set to weigh on Croatia's potential growth, and hence on the pace of unwinding of macroeconomic imbalances.

the number of employees increased significantly, whereas the number of self-employed decreased — which affects the metrics for compensation of employees (see box 2.4.1). Independently of the metrics used, the adjustment in real wages as of 2011 has been substantial, when compared with dynamics in the EU28 and the EU peer countries.

Graph 2.4.3: **Employment, unemployment and inactivity rates in Croatia (left panel) and in the EU (right panel) by sex and age group, % of the population in the relevant age group**



Source: Eurostat

Labour supply and inactivity

The labour force continues to be negatively affected by the rapidly ageing population and recent migration outflows Since 2000, the Croatian working age population has been declining on average by some 10 000 persons a year (ca 0.3 % of working age population) and significant further drops are expected. The natural growth rate has been negative by ca 0.25 % in this period. EU accession has increased opportunities to work abroad, but the impact of outward migration on the labour force has so far remained limited. Based on register data, between 2012 and 2013, labour mobility flows out of Croatia into other Member States increased by around 26 %, although in headcount these flows remain very small (3 216 people in 2012 and 4 058 in 2013)⁽³¹⁾. Of those who left the country in 2014, about 45 % were aged between 25 and 44. These figures are, however, likely to underestimate the real size of emigration, since many people do not inform the register offices that they have left the country. Data from the LFS, for example, show that between 2014 and 2015, the number of Croats

living in other EU Member States may have increased by some 15 000 — a significantly higher number, but nevertheless still a contained outflow (ca 0.8 % of labour force). Tertiary graduates are slightly overrepresented among those who have recently left Croatia ⁽³²⁾.

Notwithstanding the negative demographic dynamics, the main challenge to greater labour utilisation stems from low employment. In 2014, employment rates for men and women aged over 15 stood at 49.2 % and 37.9 % respectively, as opposed to 57.9 % and 46.0 % in the EU28. The high rate of unemployment in Croatia is the main driver of the employment gap to the EU average in the younger age groups (especially males) up to 40 years of age. Among the prime age groups (i.e. 40-59), however, the main reason for the employment gap is low activity rates (see graph 2.4.3).

Low activity rates are mainly the result of early retirement for men; for women, family care responsibilities also play a major role. According to self-declared reasons for not seeking work based on the LFS, the impact of retirement is most visible among men in prime age. It explains more than half of the inactivity already starting in the age bracket 40 to 44, whereas discouragement explains only a small

⁽³¹⁾ European Commission, Report from the Commission to the Council on the Functioning of the Transitional Arrangements on Free movement of Workers from Croatia (First phase: 1 July 2013 - 30 June 2015), of 29 May 2015, COM(2015)233, and the accompanying Commission Staff Working Document, SWD(2015)107.

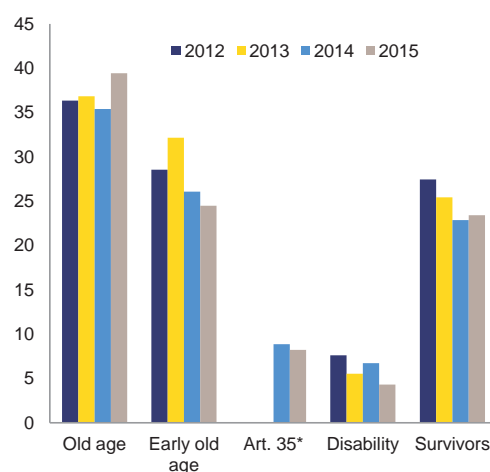
⁽³²⁾ Ibidem.

fraction (about 8 %; EU: 16 %) of inactivity in Croatia. For women, retirement is the predominant reason not to work in the 55 to 59 age bracket. In the larger age bracket 45-59, care responsibilities explain about one third of the inactivity among Croatian women (well above the EU average) ⁽³³⁾. In contrast, inactivity rates among women up to age 44 tend to be slightly lower in Croatia than in the EU. The reverse situation among older women may signal changing attitudes across cohorts to childcare, but also seems to be linked to limited availability of elderly care ⁽³⁴⁾. In Croatia, the provision of community-based services and formal care are scarce, while there is a high degree of family care, mainly provided by female relatives ⁽³⁵⁾.

Early retirement and short careers are still widespread in Croatia. With 12 % of the working age population in some form of retirement, Croatia tops the EU ranking. The average duration of working lives (32.3 years in 2014) is among the lowest in the EU (35.3 years). Since the beginning of the crisis, it has further decreased, especially for men. As a result, the employment rate of older workers (aged 55-64) stood at 36.2 % in 2014, also among the lowest in the EU (average of 51.8 %). In September 2015, only 14.1 % of all recipients in Croatia (excluding privileged categories) received pensions based on 40 or more years' service. And about 30 % of all pension beneficiaries had less than 25 years of service, with women being overrepresented in this group. Finally, Croatia ranks low for the Active Ageing Index: 18th out of

28 in 2014, but only 23rd on the employment sub-index ⁽³⁶⁾. The short contribution periods result in low pensions for the general population (see section 3.3. for further analysis on adequacy of pensions).

Graph 2.4.4: Share of new retirees per type of pension



(1) Art.35: Retirement without penalty based on age (60) and completed min. 41 years of contributions classified as old age retirement. Data related to Art.36 (early retirement with no penalty due to employer's bankruptcy) was not included as it is negligible (about 0.1 % in 2015). 2015 data are up to November 2015.

Source: European Commission based on data from Croatian Pension Insurance Institute.

Incentives for longer working lives are weak. Currently penalties for early retirement and the late retirement bonus offer little incentive to work until (and beyond) the statutory retirement age ⁽³⁷⁾. Furthermore, the gap of five years between early and statutory retirement age is high relative to the EU average of below three years. Finally, legal provisions seem also to preclude the possibility of working longer: in the public sector employment is automatically terminated at 65. The pension system includes generous rules for some categories

⁽³³⁾ At the same time, the employment impact of parenthood in 2013 was relatively low at 1.3 % vs 9.2 % in the EU28 (indicating the difference in percentage points between employment rates in the age group 20-49 with and without children aged 0-6). Formal childcare services for children under 3 had a total coverage of 11 % in 2013, compared to the EU-28 average of 27 % and the Barcelona Target of 33 %. Coverage for children aged from 3 years to compulsory school age increased from 40 % in 2012 to 47 % in 2013, compared to the EU-28 average of 82 % and the Barcelona Target of 90 %.

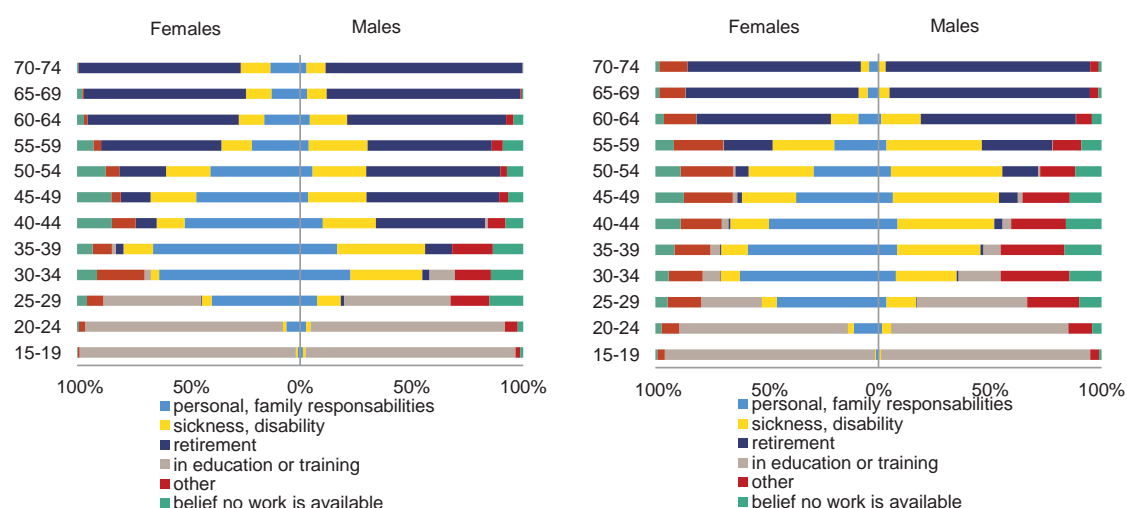
⁽³⁴⁾ There is a considerable coverage gap between the estimated number of dependent persons (around 300 000) and those receiving some type of care (around 50 000).

⁽³⁵⁾ Only 2 % of the population is in formal care versus 5 % EU average. Economic Institute of Zagreb and The World Bank (2012) Croatia Policy Notes. The scale of family care in Croatia is above the EU28 average, with, notably, 27 % of female respondents in age groups 35-49 and 50-64 involved in care for elderly or disabled relatives. The rates for women are highest in Europe. (Eurofound, 2011/2012).

⁽³⁶⁾ See the Pension Adequacy Report 2015. The employment sub-index is based on employment rates of people aged 55 to 74. The overall index takes into account also participation of older people in society, incidence of independent living and a country's capacity for active ageing.

⁽³⁷⁾ The penalties for early retirement translate into a decrease in the net theoretical replacement rate of less than 5 % for an average earner who retires two years before the standard retirement age. Working longer can raise the net theoretical replacement rate by less than 5 %.

Graph 2.4.5: **Reasons for not looking for work in Croatia (left panel) and in the EU (right panel) by sex and age group, % of the population in the relevant age group**



(1) 'Personal and family responsibilities' includes: looking after children or incapacitated adults; 'Other' includes: awaiting recall to work (persons on lay-off), no response and any other reason.

Source: Eurostat

of pensions (14 professional groups, paid from the general system but under more favourable conditions) and, until recently, lenient eligibility rules for disability, and a slow equalisation process of the retirement age for men and women. The current pensionable age for men is 65 years for statutory pension and 60 years for early retirement. For women, the retirement age (61 years and 6 months in 2016) is gradually being equalised to that of men but it will not be before 2030 that full equalisation will be realised. By 2038, the statutory retirement age will increase to 67, and 62 for early retirement.

Inflows into early retirement and disability pensions decreased in the first 11 months of 2015, but vulnerabilities in the system remain.

The positive trends in early retirement could be partly related to the improved situation on the labour market, but possibly also to policy measures taken over the past years. A Single Evaluation Body was established in January 2015 with the purpose of limiting the inflow into disability pensions and reducing fraud. 2015 data on new entrants indicate the first positive results of unifying disability assessments. It should also be noted that, due to the conversion of some 87 000 invalidity pensions to old-age pensions in March 2015, the share of disability pensions decreased without impacting the level of overall pension

expenditures. Meanwhile, the adoption of the Job Categorisation Act, aimed at streamlining the list of arduous or hazardous professions benefiting from a lower retirement age, has been put on hold⁽³⁸⁾. Similarly, legislation aimed at incentivising military personnel and police officers to stay in employment after their pension rights mature is also pending. No further steps have been taken to develop a comprehensive active ageing strategy (see also section 3.3 covering active labour market policy measures and adult education).

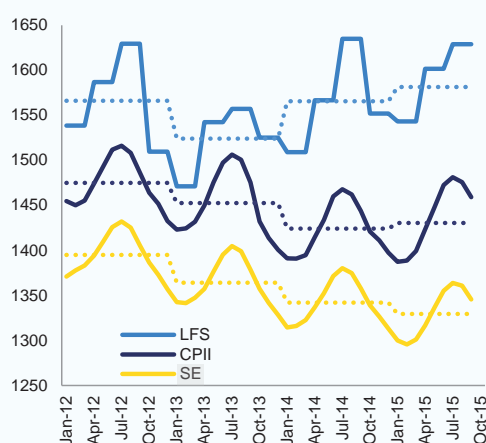
⁽³⁸⁾ Progress was made in analysing and monitoring 11 professions and 14 jobs, out of the 74 selected.

Box 2.4.1: Employment and unemployment statistics

Three different data sources are commonly used to monitor labour market developments in Croatia: i) administrative data on affiliates to social security from the Croatian Pension Insurance Institute (CPII), ii) the survey of establishments by the Croatian Statistical Bureau (CBS) and iii) the labour force survey (LFS), also conducted by the CBS.

Inconsistencies in data from the three sources – in terms of both levels and trends – make it difficult to monitor labour market developments. The inconsistencies are mainly related to the use of different definitions of employment. CPII data defines all insured persons as employed; the CBS survey of establishments counts people who are employed in Croatia with a work contract (although complemented with data from the CPII for self-employed and farmers); and the LFS uses the ILO definition of employment, which tends to be broader than the former two definitions. From 2016, the CBS will align the definition of employment in the survey of establishment to the one used in CPII, which should result in increased consistency. As regards the LFS, which is the only source that can provide comparable data across countries, the observation of labour market trends is further complicated by the fact that in 2014 the CBS reweighted the LFS data on the basis of the 2011 Census (previously it used the 2001 census). Although previous waves of the LFS were reweighted to ensure consistency, there appears to remain a break in the series in 2014.

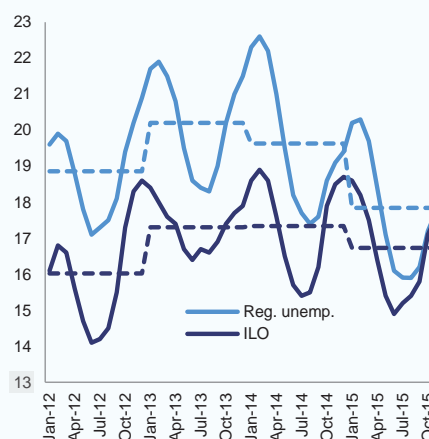
Graph (1): Employment according to the LFS, the survey of establishments and the CPII (thousands).



Notes: Dashed lines represent the yearly average; for 2015, the yearly average goes from July 2014 to July 2015.

Source: Eurostat, LFS and CBS

Graph (2): Registered and LFS unemployment rate (ILO definition) (% of active population)



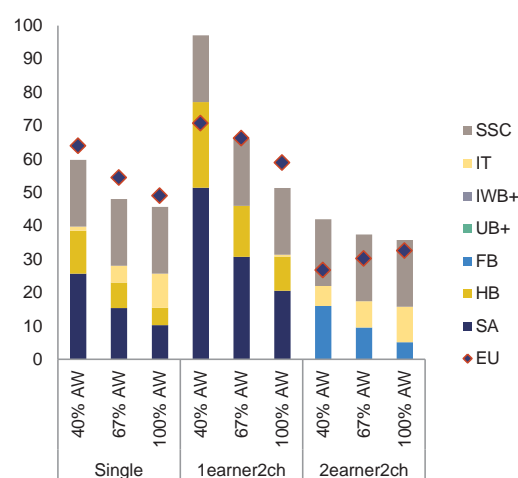
Notes: Dashed lines represent the yearly average; for 2015, the yearly average goes from October 2014 to October 2015.

Source: Eurostat, LFS and CBS

A similar problem arises with the measurement of unemployment. Two sources are typically used: the unemployment register of the Croatian Employment Service (CES), and the Labour Force Survey. For the calculation of the unemployment rate, differences in the number of unemployed compound with differences in the reference population, since the former uses the active population derived from the survey of establishment, which differs from the active population measured on the basis of the LFS. Differently from the LFS, CES data shows a significant drop in the unemployment rate in 2014. Besides differences in transitions to employment due to the above-mentioned differences in the definition of employment, the drop could be explained by the fact that eligibility conditions to the unemployment benefit became stricter in 2014, resulting in a 20% drop in the number of registered unemployed in 2014 and a similar drop in 2015.

Inactivity traps are high for single-earner households with low labour income. The analysis of the change in marginal effective tax rates (METRs) can be used to assess the risks of inactivity traps ⁽³⁹⁾. METRs are determined by the compound effect of personal financial inflows and outflows when moving from inactivity to paid employment: losing various benefits (social assistance (SA), housing (HB) and family (FB)) and paying additional income taxes (IT) and social security contributions (SSC). Graph 2.4.6 shows that in Croatia METRs are broadly in line with the EU average, but are high and above EU average for households with a potential low-wage single earner with children. High METRs mainly result from a sharp reduction in eligibility to means-tested benefits when a certain income threshold is reached ⁽⁴⁰⁾.

Graph 2.4.6: **Marginal effective tax rates in Croatia and in the EU (from inactivity to employment)**



(1) The three household typologies refer to single, single earner couple with two children and two-earner couple with two children.

For each typology, METRs correspond to three earnings levels: 40 %, 67 % and 100 % of the average wage. Earnings of the first earner are fixed at 100 % of the average wage in the case of the two-earner couple.

Source: EU-OECD Tax and Benefit database.

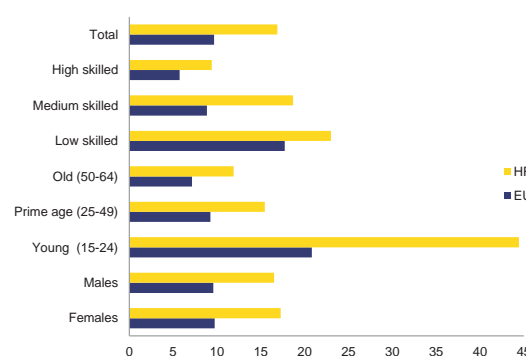
⁽³⁹⁾ METRs are defined as the income lost by moving from inactivity into paid employment, expressed as a % of the prospective labour income.

⁽⁴⁰⁾ Also Bejakovic et al (2012) and Bezeredi and Urban (2014) point to this issue. Households are not eligible for child allowance once the income per household member exceeds HRK 1 663.00 (EUR 217).

Unemployment and labour market institutions

The improving macroeconomic situation is having a positive impact on employment, but the situation is still critical for the most vulnerable. The improved macroeconomic situation and increase in public employment impacted positively on employment dynamics, however inconsistencies in statistical series blur the reading of these data (see box 2.4.1). Whereas inactivity is the main driver behind the employment gap with the EU average in prime age, Croatia also has one of the highest unemployment rates in the EU. By the end of 2014, the unemployment rate stood at 17.5 %, almost 7 % above the EU average.

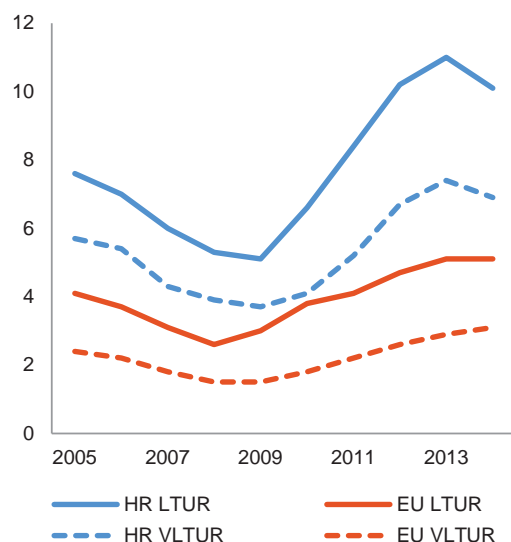
Graph 2.4.7: **Unemployment rates in Croatia and in the EU (total and specific groups, 2014)**



Source: Eurostat

Unemployment rates are particularly high among young people and the low-skilled. In conjunction with the pickup in economic activity, the youth unemployment rate (45.5 %), the Not in Education, Employment, or Training (NEET) rate (19.3 %) and the long-term youth unemployment rate (22.6 %) have all started slightly decreasing, after the peak reached in 2013. Nevertheless, all indicators are still among the highest in the EU and well above their pre-crisis levels. Also the unemployment rate for the low-skilled (25.8 % among those aged 20-64) is strikingly high, with no signs of imminent improvement. Although both the long-term and very long-term unemployment rates have recently fallen, they are still about twice as high as the EU average (see graph 2.4.8).

Graph 2.4.8: Long-term and very long-term unemployment rate in Croatia and the EU



(1) Long-term unemployment rate is the percentage of active population unemployed for more than one year. Very long-term means two years or more.

Source: Eurostat, LFS

The coverage of unemployment benefits is rather low. Only 17.8 % of the total registered unemployed received unemployment benefits in 2014, down from 20.4 % in 2013 and 22.9 % in 2012. The figure for the short term unemployed (less than 12 months) is estimated at 25 % (in 2014) compared to the EU28 average of 37 %. The falls in coverage are partly related to the relatively short duration of unemployment benefits, which is proportionate to the length of previous employment. This particularly affects young people with short work experience.

Disincentives to work seem to concern a comparably small share of the working-age population. Besides the inactivity traps discussed in the previous section, poorly-designed unemployment benefits may also reduce incentives for the unemployed to take up paid employment. Analysis based on a microsimulation model (using micro data from a 2011 households survey) suggests that about 55 % of unemployed and around 70 % of the inactive have METR below 30 %, while only 11 % of the unemployed and 7 %

of the inactive have METR greater than 50 % ⁽⁴¹⁾. Subgroups where there is a higher share of individuals with METR above 70 % are: the young inactive, low-educated unemployed, people in families with three or more children, and people whose spouse is also non-working. For the latter two groups, this seems to mainly result from a sharp reduction in eligibility for means-tested child benefits once a certain income threshold is reached. The inconsistencies in criteria for awarding social protection benefits could be another factor negatively impacting the incentives to enter the labour market. Furthermore, Croatia provides a generous sick leave package which might be subject to abuse, including by expecting mothers (though some improvements were visible in 2015 due to stricter monitoring and controls). Further details on social benefits are discussed in section 3.3.

The 2013 and 2014 labour market reforms have significantly extended labour market flexibility.

The Labour Act was extensively amended in 2013 and 2014, to extend the use of fixed-term contracts, simplify procedures for individual and collective dismissals, facilitate the use of flexible working-time arrangements and flexible types of employment (e.g. part-time and work via temporary agencies) ⁽⁴²⁾. These changes were largely driven by the government, following inconclusive consultations with the social partners. Following the 2013 labour market reform, a study of the Croatian National Bank analyses the changes in the OECD Employment Protection Legislation Indexes, for regular contracts (EPR) and temporary contracts (EPT). The study shows that the difference in the level of protection for the two contract types increased after the first phase of the reform, as the EPR index remained unchanged from 2008 (2.55), while the EPT index declined, from 2.2 in 2008 to 2.0 ⁽⁴³⁾. The Croatian National

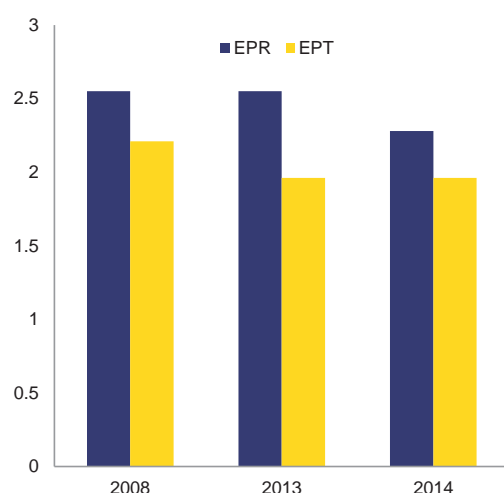
⁽⁴¹⁾ Distribution of marginal effective tax rate in Croatia: do taxes and benefits prevent people from getting employed? Institute of Public Finance.

⁽⁴²⁾ European Commission (2015), Macroeconomic imbalances Country Report — Croatia 2015, European Economy Occasional Papers 218.

⁽⁴³⁾ The author finds that the greater flexibility added to Croatia's Labour Act, by expanding the valid use of fixed-term contracts, has moved the country closer to existing practices in other countries. Kunovac (2014), Employment protection legislation in Croatia, Financial Theory and Practice, Vol.38 No2 June 2014.

Bank updated its estimate of the EPL score following the 2014 reform, and concluded that the second phase of the reform had reduced the gap, since the EPR index decreased from 2.55 to 2.25 ⁽⁴⁴⁾.

Graph 2.4.9: **Employment protection legislation for regular (EPR) and temporary (EPT) contracts in Croatia**



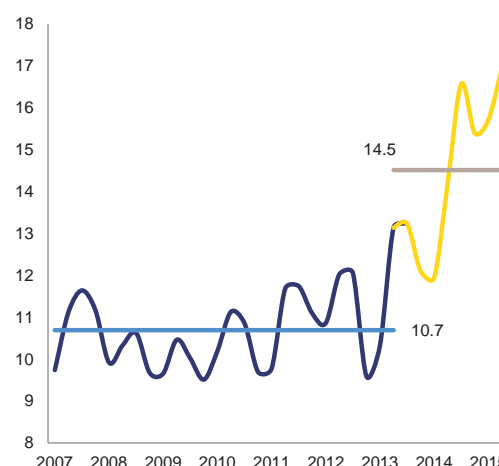
Source: OECD; figures for Croatia based on (Kunovac, 2014) and CNB (2014).

The first monitoring report on the 2014 reform paints a mixed picture of the take-up of the new legal provisions. The report indicates that few new collective agreements make use of the greater flexibility allowed in the organisation of working time. However, the renegotiation of many collective agreements — including in the public sector — is due over the next couple of years, so the take-up of these provisions may increase thereafter. Work through temporary agencies and part-time work has become more frequent, while the time to process collective dismissal procedures has been significantly reduced.

A strong pick up in temporary employment has been registered after 2013. According to LFS data, the use of fixed-term contracts has picked up considerably since 2013 (see graph 2.4.10). Although traditionally quite high in the tourism-

related sectors of food and accommodation, all sectors have registered an increase. The trend among young people (15-24 years) is even more pronounced, resulting in a higher share of such contracts than on average in the EU (some 57 % vs 43 %). On the other hand, following the amendments to the Act on Contributions ⁽⁴⁵⁾ that took effect at the beginning of 2015, more than 30 000 young people have been employed on open-end contracts, well above the initial target of 12 500.

Graph 2.4.10: **Share of employees with temporary contracts in total employment before and after the reform**



Source: Eurostat

Evidence suggests that both contract substitution and increased inflows into employment have driven the surge in temporary employment. The analysis presented in Box 2.4.2 shows that, following the 2013 reform, transitions from unemployment to employment on temporary contracts increased somewhat. However, the reform has also increased the probability of having a temporary contract for all categories of workers already in employment and especially for the self-employed (working on their own account).

⁽⁴⁴⁾ Croatian National Bank (2014), 'Reform of the Labor Act and Labor Market Flexibility in Croatia', Box 2 in Bulletin No 209, Zagreb: Croatian National Bank. As noted by Kunovac (2014).

⁽⁴⁵⁾ The Act stipulates that employers who offer permanent employment contracts to individuals under 30 are exempt from paying mandatory social contributions (20 % on the top of the wage) for 5 years.

Box 2.4.2: Assessing the impact of the labour market reform on the take up of temporary contracts

The comparison of in- and outflows across different labour market statuses between 2012 and 2014 allows capturing structural changes in the composition of employment by type of contract (i.e. open ended vs. temporary). Figure 1 shows that for all labour market statuses, the transitions to temporary contracts in 2014 were higher than in 2012, due to in particular: (i) transitions away from self-employment on own account, (ii) renewal of temporary contracts or transitions from open ended contracts ⁽¹⁾ and (iii) transitions from unemployment into employment.

Graph 1: Transition matrix between labour market status one year before the survey and status in 2012 and 2014

Current labour market status → Situation one year before survey ↓	Year	Employee		Self employed (own account)	Self employed	Inactive / unemployed
		Open ended	Temporary			
Employee	2012	82.8%	8.9%	0.5%	0.3%	7.6%
	2014	80.6%	10.2%	0.3%	0.3%	8.7%
Self employed (own account)	2012	0.9%	1.7%	91.6%	1.3%	4.5%
	2014	1.5%	10.4%	79.0%	2.3%	6.8%
Self employed	2012	0.5%	1.2%	7.3%	88.0%	3.1%
	2014	0.7%	0.8%	4.2%	89.2%	5.1%
Inactive	2012	0.0%	0.1%	1.2%	0.5%	98.2%
	2014	0.1%	0.2%	0.7%	0.3%	98.7%
Student	2012	1.3%	2.7%	0.8%	0.4%	94.7%
	2014	0.9%	4.5%	0.2%	0.7%	93.7%
Unemployed	2012	4.4%	9.0%	2.5%	0.5%	83.6%
	2014	4.3%	12.7%	0.9%	0.5%	81.6%

Source: Eurostat

The assessment of the impact of the 2013 reform is further complicated by the 2014 labour market reform which limited somewhat the protection of open-end contracts and the fact that in 2014 self-employed on own account ⁽²⁾ became liable to pay unemployment related social security contributions. These factors are also likely to have had an impact on temporary employment by reducing and increasing, respectively, the attractiveness of temporary employment. The analysis below does not distinguish the individual contribution of these subsequent measures – but measures their overall impact since July 2013, disregarding differences in the timing of implementation.

The econometric analysis presented in this Box explores whether the adopted changes in the regulation of temporary contracts increased the probability of being employed on a temporary contract, *after* controlling for effects (a) and (b) mentioned above. Other changes in legislation or variations in the overall macroeconomic situation are assumed to have an impact mainly on the relative risk of employment/unemployment, while having a negligible impact on the preferences of employers for type of contract offered.

A so-called selection model is used for the analysis, due to the fact that the outcome variable (employment on temporary contract) is only observable for a selected sample (i.e. persons in employment). ⁽³⁾ This allows to correct the estimations for potential distortions due to the fact that the employed population is not a random sample (i.e. not representative of the whole population). ⁽⁴⁾

Given that the first reform took place in June 2013 and in order to obtain a balanced sample of observations before and after the reform, the analysis relies on three consecutive years of the labour force survey, namely

⁽¹⁾ Unfortunately, the data does not allow distinguishing between transitions from open ended contracts to temporary contracts or simple continuation of previous temporary contracts.

⁽²⁾ Free lancers, private farmers, persons working in crafts and trades.

⁽³⁾ In the LFS, the question regarding the contractual form is asked only to workers who are classified as employees.

⁽⁴⁾ For example: women or low educated individuals may face lower employment opportunities, making them less likely to be included in the sample.

(Continued on the next page)

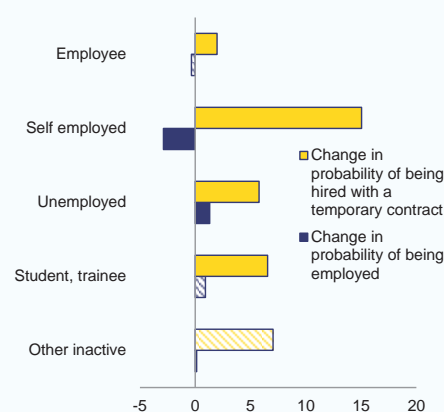
Box (continued)

2012, 2013 and 2014. The analysis is limited to all people between 15 and 65 years of age either employed, self-employed on own account, unemployed or inactive. ⁽⁵⁾

The **outcome variable** (employment on permanent contract) is modelled as a function of demographic variables (gender, age, education) as well as job specific characteristics. The latter allow taking into account the impact of the different incidence of temporary contracts across specific sectors (e.g. tourism) and occupations (i.e. occupations that do not require high investments in on-the-job training).

The **selection variable** – employment – is modelled as a function of the same demographic variables, with the addition of two controls for i) the marital status interacted with gender – since labour supply tends to be lower for married spouses, especially with children – and ii) the prevailing labour market conditions in each of the three years, i.e. the average unemployment rate.

Graph (2): **Change in the probability of (i) being employed and (ii) being hired under a temporary contract after the 2013 reform, conditional on the previous labour market status.**



Note: Pattern-filled histograms are not statistically significant.

Source: European Commission, based on Eurostat, LFS

These changes might have been indeed induced by the reform, as more flexible contractual arrangement are likely to have enhanced mobility in the labour market. The changes are however marginal and statistically not significant, except for unemployed (which could also be a consequence of activation measures) and self-employed (which could also be a reflection of the prolonged economic crisis).

More importantly, there has been a sharp and statistically very significant increase in the probability of being hired on temporary contracts for *all* labour force participants and for students and trainees – but especially so for the self-employed on own account.

⁽⁵⁾ Note that the variable indicating whether an employed person is employed under a fixed term or an open ended contract is only recorded for employees and not self-employed. The analysis therefore distinguishes two groups: employees with a temporary contract and a residual group including self-employed and employees with open-ended contracts.

In order to assess the changes following the reform, the model includes a dummy variable taking the value of zero before the reform and one after the reform. This dummy variable is interacted with the labour market situation one year before the survey. This allows capturing a possible differentiated impact of the reform for different labour market statuses – something that is indeed to be expected. Note that these interacted variables are used both in the selection equation (to measure the impact of the reform on mobility into employment) and in the outcome equation (to measure the impact of the reform on the probability of having a temporary contract, conditional upon being in employment).

Figure 2 shows the change in probability (i.e. the marginal effect) of being employed and having a temporary contract (conditional on being employed) after the reform, depending on the previous labour market status. The figure shows that following the reform, the probability of being employed increases for unemployed and students and decreases for employees and self-employed.

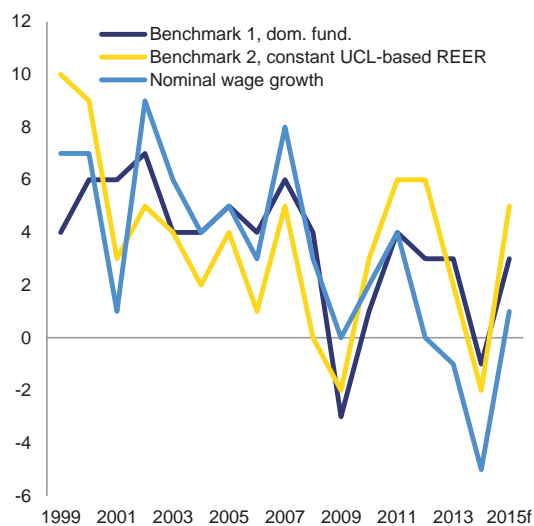
Wage-setting institutions

The public sector plays a central role in influencing employment growth and wage dynamics. In 2012 the public sector accounted for over 40 % of dependent employment, including both the government sector (e.g. public administration and public services) and an extensive subsector of state-owned enterprises ⁽⁴⁶⁾. Since then, employment increases have been mostly visible in public administration and the government-dominated areas of education and health. The 2014 review of the wage-setting system conducted by the authorities revealed that wages in the Croatian public sector are generally higher in comparison with similar jobs in the private sector. A further analysis of wage dynamics by sector suggests that the public sector also generates negative wage spill-overs to the private sectors ⁽⁴⁷⁾. The study finds evidence of wage leadership in the public sector, although the transmission of wage shocks to the private sector is only partial, due different wage-setting practices in the public and the private sectors. The conclusions suggest that wage setting in the public sector is likely to have played a role in the sustained wage growth before 2012 (see graph 2.4.11) and highlight the importance of wage setting in this sector for overall wage dynamics.

⁽⁴⁶⁾ Nestic et al (2014), data for 2012 on the basis of LFS (some 40 %) and the Annual report on employees and paid wages (some 43 %), as reported in the Statistical Yearbook published by the CBS.

⁽⁴⁷⁾ Unionisation in Croatia is relatively high in comparison to regional peers. However, there are large differences between the weakly unionised private sector and the highly unionised public sector. Wage bargaining can take place at different levels (national, industry/sector, and firm level), though in practice the bargaining system is decentralised and uncoordinated. Orsini and Ostojić (2015): 'Wage dynamics in Croatia: leaders and followers', Economic Brief, 3, October 2015.

Graph 2.4.11: Actual developments against domestic fundamentals



(1) Benchmark for wage growth predicted from wage equation on fundamentals, including unemployment, wages and prices developments.

Source: Eurostat

The determination of public sector wages is regulated by multiple legal provisions, which leads to incoherence across the system. The civil and public servant wages (defined as the basic wage multiplied by the complexity coefficient for the post occupied) increase by 0.5 % for each year of service. The basic wage (and all allowances, benefits, reimbursements and other supplements) is defined by a two-level decentralised system of collective bargaining ⁽⁴⁸⁾. On the first level, two basic agreements (one for civil servants and employees and one for public services) regulate the joint rights of all public employees. On the second level, five sectoral agreements regulate in more detail the rights of employees in certain public service activities (e.g. education, social welfare and health), and a number of collective agreements are in force for individual institutions (such as the Pension Insurance Institute, Air Navigation Services, the Croatian Centre for Agriculture etc.), for a total of 13 agreements ⁽⁴⁹⁾. The bargaining cycles for the basic and sector agreements are not fully aligned, which leads to

⁽⁴⁸⁾ Collective agreements define the wage as the basic wage plus supplements. But the laws don't recognise the concept of 'basic wage'.

⁽⁴⁹⁾ Public employees working for local administration are not covered by basic agreements and only few are covered by collective agreements.

duplications in provisions and overlaps, with different formulations regulating the same rights. Furthermore, wage determination in a number of institutions and public services is based upon internal acts, which in some cases depart from both the law and the collective agreements.

The basic principle of ‘equal pay for equal work’ is distorted by an inconsistent regulation of job complexity across public institutions. The job complexity coefficients for civil servants and public sector workers, ranging from 0.5 to 3.5, are prescribed by law. Job titles and their corresponding complexity coefficient are also prescribed by a government regulation, with numerous exceptions ⁽⁵⁰⁾. In addition, for almost 40 government bodies and over 60 public services, the government regulation establishes a whole set of ‘special’ job titles with their own complexity coefficients. This heterogeneity in the legal basis establishing the complexity coefficient across the public and civil services directly impacts wage calculation ⁽⁵¹⁾. For instance, due to the non-aligned categorisation across public institutions, there are hundreds of different wage supplements (derived from collective agreements, regulations and internal rules), even though they often refer to the same material right. Furthermore, cumulatively wage supplements can account for over 100 % of the basic wage. This has distorted the principle of ‘equal pay for equal work’. Finally, not only has this resulted in large wage differentials for the same job positions across the public sector, it has also hampered government control over the wage bill and the adjustment to prevailing macroeconomic conditions. During the crisis years, the government could not intervene in a systemic manner on the material rights of public sector employees but had to opt for a number of *ad hoc* solutions.

The reform of wage setting in the public sector is lagging behind. Preparatory steps have been taken towards reforming the wage-setting

framework, but concrete measures are still subject to debate with employers and unions. A new draft law on wages in the public sector is currently being prepared. Its main objective is to harmonise the wage-setting framework across public administrations and public services, by a set of measures including a new universal system of wage grades. For state-owned enterprises (SOEs), the Ministry of Labour and Pensions carried out a detailed analysis of all existing collective agreements concluded by state companies. The analysis highlights elements that hinder SOEs’ restructuring processes (such as open-ended collective agreements and the existence of privileged rights granted to certain categories of workers) and addresses a set of recommendations to the body responsible for following up on the report, the State Property Management Administration (DUUDI). As part of the effort to set up a more standardised and coordinated wage-setting system, four large SOEs established an employer association, with membership open to all SOEs. And the authorities have also set up an expert team involving social partners to analyse the coverage and effects of a minimum wage in terms of employment, productivity and social exclusion, with the aim of proposing future policy actions. This research focuses on sectors with the highest incidence of minimum wage.

The Croatian labour market is slowly recovering from the crisis but weaknesses remain. The unemployment rate started to slowly drop in 2014 as the economy recovered, but the situation is still critical for youth and low skilled. Labour utilisation remains low, mainly due to a widespread use of early exits from the labour market, which continue to be reflected in a structurally low activity rate. Recent reforms have extended labour market flexibility, possibly with a positive impact on employment growth but also leading to a significant increase in the use of temporary contracts. Though, part of the increase in temporary workers is due to a policy-induced shift from own-account self-employment to temporary employment contracts. Wages have been moderating over the past years, and unit labour costs remained largely stable in 2015. But inefficient wage determination in the public sector hampers government control over the wage bill and may hinder wage flexibility.

⁽⁵⁰⁾ The complexity coefficient range determined by the government regulation does not apply to public employees, whose rights are regulated by other specific laws or by the internal regulations of their institutions.

⁽⁵¹⁾ A higher complexity coefficient — sometimes more related to the affiliation to a certain institution rather than a certain job title — corresponds to a higher basic wage, and by chain-effect to higher supplements (largely determined as a share of the basic wage).

Box 2.4.3: **MIP specific monitoring**

In the 2015 European semester cycle, Croatia was found to experience excessive imbalances which require decisive policy action and specific monitoring. To this end, in December 2015 the Commission presented the third specific monitoring report ⁽¹⁾. This box concludes the specific monitoring cycle by summarising the findings on progress with reform implementation (see Annex X) focussing on the MIP relevant CSRs. For Croatia all six CSRs were considered relevant under the Macroeconomic Imbalances Procedure. The policies contribute towards the following overarching objectives:

Ensuring stable public finances. Some steps have been taken to improve budgetary planning and tighten expenditure control, but measures to strengthen the fiscal framework are facing delays. Plans to introduce a proper recurrent property tax have been put aside. Some of the savings measures identified in the spending review are being implemented but at a slow pace, while no steps have been taken to reinforce public debt management.

Reducing unemployment. There is a mixed picture on the take-up and impact of the 2013-14 labour market reforms. Preparatory steps have been taken towards reform of the wage-setting framework. Recent measures in support of youth employment are starting to bear fruit. The review of the tax and benefits system has not yet translated into concrete reform plans. Measures aimed at encouraging particular categories of workers to postpone retirement have been put on hold.

Increasing efficiency and competitiveness. A comprehensive reform of public governance is not in sight, although limited action was taken. The selection of SOE board members has been made more transparent, while the listing of minority packages and privatisations did not advance significantly. The business environment will benefit from recent steps to reduce administrative burdens and reform the insolvency framework. Lengthy court proceedings still hamper the efficiency and quality of the justice system, despite improvement in some areas.

Financial sector. Banks' lending activity remains subdued, also due to the still high rate of non-performing loans. Banking sector profitability is being affected by the legislation on the conversion of CHF loans, which could also adversely affect public finances and investor sentiment. The plan to conduct an independent asset quality review of the credit portfolio of the Croatian Bank for Reconstruction and Development (HBOR) in 2017 is welcome, given that it increasingly engages in direct lending activities.

With exception for the areas of insolvency framework and public corporate sector, where substantial and some progress have been recorded respectively, overall Croatia has made limited progress in addressing the other policy areas mentioned above.

This is broadly consistent with the findings in the third specific monitoring report. No further progress was made towards the correction of macroeconomic imbalances. With the run-up to the parliamentary elections, the implementation of the reform agenda has suffered significant delays. The elections were held on 8 November and the new government was formed in early January. Some decisive reforms therefore remain in preparatory phase and other policy decisions were put on hold.

⁽¹⁾ Review of progress on policy measures relevant for the correction of Macroeconomic Imbalances, December 2015.

2.5. MIP ASSESSMENT MATRIX

This MIP Assessment Matrix summarises the main findings of the in-depth review in the country report. It focuses on imbalances and adjustment issues relevant for the MIP.

Table 2.5.1: **MIP Assessment matrix (*) - Croatia**

	Gravity of the challenge	Evolution and prospects	Policy response
<i>Imbalances (unsustainable trends, vulnerabilities and associated risks)</i>			
Public debt	Public debt is forecast to have increased to 86.0 % of GDP in 2015. The debt sustainability analysis indicates high risks in the medium term.	<p>Between 2008 and 2014, public debt rose from 38.9 % to 85.1 % of GDP. The central government deficit was the most important driver of debt, as the authorities faced difficulties to bring expenditure in line with the developments on the revenue side.</p> <p>Materialisation of contingent risks related to state-owned enterprises and their integration into the general government sector was another key contributor to the increase in public debt.</p> <p>Public debt is projected to continue rising moderately in the short term to 87.4 % of GDP in 2017.</p>	<p>The budget law was amended in 2012 and 2015. Changes to the fiscal responsibility law are in the pipeline.</p> <p>The 2015 Public Internal Control System Act improved monitoring of state-owned enterprises, which carry a large proportion of contingent liabilities of general government.</p> <p>The debt management strategy expired in 2013. No measures have been taken to improve the debt management framework.</p> <p>Steps were taken to reduce compliance risks related to VAT refunds and the application of the reverse charge mechanism. A compliance risk management system is being developed.</p>
Household and corporate debt and the financial sector	<p>Corporate and household debt stand respectively at 80.2 % and 40.3 % of GDP.</p> <p>Reallocation of capital seems to take place, but deleveraging pressures weigh on investment and growth in the short term.</p> <p>Banking sector records abundant liquidity but is faced with profitability challenges in the light of the conversion of CHF household loans into EUR. Albeit well provisioned, the stock of the non-performing loans is congesting the banks' balance sheets.</p> <p>High corporate debt, especially in the weakly profitable construction sector, drives the high corporate non-performing loans rate (around 30 %).</p> <p>Around 70% of household debt and 25% of corporate debt is denominated in foreign currency.</p>	<p>Debt in both the household and the corporate sectors has stabilised after the peak reached in 2010.</p> <p>Deleveraging pressures in the households sector are set to abate. However, parts of the corporate sector (mainly construction) still appear burdened with excessive debt, while a significant share of debt remains concentrated in state-owned enterprises.</p> <p>Non-performing loans in the corporate sector are high. Furthermore, the high concentration of non-performing loans in the construction sector coupled with excessive debt is a source of concern.</p> <p>The recent decision on the conversion of CHF mortgage loans is resulting in significant losses for the banking sector.</p>	<p>The authorities have taken steps to facilitate the write off of corporate and household debt through reforms in the bankruptcy and pre-bankruptcy procedure and the adoption of legislation on personal insolvency, but implementation risks remain.</p> <p>No new measures have been taken to explicitly deal with the accumulation of non-performing loans on the banks' balance sheets, albeit the amended corporate and new personal insolvency legislation is expected to support their faster resolution.</p>

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External liabilities and trade performance	<p>Competitiveness losses accumulated in the years before the global financial crisis resulted in the build-up of large external liabilities, amounting to over 90 % of GDP. Around 2/3 of the net international investment position is represented by debt instruments.</p> <p>The current account has moved from a record deficit of 9 % of GDP in 2008 to surplus in 2013.</p> <p>The accumulation of external debt is driven by the public sector, which holds about 1/3 of external debt amounting to 36 % of GDP.</p> <p>The main risk to external sustainability is represented by the dynamics of the general government debt, both directly in terms of stock of liabilities and indirectly through pressures on the interest rates.</p> <p>External debt is almost exclusively foreign denominated (EUR), which adds to sustainability risks.</p>	<p>The trade performance has improved significantly and Croatia has regained some of its lost market shares (+8 % between 2013 and 2014).</p> <p>Improvement in trade performance is underpinned by structural changes, including improving quality of exports and integration in global value chains.</p> <p>In 2015, the surplus is expected to grow to over 4 % of GDP, though exceptional movements in the balance of income (linked to the conversion of CHF loans) inflate the surplus.</p> <p>Despite the turnaround in the current account the net international investment position has improved only marginally. External debt is set to contract over the medium run, but external sustainability remains vulnerable to shocks in interest rates.</p>	<p>The simplification of administrative procedures for imports and exports contributes to a reduction in transaction costs, though Croatian firms are still burdened by more costly administrative procedure.</p> <p>Weaknesses in the business environment remain, resulting in limited attractiveness of Croatia for FDIs and higher costs of doing business for Croatian enterprises</p>
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Adjustment issues

Labour market	<p>The crisis brought about a process of intense labour shedding that brought the unemployment rate from 9 to 18 %.</p> <p>Relatively sustained wage growth in the pre-crisis years and delayed adjustment to new macroeconomic environment accelerated job destruction.</p> <p>Overall, inactivity rates among the working age population in HR are among the highest in the EU.</p>	<p>Unemployment has started to decline, including for the long term unemployed, but at 16.6 % it is still among the highest in the EU.</p> <p>Temporary employment has picked up considerably.</p> <p>Wages have adjusted considerably over the past few years.</p> <p>Activity rates amongst man and women continued to decline fast after the age of 50 as recourse to early retirement is still widespread.</p>	<p>The flexibility of the labour market has been enhanced.</p> <p>The increasing weight of temporary employment is partially explained by substitution effects with self-employment.</p> <p>The government has undertaken a review of wage setting in the broader public sector (including state-owned enterprises), but has so far failed to propose reform measures.</p>
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Conclusions from IDR analysis

- The economy is burdened by a high stock of general government and corporate debt which constrains public and private investment and the ability of fiscal policy to respond to cyclical downturns. The large share of foreign denominated private and public debt amplifies vulnerability to financial markets' volatility. Despite being well-capitalised, the financial sector is under pressure by high rates of non-performing loans. The net international investment position and the external debt remain very high, and contribute to the vulnerability of the economy. Structurally low activity rates and high unemployment hold back the growth potential.
- The gradual economic recovery is expected to support the deleveraging efforts by the private sectors although non-performing loans are set to remain a challenge. Financial sector profitability will be affected by the conversion of CHF to euro loans. Public debt is expected to continue rising in the near term while contingent liabilities remain high. The current account is expected to remain positive and to support a gradual reduction in external debt.
- Measures have been taken to improve the insolvency framework for both households and corporates. High quality consolidation measures are needed to bring about a sustained improvement in the primary balance. Additional policies could help the financial sector in addressing the stock of non-performing loans. Further steps are needed to improve the performance and governance of the state owned enterprises and to improve the business environment.

Table (continued)

(*) The first column summarises "gravity" issues which aim at providing an order of magnitude of the level of imbalances. The second column reports findings concerning the "evolution and prospects" of imbalances. The third column reports recent and planned relevant measures. Findings are reported for each source of imbalance and adjustment issue. The final three paragraphs of the matrix summarise the overall challenges, in terms of their gravity, developments and prospects, policy response.

Source: European Commission

3. ADDITIONAL STRUCTURAL ISSUES

In addition to the imbalances and adjustment issues addressed in section 2, this section provides an analysis of other structural economic and social challenges for Croatia. Focusing on the policy areas covered in the 2015 country-specific recommendations, this section analyses issues related to the investment performance of private corporations and the public sector. Moreover, it analyses the investment gaps in several sectors, including infrastructure and network industries as well as the role of internal and external financing sources and the role of EU structural and investment funds. The main obstacles to competitiveness that are hampering economic growth and the recovery are also analysed in this section, with a focus on the main weaknesses in the business environment and in the broader public administration. Finally, in light of the high social costs of the prolonged crisis, the section reviews active labour market and social protection policies and identifies gaps in their design and implementation.

3.1 INVESTMENT

The period of robust pre-crisis investment came to a sudden stop in 2009, and the recovery is just beginning. Between 2002 and 2008, gross fixed capital formation grew at an average rate of almost 10.5 % per year, slightly above the average rate of peer EU countries. After a sharp decline in 2009 and 2010, the pace of contraction of investment abated, but the recovery only started in early 2015. The overall contraction of investment (35 %) in Croatia during the crisis was in line with that of peer EU countries. Some other EU countries had sharper contractions, followed by swifter recoveries (e.g. the Baltic countries) or more contained contractions altogether: Poland, Czech Republic, Slovakia, Hungary. Bulgaria, Romania and Slovenia saw contractions and slow recoveries similar to Croatia.

Private sector investment contributed slightly more to the pre-crisis robust investment growth and contracted slightly more during the crisis. As public sector investment already represented a relatively high share of GDP, private sector investment that grew at an average rate of 11.4 % in the period 2002-2008 contributed slightly more to the growth of investment. Between 2008 and 2014, private and public sector contracted by an average of 6.7 % and 6.0 % respectively. As a result of these dynamics, Croatia features a significant gap vis-à-vis the peer EU countries in both, private and public sector investment (i.e. 3.7 % and 15.0 % of GDP for public and private investment in Croatia, as opposed to 4.5 % and 16.8 % in the peer countries in 2014).

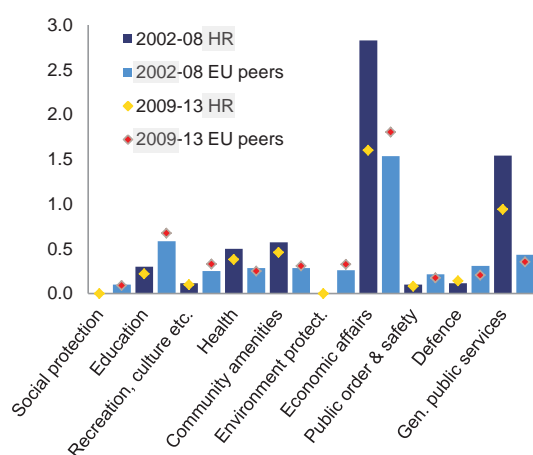
Public sector investment

Public investment was an important driver of growth in the pre-crisis period. In the period 2002-2008, Croatia's public investment averaged 6.0 % of GDP and was higher than in all EU Member States. As illustrated in graph 3.1.1, public investment focused predominantly on general economic affairs (mainly construction of roads) and public services (mainly investment in administration and operation of executive and legislative bodies). Improvements to the water supply network and healthcare investment were also considerably above the EU average. Public investments were largely carried out through debt-financed investments of public corporations ⁽⁵²⁾. Public investment was a key factor in shaping the financial position of the general government in 2002-2008 — with an average general government deficit of 5.0 % of GDP in cyclically-adjusted terms — but was also an important driver of growth in the pre-crisis period. The investment boom has been reflected in the quality of infrastructure. The World Economic Forum's 'Quality of Overall Infrastructure' Index (largely based on business executives' perceptions of the quality of transport and network infrastructure), reached EU average by 2010 and exceeded the peer countries' average by around 25 %.

⁽⁵²⁾ For instance, Moore and Vamvakidis (2008) report that investments of two motorway companies (that have recently been reclassified into the general government sector) averaged nearly 2.5 % of GDP in 2002-06. See Moore, D. and Vamvakidis, A. (2008): *Economic Growth in Croatia: Potential and Constraints*. Financial Theory and Practice, Issue 1, Volume 32, Institute of Public Finance, Zagreb.

Croatia experienced a sharp contraction in public investment. As shown in the box on Investment challenges, the fiscal adjustment in the post-2008 period was based predominantly on investment cuts. Although partly a correction of unsustainable developments from before the crisis, the strong reduction in public investment was a severe hit to an economy where investment used to be one of the biggest contributors to growth. The reduction might have contributed to the prolongation of the crisis. Correspondingly, the abovementioned quality of infrastructure index started to deteriorate again, undoing much of the comparative gains vis-à-vis Croatia's peers by 2015.

Graph 3.1.1: Breakdown of public investment by function in Croatia and in peer countries (% of GDP)

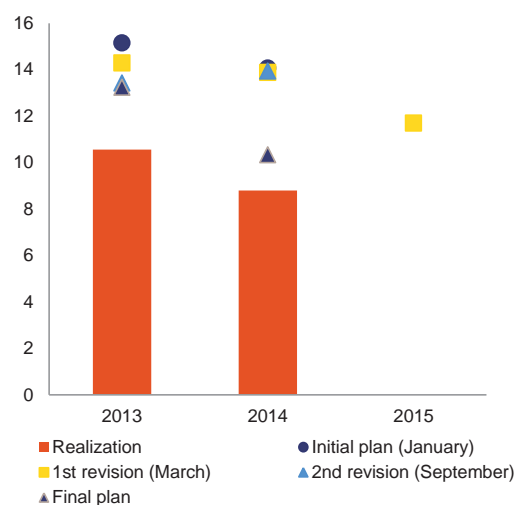


Source: Eurostat, COFOG

State-owned enterprises' (SOEs) investments were hampered by weak strategic planning and administrative bottlenecks to investment. In 2012, the government established the Centre for Monitoring Business Activities in the Energy Sector and Investments (CEI), a body tasked with monitoring and coordinating SOEs' investment. The 70 SOEs whose investments are being monitored by CEI were required to submit their investment projects to the Register of Investments by the end of Q1-2013. As of Q1-2015, only 42 companies have completed this task. CEI's reports show substantial mismatches between SOEs' investment plans and their realisation. As illustrated in graph 3.1.2, actual investment in 2013-2014 was on average around two thirds of

planned. Furthermore, even revisions of the investment plans conducted during the year tend to substantially overestimate final realisation. On aggregate, SOEs' investment plans for 2015 were substantially more conservative than the previous two ones, but nevertheless data for Q1-2015 show a realisation of merely 45 % of initially planned in the period. These findings point to weaknesses in strategic investment planning in some SOEs. Bottlenecks to investment of SOEs commonly observed by CEI include resolution of property ownership issues, lengthy expropriation procedures, mismatches between the cadastre, land registry and actual situation, differing administrative treatment of the same issues across different public administration bodies and uncertainty of public procurement procedures due to appeals which result in lengthy delays.

Graph 3.1.2: Investment plans and realisation of Croatian SMEs monitored by CEI (in HRK billion)

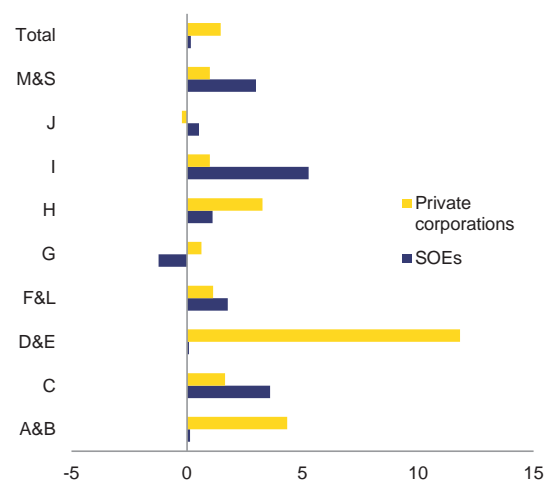


Source: Center for Monitoring Business Activities in the Energy Sector and Investments (CEI)

In the years after the crisis, SOEs invested relatively less than privately owned enterprises. In the case of Croatia this has multiple negative economic implications because of the size of SOEs and the role they play in the economy. According to microdata, investment by SOEs was somewhat stronger in certain sectors, including manufacturing and accommodation, where growth was even higher than in the private sector. When controlling for structural differences between SOEs and private companies (such as sector distribution, size and other factors including

indebtedness), SOEs significantly underperformed in terms of investment. If the growth rate of SOEs' fixed assets had been as high as in private companies (within each NACE sector), their total assets would have grown in nominal terms by almost twice as much between 2009 and 2014. Moreover, lower investment by SOEs did not result in a significant reduction in leverage ratios. As a result of these dynamics, the share of SOEs in total assets decreased substantially between 2009 and 2014 (from 36 % to about 30 %).

Graph 3.1.3: Average growth rates in fixed assets (2009-2014)



(1) Rate of change in book values of total fixed assets

Source: Orbis

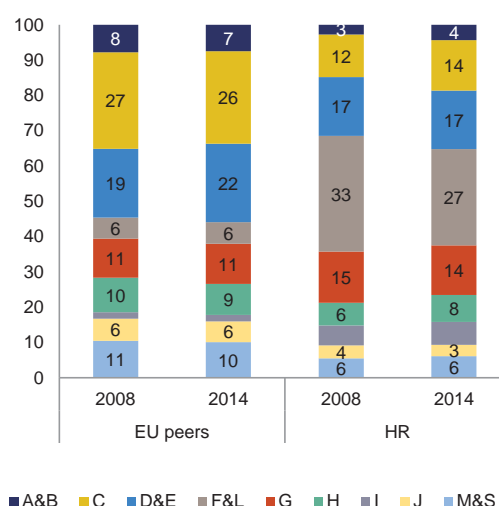
(1) A — Agriculture, forestry and fishing; B — Mining and quarrying; C — Manufacturing; D — Electricity, gas, steam and air conditioning supply; E — Water supply; sewerage, waste management and remediation activities; F — Construction; L — Real estate activities; G — Wholesale and retail trade; repair of motor vehicles and motorcycles; H — Transportation and storage; I — Accommodation and food service activities; M — Professional, scientific and technical activities; N — Administrative and support service activities; S — Other service activities.

Private investment

During the boom years, Croatian corporations invested heavily in non-tradable sectors such as construction and wholesale/retail trade. As already documented in previous reports, investment, both domestic and foreign financed, was largely oriented towards the non-tradable sectors. By the end of 2008, more than 65 % of fixed assets of firms were concentrated in the sectors of utilities and energy, retail and wholesale trade and construction and real estate. The

corresponding figure for peer EU countries was about 33 %⁽⁵³⁾. The concentration of capital in the construction sector was remarkable: it represented 34 % of total capital, compared with 5 % in the peer countries. The mirror image was a significant lower share of capital in the primary and manufacturing sectors (3 % and 12 % in Croatia, against respectively 8 % and 33 % in the peer countries).

Graph 3.1.4: Breakdown of total fixed assets by industry in Croatia and in the peer countries (% of total assets)



Source: Orbis

Despite the aggregate contraction of investment, capital reallocated towards tradable sectors.

Between 2009 and 2014, gross fixed capital formation contracted at rates of 6.6 % and 2.6 % in Croatia and in the peer countries, respectively. This process was accompanied both in the peer countries and in Croatia by a visible reallocation across sectors. The dynamics in Croatia were

⁽⁵³⁾ Sector level macro analysis of investment is hindered by the lack of national account statistics of gross fixed capital formation by NACE sector or by type of asset for Croatia. Firm-level micro-data can provide a picture of investment flows and capital allocation by sector. In particular, one can look at the distribution of fixed assets and their change in time as approximations of capital stock and investment flows. The micro-data (available only from 2005) confirm that in the period from 2005 to 2008 the rate of capital accumulation by NFCs was broadly comparable in Croatia and in the peer EU countries.

however not in sync with the broader region and to some extent compensated for the biased structure of capital allocation: the share of capital in the construction and energy and utilities decreased by 7 and 3 pps. respectively, but also in the ICT sector. On the other hand, the share of capital in the manufacturing sectors and in primary sectors increased.

The investment slowdown can be explained by high levels of debt and the weak macroeconomic environment. In the years following the financial crisis, firms have significantly reduced the pace of investment. A comparative analysis of firm investment behaviour in Croatia and EU peers, shows that the high indebtedness of Croatian firms is the main factor explaining the investment gap. Other characteristics, such as weaker profitability also play a role. More adverse macroeconomic conditions – such as weak internal demand and higher financing costs also contribute to the investment gap. According to the econometric

analysis, reducing the interest rate by 100 basis points, would push up the investment rate by almost 1 pp, while reducing the debt ratio by 10 pps. would increase the investment rate by .7 pps. (see box 3.1.1).

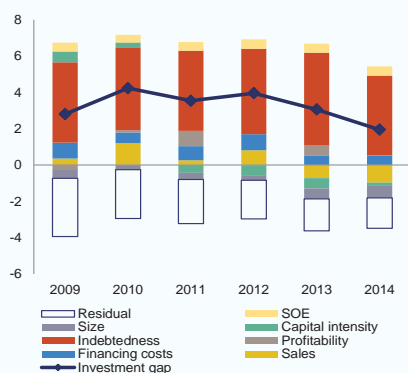
The strong contraction in FDI also contributed to the slowdown in investment. Following a strong decrease during the recession, foreign direct investment picked up in 2014 and 2015. In 2014 the inflow of foreign direct investment was strongest since 2008. It should be noted that this figure is strongly influenced by round-tripping effects, which were not present in the period 2010-2013. Even so, the pick-up in FDI in 2014 is evident and expected to have been somewhat lower in 2015, based on observed market activity. Sector-wise, during the recession FDI decreased in the financial services sector and to an extent in retail, but a shift towards the tradable sectors has overall not been very pronounced, notwithstanding a recent big outlier transaction.

Box 3.1.1: Firms' investment pattern in Croatia and in EU peers

Firm-level investment data provide valuable insights into the factors driving and hindering investment. A recent study by the European Commission analyses firms' investment decisions in vulnerable Member States of the euro area through an equation that models firm-level investment as a function of individual firm characteristics, as well as aggregate conditions affecting all firms within an industry across all the examined countries ⁽¹⁾.

The empirical analysis presented in this Box applies a similar analytical framework to determine the extent to which firms' investment in Croatia and in peer EU countries in central and eastern Europe ⁽²⁾ can be explained by market developments and individual firm characteristics such as sales growth, profitability and indebtedness. We proxy investment by the rate of change of fixed assets and estimate an investment function on annual data covering the period 2009-2014 from the Orbis database. The following lagged company variables are included as fundamentals, potentially explaining firms' investment behaviour: sales growth, profitability (measured as return on assets) and indebtedness (the ratio of noncurrent liabilities to operating revenues). The specification also includes (current) capital intensity (fixed assets over total assets) and size (total assets and total assets squared), to capture likely differences in investment behaviour related to firm needs and (non-linear) scale effects. We also include a dummy for publicly owned enterprises (SOEs) to capture their possibly specific investment behaviour, as well as a firm-specific time-invariant random effect factor, to control for unobservable characteristics of firms that may affect investment behaviour. Aggregate conditions affecting all firms within an industry or country include the sector-specific growth rates (measured as growth in aggregate sales), and interest rates (proxied by government yields), to capture differences in the cost of funds and in perceptions of country risk across countries and time.

Graph 1: Breakdown of investment gap between Croatia and EU peers (pps).



Source: European Commission, Orbis.

On the basis of the estimated coefficients it is possible to break down the investment gap – i.e. the difference between the investment rate in Croatia and in peer countries – in a part explained by differences in firms' characteristics (and market conditions) and a residual component, that corresponds to other unobservable firm specific characteristics and a residual unexplained component.

The micro-data broadly confirm the trends observed on the basis of national accounts data, namely a more subdued dynamics of investment in Croatia throughout the whole period. The estimated coefficients all have the expected sign: higher financing costs negatively affect investment decisions, whereas growth in sector sales is positively correlated with investment decisions. Past growth in each firm's sales and profitability affect investment decisions positively, as do capital intensity and firm size (with the impact of scale decreasing as expected). A high leverage ratio, on the other hand, acts as a drag on investment decisions. Finally it is worth noting that, on average, SOEs significantly underinvest compared to private companies in all examined countries.

⁽¹⁾ See Pontuch, P. (2013), "Firms' investment decisions in vulnerable Member States", Quarterly Report on the Euro Area, Vol. 12(4), pp. 29-35.

⁽²⁾ Net investment is measured by the annual variation in fixed assets, in nominal terms, resulting not only from new investment, but also depreciation, write-downs, disposals, and other stock changes. The defined investment rate is therefore partly different from the rate of growth of fixed capital as defined in macro-economic terms.

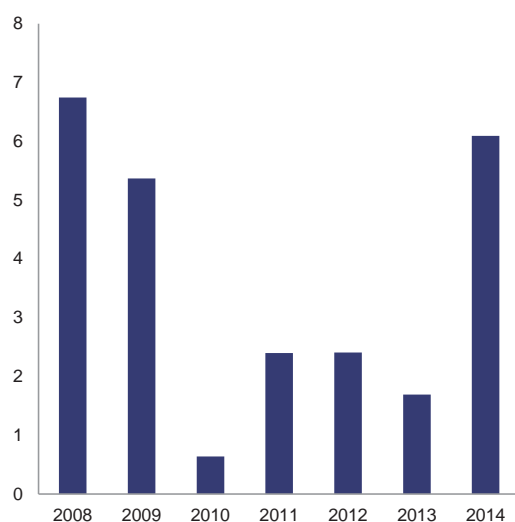
(Continued on the next page)

Box (continued)

The breakdown represented in the figure clearly shows that the bulk of the investment gap is explained by the higher leverage ratio of Croatian firms and to a lesser extent by the higher financing costs faced by Croatian firms. The higher weight of SOEs in the Croatian economy also contribute to explain part of the gap as does the weaker profitability, whereas the other factors tend to have a minor impact.

Note that in alternative specifications we also included a dummy variable to capture other possible country specific effects, beyond sales' dynamics and financing costs. In less rich specifications, the variable tended to be significant and negative – signalling a country specific effect. With the inclusion of other variables, nevertheless, the variable was no longer significant, which we interpret as evidence that the investment gap currently affecting Croatia is well explained by the fundamentals, most of all the debt overhang of part of the corporate sector.

Graph 3.1.5: **Foreign Direct Investment (% of GDP)**



Source: CNB

Weak productivity remains a challenge. Historically, productivity growth has been relatively subdued when compared with that of catching-up economies. Productivity growth slowed down already in the years before the crisis. After plummeting during the crisis, productivity levels have been increasing again, but relatively mildly considering the size of the contraction in employment. Bottlenecks to investment (see box 1.1) and a weak business environment in general (see section 3.2) impede an efficient allocation of resources, constraining productive companies from growing and integrating in European value chains (see box 2.3.1). Productivity is also affected by the low investment into R&D&I, discussed later in this section.

Investment into key aspects of the circular economy is necessary for Croatia to address its low resource productivity and recycling rates.

Resource productivity in Croatia has improved slightly over the last ten years, but is still significantly below EU average: in 2014, EUR 1.09 of economic value was generated per kilogram of raw material consumption, compared with the EU average of EUR 1.95⁽⁵⁴⁾. Maintaining the value of products and materials in the economy through reuse, recycling and reducing waste can help the Croatian economy to become more competitive and resilient. The recycling rate for municipal waste (including composting) in Croatia stands at a low rate of just 15.5 % compared to the EU average of 43 %, while landfilling represents 84.5 %⁽⁵⁵⁾. A lack of investment in separate collection and recycling infrastructure is a crucial issue. There is scope for extending the use of economic instruments such as pay-as-you-throw schemes for waste collection and economic incentives to divert waste from landfills.

Roles of network industries and R&D&I

Investments in the energy sector have historically been driven by state-owned enterprises (SOEs), even though new private entrants are playing an increasingly important role. The average investment rate in the period 2009-2012 was 6 % for SOEs and 10 % for private companies, lower than EU averages of 14 % and 11 %, respectively⁽⁵⁶⁾. In 2013 and 2014, Croatian

⁽⁵⁴⁾ Eurostat, 2014.

⁽⁵⁵⁾ Eurostat, 2013.

⁽⁵⁶⁾ Net fixed capital formation calculated by the Commission using firm-level data from ORBIS database. Companies are considered SOEs when public authorities own at least 20 % of the shares.

energy sector SOEs fell 20 and 25 per cent short of their investment plans, respectively. This saw their gross investments decline 14 % in 2013 and 15 % in 2014. In nominal terms, the most significant contributor to this underinvestment was HEP (Hrvatska Elektroprivreda) group. Subdued demand dynamics for energy may partly explain the drop in investments. Between 2009 and 2014, electricity consumption fell by 5 % while natural gas consumption fell by 23 %.

Croatia is in need of investment in better interconnections with its neighbouring countries, especially in gas. In electricity, apart from reinforcing the internal network, interconnection projects with Hungary and Slovenia are on the list of projects of common interests (PCIs). For gas, the Krk gas terminal and interconnections with Hungary and Slovenia are included on this list. Out of the four investment projects declared as strategic by the government so far, two are from the energy sector: the Krk gas terminal and block C of the Plomin power plant.

Investors interested in the exploitation of hydrocarbons in the Adriatic are awaiting decisions from the new government. 15 fields potentially containing oil and gas attracted interest from six companies. The government issued licences for 10 of those fields to 5 companies in January 2015. Of these, 3 companies remain interested in 3 fields. In September 2015, the government postponed entering into concession agreements with the bidders.

The project of a liquefied natural gas terminal on the island of Krk has recently seen some progress, while the development of the gas distribution network in southern coastal Croatia is progressing slowly. The long awaited project to construct a liquefied natural gas (LNG) terminal was designated as a strategic investment project by the Croatian government in July 2015 and a project of common interest (PCI) by the Commission in November 2015, along with the evacuation pipelines from the terminal towards Hungary. Furthermore, studies for the Krk terminal project were approved for funding under the Connecting Europe Facility (CEF) to the amount of EUR 4.9 million. The importance of this project lies in its potential to supplement the decreasing domestic gas production and diversify Croatia's and the EU's gas supply and provide new

opportunities for powering planned and recently installed production capacities in the Croatian energy sector. The development of a gas distribution network in southern coastal Croatia commenced in 2009 by a private concessionaire is ongoing. Progress is slow, in part due to low demand. The subdued demand can mostly be attributed to the negative impact of the recession on firms' investment capabilities in conjunction with the gas prices for industrial consumers (see below) that have gone up by more than 70 % since the beginning of the project in 2009. The Ionian-Adriatic Pipeline (IAP) project is envisaged to connect Croatia to the Trans Adriatic Pipeline. IAP is no longer a project of common interest in the list adopted in November 2015, even though it is, along with the Krk gas terminal and the reverse flow to Hungary, one of 33 key projects for the security of supply infrastructure listed in the European Energy Security Strategy.

Although Croatia is strategically well located, the current policy framework in the highly regulated gas sector hampers competition and market-driven investment, undermining Croatia's integration in the internal market. Both, the wholesale and retail gas prices remain regulated. However, competition has been developing over the years both at wholesale and retail level. The Herfindahl-Hirschman Index (HHI) on the wholesale market went down from 0.87 in 2012 and 0.68 in 2013 to 0.24 in 2014, marking a substantial improvement in competition. The same trend is noticeable on the retail market, where HHI decreased to 0.16 in 2014 (from 0.56 and 0.46 in 2012 and 2013, respectively) ⁽⁵⁷⁾. Still, the wholesale price is set by government decision, whereas the retail price is determined accordingly by the regulator. Apart from price regulations, restrictions on imports and exports of gas hamper the competition on the market and Croatia's integration in the Single Market. There is also no commodity exchange or gas hub and gas trading is based on bilateral contracts. Such a framework is in part responsible for a situation where the price of gas for Croatian households is among the lowest in the EU, in the range of Lithuania, Denmark, Estonia and Latvia, countries in which heating degree day indicators are almost twice that of Croatia. At the same time, weighing on the cost

⁽⁵⁷⁾ HERA 2014 annual report.

competitiveness of many Croatian firms is the price of gas for industrial consumers — third highest in the EU. This ranks Croatia among the rare Member States (together with Hungary and Romania) where the price of gas for industrial consumers is higher than for household consumers. For comparison, in peer EU countries, the price for industrial consumers is on average 22 % lower than the price for households. Under the current legal framework, the liberalisation of the market will commence in 2017. Until then the state-owned HEP will remain the 'supplier of suppliers' with a public service obligation to procure gas at regulated prices.

On the back of public incentives for renewable energy, private investments in electricity generation have been relatively steady in recent years, focusing mainly on wind power. At the same time, despite a recent decline in prices and increase in efficiency of photovoltaic systems, the potential of this power source remains relatively unexploited in Croatia, in part due to an unadjusted policy framework featuring small quotas for solar power. There have also been smaller private investments in cogeneration plants relying on biomass as a residue from production processes. The biggest public investment in 2015 was the EUR 240 million project of a new 280MW gas-powered block of the Sisak power plant which allowed the old block to be shut down. At the same time, the strategic investment project of a new block of the Plomin power plant has not been scrapped in spite of resistance against coal as the chosen energy source. Most permits have been acquired and construction is scheduled to commence this year. Two PCIs important for the dependence of the power grid have been selected for funding under the CEF: an internal connection between Brinje and Konjsko and a high voltage interconnection to Bosnia and Herzegovina.

The Croatian electricity sector is also highly regulated, but the presence of incentives (feed-in tariffs) for renewables makes it somewhat conducive to private investment. In the electricity generation sector, two main producers alone represented 92 % of total production. The incumbent company HEP (Hrvatska Elektroprivreda) held a market share of 80 % of production in 2014. In the households sector, the top three suppliers held a market share of 89 % in 2014. The price for industrial consumers has

decreased somewhat in recent years, but is still higher than in all peer EU countries. It is also above the level of Denmark and Germany, which rely heavily on expensive renewable sources of energy. Like with gas, this relatively high price of electricity for industrial consumers weighs on the competitiveness of Croatian firms, which are ranked 11th in the EU in terms of energy intensity. On the other hand, the price of electricity for households is among the lowest in the EU and below the average of peer EU countries, while their energy consumption is below (and decreasing faster than) the EU average ⁽⁵⁸⁾. The latest step in the process of liberalisation of the still regulated market was the November 2015 operational launch of CROPEX, the Croatian electrical energy exchange. Barriers to investment are present in the shape of regulatory uncertainty due to changes in the support schemes aimed at reducing overall support costs and complicated tendering procedures for renewable energy in heating and cooling, as well as lack of reliable forecasts for total grid connection costs for renewable energy producers. The division of responsibility between two ministries for spatial and environmental planning also creates uncertainty.

There are opportunities to use EU funds for investment projects in energy. Around EUR 530 million will be allocated to Croatia from the European Regional Development Fund for the Thematic Objective 4 (TO4) as a whole (low carbon economy). Over 2014-2020, under EU Cohesion Policy EUR 95 million will be invested in renewable energy in Croatia and some EUR 402 million in energy efficiency improvements in public and residential buildings and in enterprises, as well as in high-efficiency cogeneration and district heating in Croatia. These investments are expected to contribute to around 10 000 households with improved energy consumption classification and a decrease of around 55.1 million kWh per year of decreased primary energy consumption of public buildings. Also under Cohesion Policy, EUR 20 million is to be invested in smart electricity distribution grids in Croatia. These investments are expected to contribute to around 5 800 additional users connected to smart grids. At this stage, at least EUR 40 million is

⁽⁵⁸⁾ Source: European Commission based on Odyssee-Mure database.

foreseen for investments in R&I and adoption of low-carbon technologies in Croatia, but this might increase further in line with the evolving content of the smart specialisation strategy. Croatia expects to receive more than EUR 440 million in ESI funds for financial instruments providing support for small and medium-sized enterprises, research, development, and innovation, energy efficiency, urban transport, self-employment and social entrepreneurship.

While the motorway network in Croatia is relatively well developed, inland waterways and especially the rail infrastructure network remain underdeveloped. Completion of the TEN-T core road network is currently at 61 % in Croatia, compared with the EU average of 74 %. The Inland Waterway core network is 38 % complete in Croatia, substantially less than the EU average of 89 %. Finally, the TEN-T core rail network is only 5 % completed, whereas the EU average is 60 %. Against this background, the SOEs in the rail sector are continuously underinvesting: SOEs in rail cargo, infrastructure and passenger transport fell short of their investment plans by 62 %, 30 % and 83 %, respectively in 2013. This trend continued in 2014, when HŽ Infrastruktura, the rail infrastructure SOE, realised only 38 % of their investment plans, while figures for Q1-2015 show a realisation of 48 %. In addition to falling substantially short of plans, the nominal levels of realised investments are also decreasing ⁽⁵⁹⁾. Sizeable investment gaps in rail and compatibility with EU rail networks have many negative effects, particularly on the reliability of the rail services, especially international rail freight services on the core trans-European transport network corridors. Rail access to major shipment points, such as industrial sites, maritime and inland ports and safety at level crossings require specific attention in infrastructure development programmes. Over the period 2009-2013, railway freight traffic fell by 20 % while passengers' traffic fell by nearly 50 %. The train services market was recently assessed by consumers as the second worst in the EU ⁽⁶⁰⁾.

⁽⁵⁹⁾ Center for Monitoring Business Activities in the Energy Sector and Investments (CEI): Reports on the state and realisation of investments.

⁽⁶⁰⁾ Consumer Markets Scoreboard 2016 (forthcoming).

Cohesion policy support offers considerable opportunity to upgrade Croatia's railway infrastructure. Cohesion policy support to develop the railway network has been available to Croatia since the accession. EUR 100 million was allocated for the period 2007-2013 and EUR 500 million for the period 2014-2020 to advance investments on the Mediterranean core network corridor from Rijeka to Zagreb and the Hungarian border. These funds should be complemented by the national envelope earmarked for Croatia under the Connecting Europe Facility (EUR 450 million). These resources combined account for more than EUR 1 billion available immediately to the Member State to start modernising its rail network. These funds require solid and transparent policies; rigorous risk assessments of the procurement procedures including conflict of interest with necessary preventive actions, by the institutions at the level of the project promoters, as well as mature investment projects with positive impact. It is expected that Croatia will (re)submit projects aimed at addressing key transport bottlenecks in the second call for proposals (closing in February 2016), which is mainly targeted at Cohesion Fund countries (out of EUR 7.6 billion available, EUR 6.47 billion is reserved for Cohesion countries). Possible projects include improvements on the main railway line from the Slovenian border towards Belgrade (former pan-European Corridor 10), but also on sections of the railway from Rijeka via Zagreb to Hungary. The latter line forms part of the core TEN-T corridor which connects CEE countries to the important deep sea port of Rijeka in the northern Adriatic. Co-financing of projects for several sections of this line has already been approved under the European Regional Development Fund and the Connecting Europe Facility, while others are expected to be submitted in the current and upcoming calls.

Potential for further development of the rail sector is severely diminished by excessive regulation, anti-competitive practices and underperformance of state-owned enterprises (SOEs). Lengthy and costly procedures required to obtain often excessive national authorisations from the safety authority, as well as long waiting times at border crossings compared to road traffic, hinder competition and suppress the potential for development of rail cargo in Croatia. Adding to the administrative bottlenecks is the monopolistic conduct of the incumbent freight operator, HŽ

Cargo. A combination of such barriers contributes to underutilisation of rail cargo. This can also have negative implications for connected modes of transport, as is the case in the port of Ploče where following major investments, the new facilities are not used. The state-owned enterprises operating in the rail sector have generated, on aggregate, negative returns on capital employed since 2009. Furthermore, the companies seem to be less cost-efficient than their counterparts in the EU. Liquidity and solvency ratios also point to a particularly difficult financial situation. The level of support from the Government for public service obligation appears to be very small in terms of passengers transported, which may at least in part explain the negative results of the rail operators.

Croatia is planning to further step-up investment into fast broadband through use of Structural Funds. The Croatian authorities plan to develop a high speed access network and a backhaul broadband infrastructure. Total investment involved amounts to EUR 203 million from the European Regional Development Fund, to be leveraged by private and public national funds. The main challenge is to carry out these investments on time and in a way which leads to a competitive market and lower prices ⁽⁶¹⁾.

Access to fixed broadband improved, but remains low in rural areas. Although by the end of 2015, fixed broadband was available to 97 % of homes in Croatia, in rural areas this was only 81 %. With no progress compared with 2014, Croatia remains behind the EU average of 90 %. Broadband access capable of providing high-speed Internet (at least 30 Mbps download) was available to 52 % of homes, compared with an EU average of 70 %. This is an improvement compared to 2014, when only 47 % of the population had access to fast broadband connections. Croatia's rank in this measure remains 25th among the Member States.

⁽⁶¹⁾ Further to the broadband schemes funding is planned for the strengthening of ICT applications for e-government, e-learning, e-inclusion, e-culture and e-health and the increase of the use of ICT in communication between the citizens and public administration through establishment of ICT coordination structure and software solutions, with ERDF support of EUR 111.5 million.

The limited take-up of digital technology holds back the development of e-commerce. In 2015, 44 % of Croatian consumers who used the internet in the last year (compared with the EU average of 65 %) bought goods or services online. Despite a big improvement (19 pp.) since 2014, Croatians are still reluctant to make transactions involving the use of online payment devices: only 47 % of those who used the internet in the preceding three months (compared with an EU average of 57 %), used the internet for banking in 2015. This might be linked to a general mistrust of the security of online payment systems. This is all the more striking given that 19 % of small and medium-sized enterprises sell online, more than the EU average of 16 %.

The price for fixed broadband is still nearly twice as high as the EU average. Croatia ranks 25th in the EU according to this measure. Furthermore, only 2.7 % of the population subscribes to fast broadband, compared to an EU average of 30 %, ranking Croatia last in the EU. The high prices are in part due to a lack of competition, with the incumbent Hrvatski Telekom (HT) still strongly dominant on the market ⁽⁶²⁾. Moreover, according to the 2015 Market Monitoring Survey, the performance of all telecommunications related markets is below the EU average (mobile telephone services 4th lowest in the EU, fixed telephone services 2nd lowest, internet provision 2nd lowest and ICT products lowest in the EU), with a very high proportion of problems ⁽⁶³⁾.

In 2014, Croatia had the fourth lowest R&D intensity level in the EU. At 0.8 % of GDP, it was well below the 2 % EU average and the 2020 target of 1.4 %. Public R&D spending has decreased from 0.44 % of GDP in 2008 to 0.33 % of GDP in 2014. This relative decrease is even more pronounced against the background of a shrinking GDP in that period. Private R&D intensity level has decreased somewhat since 2008, but bounced back to 0.34 % of GDP in 2014. Sub-

⁽⁶²⁾ HT's official market share in fixed broadband in 2014 (% of subscriptions) amounted to 53 %. However, together with affiliated companies the market share is significantly higher: by some estimates more than 80 %.

⁽⁶³⁾ Consumer Markets Scoreboard 2016 (forthcoming). Only the market for mobile telephone services has seen an improvement in performance since 2013.

critical scale, fragmentation, relative isolation and a mismatch between academic curricula and labour market needs continue to affect public research. Public-private cooperation remains at a relatively low level, as shown by the number of public-private co-publications or the share of public research financed by business. Croatia is classified as a moderate innovator and is performing below the EU average in most innovation dimensions⁽⁶⁴⁾. Research and innovation in Croatian enterprises is hindered by the structural orientation of the economy towards low and medium-tech sectors, the small size of knowledge intensive sectors, limited business R&D capacities, unfavourable incentive structures, lack of qualified personnel and limited internationalisation of companies pursuing innovation investments.

Policies in support of innovation are characterised by the lack of a coherent and integrated R&I policy framework and a lack of financing. There are weaknesses in the monitoring of research and innovation policies and the governance of public research and higher education institutions. The need to strengthen the private sector R&I capability is addressed by the Croatian Smart Specialisation Strategy (2015) and by the National Innovation Strategy (adopted December 2014).

Measures aimed at reviving investment

During the recession, several legislative actions were taken by the authorities with the goal of reviving investment, with mixed results. The Law on Strategic Investment projects enacted in 2013 was envisaged to fast-track big investments. Recognising red tape as one of the key barriers to investment, this law provided that a team of officials be allocated to every project declared as strategic. The team's task is to guide the investors by coordinating and facilitating their interaction with different bodies of central and local administration, while the most important condition for designating a project as strategic is the size of the investment. This law can be seen as controversial in its design that disregards smaller investors that have less administrative capacity to deal with red tape to begin with and in the

rationale behind it to circumvent rather than eliminate red tape. Nevertheless, it could have had an overall positive effect on attracting investment while buying the time needed to resolve the underlying structural issues. However, even after the law's 2014 amendments that relaxed the criteria for approving projects, it failed to attract and fast-track substantial investment: in the 12 months after the amendments, only 36 projects applied, compared with 78 projects during the 13 months after the enactment of the initial law. Of the overall 114 applications since November 2013, only 4 have been declared strategic by now, with the rest either rejected (29), withdrawn (12) or still under examination. Furthermore, all four projects declared as strategic were public investment projects, making this law in practice used mostly by publicly-owned companies.

A different stream of legislative action with the aim of stimulating investment originated with the 2012 amendments to the corporate income tax act which allowed companies to reduce their tax base in the amount of reinvested earnings.

This legislative action was somewhat modified in 2014 when provisions were added to prevent misuse. The gross effect of this measure on tax revenues was substantial: in 2013 and 2014, almost HRK 2.4 billion less corporate income tax was collected. At the same time, its overall effects on stimulating investment are more difficult to estimate. However, the measure's effects on reducing the relative debt bias at a time of sluggish deleveraging and providing successful firms with cheaper capital to invest are largely positive. After the 2014 amendments aimed at minimizing the scope for misuse of this measure and thus limiting the budget shortfall strictly to the amount of capital reinvested into the real sector, its overall effect should be even more positive.

Most recently, in 2015, the new law on fostering investment replaced the old law on fostering investment and enhancing investment climate.

The role of the new law was to achieve harmonisation with Commission regulation 651/2014, but also with the act on state subsidies and Croatia's industrial strategy 2014-2020. The purpose of the law is to put in place a legal framework that will make use of state aid in a way that ensures an increase in quality investment projects that result in inward transfer of know-how and technology, development of products of higher

⁽⁶⁴⁾ Cf. Innovation Union Scoreboard, 2015, European Commission.

added value and increase in competitiveness. More than HRK 220 million has been earmarked for the execution of this law in the period 2015-2017. A notable change compared to the previous law is a stronger focus on investment in tradable sectors.

Measures to facilitate credit allocation

The contraction in loan volumes is slowing down. This is confirmed by CESEE Bank Lending Survey coordinated by the EIB and carried out in September 2015 ⁽⁶⁵⁾. Accordingly, Croatian banks report that both credit supply and demand conditions improved slightly in the second and third quarter of 2015. The rise in demand was driven by large corporates, while new loans stagnated for SMEs and anyhow mostly aimed at restructuring of existing loans. Demand from the household sector also improved, especially for consumer loans. Credit conditions have also been easing both for households and corporates.

The access of small and medium-sized enterprises to bank financing has improved. Only 13 % of such firms reported problems in obtaining bank loans in 2015, which is less than in neighbouring countries and below the EU average of 21 %. Only 2 % of loan applications were reported to be rejected, indicating improvement. In spite of the positive improvements, the latest SAFE (Survey on the Access to Finance of Enterprises) shows that, in comparison to other Member States, access to finance remains an issue for small and medium sized firms. In general, for corporate customers, bank interest rates are substantially higher than the average of the euro area countries.

Banks are the most important source of external financing, in particular for small to medium sized firms, but there is scope for other types of funding. Apart from direct bank financing, important sources of financing are loans and credit lines with subsidized interest rates from the Croatian Bank for Reconstruction and Development (HBOR) implemented through counties and commercial banks. However, there is

a need for diversifying the sources of finance. In line with the objectives of the Commission's Capital Markets Union initiative, the Croatian financing system needs to develop and ideally move towards a capital markets system: retail and institutional investors could play a more prominent role, together with business angels and crowd funding. Improvements are expected through the engagement of the European Structural and Investment Funds (ESIF), as over EUR 1.9 billion is allocated to strengthening the competitiveness of Croatian SMEs for the period 2014-2020. A set of new financial instruments supported through EUR 310 million of ERDF and ESF funding (leveraged by private funds) are expected to be in place in 2016 to support entrepreneurship and SMEs through loans, guarantees and venture/risk funds.

Obtaining start-up capital represents an important financing obstacle. Some measures have been put in place to improve small and medium sized firms' access to alternative financing sources, such as venture capital and crowd-funding, which are not well developed. Venture capital is investment made to support the pre-launch, launch and early stage development phases of a business. Croatian SMEs are becoming more interested in equity financing. Also, a pilot project to establish a venture capital industry in Croatia has been initiated in cooperation with the World Bank and a first crowd-funding platform (Croinvest.eu) has been launched.

Further benefits to the Croatian economy and small and medium enterprises can arise from the Investment Plan, launched in 2015 by the Commission. The Investment Plan will be driven by the European Fund for Strategic Investments (EFSI) which aims to support strategic investments including risk finance for small businesses. So far, one major project in Croatia (Croatian Bank for Reconstruction and Development — risk sharing for midcaps and other priorities) benefited from the Plan, opening up the possibilities for this funding source.

The Croatian Bank for Reconstruction and Development (HBOR) is to become an important partner in the EU investment plan. Like for any other promotional bank with a public mandate, its economic rationale is to overcome market failures that may lead to less investment than would be economically efficient. The mission

⁽⁶⁵⁾ Note that the survey only covers subsidiaries of international groups and specifically for Croatia the coverage included 5 banks representing more than 70 % of the market.

of the national promotional bank HBOR is to support exports, finance infrastructure and provide credit to SMEs. In doing so, the Bank increasingly engages in direct lending activity.

HBOR is set to undergo an asset quality review.

National promotional banks need appropriate legal and regulatory framework and governance structures. As stressed in the Commission Communication on the role of National Promotional Banks (NPBs) in supporting the Investment Plan for Europe, this is needed to avoid the possible negative side effects of NPB action, such as the misallocation of investment and the preservation of inefficient market structures due to political interference; the crowding out of private sector financing alternatives, where these exist; and losses to the guarantor governments stemming from substandard underwriting. The Communication sets out some guiding principles in this area, by way of best practices. Namely, these include high standards of transparency and accountability, professional management, and prudential supervision exercised independently by a separate entity. To this end, the authorities plan to perform an independent asset quality review of HBOR's credit portfolio, albeit relatively late, in the second quarter of 2017.

The role of European structural and investments funds

The European Structural and Investment Funds (ESIF) offer a crucial investment resource for the implementation of vital reforms in many areas. The Partnership Agreement for Croatia adopted on 30 October 2014 set out the main intervention areas of the ESIF for the period 2014-2020. Croatia benefits from a large financial envelope that amounts to EUR 972 million for the period 2007-2013 and EUR 10.7 billion (see Table 3.1.1) for the period 2014-2020. The allocation of the ESI funds has increased twofold upon accession, and nine-fold in the 2014-2020 programming period, covering a larger set of sectors. However, for the projects to benefit from the funds, a set of *ex-ante conditionality* terms (see Box 1.2) per intervention

area have to be complied with before 31 December 2016 ⁽⁶⁶⁾.

The absorption rate of ESIF has so far been low. The current financial absorption rates of the ESF, European regional development fund (ERDF) Cohesion Programme total up to 46 % of the Funds allocation for the period 2007-2013 ⁽⁶⁷⁾. The management conditions of these Funds changed partly upon accession of the country to the EU, distressing the programme implementation. A limited number of ready-to-implement projects and their lengthy design and tendering periods are partly causing the slow absorption of the 2007-2013 funds. This issue is particularly critical for the implementation of large infrastructural projects, in particular in the railway sector (Graph 3.1.6).

Bottlenecks in administrative capacities and procedures hamper absorption. Managing ESI funds requires strong strategic, administrative and technical capacities in the management bodies — line Ministries and national agencies in the case of Croatia. Administrative requirements at the selection and reporting stages are rigorous. The challenge lies in reducing the administrative burden, while ensuring a reliable and regular management of the funds. Implementation of the staff recruitment plan is expected to pick-up again, but the issue of a high turnover in qualified staff remains. A fully functional Management and Information System is still being developed in order to provide aggregated updates and forecasts on the programme implementation.

⁽⁶⁶⁾ The payment of ESIF is suspended in the respective intervention area until the conditionality has been effectively complied with.

⁽⁶⁷⁾ The payment claimed to the Commission for reimbursement of project costs amount to 52 % of ESF, 43 % of the Cohesion Fund and 46 % of the ERDF, on 31 December 2015.

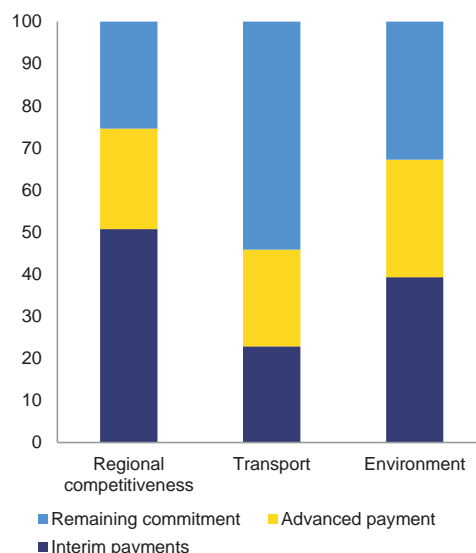
Table 3.1.1: Allocation of ESIF (2014-2020) by thematic objective

Indicative allocation of support by the Union by thematic objective	Million EUR	% of 2014 GDP
01. Strengthening research, technological development and innovation	681	1.6%
02. Enhancing access to, and use and quality of, information and communication technologies	308	0.7%
03. Enhancing the competitiveness of small and medium sized enterprises, the agricultural sector (for the EAFRD) and the fisheries and aquaculture sector (for the EMFF)	1,917	4.4%
04. Supporting the shift towards a low-carbon economy in all sectors	757	1.8%
05. Promoting climate change adaptation, risk prevention and management	501	1.2%
06. Preserving and protecting the environment and promoting resource efficiency	2,309	5.4%
07. Promoting sustainable transport and removing bottlenecks in key network infrastructures	1,310	3.0%
08. Promoting sustainable and quality employment and supporting labour mobility	615	1.4%
09. Promoting social inclusion, combating poverty and any discrimination	971	2.3%
10. Investing in education, training and vocational training for skills and lifelong learning	730	1.7%
11. Enhancing institutional capacity of public authorities and stakeholders and an efficient public administration	191	0.4%
Technical assistance	386	0.9%
Total	10,676	24.8%

Source: European Commission

A high-quality pipeline of projects is crucial for the efficient use of ESI funds. Although some progress is being made in certain sectors, the project beneficiaries are not receiving sufficient support to prepare and implement projects in line with EU rules and are well prepared so that complaints at procurement stage are avoided. Likewise, an overly 'bottom-up' approach also tends to be a source of lengthy procurement procedures.

Graph 3.1.6: Absorption of 2007-2013 European Regional Development Fund and Cohesion Fund programmes (% of total commitments)



(1) Cut-off date 30 November 2015

Source: European Commission

Investment is slowly growing again, but achieving a sustained pace of public and private investment and ensuring a more efficient capital allocation rests on a precondition of important structural reforms. After a prolonged contraction, Croatia is in a dire need of achieving a sustained pace of capital accumulation in sectors with fast productivity growth, while well targeted public investments are needed in network industries and key infrastructure. High indebtedness still weighs on corporate investment strategies. Weak business and administrative environments also hamper investments of both SOEs and private corporates. SOEs' investment, moreover, suffers from shortcomings in strategic planning and coordination. Legislative attempts to support investment have so far fallen short of expectations when they relied on winner-picking strategies instead of addressing structural issues. Public investment is set to benefit from the EU funds, but the growing volume of funds earmarked for Croatia requires further stepping-up absorption capacity.

3.2. PUBLIC GOVERNANCE AND SOES

Vertical and horizontal fragmentation in public administration

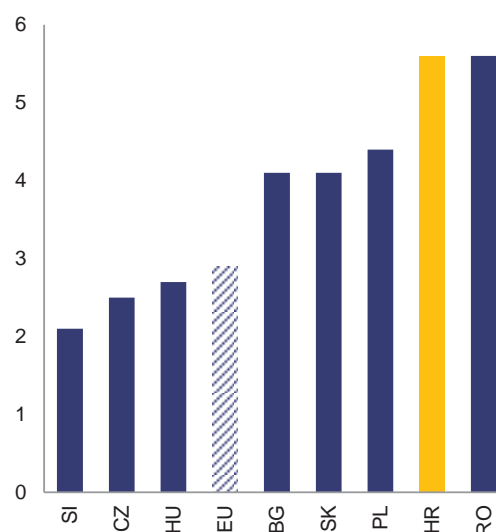
The Croatian public administration is characterised by a high level of territorial fragmentation. Croatia has three levels of governance: central, county and local level (municipalities and towns). The capital Zagreb has the special status of both a town and a county. The legislative framework does not provide a clear distinction between town and municipalities in terms of competencies and function. The average size of a town, according to the 2011 census is slightly below 24 000, but the vast majority of towns have a population below 15 000. The distribution of towns by size is therefore skewed, with a high share of very small towns. The distribution of municipalities by population is less skewed with a larger share of municipalities clustering between 2 000 and 3 000 inhabitants per municipality.

The fragmentation and complexity of the state administration system weigh on efficiency. Over the past two decades there has been an exponential increase in the number of institutions and legal persons vested with public powers to perform specific tasks. To date the state administration numbers 20 ministries, four state offices, 7 state administrative organisations and 20 state administration offices in counties. The functions of central state administration bodies are performed through a network of 1 279 units and branch offices in counties, cities and municipalities (which in part have independent staff). Another 91 branch offices and 302 register offices, tasked with functions related to the county-level administration, operate in municipalities and cities. The current setup leads to the multiplication of expenses and inefficient utilisation of human resources in the public administration.

The 2001 constitutional and legislative amendments redefined the core of sub-central government. An overview of the division of competences is presented in Table 3.2.1. Secondary legislation prescribes in more detail the transfer of competencies from central to local government in primary and secondary education, healthcare, social welfare, and fire-fighting. The functional transfer of competences implied also a new model of financing for local units. Most notably, 60 % of the personal income tax revenues

paid by local residents are kept by towns/municipalities, 16.5 % by counties. The units of local government have the option to take over a number of decentralised functions for which they are granted an additional share of the personal income tax, which can go up to 6 %. The remaining share of income tax is pooled at central level into a ‘fiscal equalisation fund’ and re-distributed to the local units that are unable to fully support their decentralised functions. Furthermore, local units are also given the possibility to raise their own revenues by introducing new municipal and town taxes, as well as different levels of surtax on the income tax, depending on the size of the municipality ⁽⁶⁸⁾.

Graph 3.2.1: **Current transfers from central to local government in 2014 (% of GDP) in Croatia and EU peers**



Source: Eurostat

The central government finances part of the expenditure of decentralised activities. The decentralised functions are financed only partly by the local governments. Primary education is an illustrative example: despite formally being a competence of local government, the central government budget provides funds to pay all school employees, as well as for IT equipment and

⁽⁶⁸⁾ See Alibegović et al. (2014), Regional Development and Decentralisation — Two options to Overcome Lack of Funding. Transylvanian Review of Administrative Sciences, No 43 E/2014, pp. 146-167.

Table 3.2.1: **Distribution of functions by government level**

	Central State	Counties	Towns	Municipalities
General public services				
Executive and legislative bodies, financial and fiscal affairs, external affairs	✓	✓	✓	✓
Defense				
Military defense	✓			
Civil defense			✓	✓
Public order and safety				
Police services	✓			
Fire-fighting services			✓	✓
Economic affairs				
General economic, commercial and labor affairs (consumer protection)			✓	✓
Transport	✓	✓	✓	✓
Environmental protection				
Waste management		✓		
Waste water management		✓		
Pollution abatement			✓	✓
Housing and community amenities				
Housing planning and development		✓	✓	✓
Community planning and development		✓	✓	✓
Water supply			✓	✓
Street lighting			✓	✓
Health				
Medical products, appliances and equipment	✓			
Outpatient services		✓		
Hospital services	✓	✓		
Public health services		✓		
Recreation, culture and religion				
Recreational and sporting services			✓	✓
Cultural services	✓		✓	✓
Education				
Pre-school and primary education			✓	✓
Secondary education		✓		
Post-secondary non-tertiary education	✓	✓		
Tertiary education	✓			
Social protection				
Social services	✓	✓	✓	✓
Housing	✓	✓		
Social exclusion	✓	✓		

Source: Alibegović et al. (2014), Regional Development and Decentralization – Two options to Overcome Lack of Funding.

school libraries. All other expenditure is financed from the local government budget. To keep the same standard of service across all schools in the country, the central government prescribes on an annual basis 'minimum financial standards'. These standards, based on a set of indicators ⁽⁶⁹⁾, define minimum expenditure at local unit level in each individual decentralised activity.

Decentralised competences and tasks of local units are not commensurate with their fiscal capacity. As explained above, once the local government claims responsibility for a decentralised activity, it must also cover part of the expenditure. However, very often the extra share of the personal income tax allocated for additional decentralised functions is not sufficient to cover minimum financial standards, and the central government must intervene from its 'fiscal

⁽⁶⁹⁾ For example, in primary education, indicators are numbers of pupils, number of classes and number of school buildings in the local government unit.

equalisation fund'.⁽⁷⁰⁾ In the 2015 budget, roughly two-thirds of the minimum financial standards (HRK 2.2 bn, or 0.7 % of GDP) came from the fiscal equalisation fund. The financing of most decentralised activities therefore depends to a great extent on the central budget, opening the issue of accountability for the local government units. The only exception being fire-fighting, which is mostly financed at local level.

The analysis of local government budgets is hindered by the lack of a central register for decentralised functions. The Ministry of Finance recently published detailed data on the structure of revenue and expenditure of local government units. Preliminary analysis supports the general consensus about the weak fiscal capacities of local government units⁽⁷¹⁾. The data also provides further evidence of the over-reliance of local units on central budget funding (see graph 3.2.1). However, it should be noted that a central register that lists competencies and functions for each local administrative unit is not publicly available. So it is unclear which local government unit is responsible for which function on its territory, which makes a more detailed assessment of their fiscal capacities difficult.

The process of reallocation of funds for decentralised functions appears administratively burdensome. The mechanism of fiscal equalisation, with its multi-layered interaction between the local authorities and the different institutions of the central government, seems rather complex. During the annual budgetary cycle, the central government sets the minimum financial standards for the provision of public services devolved to the local governments. Even though the system formally envisages

elements of strategic planning, in reality it relies heavily on historical outturns. After the minimum expenditure standards are set for each function, the local government units must report the possible gap between their revenue and the minimum standards for the decentralised functions. The central government then disburses the equalisation funds to cover the gaps between revenues and the minimum expenditure for the financially weak local units. Throughout the year local units have to report separately their revenue data to the ministry of finance, and the expenditure data to the responsible ministry (i.e. health, education, social policy etc.). According to the State Audit office the system lacks control mechanisms and is administratively demanding⁽⁷²⁾.

The current system of territorial organisation results in high disparities. The current setup is characterised by incomplete decentralisation, in which local government units have been formally allocated a number of functions and responsibilities, although these remain to a large extent financed from the central budget (see graph 3.2.2). Given that the main source of revenues for the local units is personal income tax, units from the least developed parts of Croatia have the lowest financing capacity, which creates high regional disparities in the provision of public services.

Communal charges – another source of local governments' revenue – are currently being reviewed with a view to harmonising the system. The harmonisation of communal charges is presented as a transitional step before the eventual introduction of a proper recurrent property tax. It should reduce the differences in calculation and collection of the charge across local units. While the update of records on utility fees payers and the register of properties is underway, the adoption of the key Local Utilities Act, which determines the way local units set the level of the communal fee, is facing delays. A framework law for real-estate valuation was adopted in July, but the actual property valuation method is yet to be established. The authorities expect that the harmonisation of communal fees

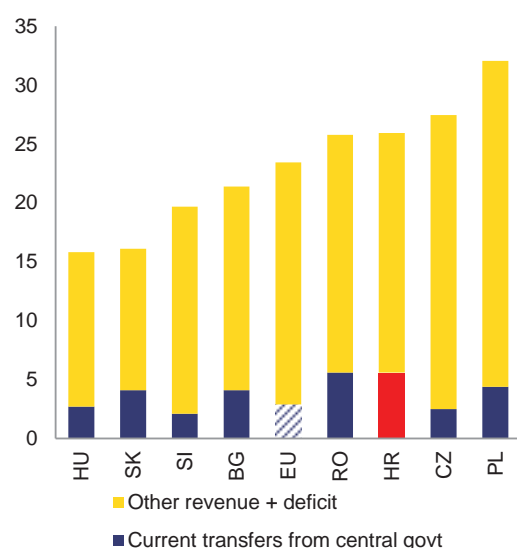
⁽⁷⁰⁾ On the other hand, in some economically stronger local government units, extra funds from the additional share of personal income tax generate a surplus above the minimum financial standards. The most notable example would be the City of Zagreb. Recently the central government tried to confiscate such extra revenue from Zagreb. This is an on-going court issue, but it appears that the City of Zagreb will be allowed to keep the extra funds. However, this example provides additional evidence that the division of funds and responsibilities is not optimal.

⁽⁷¹⁾ See Bajo et al (2015) Neto fiskalni položaj županija od 2011. do 2013, and EIZG (2013) Istraživačke podloge za raspravu o prijedlozima mjera za funkcijsku, fiskalnu i administrativnu reformu za ostvarivanje ciljeva decentralizacije u Republici Hrvatskoj.

⁽⁷²⁾ See SAO (2015) Izvješće o obavljenoj reviziji Godišnjeg izvještaja o izvršenju Državnog proračuna Republike Hrvatske za 2014. Godinu.

may have a revenue-increasing impact of 0.1 % of GDP. Harmonising the fragmented system of communal charges across municipalities will have benefits of its own, but such charges are linked to the provision of specific local services in principle; the move to a genuine property tax would allow local governments raise revenue without this specific purpose.

Graph 3.2.2: **Financing of local government expenditure in 2014 (% of GDP) in Croatia and EU peers**



Source: Eurostat

The weaknesses in public administration are recognised as reform priorities by the authorities. The Public Administration Development Strategy 2015 – 2020 and the 2015 National Reform Programme discuss at length the main weaknesses of the public administration system and put forward broad reform plans. Both documents acknowledge that efficiency in the provision of public services and performance of public functions is low, due to the highly fragmented system, and particularly at local government levels, but also due to excessive rigidity in organisational structures. The Strategy highlights that over the past decades, the number of local sub-central units has increased several times, which resulted in a decreased capacity of those units to perform public functions.

Progress in carrying out the reform agenda in public administration nevertheless remains

uncertain. The reform of governance at local level to overcome fragmentation and administrative weaknesses is still not in sight. Over the past year the authorities have mainly focused on gathering data and information for analysing the functional distribution, costs and capacities of local government units. The Action Plan for the Modernisation of the Public Administration, adopted in September 2015, is a starting point for developing appropriate measures and intermediary steps. A number of other initiatives have been put on hold, including: the planned 20 % reduction in the number of state offices in local units; the merging of the management structures of regional administration offices, with a view to reducing them from 20 to 5; the amendments to the Civil Servants Act, aimed at redefining accountability and decision-making in the civil service as well as simplifying recruitment and dismissal procedures. In September 2015, Parliament adopted a law which establishes the legal framework for the voluntary mergers of local government units. The law does not, however, establish the envisaged financial incentives. New legislation regulating the establishment of state agencies and introducing a higher degree of homogeneity within the system is being drafted. The authorities are implementing the merger of two (out of the nine) agencies identified to be merged by the end of 2015.

Business environment and regulatory burden

Despite some improvements, business environment in Croatia still provides little support to growth. While still problematic, recent improvements were recorded regarding the high level of administrative burden and parafiscal charges. Most notably, the authorities compiled and published a Register of parafiscal charges, providing a needed comprehensive overview. Eleven charges were reduced, one was abolished but also a new one was added. Furthermore, the authorities measured the level of administrative burden on businesses using the Standard Cost Model (SCM) methodology in the retail and real estate sectors, and subsequently reduced 20 % of total identified burden in those areas. Measurement using the same methodology continues in the remaining six regulatory areas outlined by the action plan for reducing the administrative burden on business, with the ultimate aim of achieving the same 20 % rate of reduction in burden.

Weighing on the quality of the business environment are unpredictable legislation and judicial decisions. While on one hand steps have been taken to strengthen the weak regulatory impact assessment framework, it remains underutilised. In 2015, it was used to assess the impact of less than 6 % of all new laws, which marks a deterioration from over 7 % in 2014. Insufficient use of impact assessment is in part responsible for the frequent changes in legislation. The prominence of the issue is confirmed by a Eurobarometer survey ⁽⁷³⁾ which shows that 79 % of firms in Croatia find the fast-changing legislation and policies to be a problem when doing business, the fifth highest percentage in the EU. Similarly, the business environment suffers from lack of consistency in case law which leads to differing and thus unpredictable decisions by courts, diminishing legal certainty for investors. This issue has been recognized by the Supreme Court, resulting in the establishment of a special service tasked with following and studying the case law.

The regulatory environment for business services and regulated professions remains restrictive. Restrictions hamper investment and present obstacles for natural and legal persons who wish to set up in Croatia or provide services there temporarily. The lack of rules or procedures allowing national companies (apart from the 'European Companies', SEs) ⁽⁷⁴⁾ to directly transfer their registered office abroad (or enabling foreign companies' transfers to Croatia) may make it difficult for companies to relocate and better seize business opportunities. Regarding legal services, compulsory chamber membership, shareholding restrictions, regulation on prices and fees and advertising restrictions are in place. Significant regulatory restrictions (e.g. authorisation procedures to access the market) are also in place for architects and engineers. A new law is being prepared to abolish legal form restrictions for tax advisers, but it has been considerably delayed. At the same time, the new accounting law aims to regulate the only area of the OECD's Product Market Regulation indicator in which Croatia was not among the worst performers in terms of conduct restrictions. Croatia is reviewing the

necessity and proportionality of restrictions on access to and conduct of regulated professions. Delivery of an action plan (supposed to be submitted in January 2016) was delayed.

Modern communication channels with the public administration are unevenly developed. Introduced in 2014 to tackle the very low online interaction between the public administration and the public, the e-citizens web portal hosted 26 services at the end of 2015, with further upgrades planned for 2016. However, an e-business module has only recently been introduced and is still being supplemented by additional features. Furthermore, Croatia has two points of single contact operating in parallel, which are managed by different institutions. However, neither has all the necessary functionalities required by the Services directive ⁽⁷⁵⁾. In physical planning, an advanced information system (ISPU) is in place. This includes a new e-construction permit application, which allows permits to be issued within 30 days.

Judicial system

Despite improvements, lengthy court proceedings and sizeable backlogs still hamper the efficiency and quality of the judicial system. Ensuring the effectiveness of the judicial system, including the enforcement of rights and contracts is vital for Croatian economic recovery. While the backlog in civil, commercial and enforcement first instance cases, which was the third largest in the EU ⁽⁷⁶⁾, decreased in 2015 (-10 % compared to end 2014), the progress was entirely achieved due to a lower workload (-12 %), as the number of resolved cases also decreased. As older cases are prioritised, the average length of proceedings increased, with litigious civil and commercial cases taking 774 days and enforcement cases taking 531 days at first instance. At Supreme Court level, delays and backlog increased in civil cases. Resolution of cases takes a long time, including at the High Commercial Court, where disposition time, despite improvement, remains long (891 days in 2015, down for 352 days compared to 2014). Initial exploration toward reorganisation of business processes and case management that could bring improvements to the functioning of High

⁽⁷³⁾ Flash Eurobarometer 428, December 2015.

⁽⁷⁴⁾ Apart from the European Companies (SEs).

⁽⁷⁵⁾ Directive 2006/123/EC.

⁽⁷⁶⁾ 2016 EU Justice Scoreboard (forthcoming).

Commercial Court and commercial courts has been made. Reorganised first instance civil courts after the 2015 reform of the judicial map are expected to improve efficiency, as the judges' workload has been evened out, and specialised second instance civil courts at national level are expected to improve the consistency of case law. In administrative courts the backlog has been halved at the second instance courts, whereas at the first instance courts additional judges have been appointed to address increasing backlog and delays.

ICT is increasingly used in case management, but remains a challenge in the communication with parties. The introduction of ICT in courts is on track, with the last two remaining courts (High Commercial Court and Supreme Court) expected to be included into the unified 'e-file' system in 2016. However, the use of ICT in communication between courts and parties/public notaries/lawyers is lacking, which hampers efficiency and creates costs (e.g. electronic submission of claims not possible). Electronic delivery of court documents (e.g. for financial agency's liquidation requests and public notaries' enforcement cases) is almost non-existent. While alternative dispute resolution methods appear to be sufficiently promoted and accessible, they appear underutilised. According to the Ministry of Justice, only for 1 % of cadastral municipalities the data on size and use are completely aligned between the land registry and the cadastre. Nevertheless, data on ownership and burdens (e.g. mortgages) in the land registry appear to be updated relatively quickly. Continuous judicial training is focused on IT skills, with little training on judicial issues, and none on court management or ethics.

The involvement of the national security agency in the appointment of first time judges is under constitutional review. This issue raises concern on the independence of the judicial system. Recent legislation mandating the security clearance for first-time judges including at the Supreme Court also raises concerns about effective judicial review. The effectiveness of the Council for the Judiciary is vital as it has final responsibility for the support of the judiciary in the independent delivery of justice. While in normative terms, the Council in Croatia seems to have sufficient powers, particularly regarding the appointment and career

of judges⁽⁷⁷⁾, in practice, its low administrative capacity hinders the effectiveness of its work.

Corruption and transparency

Corruption still hampers business, but indicators show progress. According to a dedicated 2015 Eurobarometer survey⁽⁷⁸⁾, while corruption is still perceived by companies as an obstacle to doing business in Croatia, the proportion of companies holding this view is diminishing (51 % compared to 59 % in 2013). Companies are also less likely to consider patronage and nepotism a problem when doing business (50 % compared to 57 % in 2013), but are more likely than in 2013 to agree that favouritism and corruption hampers competition (86 % compared to 81 % in 2013). Similarly, 90 % consider that too close links between business and politics lead to corruption (compared to 87 % in 2013). This seems to be in line with the Global Competitiveness Report 2015-2016⁽⁷⁹⁾, where Croatia, while maintaining its global position, is scoring very low on public trust in its politicians. However, bribery and abuse of power for personal gain by politicians on national level is considered less widespread than in 2013 (75 % v 83 %).

The 2015-2020 anti-corruption strategy and its implementing action plan for 2015-2016 focus on overcoming corruption risks in public administration. The strategy outlines, at a very general level, 31 horizontal and 33 sector-specific measures. While the ambition and the coverage of the strategy are broadly commensurate with the perceived significance of identified risks, the strategy itself provides little clarity on the main priorities and how the main risks would be specifically addressed. The action plan consists of 126 actions, around one third of which were planned for the second half of 2015. Rather than focusing on priority areas with high economic and social impact, e.g. local and territorial government, public procurement, prevention of conflict of interest and SOEs, the actions cover all general and sectoral areas set in the strategy. The proposed initiatives for 2015 on integrity within the political

⁽⁷⁷⁾ EU Justice Scoreboard 2016 (forthcoming)

⁽⁷⁸⁾ Flash Eurobarometer 428, Businesses' attitudes towards corruption in the EU.

⁽⁷⁹⁾ 2015 World Economic Forum, <http://www3.weforum.org/docs/gcr/2015-2016/HRV.pdf>.

system and administration have been postponed pending the formation of a new government. A renewed commitment to these measures from the Croatian authorities will help the country continue to tackle political corruption and clientelism. Most notable among the proposed initiatives for Q1-2016 are the public procurement register, update on sponsorships by SOEs, legislative proposal on whistleblowers' protection and measures in the healthcare sector. The plan gives little detail of policy objectives to be pursued by the actions and how their fit into the strategy.

Amendments to the Freedom of Information Act represent a step backwards for transparency. Even though they were primarily intended to transpose the EU Directive on the re-use of public sector information (2013/37/EU), these amendments seem to limit the right of access to information, for example by giving public authorities the right to deny access to information when the request leads to work overload. Every public authority has the power to decide when this is the case. Furthermore, the new amendments shift responsibility for a violation of the Act from the heads of the public authorities to the subordinated information officers within those authorities. These changes, in conjunction with the increasing number of complaints by physical and legal persons about unjustified refusal of access to information⁽⁸⁰⁾, will put an additional burden on the small and overstretched office of the Information Commissioner, who oversees the application of the Act to some 6 000 bodies.

Public procurement

The regulatory framework for public procurement is adequate, but challenges remain in administrative capacity. The legislative framework for public procurement is in line with the requirements of relevant EU legislation, including the new EU Directives to be transposed by The Public Procurement Act, expected in early 2016. The general institutional setup appears adequate. However, some of the institutions responsible for public procurement are facing insufficient administrative capacity, high turnover, need for additional training and (especially at local

level) lack of experience. The network for training seems to have been set up. Weaknesses in administrative capacity often lead to faulty tender documentation, resulting in lengthy appeals and even cancellations of tenders. This is especially common in case of complex tenders such as those related to EU funded projects (42 % cancelled in 2014). This is a bottleneck for the absorption of ESI Funds, in particular in heavy-infrastructure sectors such as the transport and waste and water management.

With below-EU average bidder participation of around 3.2 bids per tender, there is room to foster competition. The latest Single market scoreboard shows that in 45 % of cases there was a single bidder in public calls for tender and in 10 % of cases the companies were selected without a call for tender. At the same time, 51 % of companies have taken part in public procurement in the past three years, which is substantially more than the EU average of 37 %. This hints at inadequacies in public procurement on both the side of the contracting authorities and economic operators and thus the need to develop knowledge and experience at all levels, especially among local contracting authorities, including public companies under indirect influence of public authorities and sectorial contracting authorities.

Although the e-procurement system is available and functioning, it is not sufficiently interoperable with other government e-services. On the adoption of the new law on public procurement, Croatia will have made progress towards full implementation of e-procurement. Making the links with various registries would help capture the added value of e-procurement, simplify procedures for economic operators, increase transparency and gather better quality data on public procurement procedures. The National action plan for green procurement from 2015 envisages that the State Office must include green criteria in its own procedures, but also participate in promoting green procurement and sharing examples of best practices.

There is room for improvement in combatting irregularities and corruption in public procurement. According to the 2015 Eurobarometer survey, 74 % of companies (third largest proportion in the EU and an increase in 12 percentage points since 2013) perceive the practice

⁽⁸⁰⁾ See data from the 2014 Report, available on <http://www.pristupinfo.hr/>.

of tailor-made specifications for certain companies as widespread in public procurement. Furthermore, 57 % of companies think bidders themselves are involved in the design of specifications (14 percentage points more than in 2013). Collusive bidding is also perceived as widespread by 69 % of companies (fourth largest share in EU and 11 percentage points more than in 2013). On the rise also are misuses of negotiated and fast-track (urgent) procedures, while substantially less problematic (and declining) is the perceived prevalence of unclear selection and evaluation criteria. While more companies see corruption in public procurement managed by regional or local authorities as widespread, this proportion has decreased for procurement managed by national authorities. Similarly, a view that measures against corruption are applied impartially is shared by an increasing proportion of companies (39 % compared to 26 % in 2013), just short of the EU average of 44 %.

Overall, the public procurement legal framework sets high standards, but contracting authorities are subject to different control mechanisms. An analysis of the structure of public procurement shows that around half of the total public procurement contracting value in Croatia for 2008-2013 was executed by legal persons other than the public authorities and by sectoral contracting authorities – namely by state-owned enterprises (including those owned by units of local government). The state-owned enterprises are subject to weaker control mechanisms. A recent study highlighted the link between election cycles and management appointments in these entities⁽⁸¹⁾. The law provides for preferential treatment of SOEs in public procurement conducted by such authorities, with weaker justification needed for the use of restricted procedures.

State-owned enterprises

Croatia administers a large portfolio of public enterprises. The central government is a majority owner of around 85 companies and owns minority stakes of more than 25 % in some 50 companies.

The remaining 600 plus companies under general government control are owned mostly by sub-central government, at regional or municipal level. A part of the companies managed by the central government is classified as being either of ‘special interest’ or of ‘strategic interest’. Companies of strategic interest are not scheduled for privatisation, whereas companies of special interest are scheduled for restructuring or privatisation. The state portfolio is administered by the State Administrative Office for State Property Management (DUUDI), which together with the line ministries manages 56 companies of strategic and special interest.

State-owned enterprises (SOEs) play an important role in the Croatian economy.

According to Commission estimates based on ORBIS database, employment in state-owned enterprises represents 12 % of overall employment, while they represent 18 % of the total turnover and 30 % of total assets. The state is heavily present in utilities and transportation, where the share of employees working for the SOEs in 2012-2013 reached 79 % and 45 %, respectively. Other sectors with significant state presence include information and communication (14 %), construction (8 %) and manufacturing (6 %).

SOEs have more debt than private companies, albeit mostly low-risk debt. The leverage ratio of public non-financial companies was around 40 % higher than private companies of comparable size, both when assessed relative to a company’s ability to generate earnings and capital employed. However, only about 13 % of debt can be considered as having a high-risk profile, compared with nearly 45 % of private corporate debt.

Croatian SOEs do not have well-defined profitability targets.

The profitability of public corporations in terms of return on assets and return on equity is in the long term significantly lower than in private corporations. In 2014, controlling for size and field of activity, the average return on assets was barely positive in public companies, compared with an average return of 4.5 % in private companies. Moreover, the return on equity in 2014 was five times lower than in the private companies. One reason might be still high labour costs. Although their proportion in turnover decreased from nearly 40 % in 2010 to 33 % in

⁽⁸¹⁾ ANTICORP Project under 7th Framework Programme: The Public Procurement of Construction Works: The Case of Croatia

2014, it remains well above the 21 % share of comparable private companies. The pilot project to develop a standard framework for setting company-specific objectives has been delayed. These objectives include financial and non-commercial targets that SOE boards are expected to deliver and based on which their performance can be evaluated.

Accountability and transparency in the SOE sector have somewhat improved, although their supervision remains fragmented. The new regulations formalise the selection and introduce clearer competency requirements for Supervisory and Management board candidates. The implementing regulation on the organisation and establishment of a central register of state assets was adopted recently, which is considered to be an important step. The monitoring framework currently in place allows for statistical and budgetary control of SOEs, but may not be broad enough given the role these companies play on the labour and product market. Nevertheless, the new provision in the Internal Control Act subjecting SOEs to internal audit requirements is expected to improve transparency and accountability in the public corporate sector.

The listing of minority packages of shares of public companies and privatisations is advancing slowly. The successful public offering of shares in the state-owned bank HPB resulted in a capital injection that decreased state ownership, while ensuring compliance with the regulatory requirements on banks for capital adequacy. For the remaining companies, there has been less progress. In general, the number of companies in which the State has a strategic or special interest, which are managed by DUUDI, has slightly decreased. Given the broad diversification of the state portfolio and SOEs' underperformance compared to private companies (see above), it is worth reviewing which companies actually represent a true strategic interest and improving their governance so they can reach both commercial and non-commercial objectives, whereas SOEs that fall out of the strategic interest category, (partial) privatisation could be considered.

Box 3.2.1: **Net costs of public corporations**

This box explains the concept of net costs of public corporations used in this section to quantify the financial burden of SOEs on public finances. Please see Eurostat's ESA2010 Manual on government deficit and debt, 2014 edition, for a full explanation of the national accounting categories mentioned below.

Several transactions related to SOEs have a direct impact on the general government deficit. These include

- Net borrowing/lending of SOEs classified within the general government sector;
- Dividends received from public corporations classified outside of the general government sector;
- Capital injections to SOEs are also part of the general government deficit in cases when it cannot be reasonably assumed that the government is acting in the same manner a private investor would do;
- Other transactions include net costs of guarantees (guarantees called less repayments) and, in the case of a third call on a guarantee, the whole guaranteed debt.

It is relevant to note that some transactions with SOEs either do not impact the ESA deficit at all or, if they do, they need to be interpreted with caution. An example of the former is privatisation receipts obtained from companies whose shares are traded in the stock market. In accordance with ESA, they are classified as financial transactions (i.e., an increase in cash and decrease in shares), and have therefore no direct impact on the ESA deficit. In contrast, certain SOE-related transactions directly affect the deficit but cannot be taken as a financial burden of SOEs and are therefore excluded from the concept of net costs. This is for instance the case of subsidies and certain capital transfers, which, while representing a transfer to SOEs, may represent costs of public service obligations or genuine public investment and might have been spent irrespective of whether the contractor was a public corporation. By the same token, taxes paid by SOEs are also excluded from the measure, as they would have been paid even if the companies were privately owned

Last but not least, poorly-managed SOEs may carry significant opportunity costs even if they are not directly loss-making. Quantification of such costs is however conditional on identifying the hypothetical rate of return that would have been attained had the company been run as its peer companies in the private sector (or similar companies abroad). Given the large scale of uncertainty surrounding this exercise, such considerations have been excluded from the analysis.

In 2015, the State Audit Office completed a review of activities and financial reports by the State Administrative Office for State Property Management (DUUDI) for business year 2014, issuing a negative opinion. Irregularities were found in the scope and internal structure (regarding the establishment of DUUDI, take-over of duties from the agency that was in place until September 2013, the internal control system, real estate management, reporting on property management and Registry of state property); accounting practices (in particular recording of financial transactions, shareholders' equity, assets and

liabilities registry, valuation of state property, off-balance-sheet records and financial reports); fees for use of non-financial assets; expenses based on the piecework agreements; and public procurement. The negative opinion was published in November 2015. DUUDI stated that the identified concerns are mostly legacy issues. Moreover, some of these issues might be resolved by ISUDIO, the ICT system for property management, introduced when the contract with the provider was signed in December 2015.

3.3. EMPLOYABILITY, EDUCATION AND SOCIAL OUTCOMES

Croatian Employment Service and active labour market policies

The 2015-2017 reform of the Croatian Employment Service (CES) is being implemented. The main objectives of the reform are strengthening administrative capacity, increasing efficiency and offering new services. Using the public employment service for help in job search is more widespread in Croatia than on average in the EU. This may be a contributing factor to the high caseload for employment counsellors and to the fact that it can take up to 60 days before a basic activation plan is drawn up. However, thanks to increased specialisation of counsellors, recruitment of new staff ⁽⁸²⁾ and an overall decrease in unemployment in 2015, the caseload improved considerably over the last year. The newly established career guidance centres (CISOKs) started to provide free of charge tailor-made services, including counselling and support in life-long career guidance, focusing particularly on young people, including those not in education, employment or training (NEETs). Significant efforts have been made to develop user-friendly online services, including self-assessment, job search and e-counselling tools. However, the visibility and public awareness of these tools are still low to date.

Youth remains the focus of active labour market policy measures. Despite the positive trends in recent years, in 2015 expenditure on active labour market measures (ALMPs) still amounted to only 0.5 % of GDP, the coverage was 10 % and the targets for new beneficiaries were not met ⁽⁸³⁾. ALMPs continued to focus primarily on highly educated young people (15-29) without working experience. The two measures most used in 2015 were subsidies for hiring and ‘occupational training without commencing employment’, both of which seem to be showing their first positive effects. However, the decrease

in the number of unemployed may be associated with deadweight losses, given the high educational level of the target groups. The long-delayed external evaluation of active labour market policies in 2010-2013 has started, with final results expected in the first quarter of 2016.

The implementation of the Youth Guarantee is facing challenges. In 2015, the Youth Guarantee Implementation Plan was aligned with the European Social Fund Operational Programme 2014-2020, its main source of financing. As the 2014 data on the implementation of the scheme show, there is room to improve the effectiveness of the Youth Guarantee in terms of both its rate of placement of people in work or training and its monitoring and evaluation. The main obstacles to its successful implementation have been identified as a lack of capacity and of coordination among the implementing bodies, as well as delays in the introduction of measures in education and skills.

Further steps have been taken to improve outreach to non-registered persons not in education, employment or training (NEETs). In November 2015, the delayed agreement on inter-institutional data exchange for establishing a NEETs tracking system was signed, with first data expected in spring 2016. This should allow better identification and follow-up of NEETs and better tailoring of measures. Dedicated career guidance centres will be in charge of the outreach and activation of NEETs once the tracking system becomes operational.

Activation of the long-term unemployed is still inadequate. The long-term unemployed accounted for 35 % and 40 % of all ALMP participants in 2014 and 2015 respectively. This group is mainly addressed through public works schemes, in which new participants doubled in 2015. This led to an improvement in the traditionally limited coverage of older and low-skilled people. However, the take-up of training, generally considered to be a more effective measure in the case of long-term unemployed, has substantially decreased recently. In 2014, data sharing between the CES (responsible for unemployment benefits) and Centres for Social Welfare (responsible for administering social welfare benefits) led to tighter controls over eligibility for benefits. A comprehensive activation strategy for Guaranteed Minimum Benefit beneficiaries who are capable of

⁽⁸²⁾ Counsellor specialising in specific target groups were introduced in 2015 in order to improve services, including for long-term unemployed and young. The Ministry of Labour and Pensions approved the employment of additional 116 staff. Around 100 new counsellors have already been employed.

⁽⁸³⁾ The target was set at 52 856 in the Guidelines for development and implementation of active labour market measures for the period 2015 – 2017 and the NRP. In December the number of new beneficiaries amounted to 41 595.

work is not yet in place. However, the recently introduced ‘activation’ counsellors ⁽⁸⁴⁾, the planned statistical profiling and one-stop-shops (especially if designed as single points of contact offering joint employment and social services) should help improve the situation. Overall, given the size of the challenge there is substantial room to improve the coverage and the offer of ALMP measures targeting the long-term unemployed and minimum income scheme beneficiaries.

Education and training

Croatia is underperforming on access to and the quality of the education system. Large regional differences in the availability and quality of early childhood education and care ⁽⁸⁵⁾ help explain why Croatia has the lowest rate of participation in education (71.4 %) in the EU among 4-6 year olds. According to the OECD PISA survey, one third of 15-year old pupils lack numeracy skills, which points to a weakness in the education system's ability to deliver basic skills ⁽⁸⁶⁾. The acquisition of digital skills is hampered by delays in digitisation of teaching practices and inadequate ICT infrastructure in schools.

Croatia is taking ambitious steps to improve the quality of education. While access remains an issue, the quality of early childhood education is being addressed by the introduction of a national curriculum in the 2015/2016 school year. A comprehensive structural and curricular reform of primary and lower secondary education which started in 2015 is tackling basic skills deficits. The reform entails a gradual transition from the current eight-year system to a nine-year system and a large-scale upskilling of teachers. In parallel, a

significant investment programme, financed through EU funds, was begun in 2014 to raise the level of digitisation in 60 % of primary and secondary schools by 2020.

An ever larger number of people choose to enter tertiary education, but many do not complete their studies. The proportion of 30-34 year-olds with tertiary education significantly increased in 2014 to 32.2 %. This brought Croatia much closer to the national 2020 target of 35 % but it was still below the EU average of 38 %. Even though the progression rate from school into higher education is high ⁽⁸⁷⁾, completion rates remain low. Only just over half of students manage to reach their final year of studies within the planned time, and an estimated 41 % drop out completely. The main reasons for this are lack of motivation and limited financial means ⁽⁸⁸⁾. The situation is especially acute in traditionally underrepresented subjects, such as science, technology, engineering and mathematics, due to insufficient mathematics skills at entry. So far there has been little systematic policy response in this area.

Shortcomings in the education system make the transition to the labour market more difficult.

The level of participation in vocational education and training (VET) at upper secondary level in Croatia is one of the highest in the EU, at 71.1 % against an EU average of 48.9 % in 2013. However, the employment rate of upper secondary graduates is one of the lowest (see Graph 3.3.1). What is more, about 45 % of these graduates are employed in jobs outside their field of education, and around one third below their skills level. One third of employers report difficulties in recruiting suitable employees. Public sector employers highlight the shortage of candidates with the right level of qualifications (49 %), while private sector employers struggle to find candidates with relevant work experience (43.5 %) ⁽⁸⁹⁾. In higher education,

⁽⁸⁴⁾ ‘Activation’ counsellors are responsible for providing personalised services to long-term unemployed, low skilled and older work people. In 2015 there were ca 140 such counsellors.

⁽⁸⁵⁾ Responsibility for early childhood education and care is delegated to the local government level, which results in significant regional differences and the lowest coverage in the poorest counties. See Matković, T., Dobrotić, I. (2013). Changes in Early Childhood Education and Care Coverage in Croatia: National and Country-level Overview. Croatian Journal of Social Policy, 20(1): 65-73.

⁽⁸⁶⁾ 29.9 % of students in Croatia failed to achieve basic skills in the mathematics test compared to the EU-25 average of 22.1 %. OECD (2013b) PISA 2012 results: What Students Know and Can do. Student Performance in Mathematics, Reading and Science (Volume I).

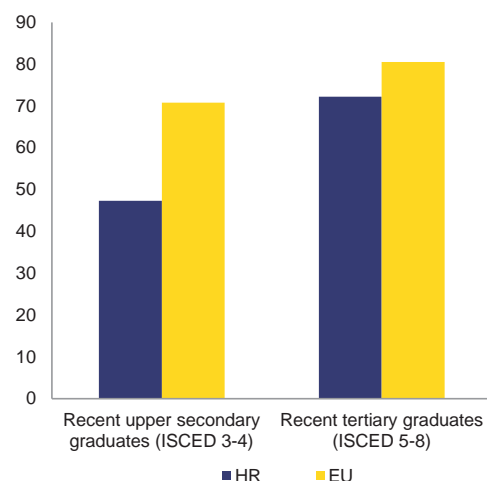
⁽⁸⁷⁾ Between 2010/2011 and 2013/2014, on average 78 % of graduates of upper secondary vocational programmes gained access to higher education by successfully passing the ‘matura’ exams and 60.7 % enrolled into higher education programmes.

⁽⁸⁸⁾ Institute for the Development of Education (2011), Higher education funding and the social dimension in Croatia: analysis and policy guidelines.

⁽⁸⁹⁾ Croatian Employment Service (August 2015) Survey of employers 2015, p. 26.

the current design of tuition fees and scholarships aims at increasing enrolment in fields of high labour demand. However, the entrance quotas for study programmes set by public institutions are not in line with demand. In addition to labour market conditions and outdated curricula and limited opportunities for high quality work-based learning also contribute to the poor employment outcomes of recent graduates at all levels.

Graph 3.3.1: **Employment rate of recent graduates (20-34 year olds within 1-3 years of graduation) by educational level**



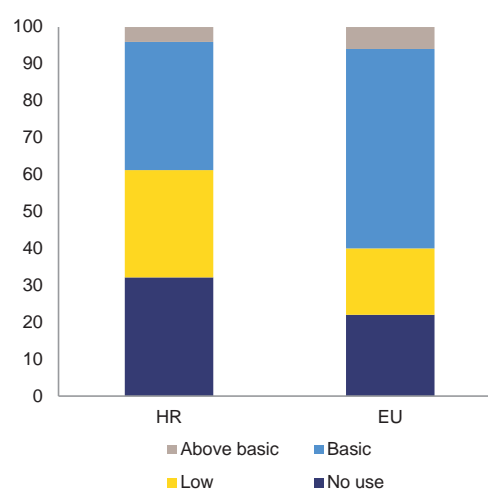
Source: Eurostat

Implementation of policies to improve the labour market relevance of education is slow. The ambitious reform of the Croatian qualifications framework of May 2014 aims at aligning higher education and secondary VET outcomes with labour market needs so as to reduce skills mismatches. The reform is in the initial stages of implementation, with the higher education sector moving ahead faster than others⁽⁹⁰⁾. To modernise outdated curricula and increase work-based learning, Croatia is currently drafting a programme for the development of VET. Given that the private sector plays a minor role in the

⁽⁹⁰⁾ Between December 2014 and November 2015, 8 out of 25 sector skills councils were formed. Occupational and qualifications standards are pending and the online qualifications register is expected to be fully functional at end-2016.

funding of VET, the sustainability of the reform and its pace will highly depend on the absorption of EU funds and on human resources in schools. Finally, the so-called advanced labour market information system, a forecasting and vocational guidance and career development tool, is being launched at the beginning of 2016.

Graph 3.3.2: **Digital skills (% individuals with above basic, basic and low digital skills and no internet use)**

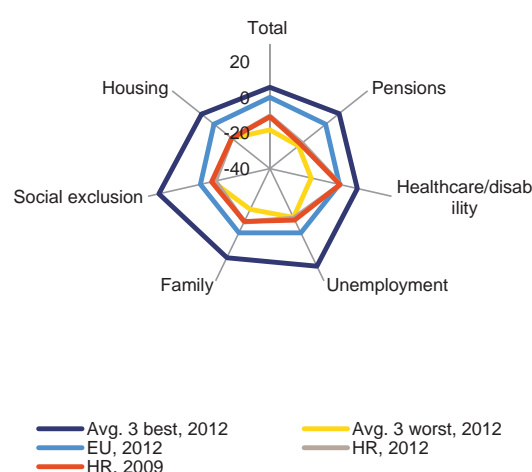


Source: Eurostat

The system of adult education is weakly governed and participation in lifelong learning remains very low. The proportion of adults taking part in education and training was 2.5 %, far below the EU average of 10.7 %. While the situation is somewhat improving for the highly educated (partly also due to targeted ALMPs), the trend has recently turned negative for the less educated. At the same time there is a major need for more adult education: in 2014, 20.8 % of the population had only primary education, 60.7 % had completed secondary education and only 18.5 % had finished tertiary education. These figures confirm a generally poor educational attainment in people over 15. This is coupled with a low skills composition among the unemployed and the relatively high share of people with limited digital skills (see Graph 3.3.2). In 2014 employers' commitment to offer training to workers, including in the private sector and small and medium-sized enterprises, improved as nearly half organised training, against 32 % in 2013.

The policy response has been piecemeal and inadequate to the size of the problem. The strategy for lifelong learning and career guidance adopted in October 2015 should help improve career guidance and participation in lifelong learning. Similarly, the introduction of a system for recognising and validating non-formal and informal learning could open up possibilities for upskilling in the long run. However, implementation of both measures is still pending. The December 2015 recommendation of the National Committee on the Development of Human Potential, asking for an amendment of the 2007 Law on Adult Education, sends a strong signal that there is a need of reform. Overall, further steps are needed to make lifelong learning accessible, high-quality and responsive to the needs of the economy.

Graph 3.3.3: Expenditure on social protection spending in 2009 and 2012, by function



(1) Spending levels for pensions, unemployment and family benefits are corrected for the size of the target population, using as reference (i) unemployed people for unemployment expenditure; (ii) people aged 65 and older for pension expenditure; and (iii) people aged under 18 for family expenditure.

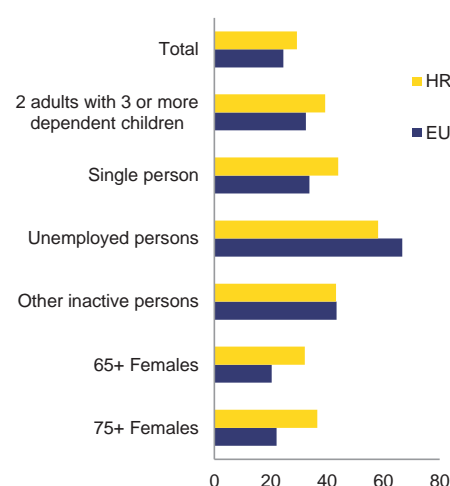
Source: European Commission based on ESSPROS data

Social protection system outcomes

Levels of poverty and social exclusion are high. This is partly explained by low expenditure on social protection which in 2013 stood at 21.7 % of GDP, well below the EU average of 28.6 % of GDP in 2012. Compared with the size of the target population, expenditure on old-age and survivors

pensions, unemployment benefits, social exclusion and housing is among the lowest in the EU (see graph 3.3.3). As a result, the proportion of people at risk of poverty and social exclusion is still considerably higher than the EU average (29.3 % in 2014 compared to 24.5 %). Particularly the unemployed, inactive and single people are at high risk. The situation of the elderly, especially women, but also of households with three or more children is substantially worse than the EU average (see graph 3.3.4).

Graph 3.3.4: People at risk of poverty or social exclusion by age, household typology and most frequent activity status (2014, % in each group)



Source: European Commission, based on EU-SILC

There are indications that access to healthcare and long-term care is an issue. Spending on healthcare (7.5 % of GDP in 2013; EU-28: 8 % in 2012) and disability benefits (3.6 % of GDP in 2013; EU-28: 2 % in 2012), including disability pensions, has been slightly increasing and accounted for 52 % of total social protection spending in 2013 (EU-28: 36 % in 2012). However, the share spent on prevention is lower than the EU average. Access to healthcare could also be an issue as the share of the population reporting an unmet need for medical examination due to distance is one of the highest in the EU ⁽⁹¹⁾. The gap between the lower and higher income quintiles of the population in terms of unmet needs

⁽⁹¹⁾ Reported by 1.2 % of the population vs 0.2 % in the EU in 2013, EU SILC.

is also higher than the EU average. In addition, the continued spread of long-term care services between the healthcare and social welfare systems results in inefficiencies, including the coverage gaps mentioned earlier (see section 2.4 on labour supply and inactivity).

The analysis of the tax and benefits system conducted by the authorities revealed regional disparities in social benefits. In June 2015 the authorities completed a first comprehensive analytical review of the tax and benefits system. The study analyses Croatia's social protection system using data from both central and local government. It is meant to inform the design of policy to reduce the system's fragmentation and inefficiency. The review concludes that benefits awarded at different levels of government seem to be largely complementary. However the substantial differences in per capita spending on social protection in different parts of Croatia further worsen the existing regional differences and inequalities. The City of Zagreb and the more developed counties spend up to five times more per person than the poorest counties. The review found that most social expenditure is administered at central level, including healthcare, pensions, and disability and unemployment benefits. The main focus at the sub-national level is on family benefits, such as birth grants, child allowance, and subsidies for books and transport. Since one-off birth grants and similar subventions are paid at both the central and local levels, there is some degree of overlap. Social welfare programmes targeting the most vulnerable are the second largest area of intervention at local level. These consist mainly of transport subsidies (40 %) and support for housing and fuel (33 %). Housing and fuel support is means-tested and complementary to the national guaranteed minimum income scheme.

Eligibility criteria for social protection benefits are inconsistent. The review shows that cash benefits and subventions are not always awarded in a consistent manner at the central level. Some general schemes apply strict criteria including asset- and/or means tests and ceilings such as the Guaranteed Minimum Benefit (GMB). Other schemes targeted at special categories such as war veterans and their families apply a more universal approach. In addition, the benefits under special schemes also tend to be higher than comparable benefits under general schemes. Hence, the current

design of the system seems to be undermining its effectiveness, in terms of both its fairness and adequacy. The situation could be improved by unifying eligibility criteria and further consolidating benefits. This seems especially necessary given current fiscal constraints and the fact that only a marginal share of the social protection budget is spent on the most vulnerable groups.

The Guaranteed Minimum Benefit scheme (GMB) is not adequate to cover basic subsistence needs. The base amount of the GMB, operational since January 2014, has been set at HRK 800 (EUR 105) for a single person while the poverty line is HRK 1 980 (EUR 260, or 60 % of the median income). However, the levels of social assistance benefits are still not linked to any reference value or relevant indicator. Depending on household composition, the benefit level amounts to 32 % to 46 % of the poverty line. Based on the OECD tax-benefit model, even when locally awarded housing benefits are included ⁽⁹²⁾, the net income for a single person in 2013 was still less than half (i.e. 47 %) of the relative poverty threshold. At the same time, despite being one of the best targeted programmes in Croatia, the coverage of the GMB remains extremely low, reaching only an estimated 12 % of the population at risk of poverty and only 16.2 % of the poorest quintile. The unsatisfactory performance of the minimum income provision leads to the relatively high poverty gap. In addition, the current child tax allowance only benefits families with higher incomes, leaving middle-class families without financial support.

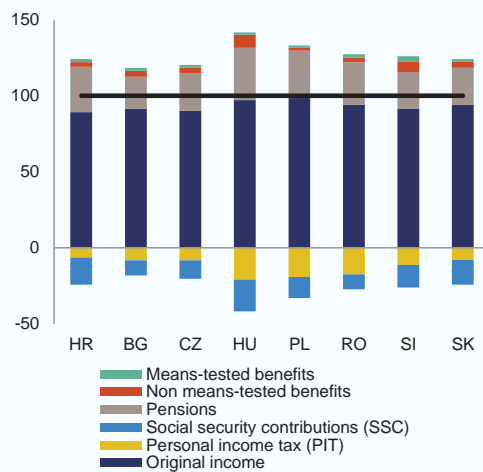
Some steps have been taken to improve the adequacy and expand the coverage of social assistance. The recent amendments to the Social Welfare Act increased the GMB for single persons not capable of work and for single parent households with children by 15 %. They also introduced a new benefit for 73 000 vulnerable energy consumers. According to the authorities, the cost of this benefit will be borne by electricity distributors, without in principle increasing the electricity bill.

⁽⁹²⁾ They make up about one third of the total incomes received by social assistance recipients.

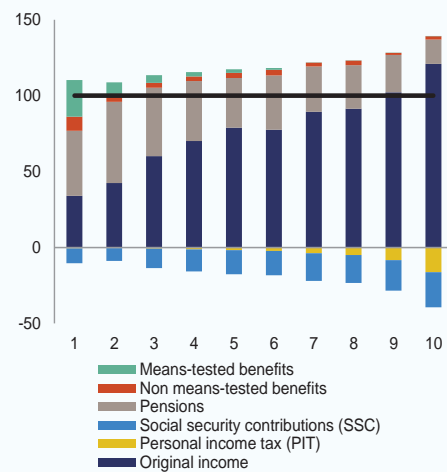
Box 3.3.1: Impact of tax and benefits in Croatia and EU peers

This box analyses the structure of households' disposable income in Croatia and its EU peer countries. The analysis is based on the tax-benefit microsimulations ⁽¹⁾ conducted by the European Commission Joint Research Centre using the Euromod model, which simulates taxes and social security contributions as well as most means-tested benefits. It does not simulate pension income and unemployment benefits that are related to taxpayers' previous contributions. The latter, together with market income ⁽²⁾, are taken directly from the EU-SILC survey of household incomes. The graph below gives the breakdown of average household income based on its source.

Graph (1): Composition of average disposable income in Croatia and peer countries (average disposable income in each country = 100)



Graph (2): Composition of disposable income by income decile (average disposable income in each decile = 100)



Source: Simulations are conducted by the European Commission Joint Research Centre based on the EUROMOD model, which uses EU-SILC data of 2012 (European Union Statistics on Income and Living Conditions, income reference period is 2011). Uprating factors are used to update incomes to 2015.

In Croatia, social protection benefits represent about 28 % of gross income (i.e. the sum of gross market income and gross social benefits) on average, which is slightly more than the share in most other Member States considered, except for Hungary. In terms of composition, means tested and non-means-tested benefits account for around 4 % of gross income on average — broadly in line with the average in peer countries (albeit lower than Hungary and Slovenia). On the other hand income from pensions stands at 24 % of average disposable income and represents a significantly higher share of disposable income than in most peer countries. The greater reliance on these transfers reflects structural factors such as higher inactivity.

Social security contributions represent on average 14 % of gross income, the highest share in gross income among EU peers with the exception of Hungary. Personal income taxes, on the other hand, represent only 5 % of gross income on average — the lowest share among EU peers. Overall, this explains the low level of direct taxation and indicates a limited redistributive capacity of the tax system.

⁽¹⁾ The advantage of using a micro simulation model is that it allows assessing the impact of the taxes and benefits since gross income sources and taxes are typically not recorded in income surveys.

⁽²⁾ Original incomes include employment income, self-employment income, income of children under 16, private pensions, property income, investment income, private transfers received, maintenance payments and reported other income. Income sources are not equalised and measured at household level.

(Continued on the next page)

Box (continued)

Net transfers represent slightly less than 9 % of gross income. As elsewhere, the State gives more to households in the form of benefits than it deducts through income taxes and social security contributions, but the share of net transfers is higher in Croatia than in peer countries (where net transfers represent on average 5 % of gross income). Focusing on net disposable income, however, neglects the role of indirect taxation. The latter represent a higher burden on households in Croatia than in peer countries ⁽³⁾. To the extent that indirect taxes such as VAT tend to be a more regressive form of taxation, the higher share of net transfers in Croatia may be justified on equity grounds.

Market income represents less than one third of gross income in the first decile and less than 40 % in the second decile. Non-means-tested benefits represent a relatively low share, while pensions and means-tested benefits account respectively for 39 % and 22 % of income in the first decile and 49 % and 7 % respectively in the second decile. The high concentration of means-tested benefits in the first decile points to fairly good targeting. The share of pensions also decreases almost linearly from 43 % in the second decile to 16 % in the top decile. The reliance on social security contributions (SSC), however, implies a relatively high tax burden on low-income classes. Moreover, while the personal income tax appears fairly progressive, its impact is weakened by the low level of taxation. Overall, the tax-benefits system decreases inequality (as measured by the Gini index) from 51 to 29, mainly thanks to benefits ⁽⁴⁾. This is comparable to the reduction achieved by other countries. However, inequality would increase if disposable income were to be adjusted for indirect taxation, for instance, as in the case of Croatia with its high VAT.

The high reliance on social security contributions and the steep withdrawal of means-tested benefits can result in weaker incentives to work, especially for households with weak earning capabilities. Because of their linear structure, social security contributions typically impose a relatively high burden on low incomes. Excessively low income thresholds for means-tested benefits imply relatively steep withdrawal rates. The combination of the latter with the flat rate of social security contributions tends to result in high marginal effective tax rates and hence weak incentives to take up work — particularly for the low-skilled with weak earning capacity.

⁽³⁾ In 2015 indirect taxation amounted to 18.67 % of GDP, well above the EU average of 13.49 %.

⁽⁴⁾ The Gini index is generally used to measure inequality: it ranges from 0 (maximum equality or equal distribution of disposable income) and 1 (maximum inequality).

The reform of the social protection system is proceeding slowly. As a result of the autumn 2015 parliamentary elections, the action plan outlining concrete reform steps to address the fragmentation and inefficiency of the social welfare system — planned for the summer 2015 — was put on hold. In September 2015, 127 ‘one-stop-shops’ (OSS), which will serve as the single administrative point for the provision of social protection services, were legally established. The OSSs are expected to relieve the Social Welfare Centres from the administration of social benefits, allowing them to focus on their core functions. The full functional transfer of the GMB to the OSS has been postponed from March to June 2016, while the transfer of other benefits (i.e. all child allowances, the unemployment allowance and five different

maternity benefits) is planned for end-2016 and early 2017. Despite the ongoing consolidation of social benefits through the ‘one-stop shop’, local and regional benefits and those granted under special schemes will not be unified with those of the central government in the near future.

Adequacy of pensions

The adequacy of pensions is low and leads to high risks of poverty and social exclusion in old age. Pensioners tend to experience a significant income drop compared to their pre-retirement income. The net theoretical replacement rate was equal to 55.5 % for men and 49.6 % for women in 2013. Likewise, the benefit ratio stood at a low of 30.8 % in 2013, compared to the EU average of

45 %. Both indicators are among the lowest in the EU. In 2014, 29.7 % of the population aged 65+ lived in poverty or social exclusion (EU-28: 17.8 %). There was a higher risk of poverty among people over 75 years (33.2 %), and especially women (36.5 %) ⁽⁹³⁾.

Pension adequacy is projected to further drop substantially. Croatia is among the Member States with the highest projected increase in the effective economic dependency ratio (calculated as the population under 14 or above 65, over the working-age population). At the same time, a record drop in gross public pension expenditure is projected (-3.9 % between 2013 and 2060). By 2053 the net theoretical replacement ⁽⁹⁴⁾ rate for a full career at average earnings will become one of the lowest in the EU (43.5 %), while the benefit ratio will drop to 17.6 % by 2060. The current high unemployment rate also raises concerns about people's ability to meet the conditions for receiving a pension in the future, as unemployment periods are not credited in the pension system except in some exceptional cases. Finally, those who retire five years before the standard pensionable age due to unemployment are projected to be at a particularly high risk of old-age poverty. The net pension of an average earner in this case is projected to be 31.6 % of the net average wage in 2053.

Some attempts are being made to improve the adequacy and equity of pensions. The amendment of the Income Tax Act, effective from 1 January 2015, raised the non-taxable share of pensions from HRK 3 400 (EUR 444) to HRK 3 800 (EUR 496). The measure should improve the adequacy of above-average pensions. Furthermore, pay-as-you-go 'earned' pensions rose twice in 2015 thanks to a new and more generous indexing formula. Privileged pensions are now subject to separate indexation rules — their growth is tied to a GDP trigger and conditional on the government's decision. During 2015 a number of awareness-

raising campaigns took place in Croatia to explain the financial implications of early retirement for future pensions, raise the low level of public literacy on pensions ⁽⁹⁵⁾ and stimulate voluntary savings.

The education and social protection systems still suffer from structural weaknesses. Although ambitious measures are being taken to improve the quality of education, shortcomings in the education system make it difficult for graduates to make the transition to the labour market and for adults to re-enter it. Enhancing the skills of adults and unemployed is not being prioritised, despite the direct link to productivity and employment. The active labour market policies targeting young people have started to show good results but activation of the long-term unemployed is still unsatisfactory. Inefficiencies in the design of the social protection system result in high levels of poverty and social exclusion, leaving the most vulnerable with inadequate protection. Both the current and future adequacy of pensions is low and creates high risks of poverty in old age, especially for those with short working lives.

⁽⁹⁵⁾ More than 50 % of working age population has low awareness about the consequences of early retirement and lower contributions to the third pension pillar on future pension levels. Mirovinska pismenost i štednja za treću životnu dob, 2010, Vehovec.

⁽⁹³⁾ At-risk-of-poverty rate of people over 65 is still high (23.1 % in 2014 vs 13.8 % in EU28). 14.7 % live in severe material deprivation (compared to 6.3 % EU28 est. 2014), with a significantly higher incidence among women (16.2 %, compared to 12.5 % among men).

⁽⁹⁴⁾ Theoretical replacement rate is defined as the level of pension income the first year after retirement as a percentage of individual earnings at the moment of take-up of pension.

ANNEX A

Overview Table

Commitments

Summary assessment ⁽⁹⁶⁾

2015 Country-specific recommendations (CSRs)	
<p>CSR 1: Ensure a durable correction of the excessive deficit by 2016 by taking the necessary measures in 2015 and reinforcing the budgetary strategy for 2016. Publish and implement the findings of the expenditure review. Improve control over expenditure at central and local level, in particular by establishing a sanctioning mechanism for entities breaching budgetary limits. Adopt the Fiscal Responsibility Act and strengthen the capacity and role of the State Audit Office. Introduce a recurrent property tax and improve VAT compliance. Reinforce public debt management, in particular by publishing on an annual basis a debt management strategy and ensuring adequate resourcing.</p>	<p>Croatia has made limited progress in addressing CSR 1 (this overall assessment of CSR 1 does not include an assessment of compliance with the Stability and Growth Pact):</p> <p>Limited progress in the publication and implementation of the spending review, as only some of the identified saving measures are being implemented (namely in the area of health care and the rationalisation of public agencies). Preparatory work has been undertaken on public-sector wage-setting. The findings of the review have not been published nor presented to Parliament.</p> <p>Limited progress in improving control over expenditure at central and local level, adopting the Fiscal Responsibility Act (FRA) and strengthening the capacity and role of the State Audit Office (SAO), as the government adopted a new standard form for fiscal impact assessments on new legislation and secured additional funding for the SAO. The adoption of the new FRA has been postponed.</p> <p>Limited progress in introducing a recurrent property tax and improving VAT compliance, as measures are being taken to improve tax compliance, including a gradual development of a compliance risks management system. A reform of communal charges, presented as a step in broader property taxation reform, has been initiated.</p> <p>No progress in reinforcing public debt management and ensuring adequate resourcing, as the publication of a debt management strategy is delayed for end-2016 and no sufficient steps have been taken to</p>

⁽⁹⁶⁾ The following categories are used to assess progress in implementing the 2015 CSRs:

No progress: The Member State (MS) has neither announced nor adopted measures to address the CSR. This category also applies if the MS has commissioned a study group to evaluate possible measures.

Limited progress: The MS has announced some measures to address the CSR, but these appear insufficient and/or their adoption/implementation is at risk.

Some progress: The MS has announced or adopted measures to address the CSR. These are promising, but not all of them have been implemented and it is not certain that all will be.

Substantial progress: The MS has adopted measures, most of which have been implemented. They go a long way towards addressing the CSR.

Fully implemented: The MS has adopted and implemented measures that address the CSR appropriately.

	ensure adequate resourcing.
<p>CSR 2: Discourage early retirement by raising penalties for early exits. Improve the adequacy and efficiency of pension spending by tightening the definition of arduous and hazardous professions. Tackle the fiscal risks in healthcare.</p>	<p>Croatia has made limited progress in addressing CSR 2:</p> <p>Limited progress in discouraging early retirement and improving the adequacy and efficiency of pension spending, as planned policy action to encourage particular categories of workers to stay in longer employment has been put on hold.</p> <p>Limited progress in tackling the fiscal risks in healthcare, as the reduction in arrears in the health care system is not proceeding according to plan even though the financial situation of the hospital sectors is improving overall.</p>
<p>CSR 3: Tackle the weaknesses in the wage-setting framework, in consultation with the social partners and in accordance with national practices, to foster the alignment of wages with productivity and macroeconomic conditions. Strengthen incentives for the unemployed and inactive to take up paid employment. Based on the 2014 review, carry out the reform of the social protection system and further consolidate social benefits by improving targeting and eliminating overlaps.</p>	<p>Croatia has made limited progress in addressing CSR 3:</p> <p>Limited progress in tackling the weaknesses in the wage-setting framework as preparatory steps have been taken to reform the wage-determination system in the public sector, but concrete measures have yet to be adopted.</p> <p>Limited progress in strengthening incentives to take up paid employment and carrying out the reform of the social protection system as the consolidation of social benefits is proceeding slowly and concrete reform plans following the 2014 review have not yet been put forward.</p>
<p>CSR 4: Reduce the extent of fragmentation and overlap between levels of central and local government by putting forward a new model for functional distribution of competencies and by rationalising the system of state agencies. Increase transparency and accountability in the public corporate sector, in particular as regards managerial appointments and competency requirements. Advance the listing of minority packages of shares of public companies and privatisations.</p>	<p>Croatia has made limited progress in addressing CSR 4:</p> <p>Limited progress in reducing fragmentation and overlap between levels of central and local government as a comprehensive reform of local governance is lagging behind and the rationalisation of the agency system had been initiated but is currently on hold.</p> <p>Some progress in increasing transparency and accountability in the public corporate sector, as new legislation on managerial appointments has been adopted, though it remains to be established how the new provisions will be implemented.</p>

	<p>Limited progress in advancing the listing of minority packages of shares of public companies and privatisations as no new privatisations took place, apart from the recapitalisation of the state bank HPB with an increased share of private owners.</p>
<p>CSR 5: Significantly reduce parafiscal charges and remove excessive barriers for service providers. Identify and implement steps to improve the efficiency and quality of the justice system, in particular commercial courts.</p>	<p>Croatia has made limited progress in addressing CSR 5:</p> <p>Limited progress in significantly reducing parafiscal charges and removing excessive barriers for service providers as 12 parafiscal charges were reduced or abolished (and 1 added), but main barriers for service providers remain unresolved, especially in professional and business services.</p> <p>Limited progress in identifying and implementing steps to improve the efficiency and quality of the justice system as proceeding and backlogs remain considerable and the use of electronic means to communicate with parties remains a challenge (despite some progress).</p>
<p>CSR 6: Reinforce the pre-insolvency and insolvency frameworks for businesses in order to facilitate debt restructuring and put in place a personal insolvency procedure. Strengthen the capacity of the financial sector to support the recovery in view of challenges from high non-performing corporate loans and foreign currency mortgage loans, and weak governance practices in some institutions.</p>	<p>Croatia has made some progress in addressing CSR 6:</p> <p>Substantial progress in reinforcing the pre-insolvency and insolvency frameworks for businesses and putting in place a personal insolvency procedure as implementation of the amended corporate insolvency legislation is expected to contribute to faster resolution of impaired debt and the legislative framework for personal insolvency entered into force, tough implementation could prove challenging.</p> <p>Some progress in strengthening the capacity of the financial sector to support the recovery in view of challenges from high non-performing corporate loans. Although no additional measures to tackle the issue have been prepared, the non-performing loans (NPL) ratio is stabilising at a high level. The reform of the insolvency framework is expected to support a faster resolution of NPLs.</p> <p>Limited progress in strengthening the</p>

	<p>capacity of the financial sector to support the recovery in view of challenges from foreign currency mortgage loans, as the CHF loan conversion legislation puts strain on public finances and causes substantial losses for banks.</p> <p>Some progress in addressing the challenges from weak governance practices in some institutions, as there is a commitment from the authorities to carry out an asset quality review of the credit portfolio of the Croatian Bank for Reconstruction and Development (HBOR) in 2017.</p>
Europe 2020 (national targets and progress)	
Employment rate target: 65.2 %	<p>The employment rate in Croatia is one of the lowest in the EU, but since 2013 there have been some moderate positive trends. It increased from 57.2 % in 2013 to 59.2 % in 2014, and the trend continued in 2015, with 62.1 % in Q3-2015. Croatia may achieve its national target of 65.2%, but this is still far below the level in other EU countries.</p>
R&D target: 1.4 % of GDP	<p>The level of investment in research and development in Croatia increased from 0.75 % of GDP in 2012 to 0.81 % in 2013 (partly due to the contraction in GDP). However, it declined again to 0.79 % of GDP in 2014 and is still significantly below the national target of 1.4 % for 2020. Public R&D intensity decreased sharply from 0.44 % in 2008 to 0.33 % in 2014. Business R&D intensity remained stable at 0.34 % between 2009 and 2014. Only limited progress has been made in relation to the Europe 2020 target.</p>
<p>Greenhouse gas emissions target: 20 %</p> <p>Non-ETS emission reduction target: +11 % compared to 2005 emissions.</p>	<p>According to the latest national projections and taking into account existing measures, non-ETS (Emissions Trading System) emissions will decrease by 9 % between 2005 and 2020. The target is consequently expected to be met with a margin of 20 pps.</p> <p>The latest data for 2014 show that Croatia reduced its emissions by 13.9 % instead of increasing its emission up to 4.9 %, which is the annual allocation interim target allowed for the year 2014.</p>

Renewable energy target: 20 % Share of renewable energy in all modes of transport: 10 %	With a share of renewable energy in gross final consumption of 27.9 % in 2014, Croatia has largely achieved its 20 % renewable energy target for 2020. The share of renewable electricity generation in final electricity consumption increased from 35.8 % to 45.3 % between 2005 and 2014, while the share of renewable heating/cooling increased from 30 % to 36.2 % in the same period. With a 2.1 % renewable energy share in transport in 2014, there is still a substantial distance to the 10 % renewable energy share target by 2020 and a risk that Croatia fails to reach the target.
Energy efficiency: 9.2 Mtoe expressed in primary energy consumption (7.8 Mtoe expressed in final energy consumption)	Although Croatia's current primary energy consumption is below its 2020 target, additional efforts on energy efficiency are needed to keep primary energy consumption at this level or to minimise its increase, accounting for GDP growth over the next five years. Within the EU, Croatia has the eleventh most energy-intensive economy. Energy intensity declined by 11 % from 2005 to 2013, while the final energy consumption dropped by 8.4 % from 2005 to 2013 with the reductions coming mainly from the industrial sector and partly from the residential sector.
Early school leaving target: 4 %	The proportion of early school leavers aged 18-24 in Croatia is 2.7 %. This is the lowest rate in the EU and significantly below the EU target of 10 %. The rate has been mildly fluctuating in recent years but always remaining close to the national target of 4 %.
Tertiary education target: 35 %	Tertiary attainment of 30-34 year olds has been rising continuously since 2012, with a particularly significant increase from 25.6 % in 2013 to 32.2 % in 2014. Croatia is on track for reaching its 35 % national target by 2020, despite still performing far below the EU average of 37.9 %.
Target on the reduction of population at risk of poverty or social exclusion: by 150 000	The number of people at risk of poverty fell from 1 384 000 in 2012 to 1 243 000 in 2014. Croatia is likely to meet its national target of reducing the number of people at risk of poverty or social exclusion by 150 000. This drop can, at least partly, be attributed to recent positive economic growth.

ANNEX B

MIP scoreboard

Table B.1: The MIP scoreboard for Croatia

		Thresholds	2009	2010	2011	2012	2013	2014
External imbalances and competitiveness	Current account balance, (% of GDP) 3 year average	-4%/6%	-7.1	-5.0	-2.3	-0.7	0.0	0.5
	Net international investment position (% of GDP)	-35%	-87.6	-95.6	-92.3	-90.2	-88.5	-88.6
	Real effective exchange rate - 42 trading partners, HICP deflator 3 years % change	±5% & ±11%	5.8	2.0	-4.4	-8.3	-4.0	-0.9
	Export market share - % of world exports 5 years % change	-6%	-5.2	-13.2	-15.8	-23.7	-22.7	-18.0
	Nominal unit labour cost index (2010=100) 3 years % change	9% & 12%	27.8	12.5	7.6	-0.6	-3.0	-5.9
Internal imbalances	Deflated house prices (% y-o-y change)	6%	-6.8p	-9.4p	-5.9p	-2.2p	-18.1p	-2.0p
	Private sector credit flow as % of GDP, consolidated	14%	2.8	5.7	-2.1	-3.0	-0.6	0.3
	Private sector debt as % of GDP, consolidated	133%	119.6	126.5	124.0	121.1	119.5	120.6
	General government sector debt as % of GDP	60%	48.0	57.0	63.7	69.2	80.8	85.1
	Unemployment rate 3 year average	10%	9.2	9.8	11.5	13.8	15.7	16.9
	Total financial sector liabilities (% y-o-y change)	16.5%	5.0	3.4	1.8	1.3	3.2	0.9
New employment indicators	Activity rate - % of total population aged 15-64 (3 years change in p.p)	-0.2%	2.8	-0.6	-1.7	-1.7	-1.4	2.0
	Long-term unemployment rate - % of active population aged 15-74 (3 years change in p.p)	0.5%	-1.9	0.6	3.1	5.1	4.4	1.7
	Youth unemployment rate - % of active population aged 15-24 (3 years change in p.p)	2%	-3.6	7.2	13.0	16.9	17.6	8.8

Flags: b: break in time series; i: see metadata; p: provisional.

Note: Figures highlighted are those falling outside the threshold established in the European Commission's Alert Mechanism Report. For REER and ULC, the first threshold applies to euro area Member States.

Source: European Commission

Standard Tables

ANNEX C

Table C.1: **Financial market indicators**

	2010	2011	2012	2013	2014	2015
Total assets of the banking sector (% of GDP)	-	131.4	132.2	133.0	134.1	132.0
Share of assets of the five largest banks (% of total assets)	-	-	73.9	72.9	72.3	-
Foreign ownership of banking system (% of total assets)	-	-	-	-	-	-
Financial soundness indicators:						
- non-performing loans (% of total loans) ¹⁾	11.1	12.3	13.8	15.4	16.7	17.1
- capital adequacy ratio (%) ¹⁾	18.8	20.5	20.9	20.9	21.8	22.3
- return on equity (%) ¹⁾	8.3	8.8	6.1	2.4	5.0	6.0
Bank loans to the private sector (year-on-year % change)	-	-	-6.2	-0.1	-1.7	-2.3
Lending for house purchase (year-on-year % change)	-	-	-0.9	-2.0	-2.8	-1.9
Loan to deposit ratio	-	111.2	100.5	95.6	91.0	83.7
Central Bank liquidity as % of liabilities ²⁾	0.0	0.0	0.0	0.0	0.0	0.1
Private debt (% of GDP)	126.5	124.0	121.1	119.7	120.8	
Gross external debt (% of GDP) ³⁾ - public	23.8	24.7	28.1	32.7	35.9	36.0
- private	54.4	50.7	51.7	50.9	52.8	52.3
Long-term interest rate spread versus Bund (basis points)*	354.2	393.1	463.4	311.1	288.8	305.5
Credit default swap spreads for sovereign securities (5-year)*	239.5	322.5	382.9	303.7	276.1	273.1

1) Latest data Q2 2015.

2) Latest data October 2015.

3) Latest data September 2015. Monetary authorities, monetary and financial institutions are not included.

* Measured in basis points.

Source: IMF (financial soundness indicators); European Commission (long-term interest rates); World Bank (gross external debt); Eurostat (private debt); ECB (all other indicators).

Table C.2: Labour market and social indicators

	2010	2011	2012	2013	2014	2015 ⁽⁴⁾
Employment rate (% of population aged 20-64)	62.1	59.8	58.1	57.2	59.2	60.5
Employment growth (% change from previous year)	-3.8	-3.9	-3.6	-2.6	2.7	1.4
Employment rate of women (% of female population aged 20-64)	56.4	53.6	52.6	52.8	54.2	55.9
Employment rate of men (% of male population aged 20-64)	67.9	66.1	63.7	61.6	64.2	65.1
Employment rate of older workers (% of population aged 55-64)	39.1	38.2	37.5	37.8	36.2	39.3
Part-time employment (% of total employment, aged 15 years and over)	8.6	8.8	7.1	6.5	6.2	7.1
Fixed term employment (% of employees with a fixed term contract, aged 15 years and over)	12.8	13.5	13.3	14.5	17.0	20.1
Transitions from temporary to permanent employment	-	43.7	39.2	23.7	-	-
Unemployment rate ⁽¹⁾ (% active population, age group 15-74)	11.7	13.7	16.0	17.3	17.3	16.6
Long-term unemployment rate ⁽²⁾ (% of labour force)	6.6	8.4	10.2	11.0	10.1	10.3
Youth unemployment rate (% active population aged 15-24)	32.4	36.7	42.1	50.0	45.5	44.6
Youth NEET ⁽³⁾ rate (% of population aged 15-24)	15.7	16.2	16.6	19.6	19.3	-
Early leavers from education and training (% of pop. aged 18-24 with at most lower sec. educ. and not in further education or training)	5.2	5.0	5.1	4.5	2.7	-
Tertiary educational attainment (% of population aged 30-34 having successfully completed tertiary education)	24.5	23.9	23.1	25.6	32.2	-
Formal childcare (30 hours or over; % of population aged less than 3 years)	10.0	12.0	11.0	10.0	-	-

(1) Unemployed persons are all those who were not employed but had actively sought work and were ready to begin working immediately or within two weeks.

(2) Long-term unemployed are peoples who have been unemployed for at least 12 months.

(3) Not in Education Employment or Training.

(4) Average of first three quarters of 2015. Data for total unemployment and youth unemployment rates are seasonally adjusted.

Source: European Commission (EU Labour Force Survey).

Table C.3: Labour market and social indicators (continued)

Expenditure on social protection benefits (% of GDP)	2009	2010	2011	2012	2013	2014
Sickness/healthcare	7.1	6.9	6.7	7.1	7.5	-
Invalidity	3.6	3.7	3.6	3.6	3.6	-
Old age and survivors	7.5	7.6	7.6	7.8	8.1	-
Family/children	1.5	1.5	1.5	1.5	1.5	-
Unemployment	0.4	0.5	0.5	0.5	0.5	-
Housing and social exclusion n.e.c.	0.0	0.0	0.0	0.0	0.0	-
Total	20.2	20.3	20.0	20.5	21.2	-
of which: means-tested benefits	1.3	1.3	1.4	1.4	1.4	-
Social inclusion indicators	2009	2010	2011	2012	2013	2014
People at risk of poverty or social exclusion ⁽¹⁾ (% of total population)	-	31.1	32.6	32.6	29.9	29.3
Children at risk of poverty or social exclusion (% of people aged 0-17)	-	29.4	31.1	34.8	29.3	29.0
At-risk-of-poverty rate ⁽²⁾ (% of total population)	-	20.6	20.9	20.4	19.5	19.4
Severe material deprivation rate ⁽³⁾ (% of total population)	-	14.3	15.2	15.9	14.7	13.9
Proportion of people living in low work intensity households ⁽⁴⁾ (% of people aged 0-59)	-	13.9	15.9	16.8	14.8	14.7
In-work at-risk-of-poverty rate (% of persons employed)	-	6.3	6.6	6.0	6.2	5.7
Impact of social transfers (excluding pensions) on reducing poverty	-	31.3	31.9	33.3	34.3	35.1
Poverty thresholds, expressed in national currency at constant prices ⁽⁵⁾	-	23045	21740	20921	19329	19585
Gross disposable income (households; growth %)	1.3	1.3	1.9	0.2	-1.6	-
Inequality of income distribution (S80/S20 income quintile share ratio)	-	5.5	5.6	5.4	5.3	5.1

(1) People at risk of poverty or social exclusion (AROPE): individuals who are at risk of poverty (AROP) and/or suffering from severe material deprivation (SMD) and/or living in households with zero or very low work intensity (LWI).

(2) At-risk-of-poverty rate (AROP): proportion of people with an equivalised disposable income below 60 % of the national equivalised median income.

(3) Proportion of people who experience at least four of the following forms of deprivation: not being able to afford to i) pay their rent or utility bills, ii) keep their home adequately warm, iii) face unexpected expenses, iv) eat meat, fish or a protein equivalent every second day, v) enjoy a week of holiday away from home once a year, vi) have a car, vii) have a washing machine, viii) have a colour TV, or ix) have a telephone.

(4) People living in households with very low work intensity; proportion of people aged 0-59 living in households where the adults (excluding dependent children) worked less than 20 % of their total work-time potential in the previous 12 months.

(5) For EE, CY, MT, SI and SK, thresholds in nominal values in euros; harmonised index of consumer prices (HICP) = 100 in 2006 (2007 survey refers to 2006 incomes)

Source: For expenditure for social protection benefits ESSPROS; for social inclusion EU-SILC.

Table C.4: Structural policy and business environment indicators

Performance indicators	2009	2010	2011	2012	2013	2014
Labour productivity (real, per person employed, y-o-y)						
Labour productivity in industry	-3.07	1.10	-1.57	-1.14	3.64	-0.17
Labour productivity in construction	-1.97	2.64	1.59	-2.56	-5.10	-3.76
Labour productivity in market services	-8.29	-0.35	6.21	-0.10	3.38	0.00
Unit labour costs (ULC) (whole economy, y-o-y)						
ULC in industry	9.65	0.78	-0.24	5.77	1.24	0.00
ULC in construction	4.71	4.53	1.62	7.21	-1.43	0.00
ULC in market services	5.94	-0.20	-0.34	1.69	-1.56	0.00
Business environment	2009	2010	2011	2012	2013	2014
Time needed to enforce contracts ⁽¹⁾ (days)	561	561	561	561	572	572
Time needed to start a business ⁽¹⁾ (days)	22.5	22.5	15.5	15.0	15.0	15.0
Outcome of applications by SMEs for bank loans ⁽²⁾	0.65	na	0.17	na	0.19	0.88
Research and innovation	2009	2010	2011	2012	2013	2014
R&D intensity	0.84	0.74	0.75	0.75	0.81	0.79
Total public expenditure on education as % of GDP, for all levels of education combined	4.42	4.31	4.21	na	na	na
Number of science & technology people employed as % of total employment	29	31	30	32	36	37
Population having completed tertiary education ⁽³⁾	15	16	15	16	17	19
Young people with upper secondary level education ⁽⁴⁾	94	94	95	94	94	96
Trade balance of high technology products as % of GDP	-1.74	-1.49	-1.50	-1.27	-1.49	-1.48
Product and service markets and competition				2003	2008	2013
OECD product market regulation (PMR) ⁽⁵⁾ , overall				na	na	2.08
OECD PMR ⁽⁵⁾ , retail				na	na	1.42
OECD PMR ⁽⁵⁾ , professional services				na	na	3.70
OECD PMR ⁽⁵⁾ , network industries ⁽⁶⁾				na	na	2.75

(1) The methodologies, including the assumptions, for this indicator are shown in detail here:

<http://www.doingbusiness.org/methodology>

(2) Average of the answer to question Q7B_a. "[Bank loan]: If you applied and tried to negotiate for this type of financing over the past six months, what was the outcome?". Answers were codified as follows: zero if received everything, one if received most of it, two if only received a limited part of it, three if refused or rejected and treated as missing values if the application is still pending or don't know.

(3) Percentage population aged 15-64 having completed tertiary education.

(4) Percentage population aged 20-24 having attained at least upper secondary education.

(5) Index: 0 = not regulated; 6 = most regulated. The methodologies of the OECD product market regulation indicators are shown in detail here: <http://www.oecd.org/competition/reform/indicatorsofproductmarketregulationhomepage.htm>

(6) Aggregate OECD indicators of regulation in energy, transport and communications (ETCR).

Source: European Commission; World Bank — Doing Business (for enforcing contracts and time to start a business); OECD (for the product market regulation indicators); SAFE (for outcome of SMEs' applications for bank loans).

Table C.5: **Green growth**

Green growth performance		2009	2010	2011	2012	2013	2014
Macroeconomic							
Energy intensity	kgoe / €	0.23	0.23	0.23	0.23	0.22	-
Carbon intensity	kg / €	0.76	0.76	0.74	0.70	0.68	-
Resource intensity (reciprocal of resource productivity)	kg / €	1.39	1.19	1.19	1.10	1.17	1.10
Waste intensity	kg / €	-	0.08	-	0.09	-	-
Energy balance of trade	% GDP	-3.5	-3.8	-5.4	-5.6	-5.1	-4.0
Weighting of energy in HICP	%	11.42	12.14	13.19	14.47	15.74	16.49
Difference between energy price change and inflation	%	4.5	6.1	0.3	11.4	2.6	-0.2
Real unit of energy cost	% of value added	-	-	-	-	-	-
Ratio of labour taxes to environmental taxes	ratio	4.6	4.1	4.4	4.5	4.1	3.9
Environmental taxes	% GDP	3.4	3.7	3.3	3.2	3.5	3.9
Sectoral							
Industry energy intensity	kgoe / €	0.22	0.22	0.21	0.19	0.19	-
Real unit energy cost for manufacturing industry	% of value added	-	-	-	-	-	-
Share of energy-intensive industries in the economy	% GDP	-	-	-	-	-	-
Electricity prices for medium-sized industrial users	€ / kWh	0.09	0.09	0.09	0.09	0.09	0.09
Gas prices for medium-sized industrial users	€ / kWh	0.03	0.04	0.04	0.04	0.04	0.04
Public R&D for energy	% GDP	0.00	0.00	0.00	0.00	0.00	0.00
Public R&D for environment	% GDP	0.00	0.00	0.00	0.00	0.00	0.00
Municipal waste recycling rate	%	-	-	-	-	-	-
Share of GHG emissions covered by ETS*	%	32.3	30.2	-	-	35.9	33.9
Transport energy intensity	kgoe / €	1.14	1.11	1.13	1.17	1.24	-
Transport carbon intensity	kg / €	3.28	3.21	3.24	3.30	3.49	-
Security of energy supply							
Energy import dependency	%	51.0	52.1	54.4	53.6	52.3	-
Aggregated supplier concentration index	HHI	40.0	29.1	27.6	20.5	29.3	-
Diversification of energy mix	HHI	0.34	0.30	0.30	0.29	0.29	-

All macro intensity indicators are expressed as a ratio of a physical quantity to GDP (in 2005 prices)

Energy intensity: gross inland energy consumption (in kgoe) divided by GDP (in EUR)

Carbon intensity: greenhouse gas emissions (in kg CO₂ equivalents) divided by GDP (in EUR)

Resource intensity: domestic material consumption (in kg) divided by GDP (in EUR)

Waste intensity: waste (in kg) divided by GDP (in EUR)

Energy balance of trade: the balance of energy exports and imports, expressed as % of GDP

Weighting of energy in HICP: the proportion of "energy" items in the consumption basket used for the construction of the HICP

Difference between energy price change and inflation: energy component of HICP, and total HICP inflation (annual % change)

Real unit energy cost: real energy costs as a percentage of total value added for the economy

Environmental taxes over labour taxes and GDP: from European Commission's database, 'Taxation trends in the European Union'

Industry energy intensity: final energy consumption of industry (in kgoe) divided by gross value added of industry (in 2005 EUR)

Real unit energy costs for manufacturing industry: real costs as a percentage of value added for manufacturing sectors

Share of energy-intensive industries in the economy: share of gross value added of the energy-intensive industries in GDP
Electricity and gas prices for medium-sized industrial users: consumption band 500–20 000MWh and 10 000–100 000 GJ; figures excl. VAT.

Municipal waste recycling rate: ratio of recycled municipal waste to total municipal waste

Public R&D for energy or for the environment: government spending on R&D (GBAORD) for these categories as % of GDP

Proportion of greenhouse gas (GHG) emissions covered by EU Emission Trading System (ETS): based on greenhouse gas emissions (excl land use, land use change and forestry) as reported by Member States to the European Environment Agency)

Transport energy intensity: final energy consumption of transport activity (kgoe) divided by transport industry gross value added (in 2005 EUR)

Transport carbon intensity: greenhouse gas emissions in transport activity divided by gross value added of the transport sector

Energy import dependency: net energy imports divided by gross inland energy consumption incl. consumption of international bunker fuels

Aggregated supplier concentration index: covers oil, gas and coal. Smaller values indicate larger diversification and hence lower risk.

Diversification of the energy mix: Herfindahl index over natural gas, total petrol products, nuclear heat, renewable energies and solid fuels. * European Commission and European Environment Agency

Source: European Commission (Eurostat) unless indicated otherwise