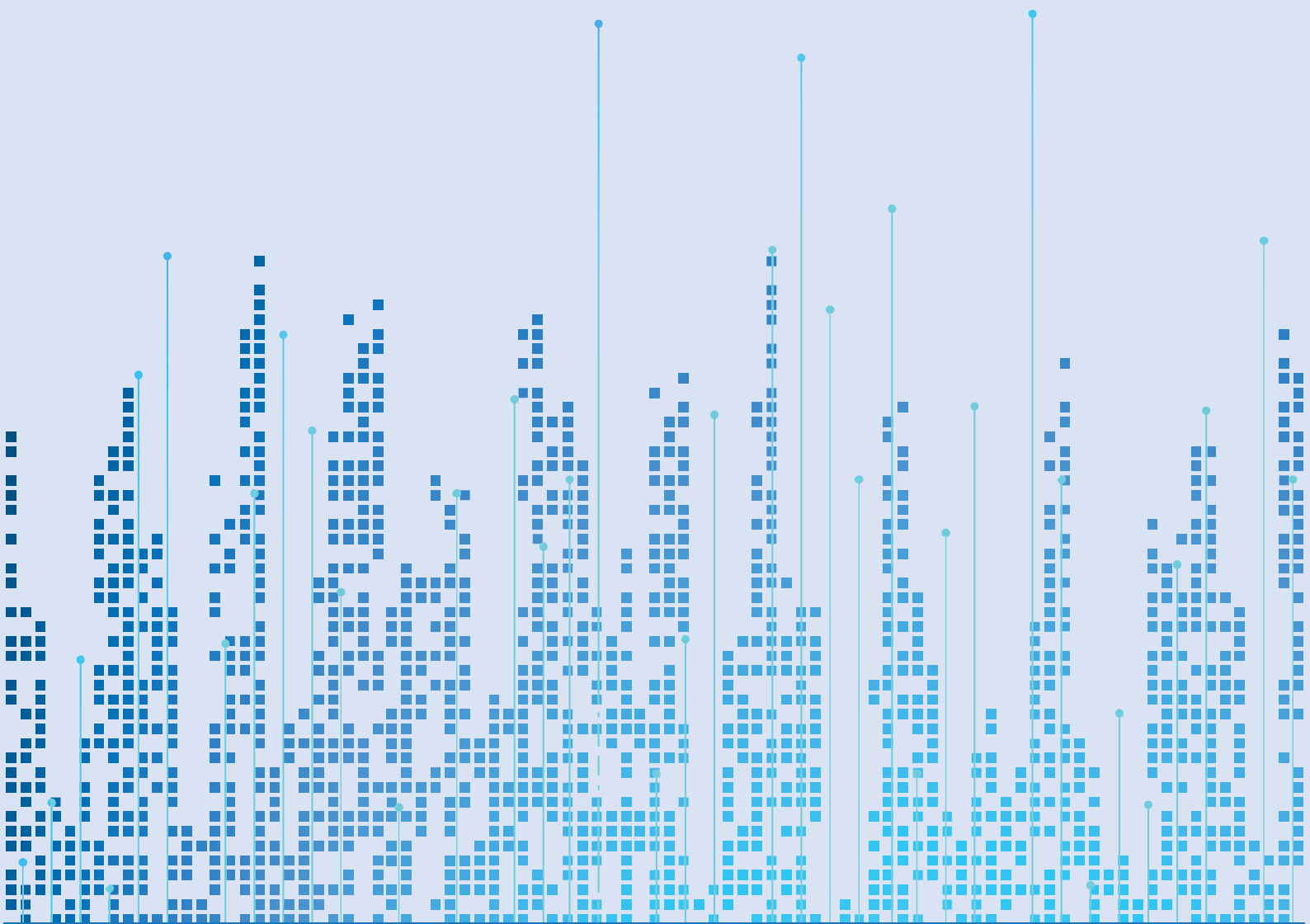


National Development Strategy Croatia 2030

Croatia 2030: Roadmap for a Better Future

January 2020



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Note

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List of Acronyms

ACM	Active Case Management
ADR	Alternative dispute resolution
AI	Artificial intelligence
ALMP	Active labour market policies
CEE	Central and Eastern Europe
CF	Cohesion Fund
CLLD	Community-led local development
CNG	Compressed natural gas
CPR	Common Provisions Regulation
CROPEX	Croatian Power Exchange Ltd.
DESI	Digital Economy and Society
DRG	Diagnosis-related group
DRT	Demand-responsive transport
EAFRD	European Agricultural Fund for Rural Development
EC	European Commission
ECEC	Early childhood education and care
EE	Energy efficiency
EIB	European Investment Bank
EMFF	European Maritime and Fisheries Fund
ERDF	European Regional Development Fund
ERTMS	European Railway Traffic Management System
ESF	European Social Fund
ESI	European Structural and Investment (Funds)
EU	European Union
FDI	Foreign direct investment
FLAG	Fisheries Local Action Group
FTTH	Fiber to the home
GDP	Gross domestic product
GHG	Greenhouse gases
GMR	Guaranteed minimum benefit
GP	General practitioner
GVA	Gross value added
HBOR	Croatian Bank for Reconstruction and Development/ Hrvatska banka za obnovu i razvitak
HE	Higher education
HMA	Hilly and mountainous areas
HOPS	Hrvatski operator prijenosnog sustava
HR	Human resources
HTA	Health technology assessment
ICMS	Integrated case management system

ICT	Information and communications technology
IMF	International Monetary Fund
IPA	Instrument for Pre-Accession Assistance
IPARD	IPA Rural Development
ISUDIO	Information System for Management of State Property
IT	Information technology
ITI	Integrated Territorial Investments
KIA	Key intervention areas
LAG	Local action group
LAN	Local area network
LNG	Liquefied natural gas
LPG	Liquefied petroleum gas
M&E	Monitoring and evaluation
MA	Managing authority
MCS	Management control system
MoA	Ministry of Agriculture
MoF	Ministry of Finance
MRDEUF	Ministry of Regional Development and EU Funds
MSTI	Ministry of Sea, Transport and Infrastructure
NAP	National Action Plan
NAS	National Adaptation Strategy
NDS	National Development Strategy
NEET	Not in Education, Employment, or Training
NPB	National Promotional Banks
NUTS	Nomenclature of territorial units for statistics
NWMP	National Waste Management Plan
OECD	Organisation for Economic Co-operation and Development
OP	Operational programmes
p.a.	Per annum
PMR	Product market regulation
PO	Policy objective
PPS	Purchasing power standard
R&D	Research and development
RDI	Research, development, and innovation
SME	Small and medium-sized enterprises
SOE	State-owned enterprise
STEM	Science, technology, engineering and mathematics
TEN-T	Trans-European Transport Network
TFP	Total factor productivity
US	United States
UWWTD	Urban Wastewater Treatment Directive

VAT	Value-added tax
VET	Vocational education and training
WAN	Wide area network
WEF	World Economic Forum

Executive Summary

***Croatia 2030: Roadmap for a Better Future* is a World Bank report summarizing the analysis performed by the Bank in support of Croatian authorities for the preparation of the National Development Strategy Croatia 2030 (hereafter NDS Croatia 2030).** The preparation of the NDS represents a novelty for Croatia on several fronts. First, while broad vision documents were produced in the past, this is the first time Croatia embarks on a comprehensive and evidence-based process to prepare a national strategy using a participatory and bottom-up approach. Second, this is also the first time that rigorous sectoral diagnostics are accompanied by recommendations on areas of reform and policy actions for the next decade. Finally, the strategy is being prepared under a new strategic planning system, aiming to ensure consistency among long term strategic documents, medium-term plans and short-term implementation documents. It is important to note that this Report is not a strategy, it does not set the vision for the country nor does it contain strategic objectives for Croatia. Also, the list of reforms and investments is not exhaustive and requires further prioritization and modification by Croatian authorities. Instead, this Report is intended to serve as an input that can guide Croatian authorities in the preparation of their strategy and point to critical reform areas. In addition, the Report, together with the policy notes it builds on, can help the Croatian government in the preparation of the next Partnership Agreement between Croatia and the European Commission, as well as to define the Operational Programs for the new EU financial perspective (2021-2027).

Croatia has made significant economic progress since independence, but the global financial crisis has exposed weaknesses in its economy and growth model. Prior to the 2008 global financial crisis, building on the market-oriented structural reforms of the 1990s and on regained political stability, Croatia achieved significant social and economic progress. While the average annual growth of 4.4 percent recorded during the 2002-08 period was solid, it was largely debt financed, implying a decline in the saving rate and leading to a significant increase in financial liabilities, while the contribution of exports to GDP growth was by far the lowest in the CEE region. The 2008 global crisis exposed the weakness of such growth model. Borrowing costs increased, capital inflows dried up, and the economy was pushed into a recession with a sharp contraction in employment, private sector illiquidity and rising fiscal imbalances. The crisis hit Croatia hard causing a reversal of the convergence process and a six-year long recession that reduced output by 12 percent and investment by 33 percent, while unemployment doubled to above 17 percent by 2014.

Economic growth now rests on more solid foundations, but it remains comparatively low. Since 2015, a more favorable external environment, along with the effects of EU accession in mid-2013, has helped to reignite growth to an average of 3 percent per year in 2015-18. Exports have been performing strongly supported by record-high tourist seasons and a recovery of merchandise exports, as Croatian firms integrated in European value chains and increased their market shares after EU accession. Private investment has also recorded solid growth, accompanied by significant corporate deleveraging, even as government investment plunged due to the slow absorption of EU funds and fiscal consolidation. Recovery started in 2015, but by 2018 Croatia was the only country in the CEE region whose output level had not yet reached the pre-crisis level.

Croatia should preserve its hard-won fiscal stability and take advantage of the opportunities offered by euro adoption in the near future. Fiscal developments have been favorable since 2014, with significant improvement in the fiscal balance and public debt firmly on a downward path. In 2018, public debt dropped below 75 percent of GDP, almost 10 percentage point below the peak reached in 2014. Croatia will need to continue with debt reduction, while ensuring growth and an equity friendly composition of the budget. The policy focus in the upcoming period will therefore have to be on rebalancing expenditures, reducing the tax burden and improving the management of public debt. On the monetary and financial sector front, it is critical to preserve the stability of the financial sector and its ability to support growth. In a system dominated by banks it would be advisable to further develop capital markets as a source of financing equity or issuing corporate bonds and strongly promote private equity, venture capital and angel financing. In 2019 Croatia made a first official step towards euro adoption by sending a letter of intent to

join the Exchange Rate Mechanism (ERM II). Introduction of the euro as the national currency will significantly reduce the currency risk, promote financial stability and create opportunities for even deeper economic and financial integration with the rest of Europe.

A new reform impetus is needed to close the income gap with wealthier EU partners and achieve inclusive and sustainable growth. Income convergence requires boosting the economy's growth potential by encouraging a more efficient allocation of resources, promoting more and better investment in tangible and intangible productive assets, as well as raising labor force participation and the quality of human capital. Concerted reforms on these fronts must be accompanied by a conscious effort to achieve more inclusive growth across social groups and geographical areas and to preserve the country's natural assets.

Unlocking productivity to accelerate the pace of convergence

Croatia's productivity performance lags its CEE neighbors. Croatia's overall productivity only marginally increased over the last 15 years, compared to a significant rise in most other CEE countries. While drivers of productivity are difficult to identify, quality of national institutions and regulations, the business environment, and the innovative capacity of the domestic economy are often put to the forefront.

Improving the effectiveness of Croatia's public administration would positively affect the quality of public service delivery and trust in public institutions. According to World Bank data on the quality of governance, in 2017 Croatia was ranked 23rd among the 28 EU member states regarding government effectiveness. This multidimensional indicator captures perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies. Increase in the quality of public sector institutions would also lead to a higher level of trust in the fairness and efficiency of these institutions and in government in general facilitating implementation of reforms.

Easing regulatory constraints would facilitate business operation and growth. A comparison with peer countries reveals the slow pace of business environment reforms in Croatia. The 2019 World Economic Forum's (WEF) Global Competitiveness Report ranks Croatia 63rd globally, the lowest among EU member states. Croatia also continues to lag peer EU countries in key Doing Business indicators, including starting a business, dealing with construction permits, access to credit and resolving insolvency.

Reducing the State footprint in the economy would lead to a more efficient allocation of resources. Croatia's general government expenditure-to-GDP ratio, at 46.1 percent in 2018, is well above the level prevailing in most of its CEE peers, while the incidence of taxation is correspondingly high, creating a burden for the economy. Croatia especially stands out for the size of its public sector wage bill, which limits fiscal space for more productive spending and raises concerns about fiscal sustainability during economic downturns. This highlights the importance of boosting the efficiency of public sector spending to generate savings for the budget, while improving the business environment. Moreover, extensive state ownership has the likely consequence of impairing growth since average productivity and allocative efficiency are lower in sectors with high state presence. A large SOE footprint affects factor returns, influences output prices by limiting product market competition and reduces private firms' incentives to invest, innovate and become more productive.

A better, faster and modern judiciary is of paramount importance to improve the business environment and increase trust in Croatia's public institutions. Croatia has undertaken comprehensive reforms to address the key challenges of the justice system during the pre- and post-accession period. Noteworthy progress has been made in recent years in key areas, especially concerning the reduction of the backlog of cases. The court system, however, continues to manifest significant inefficiencies regarding the length of time to resolve cases, the significant costs of the system (with the largest number of judges per capita in the EU), and public perceptions not only of inefficiency, but also of unpredictability and corruption, especially in civil and commercial cases.

A legal and institutional framework to prevent and address corruption is in place, but enforcement needs improvement. Widespread perception of significant corruption, including within the justice system, requires higher attention from policymakers. Outcomes of the improvement of the policy design process,

including better transparency and inclusiveness in the area of anti-corruption, remain to be seen. More effective implementation of policy measures envisaged by the anti-corruption strategy is crucial.

Strengthening productivity will also require modernization of Croatia's approach to research, development and innovation. In 2017 Croatia spent 0.9 percent of its GDP on RDI, compared to the Europe 2020 Strategy target of 3 percent, and will not reach its national target of 1.4 percent of GDP by 2020. Only half of this amount is spent by the private sector with the rest being public research centers and universities, the latter still being funded in very traditional ways relying to a large extent on grants. Employment in R&D is very low, especially in the business sector. Croatia's rate of transformation of research into high added value products and services is also low, resulting in very limited impact of R&D expenditures on increased sales.

Investing in tangible and intangible assets to improve connectivity and innovation

Significant investment needs suggest capital accumulation will remain an important growth driver in the next decade. During 2002-08, overall investment was one of the main drivers of GDP growth, with an average share in GDP of 26 percent and average annual growth above 10 percent. At the same time, general government investment reached 6 percent of GDP, one of the highest levels in the EU, to a large extent related to investment in roads and highways infrastructure. Concomitantly, rapid capital accumulation made the largest contribution to potential growth, also reflecting strong capital inflows from abroad.

The composition of investment has recently improved, but investment levels remain significantly below the pre-crisis period. The 2002-2008 period was dominated by investments in non-tradable sectors, like retail and housing, with limited effect on aggregate productivity growth. Following a sharp contraction in the post-crisis period, investments have started to recover since 2015, albeit at a slower pace and inflow of FDI remained low. On the positive side, the composition of investment has improved, with a strong contribution from investments in manufacturing, and financing increasingly shifting from debt to own resources and EU funds.

Going forward, the contribution of investment to economic growth will depend on Croatia's ability to create an investment-friendly environment for domestic and foreign entrepreneurs, as well as on the recovery in public investment and effective utilization of EU funds. Efficient implementation of reforms aimed at improving the business environment and the efficient absorption of EU funds will crucially hinge upon effective management, professionalization and depoliticization of public administration, both on the central and local level.

Investments are particularly needed to help Croatia strengthen the integration of its transport networks into the international flows of goods and passengers and to increase its ability to satisfy the new needs of the European and global transport market. The transport sector can support Croatia's economic development by further leveraging the country's advantageous geographical position. Currently, Croatia's transport system is highly unbalanced in terms of the competitiveness of various modes of transport. Such outcome reflects the very significant investments made in the road sector in the 2000s, and, on the other hand, significant underinvestment in other modes of transport, especially in railways. Also, further development of major seaports requires additional investments in their capacity for goods transport and provision of other logistical services. Finally, investments for better connectivity of the islands could have immediate development benefits.

Investments can also help improve Croatia's digital performance and R&D driven innovation. While Croatia has made good overall progress in recent years in digital performance, it still belongs to the low-performing cluster of EU countries. Croatian citizens are above average internet users and enterprises are keen to employ digital technologies, but low connectivity remains a challenge, as rural broadband connectivity and fast broadband coverage are limited, and affordability of broadband remains the lowest in Europe. Therefore, public and private investment in ICT and new technologies in general could open new business opportunities and increase the country's competitiveness. This can be further supported by investment in R&D capabilities. While Croatia's non-R&D driven innovation performance, including marketing and organizational innovation, improved recently, R&D-driven innovation is lagging significantly behind peers and deserves special attention from policymakers.

EU funds can help boost public and private investment and shift its composition towards growth inducing areas and environmental sustainability. Large amounts of EU funds tend to be invested in areas that are critical for improving Croatia's competitiveness, such as research, development and innovation; entrepreneurship; labor market and education; energy transition; ICT and others. These areas include investments in both tangible and intangible assets. The latter are particularly important as they often include activities related to knowledge creation and lead to improvements in labor productivity. Furthermore, substantial resources are devoted to energy efficiency, to ensure compliance with environmental directives, and to ensure protection of natural assets.

Encouraging labor supply and investing in people to power future growth

Labor shortages and skills mismatches in the labor market are increasingly becoming a constraint for growth. Policy actions are needed to address adverse demographic trends including emigration, low labor force participation, comparatively poor education outcomes, and inefficiencies in the provision of health services.

A demographic crisis and emigration are reducing labor supply. Croatia's total fertility rate has declined from 1.5 to 1.4 over 2001-2017, compared to an average increase from 1.5 to 1.6 in the EU over the same period. At the same time, society is aging: the share of people aged over 65 has increased from 16 percent to 20 percent in the same period. Recent estimates suggest that close to 270,000 mostly young people left the country after accession to the EU amounting to over 15 percent of the labor force. This situation presents important challenges, not just for the labor market but also by imposing an increasing financial strain on the pension system and on increasing the long-term demand of health care services. Family policies, including parental leave, family allowances, and childcare service provision, are the main instruments that should be employed to foster demographic renewal through increased fertility. Furthermore, the country should consider liberalizing its policy towards inflow of foreign workers and their families and adopt a proper management of migration.

Labor supply is also affected by high inactivity rates. Croatia has a higher rate of inactivity relative to the EU average for both men and women. In 2018 the inactivity rate among men hovered around 30 percent and around 40 percent for women, compared to an average of 20 percent for men and 30 percent for women in the EU. Those not participating in the labor market lose skills, in turn affecting current and future productivity and lowering future growth prospects. Several initiatives in the last years have introduced measures to promote employment among the youth, women, long term unemployed, and low skilled workers, much in line with the Europe 2020 Strategy and the 2016 New Skills Agenda for Europe. However, important gaps in the supply, accessibility and delivery of labor services exist. Furthermore, without offering targeted training and creating job opportunities especially in rural areas and lagging regions, just increasing the funding and range of active labor market policies (ALMP) is unlikely to significantly impact labor market indicators.

Raising quality of labor through improvements of the education system will determine Croatia's ability to leapfrog in productivity. Croatia needs to enhance the quality and relevance of, and access to education, for all its citizens, including adults. Early childhood education and care for children younger than three and kindergarten education for children aged 4-6 is significantly constrained and not easily affordable. Access to early childhood education and care varies depending on the area where people live, also affecting the choices of parents (primarily mothers) regarding their participation in the labor market. At the level of primary and secondary education low annual instruction time, inadequate teaching methods and outdated curricula in key subjects contribute to unsatisfactory learning outcomes. However, expanding the hours is difficult because more than 60 percent of students are enrolled in schools that operate in double (or even triple) shifts. Also, although a new curriculum is in the process of being introduced, it will take time to change teaching practices. Finally, Croatia's institutions of higher education suffer from a weak accreditation system, resulting in poor matching with labor market needs.

Better human capital also requires improvements in health. Life expectancy in Croatia is comparable to CEE countries but it is still 3 years below the EU-28 average highlighting the need to strengthen prevention and raise the quality of the health system and promote a healthy life style. While part of the gap is related to the quality of the health system, many determinants of life expectancy and healthy life expectancy

lie outside of it. The lack of sustained and focused interventions/measures to capture modifiable risks such as obesity and smoking, in particular among low income groups who report disproportionately higher levels of poor health status, is contributing to this gap.

[Bridging social and geographical divides to achieve inclusive growth](#)

Despite a reduction during the recent growth spurt, inequalities in Croatia remain comparably high. Regional disparities in poverty are substantial and on the rise. Such developments deserve close attention and the implementation of effective social development programs that would enable poor and vulnerable groups in society to benefit from the increasing opportunities that a growing economy provides. Stronger social and economic cohesion is among the most significant challenges for Croatia and deserves to be at the heart of its national development strategy.

The gains from growth need to be shared by providing equal opportunities and adequate protection to all social groups. In 2018 close to a quarter of Croatia's population was at risk of poverty or social exclusion. While sustained economic growth is the most effective way to fight poverty and social exclusion, there is a need for a more effective social protection system to meet the needs of social groups that are currently poorly protected. These include unemployed persons, single-person households, especially elderly living alone, and single parents with one or more dependent children are the groups most affected by poverty. The effectiveness of the current social protection system should be improved, especially with regard to the amount of benefits, the criteria for the selection of users, targeting and further strengthening of local social welfare centers.

Poverty in Croatia also has a distinct regional pattern, with strong concentration in the lagging regions in the East, and in the border areas with Bosnia-Herzegovina. The problems of lagging regions are similar to those facing Croatia as a whole but more pronounced, while specific areas (e.g. islands) face particular issues. Economic activity is never spread evenly across regions within a country, but the extent of variation in activity matters for inclusion, growth prospects and social cohesion. Croatia is characterized by sizeable and rising regional disparities, driven by strong dominance of the metropolitan region, and highly challenging socio-economic circumstances in the lagging regions, mainly situated in the eastern parts of the country. The divergence at the subnational level matters because regions that are already lagging risk falling behind even further. Government's efforts to support more territorially balanced development are challenged by the significant fragmentation of the administration at the local and regional level, which reduces the institutional capacity to undertake appropriate interventions. Furthermore, specific areas of the country, like the islands, face more pronounced challenges of connectivity, access to basic public sector services and strong seasonality of economic activity.

[Protecting natural capital and addressing climate vulnerabilities to make growth sustainable](#)

Sustainable economic growth requires environmentally friendly policies and investment. Croatia has a strong national interest to promote sustainable production and consumption and to ensure a high level of environmental protection and prevention of pollution to preserve its natural resources. High dependence on tourism, which is mainly based on the natural beauty of the country, and obligations to meet EU requirements underscore the importance of an environmentally sustainable growth model.

Transition towards a circular economy requires system-wide thinking. While the government has acknowledged the need to move towards a circular economy, and national and local authorities have made some efforts in this direction, Croatia lacks a comprehensive circular economy framework or strategy. Low support for dedicated R&D, eco-design, and eco-innovation has further hindered the development of a circular economy. Recognizing the importance of resource efficiency for sustainability in the long-term, the EU has adopted the 'Circular Economy Package', which amends several directives related to landfills and waste. Croatia needs to transpose these changes into national legislation and revise its National Waste Management Plan (2017-2022), which is required to access EU funds in the 2021-2027 Programming period.

The implementation of the current national waste management plan is significantly lagging behind EU targets, putting Croatia at risk of infringement procedures as well as losing funding under the current EU operational program. The current recycling rate of municipal waste in Croatia remains still lower (24 percent in 2017) than the EU average (46 percent) and more than 70 percent of waste was land-filled in 2017. Moreover, with only two constructed and operational EU-standard compliant waste management centers (WMC), a significant fraction of the waste is being deposited on approximately 100 landfills that are still open.

A similar situation is present in the water sector, where Croatia has failed to meet the first deadline to satisfy the requirements of the EU Urban Wastewater Treatment Directive and will struggle to meet future deadlines. Croatia's slow progress in reaching the EU's very ambitious targets in the waste water sector is also connected with the low investment capacity of the responsible organizations. Furthermore, coverage of water services is high, but the supply network needs to be rehabilitated and upgraded. The average age of water pipes is more than 40 years, and the system suffers from maintenance backlogs. This poses a threat to water security due to high water losses, which undermine the financial sustainability of the system both in terms of increased cost of production and forgone revenues.

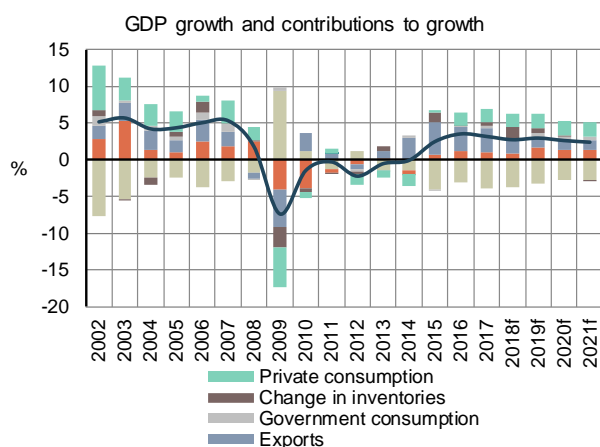
Current efforts to plan for adaptation to climate change are insufficient. Croatia is highly vulnerable to the impacts of climate change and has identified water resources (consumption and irrigation), coast and coastal zones, forestry and land use change, agriculture, biodiversity, and human health as its most vulnerable sectors. The National Adaptation Strategy (NAS) covering the period until 2040 with a view to 2070 and the National Action Plan (NAP) are being finalized and should be adopted in 2020. Climate adaptation actions are yet to be adequately embedded in sectoral strategies. Also, further development of national capabilities to monitor climate change and undertake research activities in this area is necessary.

The way forward

Croatia is in a good position to leapfrog on multiple fronts during the next decade. While the reform and investment agenda is substantial, macroeconomic and financial stability, solid economic growth, access to EU funds and the prospect of joining the euro area and Schengen zone in the near future create new opportunities for Croatia. The Croatian economy is now growing at around 3 percent annually, the labor market is improving, public debt is firmly on a downward path, and advancement has been achieved in critical areas such as the business environment and institutional quality. This has created an environment where the return on further reforms can be substantial, leading to stronger economic growth and faster convergence with the EU. Economic growth, however, can only be sustainable if it translates into shared prosperity. Equally important, while economic growth is an important prerequisite for improving welfare, it alone is not sufficient to achieve better quality of life. Living conditions, opportunities for individuals and families, equal access to education and health services, personal safety, national identity, etc., all strongly affect well-being.

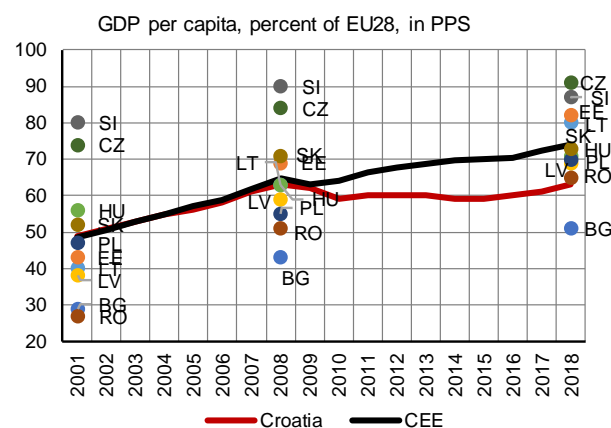
The preparation of Croatia's new development strategy for the next decade is an opportunity to create a platform for a constructive dialogue among all stakeholders on the path Croatia wants to take in the fourth decade of its independence. The previous national goals of independence, integration into the international community and accession to the EU have served as anchors for citizens' aspirations and goals of policy making for over two decades. After these goals were achieved, and after the economy recovered from the protracted slump that followed the global financial crisis in 2008, Croatia now needs new goals and a new social consensus that will guide the economy and society through the next decade. The preparation of the development strategy is an obvious opportunity to advocate for a new common ground, new common vision and new social consensus on the type of future Croatia wants for itself and on the reforms and investment that are needed to make Croatia's aspirations a reality.

Figure 1. Croatia continues to steadily recover after prolonged recession, but...



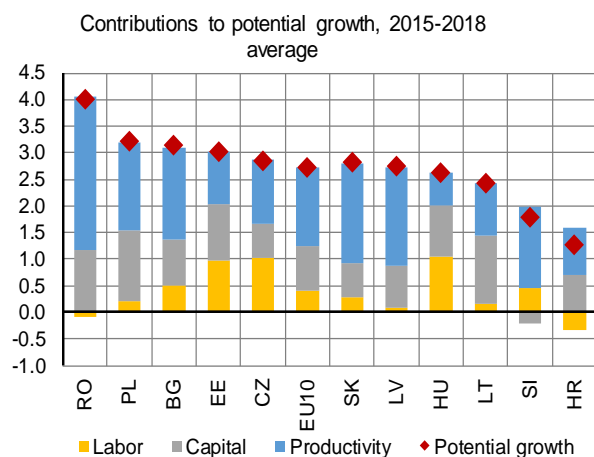
Source: CBS

Figure 2. ...still significantly lags behind many CEE peers.



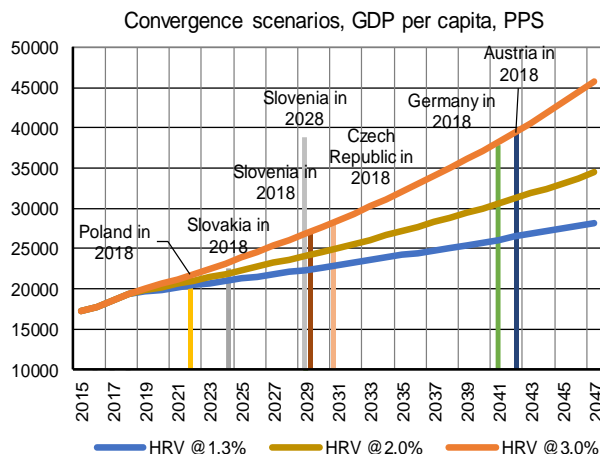
Source: Eurostat

Figure 3. Raising growth potential will be essential for fostering economic convergence, ...



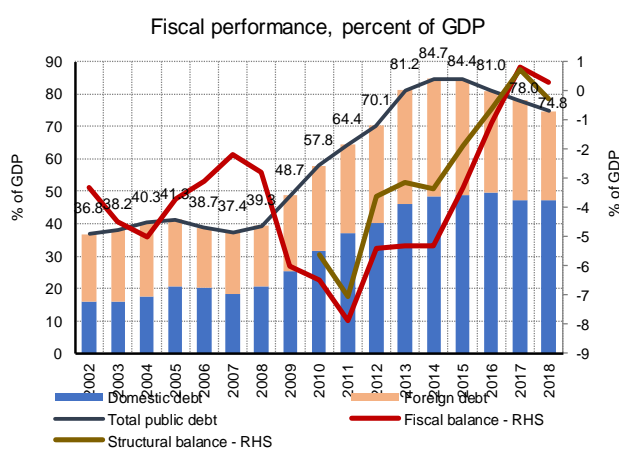
Source: EC

Figure 4. ...otherwise it could take decades to catch-up with the rest of the EU.



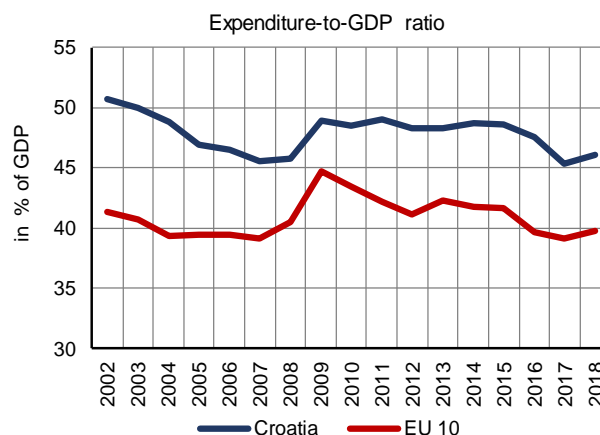
Source: WB staff calculation

Figure 5. While public finances are currently on a stable footing, ...



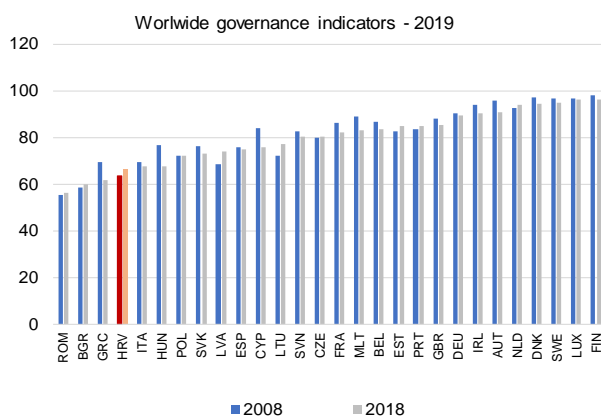
Source: CNB, Eurostat, EC

Figure 6. ...large state presence still weighs on economic activity and allocative efficiency of the economy.



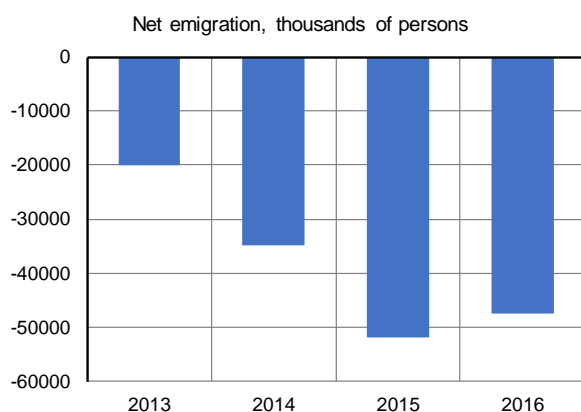
Source: Eurostat

Figure 7. Unlocking productivity will also require improved governance, ...



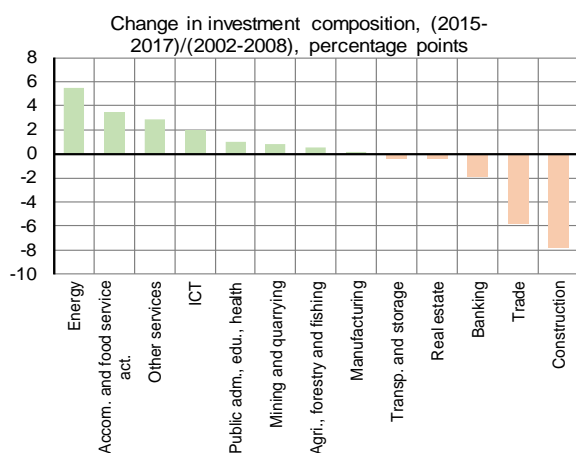
Source: World Bank

Figure 9. Aging and strong migration outflows...



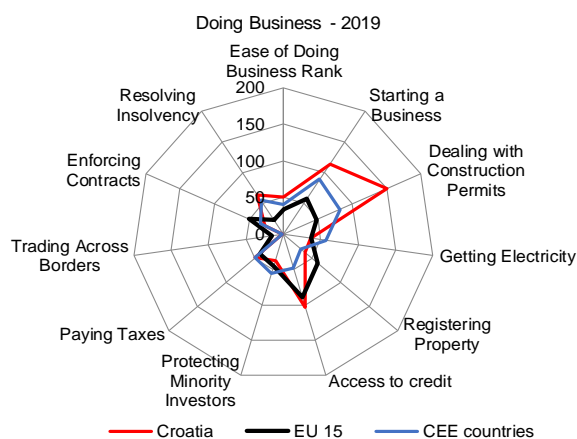
Source: Drazenovic, Kunovac and Pripuzic (2018),

Figure 11. The composition of investment has improved....



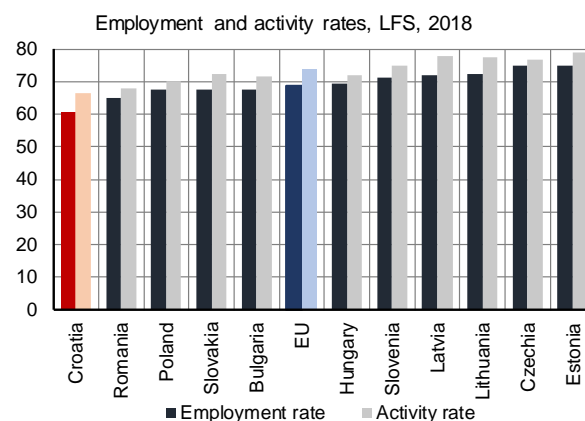
Source: CBS

Figure 8. ...as well as overall business environment.



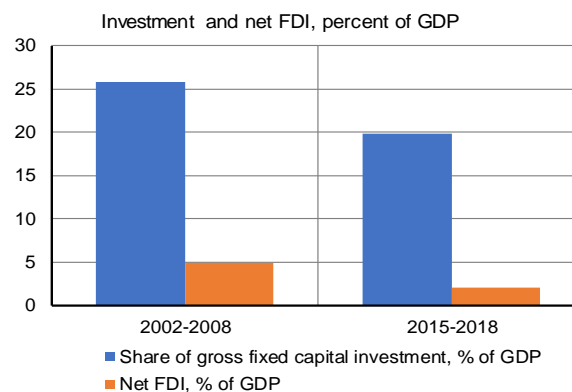
Source: World Bank

Figure 10. ...as well as low activity rates require measures for raising both quality and availability of labor.



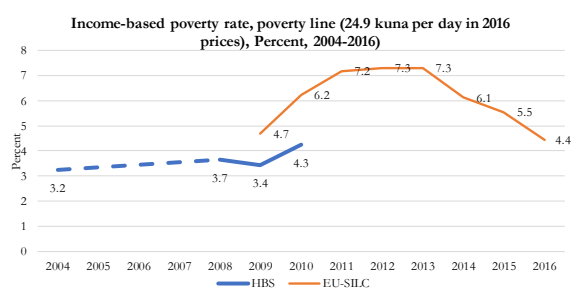
Source: WB staff calculation

Figure 12. ... but improvement of investment climate and the efficient absorption of EU funds is needed to boost investment activity.



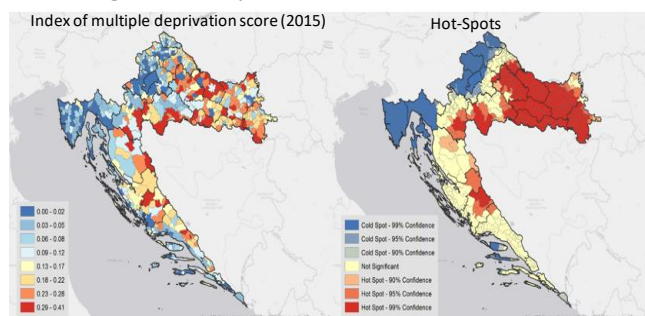
Source: CBS, Eurostat

Figure 13. Benefits of stronger growth will need to be shared among all members of society...



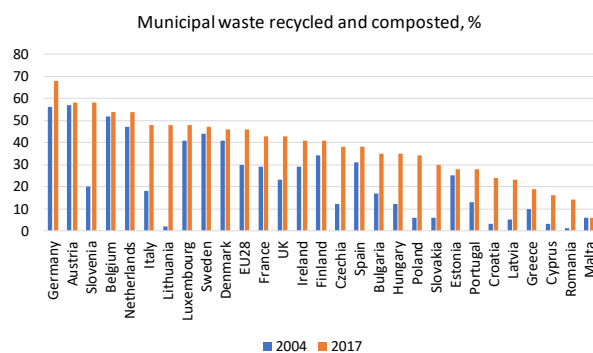
Source: WB staff calculations

Figure 14. ...and particular attention needs to be given to balanced regional development.



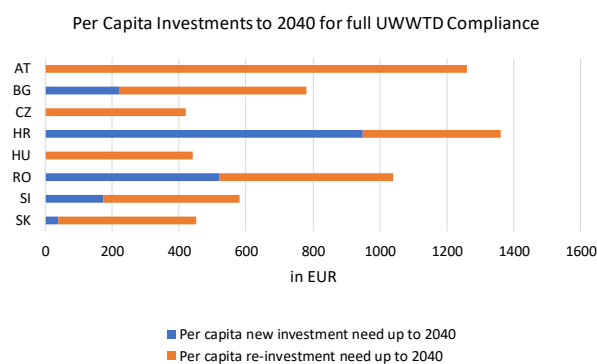
Source: WB staff calculation

Figure 15. In addition to strengthening inclusiveness, sustainable growth will also require environmentally friendly policies...



Source: European Environment Agency

Figure 16. ...and investment.



Source: Umweltbundesamt et al. (2017)

1. Introduction

1. Building on the market-oriented structural reforms of the 1990s and regained political stability, before the 2008 global economic crisis Croatia enjoyed a period of sustained economic growth and income convergence with the EU. During 2002-08, real GDP per capita rose annually by 4.5 percent on average, and its level more than doubled reaching 63 percent of the EU-28 average (at PPS). As a result, Croatia's real convergence with EU-28 income levels was similar to other CEE countries.

2. Until 2008, economic growth was mainly driven by largely debt-financed domestic demand, leading to a buildup of macroeconomic imbalances. The main drivers of expansion were capital investment and private consumption while the contribution of exports to overall GDP growth was by far the lowest in the CEE region. Investment averaged 25.8 percent of GDP, comparable with other fast-growing economies in the region. However, it largely took place in non-tradable sectors like construction, retail and the financial sector, which stands in sharp contrast to other CEE countries where manufacturing investments accounted for almost a quarter of all investment. The rise in consumption and investment was largely debt financed, fueled by strong capital inflows and robust credit growth in the domestic banking sector. Households' saving rate declined and financial liabilities of households, firms and the government rose significantly. Furthermore, rapid growth of domestic demand triggered an import surge, and with a modest performance of the export sector this resulted in rising external imbalances.

3. Even in the pre-crisis period, Croatia's potential growth was among the lowest in the CEE region with limited productivity improvements. Despite relatively high growth rates during the 2002-08 economic expansion, potential growth averaged only around 3 percent, compared to an average of 5 percent in the CEE region. This largely stemmed from sluggish productivity growth, which made by far the smallest contribution to potential growth in Croatia compared to the CEE region, reflecting, among other, the large presence of the state in the economy, including through SOEs, a cumbersome business environment, poor quality of institutions, unfavorable composition of FDI and a small export sector. Furthermore, despite long accession negotiations, Croatia was not fully prepared for EU entry in 2013, with institutional shortcomings limiting the country's ability to efficiently absorb EU funds.

4. The 2008 global crisis pushed the economy into a prolonged recession and reversed the process of income convergence that was previously underway. Borrowing costs increased, capital inflows dried up, and the economy was pushed into a vicious circle of declining employment, private sector illiquidity and eroding business and consumer confidence leading to a sharp fall in investment and private consumption. A six-year long recession reduced output by 12 percent and investment by one third, unemployment doubled, and the poverty rate rose significantly. This also implied a reversal of the convergence process, whereas, all other countries in the CEE region (except Slovenia) continued to converge towards the average EU-28 level of income.

5. Since 2015, a more favorable external environment, along with the effects of EU accession in 2013, helped to reignite growth on more solid foundations, although the medium-term outlook is less favorable (Box 1). In 2015, strong exports, coupled with a pick-up of private consumption and investment, led to 2.4 percent GDP growth, the first positive rate in six years. GDP growth was broad-based, accelerating to 3.5 percent in 2016, before slowing down below 3 percent in 2017-2019. Exports performed strongly throughout this period, supported by record-high tourist seasons and a recovery of goods exports, as the European economy continued to recover, and Croatian firms integrated more deeply into European value chains after EU accession. At the same time, the increase in domestic demand was built on more solid foundations than before the crisis. Income tax cuts, low energy prices and rising consumer confidence initially boosted private consumption, later further underpinned by favorable labor market developments, while households continued to deleverage. Also, private investment recorded solid growth during the recovery period, accompanied by significant corporate deleveraging, even as government investment failed to pick up due to the weak absorption of EU funds and fiscal consolidation.

Box 1: The global and European context

Global growth decelerated to a post-crisis low in 2019 but is expected to firm in 2020 as investment and trade gradually recover. According to the January 2020 *Global Economic Prospects* report, global growth fell to an estimated 2.4 percent in 2019—a post-crisis low—with key indicators, such as industrial production and trade, declining in parallel. This weakness was broad-based, with nearly 90 percent of advanced economies and 60 percent of emerging market and developing economies (EMDEs) experiencing varying degrees of deceleration last year. Manufacturing activity slowed sharply over the course of last year, and, to a lesser extent, services activity also moderated. A prolonged period of rising trade disputes between the United States and China weighed on international trade, confidence, and investment for most of last year. Trade tensions between the two economies, however, have partly eased following the negotiation of a Phase One agreement, which includes plans to roll back a subset of U.S. tariffs in exchange for several Chinese concessions. In the near term, monetary policy across the world is generally expected to remain accommodative; however, fiscal policy support is likely to fade.

Against this international context, global growth is projected to edge up to 2.5 percent in 2020 and reach 2.7 percent by 2022, as investment and trade gradually firm. The global outlook, however, masks diverging trends between advanced economies and EMDEs. Growth in advanced economies is forecast to slow by 0.2 percentage point this year, to 1.4 percent, with the Euro Area set to decelerate to 1 percent amid lingering weakness in manufacturing. In contrast, EMDE growth is envisioned to pickup to 4.1 percent this year and stabilize at 4.4 percent in 2021-22, with the pace of the recovery restrained by soft global demand and structural constraints.

The global outlook represents a benign but fragile scenario given ongoing headwinds, with risks remaining tilted to the downside despite a recent reduction in the threat of protectionism. The near-term growth outlook reflects a benign baseline given slowing growth in advanced economies, subdued global trade, and moderating commodity prices. More generally, a deeper global downturn could result if global trade tensions re-emerge, policy uncertainty persists and becomes entrenched, or activity in major economies deteriorates significantly. Additionally, the global recovery precariously hinges on a pickup of growth in a small number of large EMDEs, some of which are tentatively emerging from deep recessions or severe slowdowns. Other risks include financial stress in large EMDEs, heightened geopolitical tensions, or a higher incidence of extreme weather events. Meanwhile, growth in Europe remains vulnerable to disruption in the United Kingdom's exit from the European Union, the future program of EU structural funds, and renewed involvement in conflicts in Libya, the Syrian Arab Republic, or Ukraine. Against the backdrop of a fragile outlook, many economies are not adequately prepared to confront negative shocks. In advanced economies, the weakness of the current expansion has made it difficult for central banks to create room for additional easing, while fiscal space in EMDEs has narrowed amid record-high debt levels and eroded policy buffers.

A number of structural trends affect the context in which European countries develop.¹ In what follows, we comment on the specific relevance for Croatia of five structural issues recognized in EU policy.

(i) The demographic and health trends of the EU. These combine “the demographic extremes of very high life expectancy and very low fertility”.² By 2050 Europe is likely to have twice as many people over the age of 65 dependent on the working population as there are today (the dependency ratio is expected to rise from 32.2 percent in 2016 to 55.3 percent in 2050). This trend will only get worse if not addressed through increased fertility, higher labor participation and significant in-migration. This is accompanied by longer life expectancy, especially in the more recent member states as their GDP rises, and is expected to impose a heavy burden on public finances and on the working population.

(ii) Energy and climate change imperatives. On current trends, the proportion of energy that is imported annually will rise from 50 percent today to 60 percent by 2030, and of this, 80 percent will be fossil fuels. With shrinking European supplies and rising world demand, this is also likely to be an increasing drain on resources. Europe – as the host of the Paris Agreement on Climate Change – also has a strong political commitment to the cause of climate change. Over the next decade, EU policies on greenhouse gases, energy efficiency and on the conversion to a circular economy will become ever deeper, and this will have a strong impact on the types of policies that Croatia will be able to adopt and will be required to adopt.

¹ This draw upon Project Europe 2030 (op. cit.), and “Transitions on the Horizon: Perspectives for the European Union’s future research and innovation policies”.

² Project Europe 2030, p. 25.

(iii) The need for Europe-wide economic reform to boost productivity. Potential growth has been slowing in Europe due to a combination of demographic trends and decelerating productivity growth. In the Euro Area, productivity growth has been anemic, averaging less than 1 percent over 2013-18. The weakness primarily reflects the appreciably diminished role of capital deepening as a contributor to growth since the global financial crisis. Meanwhile, labor productivity growth in EMDEs in Europe and Central Asia (ECA) sharply fell from 5.5 percent in the pre-crisis period (2003-08) to 1.6 percent in the post-crisis period, predominately reflecting weaker within-sector productivity growth. Amid weak investment growth and aging populations, subdued labor productivity growth compounds the existing policy challenges confronting Europe. Given the tight economic and institutional integration with Europe, productivity enhancing reforms in individual countries will increasingly become a matter of European oversight. The rest of this Report discusses these issues in the case of Croatia.

(iv) Coordinated efforts to boost education and investment in research, development and innovation. Europe's yearning for enhanced productivity and its place in the new industries of the 21st Century will only be successful if there is enhanced investment in education and RDI. This has been a theme for some time, but it is also likely to be the subject of a coordinated EU program, which is likely to boost Croatia's own aspirations in this regard.

(v) A pioneering role in global governance. The big issues confronting the world cannot be addressed by national governments alone. This requires "*a move from a governance system that builds on the pursuit of national and organizational interests to a system where cooperation and collective global values effectively underpin major political choices*".³ This may seem counterintuitive in the face of the strong nationalist forces that are seen in Europe and very explicitly in the United States at present, but its logic is clear given the nature of the problems being confronted. Europe will seek to lead in these issues by example, so Croatia as one of its member states will be obliged to do the same. Croatia's responsibilities will be even greater in the Western Balkan region during its accession to the EU.

Other global trends in terms of technologies, goods, and services, and new growth poles will also affect Croatia's development prospects. These include:

- **Automation and robotics.** These affect not only the factory, but also the home, and have their clearest impact on the demand for labor and on the need for lifelong education.
- **Urbanization.** The acceleration of urbanization in Europe will continue with the associated continued decline in the size of rural populations.
- **Big data.** The volume of data has grown 100-fold in the last ten years, and this trend is likely to continue with an increasing number of industries that exist through the use of such data.
- **Smart Cities.** A "smart" city leverages the latest technology and connectivity to make better decisions and achieve the urban aspirations of its residents. There are at present some 25 smart cities in Europe, and it seems inevitable that over this period all cities above a certain size will find it necessary to develop in this direction.

6. In the post-crisis period Croatia has strengthened its links with its European partners and the rest of the world and exports have become one of the main drivers of growth. The Croatian export sector, albeit growing, remains small compared to CEE countries. To a certain extent, this reflects the composition of the economy, which is dominated by the services sector, and especially low technology—and low-productivity—services, like tourism, retail distribution and construction. EU accession in 2013 was an important catalyst as Croatian firms used the opportunity to integrate better into European and global value chains helping the economy to recover from six years of recession. The composition of Croatia's exports also improved in terms of markets and technological complexity.

7. However, structural weaknesses remain substantial and weigh on Croatia's ability to reach higher growth rates increasing the pace of convergence with the richer countries in the EU. A more efficient public administration and justice system will be crucial to improve the business environment thus promoting a more efficient allocation of resources. Investment and reforms in the health sector and education will influence the quality of the labor force, while better state asset management can activate currently idle

³ Transitions on the Horizon (op. cit.) p.22.

capital. However, growth can be sustainable only if it is shared among all members of the society and if proper attention is given to preservation of the environment and to energy policy.

8. Against this backdrop, the Government of Croatia decided to prepare the NDS Croatia 2030 to help identify the critical areas for reforms and create the enabling environment for raising the country's growth potential, ensuring at the same time the sustainability and inclusiveness of growth. This is the first time in the country's history that such a comprehensive and detailed national strategy is being prepared and that a highly participatory bottom-up approach was followed.⁴ The Ministry of Regional Development and EU Funds (MRDEUF) who was assigned by the Government of Croatia to lead the process of the preparation of the NDS Croatia 2030 organized a series of consultations and meetings about development goals and priorities. Beside line ministries and relevant government agencies all relevant stakeholders, including private sector representatives, trade unions and academia were part of the discussions. Consultations were organized in 12 Thematic/Horizontal Working Groups covering the following areas: Health and Quality of Life; Energy and Sustainable Environment; Transport and Mobility; Security; Food and Bio-economy; Digital Society; Tourism and Creative Society; Macroeconomic policies, judiciary and good governance; Territorial Development; Education, Science and Human Resource Development; Demography and Social Policies; Competitiveness, Industrial Development and Development of Entrepreneurship and Crafts. Working Groups were asked to discuss main challenges, opportunities and investment and reform priorities and come up with the vision, development directions and set of strategic objectives for the country.

9. The World Bank was asked to provide support to the MRDEUF and the Working Groups by producing 21 policy notes including rigorous sectoral diagnostic, backed up by lists of priority areas of reforms and required actions that Croatia could undertake during the next decade.⁵ Several World Bank teams have worked closely with thematic working groups organized by Croatian authorities to produce policy notes that deep dive into sectoral developments and compare Croatia with its EU peers. The findings were also discussed in detail with the EC representatives in light of the preparations for the new multiannual financial framework. The policy notes prepared by the World Bank covered the following areas: Macroeconomic stability, Fiscal Policy and Taxation; Growth, Competitiveness and Innovation; Agriculture, Fisheries, and Food Processing in Croatia's Food & Bio-Economy; Education and Skills; Energy Sector, Environment, Family Policies; Health Sector; Justice Sector; Labor Market; Personal Income Tax Benefits for Families with Children; Public Administration Modernization; Regional Availability of Social Services; State Asset Management; Territorial Development and Transport Sector. These notes were officially endorsed by the steering committee organized at the level of the Ministry of Regional Development and EU Funds.⁶ In addition, five background documents were produced by the World Bank to inform the discussion, including: Adequacy of Pensions in Croatia; Poverty Note; Gender Assessment; Smart Cities; and Smart Islands. All these documents serve as background for the preparation of the NDS Croatia 2030 and will also be used as an input for the new Partnership Agreement between Croatia and the European Commission. Croatian authorities now have a good analytical insight into sectoral developments that allow them to prioritize reforms and investments and prepare effective operational programs.

10. Croatia 2030: Roadmap for a Better Future (hereafter the Report) is a World Bank report that summarizes the analytical work done in the context of the preparation of the NDS 2030. Neither the sectoral policy notes nor this Report should replace a national development strategy being drafted by the Government of Croatia. Also, the list of reforms and investments is not exhaustive and requires further prioritization and modification by Croatian authorities. Instead, this Report serves as an important

⁴ Croatia did prepare broad vision documents already in the past. For example, Strategic development framework 2006-2013 published in 2006 has correctly identified main opportunities and challenges Croatia was facing. The document was prepared in the context of the EU accession negotiations and while it had a nominal ambition to guide the policy agenda, in reality it served as an anchor for the programming of the pre-accession aid and to some extent also EU funds.

⁵ The Report was prepared in the context of the Reimbursable Advisory Services Agreement "Support for Establishing the System for Strategic Planning and Development Management and for Preparing the 2030 National Development Strategy" signed between the Ministry of Regional Development and EU Funds and the World Bank Group.

⁶ The World Bank did not provide technical support to the MRDEUF in the preparation of analytical background documents for *Security* and *Tourism and Creative Society*.

input that can guide Croatian authorities in the preparation of the national development strategy and point to areas in utmost need for reform. In addition, the Report, together with the sectoral policy notes, will help the Croatian government to prepare the next Partnership Agreement between Croatia and the European Commission, as well as the Operational Programs for the new EU financial perspective (2021-2027).

11. The remainder of this report is organized as follows. The next section draws on the sectoral policy notes produced by the World Bank to outline the challenges Croatia faces to achieve faster, inclusive and sustainable growth over the next decade. The third section concludes. The annex proposes a policy agenda in the various reform areas.

2. Development challenges for the next decade

12. Croatia's current growth trajectory needs to be lifted as it currently implies a very slow pace of convergence with richer countries in the European Union. Real growth of the Croatian economy has been restored since 2015 on a more solid basis but remains one of the lowest in CEE and is expected to decelerate further in the medium run. Moreover, the current composition of the economy with a small export sector and overreliance on tourism does not support strong increases in overall productivity which is critical to raise potential growth, especially in the face of an ageing population and negative migration flows. Unless it improves its growth potential, Croatia will need decades to reach the current level of living standards of the most developed EU countries or even some of its peers in CEE. For example, if the economy were to grow at the average 3 percent rate recorded in 2015-2018, it would take Croatia a full decade to reach the living standard of Slovenia in 2017. This time period almost triples if GDP growth slows down closer to the current potential of around 2 percent.

13. Stronger economic growth would also allow Croatia to increase social and economic cohesion, which remains among the most significant challenges for the country. After a sharp increase in poverty during the crisis (from 2008 to 2012), the recovery of growth and possibly also outmigration reduced poverty rates back to pre-crisis levels. However, with 24.8 percent of the total population at risk of poverty or social exclusion in 2018, Croatia is above the EU average, which stands at 21.9 percent. This points to the need to share the benefits of economic growth by providing equal opportunities and adequate protection to all social groups. Even if sustained economic growth is the most effective way to fight poverty and social exclusion, it is still necessary to ensure that social protection remains effective and achieve balanced territorial development.

14. Beside higher and more inclusive economic growth, quality of life in the country will depend on Croatia's success in protecting its natural capital and addressing environmental and climate change risks. Considering Croatia's strong dependency on tourism, mostly based on the natural beauty of the country, promoting sustainable production and consumption and ensuring a high level of environmental protection and prevention of pollution should be one of Croatia's imperatives. Croatia has designated 37 percent of the country to be under the Natura 2000 ecological network of the EU, and 8.6 percent of the land in Croatia is classified under the Nature Protection Act, as well as significant marine protection areas and species. For this protection system to be effective it is necessary to ensure sufficient financial and human resources, as well as to continuously invest into the monitoring and planning system. Furthermore, achieving resilient growth will require addressing weaknesses constraining the resource intensity of its economy, particularly in relation to energy use and waste.

15. The remainder of this chapter summarizes the main development challenges Croatia will have to address over the next decade. Following an economic growth framework, Croatia's challenges are organized around the themes of productivity, physical capital accumulation and connectivity and labor and human capital accumulation. A number of challenges are also identified in relation to Croatia's achievement of inclusive and environmentally sustainable growth.

A. Boosting the economy's growth potential

16. Lifting economic growth will require a broad set of measures aimed at improving the overall productivity of the Croatian economy and increasing the quality and quantity of labor and capital.

Without a step-up in productivity, Croatia could face prolonged economic stagnation and a deterioration of social conditions. The Croatian economy employs labor and capital less efficiently – i.e. is less productive - than its CEE peers and the causes of this low productivity can be largely found in features of the business environment. In parallel, unfavorable demographics, a low participation rate and skill mismatches are making the availability of labor, especially qualified labor, an increasingly binding constraint for the economy's growth potential. At the same time, capital accumulation's contribution to potential growth is below pre-crisis levels, warranting policies aimed at encouraging domestic and foreign private investment, and at increasing the effectiveness of public investment.

A.1. Productivity

17. Boosting productivity is essential to sustain growth in the long run. Croatia's overall productivity only marginally increased over the last 15 years, compared to a significant rise in most other CEE countries. Partly this reflects the composition of economy, with large and rising share of tourism and other low-productivity services that is not conducive for significant leap in overall productivity in the economy. However, while drivers of productivity are difficult to identify, quality of national institutions and regulations as well as business environment are often put to the forefront. These reflect restrictive product market regulation, ineffective public administration, persistent weaknesses in the judiciary, high perceived corruption, comparatively weak innovation ecosystem, and inefficient management of state assets, including SOEs. Furthermore, adverse productivity developments in Croatia reflect insufficient quality of labor and capital inputs in the production process, as well as low mobility of these factor that resulted in misallocation of resources. Finally, the

The regulatory environment

18. A weak business environment strongly contributes to the generally low level of productivity of Croatia's economy. A comparison with peer countries reveals the slow pace of business environment reforms in Croatia. The 2019 WEF Global Competitiveness Report ranks Croatia 63rd globally, the lowest position among EU member states. Croatia also continues to lag peer EU countries in key Doing Business indicators, including starting a business, dealing with construction permits, access to credit and resolving insolvency.

19. Remaining restrictive regulation distorts market functioning, especially in service sectors, with negative consequences for economic efficiency and growth. According to the OECD Product Market Regulation (PMR) index, policies in Croatia in 2018 were broadly in line with the average of the OECD and CEE countries. Croatia has made significant progress in closing the gap with prevalent OECD practices, significantly improving its performance since 2013. Observed measures contributing to this progress include liberalization of taxi services, simplifying the procedures for opening a business, and aligning public procurement procedures to best practices. On the other hand, Croatia scores particularly badly compared to the OECD average in terms of high state involvement in the economy, and particularly in the network sectors (i.e. energy, rail, water and air transport). Impediments to competition stemming from state involvement refer to SOE presence in and dominance over a large number of sectors, as well as to other forms of government controls and restrictions to competition (e.g. price controls, mandatory licenses for market entry, etc.). In addition, some services and professions remain very restrictive of competition, in particular notaries, lawyers, and pharmacies.

Public administration, management of state assets and SOEs

20. An ineffective public administration creates uncertainty in the business environment and is an obstacle to efficient business operation. The effectiveness of Croatia's public administration is low, in particular when compared to other EU member states. According to World Bank data on the quality of governance, in 2018 Croatia has been ranked 24rd among EU-28 member states with regard to government effectiveness. This multidimensional indicator captures perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies.

Furthermore, the same source ranks Croatia 26th among EU-28 member states when it comes to regulatory quality which measures perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development. Not surprisingly, according to the Eurobarometer, public opinion on the quality of services in 2018 is the second lowest among the EU-28, ahead of only Greece.

21. Administrative burden has in particular adverse effect on small and medium enterprises (SMEs) that are a vital part of Croatian economy. Croatia continues to record the lowest score among EU member states in terms of the administration's responsiveness to the needs of SMEs.⁷ While some progress has been achieved in past years, overall efforts to reduce the burden of regulation and ease the ways of doing business should be further strengthened. Based on the regular Survey on the Access to Finance of SMEs carried out by the Croatian National Bank, frequent and unpredictable changes in legislation and policies are increasingly indicated by SMEs as a particularly severe obstacle, and in this area, Croatia performs well below the EU average. A related problem is the generally high complexity and lack of coherence of regulation.

22. The low level of professionalization of the administration is closely related to the high level of politicization and a lack of skilled staff. Since 2011 there has been a trend towards increasing the politicization of senior civil service positions, which resulted in a large number of political appointments. The new Law on the public administration system⁸ introduced a reduction in the number of politically appointed managerial positions. It remains to be seen whether this attempt at depoliticization will be more successful than previous ones. As for the education level, only 46 percent of civil service positions requires tertiary education, which is unusually low in comparison to other member states. This is connected with the wide coverage of posts that are defined as 'civil servant' posts.

23. Weak organizational and human resource management is a major weakness of the civil service system. Goal setting and competency-based management are largely absent in organizational and human resource management. Weak management is also reflected in the dysfunctionality of the individual performance appraisal system and the absence of systematic performance conversations to motivate staff towards the achievement of organizational objectives.

24. Fragmented administrations at the regional and local level are another source of low government effectiveness. The functioning of the regional and local administrations is constrained by limited financial and human resources. Difficulties in recruiting qualified civil servants to set and implement policies at the local and regional level are particularly pronounced. Another challenge is Croatia's high centralization, i.e. the large scale of the central government compared with the other EU member countries. The new Law on the public administration system stipulates that the responsibilities of the Offices of state administration should be transferred to counties. This arrangement should strengthen the staff's capacities at the counties' level and promote the gradual takeover of decisions on key issues by the county level and reduce the current fragmentation of the administration at the county level.

25. Unsuccessful past attempts to implement public administration reform are connected to capacity constraints in design and implementation of complex reform processes. Public sector modernization requires strong policy coordination and leadership from the center of government. This type of coordination has so far been neglected, which has slowed down the process of implementation.

26. Despite significant progress, Croatia still lags most EU member states in terms of the quality of digital public services. For the quality of public digital services Croatia is ranked as 22nd among the 28 EU member states, according to the results of EU DESI index for 2019. Areas where Croatia performs poorly in comparison to other EU member states include the extent to which the various steps in dealing with the public administration can be carried out completely online and the degree to which public services for businesses are interoperable. On the other hand, Croatia is above the EU average with regard to the various e-Health services and number of e-Government users.

⁷ EC 2018 Small Business Act for Europe (SBA) Fact sheet.

⁸ Official Gazette 66/2019.

27. In order for the digitalization of services to be effective and bring significant benefits, it should be preceded by business process reengineering to simplify regulatory and administrative requirements for the delivery of services so that inefficient procedures are not fully digitized. Simplifying business processes for a variety of administrative services is a crucial step for successful digitalization of public administration. Detailed business process analysis, clearly identifying new proposals on delivering public services in more cost-effective ways should be performed as a part of the overall digitalization process.

28. Digitalization would also promote better management of state assets, especially harmonization of management practices across government bodies involved in asset management. The current role of the Ministry of State Assets as a custodian of state property does not extend to state assets that are under the management of line ministries and other government bodies which have a vast number of state assets under their management. The outcome of such approach is fragmented management practices that lack common strategic criteria, management principles and process standards, as well as a lack of coordination between different asset holders in general.

29. Better management of state assets would lead to more efficient allocation of resources, new investment opportunities and increased government revenues. The Croatian State owns more than one million real properties and more than 1,110 majority-owned SOEs. Public sector assets represent 80 percent of GDP,⁹ yet they generate less than one percent of state revenues. As in many other cases, lack of a systematic policy approach has been a major constraint in the realization of this goal.

30. SOEs in Croatia are less productive than their private sector counterparts and lack of credible long-term business strategies point to deficiencies in corporate governance and reduce the potential contribution of SOEs to overall economic development. SOEs in Croatia are less profitable, less productive and more indebted compared to private sector firms. Furthermore, they pay higher wages, but efficiency of labor utilization in SOEs remains well below their private sector peers. Poor performance of SOEs drags down aggregate productivity both directly in the sectors where SOEs are active, and indirectly through the inefficient provision of inputs to other sectors of the economy. This points to corporate governance deficiencies, also related to politicized management that operates the companies without a clear strategic vision and a performance-based management framework. However, some progress has been made recently with the new Code of Corporate Governance of obligatory mid-term planning and performance reporting. Yet, more effort is needed to secure the effective implementation of the code and improve the overall quality of corporate governance.

31. Croatia's main challenge with regard to state assets, including SOEs, is to develop an overarching public asset ownership policy. The current framework is fragmented and there is a lack of harmonization of legislation across different government entities and strategic areas of interest. A well-defined ownership policy is needed at the highest level, clarifying the rationale for state ownership and reviewing it case-by-case every year (based on criteria for identifying strategic SOEs, list of companies for privatization, etc.). Most of the real property and SOEs are under the management of line ministries and local and regional authorities, without clear reporting lines and uniform performance targets. Furthermore, ownership of many state assets is still not sorted out. The legal status of some state-owned properties is not fully clear nor sufficiently established and there are discrepancies in data between land registries and cadasters. This needs to be resolved for a proper asset management approach to be introduced.

The judiciary and anti-corruption policies

32. A better, faster and modern judiciary is of paramount importance to improve the business environment and increase trust in public institutions. Croatia has undertaken comprehensive reforms to address the key challenges of the justice system during the pre- and post-accession to the EU period. Noteworthy progress has been made in recent years in key areas, especially concerning the reduction of the backlog of cases. The court system, however, continues to manifest inefficiencies by the lengthy judicial

⁹ EBRD: "Economic and financial performance of SOEs: Significant room for efficiency gains" (February 2018).

proceedings, very significant costs of the system (with one of the largest number of judges per capita in the EU¹⁰), barriers to access to justice and predictability of legal outcomes, especially in civil and commercial cases. User perception and public opinion surveys show lack of trust in the justice system over the years, posing a continuing challenge to the justice sector.

33. Improving efficiency of judiciary remains an objective with a highest priority for Croatia. Despite significant results of Croatian courts in reducing the court backlog, several efficiency indicators tracked by the Justice Scoreboard show significant gap between EU member states and Croatia in processing litigious civil and commercial cases¹¹. The 2018 report of the Council of Europe's European Commission for the Efficiency of Justice (CEPEJ)¹² highlights that the 364 days disposition time of civil and commercial litigious cases is significantly higher than the European average of 233 days. Based on the European Union Justice Scoreboard 2019 the duration of court proceedings in Croatia remain among the highest in the EU. In 2018, actual average time for resolving a litigious civil case in municipal courts amounted to 854 days, and in commercial courts amounted to 669 days.¹³ Thus, set of measures focused on reducing delays in first-instance courts include digitization of the courts' services, reducing the court backlog of cases older than 10 years and further acceleration of the judicial proceedings.

34. Additional efforts in monitoring/amending productivity targets (framework criteria) for evaluating judges' performance based on shared experience and best practice are considered to be implemented to achieve intended effects entailing evidence-based policy decision making. The Framework Criteria (*Okvirna mjerila za rad sudaca*), currently under revision, are to include time management standards, such as resolving certain percentage of cases within a certain time frame, established for various types and subtypes of proceedings. In that regard, a Case Weighting Study that is being prepared by the MOJ should analyze and recommend specific time-based criteria to be used both for equalized distribution of cases (input criteria) and for establishing some average times in which particular procedural activities are expected to be done (time management).

35. Firms perceive inefficiency and delays in processing judicial cases to be among the greatest impediments to their operations due to the associated uncertainty and high costs. The World Economic Forum's 2019 Global Competitiveness Report ranks Croatia 140th out of 141 economies on the efficiency of the legal framework in settling disputes. Business entities in Doing Business Report continuously inform of lengthy judicial proceedings (650 days). The extensive demands of judicial services are compounded by the judiciary's provision of non-litigious administrative services (e.g. company registration, land ownership registration). This also obstructs exit and re-entry of businesses into markets leading to misallocation of resources and dragging down aggregate productivity. According to the Doing Business 2019 report, Croatia is ranked 23rd among EU countries on the ease of resolving insolvency.¹⁴

36. Performance is significantly affected by the quality of physical facilities, including courts, as well as the quality of offices for judges, staff, and archives. Inadequate space and shortage of courtrooms to hold open trials and conduct other court proceedings affects the workflow and compliance with security standards in court. Lack of secure space and inadequate archiving and storage facilities can jeopardize safe storage of sensitive documents and case records in courts and prosecution offices. Expenditures for the maintenance of courts buildings are high, reducing the fiscal space available to increase other important costs such as salaries of judges. Given the limited amount of capital expenditure by the judiciary over the past decade, future budgets will need to catch-up and invest greater shares in infrastructure improvements and maintenance. Increases in capital investment will depend on the removal of non-adjudicative functions

¹⁰ 2019 EU Justice Scoreboard

¹¹ *ibid*

¹² CEPEJ Report 2018.

¹³ European Commission Croatia Country Report for 2018 reported lengthy delays in resolving cases, with average time for resolution of civil litigious cases at 884 days, and in commercial courts at 730 days.

¹⁴ For illustration, resolving a sample insolvency case in Croatia takes 3.1 years in comparison to 0.4 years in Ireland. Similarly, costs of a sample insolvency case in Croatia are estimated at 14.5 percent of the estate value, in comparison to Norway where they are estimated at 1.0 percent.

from courts, increased uptake of existing IT tools, further technology upgrades, and successful implementation of the latest rationalization of the court network.

37. Insufficient use of existing e-services is among the main obstacles to efficiency and performance of the justice system. Electronic communication between lawyers and commercial courts piloted in 2018 is being scaled up due to recently introduced mandatory e-communication with the commercial courts and further rolling out to municipal courts for legal professionals. The share of the briefs done electronically is still minimal at 2.59% of the total, continuing a high operational cost on the system, both in terms of time and money. Thus, additional efforts are implemented to address poor uptake and popularize the system in order to fully take advantage of the benefits of these investments for the end users. Furthermore, recommendations of the Analysis for optimization and standardization of business processes are to be implemented and embedded in the existing IT system including its further upgrade of key application systems, data management, and technical infrastructure to strengthen the provision of judicial services.

38. The perception of corruption at the institutional level, including the judiciary, as well as the general trust in judiciary remains a serious problem. Despite reforms, the perceptions of court users measured through external surveys reveal that views of justice have hardly changed over the last decade. Lack to demonstrate to public will and ability to prevent and combat corruption, as shown by several surveys and reactions to emblematic cases resulted in continuous low level of perception. A 2016 survey conducted upon implementation of GRECO recommendation¹⁵. The Courts Users Survey conducted in 2016 reiterated the problem of negative perception of the judicial system, expressed and manifested in the negative general opinion on the functioning of the judicial system, a low absolute and relative level of confidence in the judicial institutions (compared to, for example, the tax administration, customs, police and registry offices), and the low level of expectations of a fair trial.

39. Widespread perception of significant corruption including within the justice system, requires increased attention from policymakers. Outcomes of the improvement of the policy design process, including better transparency and inclusiveness in the area of anti-corruption, remain to be seen. More effective implementation of policy measures envisaged by the anti-corruption strategy is crucial. Lastly, the sector should adopt a greater service orientation, including regular court user surveys, which will inform and reflect on policy and reform directions. The fight against corruption, based on best international practice, should entail continuous training and advanced procedures to detect and prevent corrupt practices. Moreover, it should guide development of communication policy in line with GRECO recommendations.¹⁶

40. The key issue in combating corruption is the small number of resolved cases each year, and, more importantly, the relatively mild sentences issued for charges of corruption. Thus, the effective processing of corruption cases remains a challenge for the justice sector institutions. In many cases sanctions for corruption are conditional and often prison sentences are exchanged for charity work, thus creating the impression of mild sentences and an unfair criminal justice system. Such practices hinder the prevention aspect of criminal justice, on the one hand, and can heighten the resort to corrupt practices and improper influences on the other.

41. The low number of resolved cases of corruption indicates the presence of weaknesses in the broader public/government sector in coordinating national anti-corruption efforts and in the criminal justice system in detecting, reporting, prosecuting and sanctioning corrupt behavior. Many citizens view the rich and politically connected as immune from prosecution. There is an evident lack of wider national campaigns to deal with corruption more comprehensively and more rigorously. Croatia has recently codified the protection of whistle-blowers to make it clearer (previously, it was regulated by multiple laws). In order to become effective, this code should be promoted widely in concomitance with awareness raising measures to educate the public on the menace of corruption in society.

¹⁵ Corruption prevention in respect of members of parliament, judges and prosecutors, GRECO Compliance Report, IV Evaluation Round, GrecoRC4(2016)5, October 21, 2016.

¹⁶ Recommendation viii of the Corruption prevention in respect of members of parliament, judges and prosecutors, GRECO Compliance Report, IV Evaluation Round, GrecoRC4(2016)5, 2016.

42. Croatia's approach to research, development and innovation is inadequate to unlock gains in productivity. In 2018, Croatia spent 0.97 percent of its GDP on RDI, compared to the Europe 2020 Strategy target of 3 percent and will not reach its national target of 1.4 percent of GDP by 2020. Less than half of this amount is spent by the private business sector with the rest being public research centers and universities, and the latter still being funded in very traditional ways relying to a large extent on grants rather than more sophisticated financial instruments (e.g. loans, guaranties or venture capital). Employment in R&D is very low, especially in the business sector. Croatia's rate of transformation of research into high added value products and services is also low, resulting in very limited impact of R&D expenditures on increased sales.

43. Public research organizations are scarcely visible and internationally uncompetitive. Croatian scientific production in prestigious journals is the second lowest in the EU. Less than 5 percent of scientific publications in 2017 was published in most cited publications worldwide compared to an average of around 10 percent for the EU-28 or 15 percent in countries like Denmark and Netherlands. Furthermore, Croatia's performance in Patent Cooperation Treaty patent applications has also deteriorated in relation to the EU average. Science-industry cooperation is still at low levels, despite new ESI-funded programs planned to encourage it.

44. The weak performance of the business sector in RDI is a long-standing problem. According to Eurostat data for 2018, Croatia is 23rd in the EU for R&D expenditure per capita in the business sector, investing almost 20 times less than Sweden, the leading EU country. Most of the expenditures are concentrated in a few large companies. Intensity of innovation activities in the SME sector is low. There is a lack of collaboration of SMEs in innovation activities with other entities, both public and private. Croatian SMEs significantly lag the EU average in product and process, marketing, and organizational innovations. The low performance of the SME sector is also connected to the lack of creation of knowledge-based start-ups, lack of venture capital and low and inefficient government co-funding for business investments in R&D.

45. SMEs' performance in innovation is low in comparison to the EU average. This is in part due to the lack of R&D funding opportunities for SMEs. Even though the situation has somewhat improved, mainly due to the availability of EU-funded programs, lengthy procedures for launching of public calls and evaluating proposals reduce the positive effects of increased funding.

46. The capacity of the public sector to support creation of a knowledge-intensive economy is low. Allocation of public funding for R&D in the public sector is not sufficiently linked to the potential of the research conducted to produce new products and services. This is also due to the still insufficient collaboration between the public and private sectors in R&D. Even though some indicators show fast improvement – for instance the number of scientific publications with at least one co-author based abroad, an indicator of international cooperation - a more tangible impact of scientific research on the economy is still lacking.

47. The low contribution of the public research sector to Croatia's innovation performance is connected to the weak incentives of public organizations to seek and protect intellectual property. This is partially due to the poorly defined legal framework to own and manage intellectual property (e.g. regarding the applicability of public procurement regulations in cases of spin-off companies).

48. The lack of effective mechanisms for horizontal coordination among different organizations involved in the planning and implementation of science, technology and innovation policies makes the achievement of more strategic approaches to the overall activities in the public sector difficult. A smart specialization strategy framework has only recently been established and it remains to be seen how much it will improve the current situation. Also, lack of permanent evaluation practices prevents an assessment of the effectiveness and efficiency of public financing of R&D.

49. Fragmentation of public research organizations unnecessarily increases the costs of conducting research in the public sector by increasing overheads, decreases synergies and often duplicates research efforts - including public investments in research infrastructure.

50. Despite the availability of significant resources for R&D from EU funds, their utilization is still low. This is mainly due to the inability of state administration to ensure the timely contracting of projects and processing of payment claims. Delays increase the level of uncertainty regarding investment planning, which in turn creates problems for the private and public sector to use funds effectively.

A.2. Physical capital and connectivity

51. Private and public investment are recovering from the strong decline recorded during the recession but remain significantly below pre-crisis levels. Rapid capital accumulation made the largest contribution to growth in the pre-crisis period, also reflecting strong capital inflows from abroad, large public infrastructure projects and a housing boom. With the onset of the crisis, both public and private investment plummeted. While investment started to recover in 2015, the pace of capital accumulation is still much lower compared to the pre-crisis period. However, the composition of investment has been improving, as the share of tradable sectors has increased. Going forward, the contribution of investment to potential growth will depend on Croatia's ability to create an investment-friendly environment for domestic and foreign entrepreneurs, as well as on the recovery in public investment and on the effective utilization of EU funds.

52. Private investment has been recovering while its composition and financing sources have been improving. During the pre-crisis period, private investment was one of the main drivers of GDP growth, with an average share in GDP of almost 20 percent and average annual growth of around 10 percent. Most of it, however, was debt-financed and directed towards non-tradable sectors. Following a sharp contraction during the crisis, private investment is now growing on a more solid footing and is largely directed to manufacturing and tourism. Investment growth to a significant extent relies on companies' own resources supported also with EU funds. On the other hand, investment in research and development remain well below the EU average. This is closely related to the fact that Croatia has not been successful in the past in attracting new investments in the manufacturing sector and, particularly, in more knowledge-based activities.

53. Croatia has done poorly in attracting FDI, especially in greenfield ventures and in manufacturing. While the share of FDI in GDP in the pre-crisis period was similar to the inflows in many peer countries, its structure was relatively unfavorable. FDI in financial, trade and real estate activities accounted for around 50 percent of GDP while greenfield investments were one of the lowest among CEE countries. After the onset of global crisis FDI significantly declined, as was the case in other peer countries, but the share of greenfield investments remains relatively low.

54. Public investment remained subdued in the recent recovery period but could greatly benefit from better absorption of EU funds. Due to large spending in infrastructure, public investment in Croatia in the pre-crisis period averaged at 6 percent of GDP, one of the highest shares in the EU. However, unlike CEE countries, which heavily relied on EU funds to maintain or even increase public investments during the crisis, public investments in Croatia were used as the main instruments for fiscal consolidation and were almost halved in comparison to the pre-crisis period, thus contributing to a prolonged recession. EU accession has enabled the increase of public investments based to a large extent on grant financing from the EU budget, thus making such investments more financially sustainable and less dependent on debt financing. Another important benefit of the availability of EU funds lies in their structure, which allows targeting to broad areas - RDI, SMEs, energy efficiency, broadband development - areas that were poorly funded from domestic sources. This should add to the overall quality of the investments and the outlook for public investment over the next decade looks favorable, especially if the efficiency and quality in absorption of EU funds is improved.

Transport

55. While Croatia has invested heavily in its transport infrastructure, it would benefit from further strengthening the integration of its transport networks into the international flows of goods and passengers and to increase its ability to satisfy the new needs of the European and global transport

market. The transport sector can support Croatia's economic development by further leveraging the country's advantageous geographical position.

56. Croatia's transport system is highly unbalanced in terms of the competitiveness of various modes of transport. Croatia has a high-quality road network, ranked 29th out of 140 countries in the WEF's Global Competitiveness Report for 2018. In contrast, the quality of its railways network was ranked 90th, and the quality of its air transport was 58th out of 140 countries. Such outcomes reflect the very significant investments made in highways in the 2000s, as well as the equally significant underinvestment in other modes of transport, especially in railways.

57. According to the EU Transport Scoreboard 2018, Croatia ranks last for the efficiency of service in the railway sector, lagging around 40 percent behind the EU average. This is mainly connected with: (i) outdated infrastructure with average age of railway tracks of 27.2 years and insufficient investment in renewing railway infrastructure; (ii) severe maintenance backlog which has resulted in speed restrictions; (iii) high share of single-track railways (90 percent); (iv) low level of productivity of state railway companies; (v) gaps in railway sector governance that affect both public companies and private operators alike. Key underlying factors for such situation is a continuous underfunding of railway investment combined with difficulties in modernizing the governance of publicly owned railway companies.

58. The low quality of Croatia's railway service has widened the gap with rest of the EU, in particular with regard to passenger traffic. At the moment, passenger traffic on the railways is negligible compared to the rest of Europe. This is especially the case with international rail passenger services, where there is a need to significantly upgrade both the networks and services between Croatia and its EU and Western Balkan neighbors, particularly to induce international travelers arriving into Croatia to use these services and decrease the pressure on the highways.

59. Croatia is still struggling with development of railway infrastructure along Trans-European Network for Transport (TEN-T) corridors. Despite significant EU funds available to help improve the competitiveness of the railway sector, investment needs far exceed available resources and the implementation of projects is far too slow. Consequently, the completion of the TEN-T¹⁷ Core Rail Network is lagging expectations. According to the most recent EU Transport Scoreboard, Croatia has completed only 5 percent of the TEN-T Core Rail Network, which places Croatia among the lowest ranking countries, together with Romania and Estonia.

60. The road sector dominates the market of passenger and goods transportation. However, while roads are convenient and efficient, they generate more greenhouse gases than other forms of transport. According to Eurostat data, the transport sector accounts for 35 percent of GHG emissions in Croatia, compared with the EU average of 25 percent. The negative impact on the environment is emphasized by the transport modes used in cities, where the population heavily relies on private cars.

61. Despite the excellence of the road network, the rate of accidents and fatalities is higher than the EU average. This is likely connected to the high average-age of the vehicles, mild penalties for risky driving, high number of black spots on the roads and insufficient effectiveness of traffic surveillance programs. Also, there is no road safety education program in place at schools which could help educate the population of new drivers.

62. Croatia has invested heavily in Rijeka Port and other ports but is struggling to derive full value from those investments because of the connections beyond ports themselves. Further development of major seaports and the infrastructure connections to those ports requires additional investments for goods transport and provision of other logistics services. Croatian seaports are lagging other competing seaports in the Adriatic in terms of their capacity, communal and technological equipment. An additional major challenge is the low quality of rail-port interfaces and connected railway corridors, especially in the case of the port of Rijeka.

¹⁷ Trans-European Transport Network.

63. Better connectivity of the islands could have immediate development benefits. Poor connectivity of the islands, especially during low tourist season, leads to outmigration and suboptimal economic development. The average fleet age of Jadrolinija (Croatia's State-Owned Ferry Company) exceeds 30 years which contributes additional cost of operations. Renewal of the fleet and enhanced passenger connections to mainland ports are likely to offer the most immediate development benefits for island communities. Modernization of governance arrangements relating to public subsidies for Jadrolinija should also be an area of focus for improving service quality.

Broadband infrastructure

64. While Croatia has made good overall progress in recent years in digital performance, it still belongs to the low-performing cluster of EU countries. Croatian citizens are above average internet users and enterprises are keen to employ digital technologies, but low connectivity remains a challenge, as rural broadband connectivity and fast broadband coverage are limited, and affordability of broadband remains the lowest in Europe.

65. Croatia needs to ensure fast and reliable broadband access throughout the country as the basis for digitization and deeper integration, as well as to achieve EU Gigabit Society targets. Ensuring the quality of technology services in general, and in broadband access in particular, must be a critical part of economic and social progress. However, according to the EC Digital Economy and Society Index (DESI) 2019 report, Croatia ranks 27th in the Connectivity dimension, outpacing only Greece. Croatia is a weak performer particularly in terms of ultrafast broadband coverage, reaching only 39 percent of total households compared with an EU average of 60 percent, as well as in fast and ultra-fast subscriptions, where Croatia is ranked 26th out of 28 EU countries.

66. The slow development of fast and ultrafast broadband is connected to the lack of new digital services, low internet use and high prices for fast broadband. Even though investments in fast and ultrafast broadband are picking up, the lack of market competition due to the dominant position of the incumbent (much above EU average), is negatively affecting the overall dynamics of broadband development. A high degree of market concentration leads to higher prices and a more limited availability of high-speed internet. According to DESI 2019, the incumbent has slowed down its Fiber to the home (FTTH) rollout but continued reconstructing its copper network by building street cabinets and new nodes.

67. The management of the EU funds available for investments into access and backhaul broadband infrastructure is very inefficient. The slow process of preparation of tenders will delay the positive impact of these investments on the quality and accessibility of broadband infrastructure in areas where there is a lack of commercial interest, in particular in rural areas. It remains to be seen how these investments will impact the market concentration.

Energy policy

68. Croatia imports around half of its total energy needs¹⁸ and should therefore invest more and take measures to improve its energy security. Enhanced energy security requires improved system flexibility to react to rapid changes in variable renewable energy production. There is also a need to develop a medium-term gas strategy as the country is faced with declining domestic gas production, limited sources of gas supply, while considering the international effort in moving toward net-zero greenhouse gas emissions.

69. Furthermore, while Croatia has managed to achieve the Europe 2020 objectives related to the use of renewables, due to the high share of hydropower it uses, reaching the 2030 goals will be more challenging as more essential structural reforms that tackle technical and regulatory barriers such as a methodology for allocating the costs of balancing energy to renewable generators, which impede the effi-

¹⁸ According to Eurostat data, in 2017 the share of Croatia's energy import was 53.3 percent.

cient integration into the market of electricity produced from renewable sources, would be necessary. Special attention needs to be paid to optimizing the clean energy transition agendas on the Croatian islands, focusing on promotion of renewable energy and third-generation mini-grids, in line with the framework supported by the Clean Energy for EU Islands Secretariat.

70. The feed-in renewable electricity tariff system presents a long-term relatively high cost for the final customers and suppliers and has a negative impact on market development. Since the existing feed-in system applies only to the pre-existing eligible producers that signed power purchase agreements prior to 2016, and the new incentive mechanism is not yet in place, no new renewable generation development is taking place. Furthermore, a delay in the establishment of the eco-balancing group has had a negative impact on the trading volume. Other market participants covered the imbalances, which resulted in additional financial burdens on Croatian Transmission System Operator (Hrvatski operater prijenosnog sustava, HOPS).

71. Natural gas should play a major role as a bridging fossil fuel in Croatia's transition to lower carbon energy sources—particularly for power/heat generation, residential, industrial and commercial use. As such, Croatia needs a medium-term natural gas strategy that provides energy security and operational/financial flexibility. Declining domestic gas production will lead to Croatia increasingly importing natural gas and/or LNG in the coming decade. Any introduction of LNG will be new to Croatia and the required LNG infrastructure should provide operational/financial flexibility. This points to the flexible floating and storage regasification unit (FSRU) alternative, which Croatia would utilize when there is an economic demand for LNG in Croatia and/or for re-export of gas and could subsequently be divested when it is no longer needed or when Croatia decided to reduce natural gas usage under the greenhouse gas emissions reduction effort.

Investment needs in specific sectors: tourism and agriculture, fisheries and aquaculture

72. Tourism is one of the largest sectors of the Croatian economy and has been one of the most important drivers of economic recovery in the post-crisis period. According to the Tourism Satellite Accounts for the Republic of Croatia, tourism direct gross value added accounted for 10.89 percent of total gross value added and the total contribution of tourism to the gross domestic product of Croatia amounted 16.9 percent in 2016. The tourism sector has shown very high resilience in times of economic crisis and has strongly contributed to Croatia's economic recovery.¹⁹ Despite these positive developments, tourism still faces many challenges constraining its long-term performance.

73. The current accommodation structure calls for more investment in hotels to increase the sector's competitiveness. The lack of investments into hotels is closely connected to the lack of tourism products that would more significantly contribute to the extension of the tourism season. The lack of transport links outside of the main season, particularly in air transport, is another important obstacle that needs to be tackled to attract more investments into hotels.

74. Stronger linkages between tourism and the rest of the economy would catalyze investment in other sectors. Positive spillover effects of tourism to the rest of domestic economy are limited, as evidenced by the heavy reliance of the sector on imports and significant seasonality in employment. For example, domestic agricultural production is not sufficiently linked to the tourism sector, in particular with regard to development of local agri-food chains.

75. Agriculture, forestry and fishing, as primary sectors, are shrinking contributors to the Croatian economy but there is important potential for increasing their productivity and supporting higher value-added activities. In recent years the share of agriculture in total GVA of the Croatian economy has stabilized around 3.6 percent. However, there are large regional differences and in the lagging regions of the country this share is significantly higher. Over the last two decades the sector's contribution to the economy has almost halved, despite the large amount of state aid and EU funds directed towards it. This is

¹⁹ It should be noted that security and economic crisis affecting some of Croatia's competitors in the Mediterranean in the same period have also contributed to increased foreign demand.

in line with the structural transformation of agriculture with labor productivity and value addition becoming drivers of sector growth, with economy-wide effects of the broader agri-food sector in Croatia being significant. Within this process of transformation, there is an important opportunity for improving sector performance, considering Croatia's natural endowments, and growing demand generated by the tourism sector, while better targeting support.

76. Investments in agriculture can help increase productivity and improve trade balances. Thanks to agriculture's backward (demand for inputs, capital, and labor) and forward linkages (supplying inputs to other sectors) to the general economy, agricultural sector growth has a significant effect on economic activity in manufacturing of food products and beverage, transport, wholesale and retail trade, the hospitality industry (hotels and restaurants), and research and development. Hence, improving agricultural productivity is critical for sector growth and a successful transformation of the broader agri-food system. Reducing the costs of doing business could further strengthen the economy-wide effects across the agri-food system. Improving value chain organization and integration could help smaller producers seize new market opportunities, considering Croatia's well-developed roads infrastructure.

77. Low labor and land productivity are mainly due to low capital investments, low R&D expenditures and an unfavorable crop structure dominated by low-value crops. Other important constraints which hinder improvement in productivity and total output include: (i) prolonged land administration and consolidation issues; (ii) unfavorable age and education structure of the agricultural workforce; (iii) undeveloped collaboration among producers and between producers and buyers; (iv) limited reach, reliability, and sustainability of agricultural irrigation systems.

78. Productivity of the fisheries sector is generally constrained by a range of factors, including: (i) an outdated fishing fleet (35 years average age of vessels²⁰); (ii) poor diversification of species and products (with the bulk of catchment focused on just two species, anchovies and sardines); (iii) limited technological development; (iv) limited marketing strategies and lack of product branding and licensing.

79. While total catches of marine fish are gradually declining, Croatian aquaculture has shown a notable growth trend in recent years due to the increase in marine aquaculture. This is connected to strong investment activity of several companies, mainly in Zadar county. On the other hand, inland aquaculture continues to decline showing limited ability to attract investments that would reverse the negative trend.

80. Forestry and wood processing sectors require structural changes and investment with the aim to boost competitiveness on both domestic and international markets and increase the share of finished, high-value added products. Forests in Croatia are mostly state-owned (around 75 percent) and public forest enterprises exert an important influence in forest management and play a strong social role as employer in rural areas. Production of sawn wood is by far the most important product category while wood products and furniture production also play a significant role. However, the current timber sales system or quotas, managed by the state, does not allocate the raw material efficiently and introducing a market-oriented timber sales system is necessary to strengthen the competitiveness of the local industry. Considering the high-quality raw material of Croatia, there is potential to further develop the sector and generate additional domestic value-added in final products in the processing. In addition, developing the industrial bio-mass sector could also be a promising field for investment and the private sector could play an important role there, although more government assistance or incentives may also be needed.

A.3. Labor and human capital

81. Croatia faces a demographic crisis. Croatia's birth rate has declined from 9.2 to 9.0 over 2001-2018. At the same time, society is aging: the share of people aged over 65 has increased from 16 percent to 20 percent in the same period. Recent estimates suggest that close to 270,000 mostly young people left the

²⁰ FAO, The State of Mediterranean and Black Sea Fisheries 2016 <http://www.fao.org/documents/card/en/c/4d4203da-b043-49da-8752-fe1dd5f7b536/>

country after accession to the EU (more than 67,000 annually on average) amounting to over 15 percent of the labor force. Meanwhile, Croatia's activity and employment rates are the second and the third lowest in the EU, respectively, and by far the lowest among CEE countries. This situation presents important challenges, such as an increasing financial strain on the pension system and the mounting burden of long-term needs on health care services.

82. Availability of labor is increasingly becoming a constraint for Croatia's growth potential, with a declining and aging population and low activity rates. These trends have been driven by improvements in life expectancy, persistently low fertility rates and high net out-migration rates of mostly young people, with the latter having intensified since EU accession. This situation poses important short and long-term challenges, such as labor shortages, an increasing financial strain on the pension system and the mounting burden of long-term needs on health care services. A low activity rate - especially of low skilled workers, youth, women and older citizen - further aggravates the situation of the labor market. Despite a relatively high unemployment rate, the lack of workforce has already become acute, especially in sectors like tourism and construction. Active labor market policies (ALMP) seem to have limited impact on increasing employment and there is a need for more substantial evaluation of their effectiveness. Furthermore, poor alignment between the education system and the needs of the labor market is a longstanding issue which has not been properly addressed.

83. The quality of human capital is hampered by shortcomings in the provision of education and healthcare. Croatia has the lowest in the EU formal childcare coverage for children from age 3 to school age (at 51 percent, versus the EU-28 average of 86 percent). The low share of preschool-age children in formal childcare, due chiefly to the scarce availability of kindergartens, seriously affects the choices of parents (primarily mothers) regarding their participation in the labor market. The effectiveness of basic education is constrained by one of the lowest number of hours of instruction.²¹ At the same time, the school network has not downsized in response to the 37 percent drop experienced in student numbers (since their peak in 1985). In fact, with only 16 student per class, Croatia has the lowest average class sizes in Europe. Croatia's institutions of higher education suffer from a weak accreditation system, resulting in poor matching with labor market needs. The quality of human capital is also affected by the health of the population. Life expectancy in Croatia is below the EU-28 average. With a relatively low level of wages, only a third of the population paying health insurance premia, and constantly rising costs (especially for the most expensive drugs) the health system is under constant financial distress. Additional important issues include a large hospital network that needs rationalization to meet the changing patterns of diseases, the need to strengthen the primary care network, an underutilized e-health system, and overall lack of coordination and integration between different parts of the system.

Labor market

84. Strong outmigration and aging of the Croatian population already have a profound effect on Croatia's labor market. With an employment rate of 65.2 percent in 2018, Croatia is among the worst performing EU countries; only Italy and Greece have lower rates. The high number of citizens leaving Croatia indicates that the country is struggling to create sufficient numbers of attractive jobs, especially for young people, but also point to broader social issues in the country.

85. The low employment rate is strongly correlated with persistently low activity rates. The activity rate settled at 66.3 percent in 2018, a slight improvement compared to 2013 (63.7 percent), but still well below the EU-28 average of 73.7 percent. Low activity rates are particularly pronounced for low skilled workers, youth, women and older citizens. The main reason for the low activity rate of older people (55-

²¹ In Croatia, basic education lasts for eight years (grades 1-8) and is compulsory as a rule for all children between the age of six and fifteen. Somewhat confusingly for an international audience, basic education is often translated as "primary education" although from the perspective of the International Standard Classification of Education, the first eight grades clearly cover both "primary" and "lower secondary education."

64 years) is early retirement. For older women, personal, family or care responsibilities also played an important role. The third main reason has been disability or illness.

86. Despite significant improvements in the last five years, youth unemployment still represents a major challenge. According to Eurostat data, the youth unemployment rate decreased from 50 percent in 2013 to 23.7 percent in 2018, but it is still much higher than the EU average of 15.2 percent. Only Italy, Spain and Greece have higher youth unemployment rates. Youth female unemployment is particularly pronounced. In 2018 it stood at 28.8 percent, a much higher rate than the EU-28 average (at 14.5 percent).

87. Low quality of jobs, especially for youth, is negatively affecting labor supply. Croatia has among the highest rates of temporary employment in the EU, and one of the top four rates in the EU with respect to part-time youth employment, with more than 60 percent of youth employees working with temporary contracts. Such a high proportion of temporary employment also plays a role in reducing labor supply through higher outmigration. In general, Croatian workers are less satisfied with their working conditions than workers in other member states. Data from 2015 revealed that satisfaction with working conditions in Croatia was the second lowest in the EU, just after Greece.²²

88. Undeclared work still represents a large part of Croatia's total economic activity. According to some estimates, Croatia is ranked among the top three EU countries in terms of the share of shadow economy in GDP, together with Bulgaria and Romania.²³ Undeclared work negatively affects individuals' dues to social contributions, reduces government revenues and disrupts fair market competition. The high impact of the undeclared economy is closely correlated with low tax morale²⁴ and general lack of trust in institutions.²⁵

89. Due to outmigration, labor shortages are becoming evident in certain sectors. A further escalation in the workforce shortage could seriously limit economic activities in a range of sectors, such as tourism and construction. As a policy response, the Government has been repeatedly increasing the quota for employing foreign persons. For 2019, the quota has been increased to a record high of 68,100 permits. However, due to continuous economic growth and the decline of the domestic workforce, it is highly likely that the employment of non-EU citizens will have to be further liberalized, especially for the most affected sectors. Increased shortages in the workforce create an upward pressure on wage levels. This will consequently require companies to boost their productivity in order to avoid their competitiveness decreasing as a result of higher labor costs.

90. The shortage of skilled labor is particularly affecting SMEs. This issue has been exacerbated in recent years by the significant amount of labor force that moved abroad. The problem is also highly related to the continuous mismatch between the skills provided through the regular education system and the needs of SMEs. The insufficient provision of lifelong learning opportunities that would help SMEs overcome the problem is an additional challenge. Gearing the education system to providing high quality and specialized entrepreneurial skills is a key precondition for strengthening competitiveness in the SME sector and increasing opportunities for the creation of new companies.

91. Rigid employment policies are still in place. The expected costs of dismissals remain high due to the difficulties employers experience when trying to prove poor performance or misconduct. Courts almost always rule in favor of the dismissed worker and a court ruling on dismissal takes 3 to 5 years. Furthermore, even in the case of a "legal" dismissal, employers must make mandatory severance payments for any termination of an employment contract that has lasted for at least two years. Redundancy dismissals are permitted, but rules apply as to which workers should be dismissed first (that is, the employers need to consider the family responsibilities of the workers), and employers may not hire another worker for six months.

²² Eurofound, 2016, 6th European Working Conditions Survey –Overview Report, Publication Office of the European Union, Luxembourg.

²³ Medina, L. and F. Schneider (2018), *Shadow economies around the world: What did we learn over the last 20 years?*, IMF Working paper, International Monetary Fund, Washington.

²⁴ High "tax morale" is generally understood as high voluntary compliance with tax laws and the existence of social norms encouraging compliance.

²⁵ For more details, see European Commission (2016e), *European platform tackling undeclared work: member state factsheets and synthesis report*, European Commission, Brussels.

Such conditions are likely to impact employment, as they incentivize employers to rely more on temporary contracts.

92. Croatia invests considerable amounts of funds in active labor market policies (ALMP), but the effects are not sufficiently clear. In the coming years, Croatia should analyze and evaluate the impact of the different measures from active labor market policies (ALMP). In particular, it seems that many of these are targeted towards young people who have been unemployed for a relatively short period of time. The more difficult target group for this sort of intervention should be women over the age of 30 and the long-term unemployed over the age of 45. Another noted feature of ALMPs is their rather limited coverage. Even though the coverage of ALMPs has been expanding, with the number of new participants increasing five-fold between 2007 and 2016, recent World Bank analysis suggests that programs still fall short in targeting those hardest to employ.²⁶

93. Women participation in the labor market is low, with a significant pay gap, lack of flexible working arrangements and low rates of entrepreneurship. Compared to EU averages (60.4 percent), Croatia has one of the lowest employment rates for women (51.5 percent), with the second-lowest share of women who work part time (7.1 percent) in the EU, much lower than the average for the EU (31.9 percent). Fully 32 percent of Croatian women ages 25–64 are inactive due to care responsibilities. In addition, hourly wages for women are estimated to be 17 to 19 percent lower than wages for men (after controlling for levels of education, age, and sector of employment). Furthermore, Croatia has one of the lowest rates of entrepreneurship in the EU, and women are much less likely to be entrepreneurs than men. Only 3 percent of women ages 25–29 years are entrepreneurs. Only about 12 percent of firms have women in top management, and only one-third of firms in Croatia have women as owners. Also, women’s high levels of tertiary education enrollment (49 percent more women than men complete tertiary education) do not translate into higher levels of labor market participation.

94. Discrimination and exclusion of lesbian, gay, bisexual, transgender, intersex (LGBTI), and other vulnerable groups remain high in Croatian labor market. A recent World Bank study (2017) found that 18 percent of respondents have felt discriminated against at work in the last 12 months because of their sexual orientation. Croatia has the second-highest Roma NEET rate (Not in Education, Employment, or Training) in Europe after Spain, with a striking 82 percent NEET rate for Roma women and a 72 percent NEET rate for Roma men. Croatian Roma women have the lowest paid work rate across all of Southeastern Europe.

Education

95. Croatia needs to enhance the quality and relevance of, and access to education, for all its citizens, including adults. Croatia has been implementing reforms in the education system for several years, and the education authorities are aware of the challenges that remain.

96. Early childhood education and care for children younger than three and kindergarten education for children aged 4–6 is significantly constrained and not easily affordable. For children from age 3 to school age, the formal childcare coverage is strikingly low, at 51 percent, placing Croatia at the very bottom of EU countries, far below the EU-28 average of 86 percent. The low share of preschool-age children in formal childcare is due chiefly to the scarce availability of kindergartens, especially outside urban areas. Significant investments are needed for the construction of new facilities and for the recruitment and training of new early childhood education and care teachers and related staff. The Croatian government has already initiated significant investments into new facilities. However, training and recruiting of new professional staff remains a challenge. Emphasis should be placed on regions of the country with the greatest needs and where the gaps are largest, especially rural areas. Also, special attention is needed for facilities that cater to children with special needs.

²⁶ World Bank, 2018, “Portraits of Labor Market Exclusion 2.0; Country Policy Paper (CPP) for Croatia”.

97. At the level of primary and secondary education low annual instruction time and outdated curricula in key subjects contribute to unsatisfactory learning outcomes. The length of compulsory education in Croatia is one of the shortest in Europe. In addition, according to the EC²⁷, Croatia has the second lowest level of instruction time in the EU for primary education and the lowest instruction time for secondary education - and much lower than Europe's average. Having such a short compulsory education time can lead to students having an inadequate amount of time to develop key competencies in critical subject matters and the skills necessary for lifelong learning.

98. The school network presents multiple challenges for expanding instructional hours in an efficient way. On the one hand, more than sixty percent of basic education students are enrolled in schools that operate in two or three shifts, while on the other hand the number of small schools is increasing, and these schools are becoming smaller and smaller. Schools that run in double shifts, and sometimes even in triple shifts, make increasing the number of instructional hours per day more difficult. Small schools are inefficient from both a cost and quality perspective: it is expensive to keep running half-empty buildings and classrooms with low student-teacher ratios and it is more challenging to attract talented teachers and principals. While student numbers have declined by more than 20 percent since 2000/01, the number of schools and classes have remained virtually unchanged during this period. Moreover, during the same period, the number of teachers grew by 26 percent.

99. Although a new curriculum is in the process of being introduced, it will take time to change teaching practices. And the old curricula and teaching practices did support development of advanced problem-solving skills. In fact, there was a strong tendency towards promoting the memorization of facts at the expense of devoting more time to the development of critical thinking skills. While the ongoing curricula reform aims to correct these issues, it will take time before the new teaching practices take hold. In addition, educational institutions do not sufficiently promote entrepreneurial culture and innovation among students, which is contributing to the low level of entrepreneurial culture in the country.

100. PISA scores in mathematics and science for 15-year-old Croatian students are among the worst in the EU.²⁸ This outcome is closely connected to the socio-economic status of the students, where those from poorer families tend to have lower scores. Notably, nearly half of all students who complete the primary and secondary program are functionally innumerate. In addition, there is an acute shortage of STEM (Science, Technology, Engineering, and Mathematics) teachers, which further aggravates the situation.

101. With respect to vocational education and training (VET), outdated VET programs that are disconnected from the needs of employers and a low emphasis on adult education exacerbate skills mismatches. Outdated VET programs are at the center of the mismatch between the supply of skills and the demands of the labor market. Despite recent progress in certain domains, the engagement between employers and VET schools remains limited. Croatians' participation in lifelong learning activities is one of the lowest in the EU and this gap is most acute for those with the lowest levels of education and the long-term unemployed. Furthermore, the competencies of VET and adult education teachers are often outdated and disconnected from the current needs and practices of the vocational field in which they are teaching. In the case of adult education there is a vague certification framework that lacks quality assurance mechanisms to monitor and improve the quality of the programs. Finally, limited strategic planning and coordination at the national level for VET and adult education program offerings results in overlapping courses, the oversaturation of graduates in certain areas and a lack of professionals in others.

102. In addition to the general challenges faced by VET programs, 3-year courses are particularly struggling to attract students. They are unable to secure work-based learning opportunities with employers at the rate and length needed, are particularly vulnerable to underinvestment given their outdated equipment and materials, enjoy a more negative image among the population, and have quotas that have not been adjusted to account for the demographic decline.

²⁷ European Commission, 2019, "Recommended Annual Instruction Time in Full-time Compulsory Education in Europe – 2018/19".

²⁸ According to PISA 2015 results, Croatia is ranked as 24th among EU member states in mathematics literacy and as 22nd in science literacy.

103. The higher education system is based on a complex legal framework with a multitude of governing and expert bodies that have proved inefficient. Furthermore, each faculty within non-integrated universities has legal autonomy. This creates a multitude of legal entities, which are an obstacle to efficient strategic and financial management within the system.

104. There is a low higher education attainment rate of only 29 percent compared to 40 percent in the EU. At the same time, there is significant level of migration of higher education graduates that seek employment opportunities in other EU countries. Many students do not complete their studies or take longer than expected to do so. Even though policy interventions to counteract these problems have been introduced, the lack of a monitoring and evaluation system with quantitative targets on dropout and completion rates makes it difficult to draw conclusions on their effectiveness.

105. Low employability rates of recent graduates in comparison to the EU average (72 vs 85 percent) suggest that graduates' competencies are not sufficiently relevant to labor market needs. This is a consequence of deficiencies in curriculum design, which is not systematically informed by the current and future needs of the economy and society. The high qualification-occupation mismatch for bachelor's graduates and the high share of master's graduates may indicate a structural problem within the Bologna degree structure, because the labor market might not adequately recognize bachelor's degree qualifications.

106. Internal and external quality assurance have not contributed to the enhanced relevance of study programs. Croatia's higher education institutions offer nearly 1,500 study programs, almost 80 percent more in comparison to 2005.²⁹ There is no systemic mechanism to match higher education admissions quota with labor market and societal needs, which is exacerbated by the fact that universities are allowed by law to act autonomously when defining entrance quotas. Furthermore, there are not sufficient links between qualification and occupation standards in the Croatian qualification framework on one side and the initial accreditation of study programs, as well as the reaccreditation of higher education institutions, on the other side.

107. Overall, learning outcomes and profiles of study programs do not match labor market needs. This puts many employers in a situation where they need to invest additional resources to educate young workers to make up for this lack of skills.

Health sector

108. The life expectancy estimate for Croatia is comparable to that in CEE but still 3 years below the EU-28 average.³⁰ While part of the gap is related to the quality of the health system, many determinants of life expectancy and healthy life expectancy lie outside of it. The lack of sustained and focused interventions/measures to capture modifiable risks such as obesity and smoking, in particular among low income groups who report disproportionately higher levels of poor health status, is contributing to this gap.

109. Croatia is facing a number of issues with the performance of the health sector; among these, some of the most important are: i) stress in the health financing system; ii) a large hospital network that needs rationalization to meet the changing patterns of diseases and related new investments; iii) the need to strengthen the primary care network, especially in the face of a rising incidence of non-communicable diseases; and iv) the completion of the work on Croatia's e-health system.

110. Croatia is among the five lowest ranking EU member states in terms of expenditures for health per capita in 2016. In comparison, Slovenia has more than two times higher per capita expenditures.³¹ On the other hand, when taking into account the share of health expenditures in GDP, Croatia outperforms all new member states except for Hungary, Bulgaria and Slovenia. Health spending in Croatia has not seen substantial increases in per capita terms since 2008, while the main cost drivers, such as advances in medical technologies, technology diffusion and population aging, continue to exert pressure on resources.

²⁹ World Bank (2019), draft Policy Note: Education and skills, page 29.

³⁰ According to Eurostat data for 2017.

³¹ According to Eurostat data for 2016.

111. Hospital arrears continue to be a major challenge for the system. Hospital arrears exert substantial financial pressure on the system, accounting for about 10 percent of the total Croatian Health Insurance Fund revenue and over 20 percent in selected years (if additional resources allocated to pay off arrears are factored in). Tertiary hospitals (e.g. clinics) are responsible for a substantial share of arrears and their share has been increasing. Almost all hospital arrears are for drugs and medical supplies, given that hospitals have limited flexibility with deferring other payments, such as salaries. Although it is normal for most hospitals to operate with a debt to suppliers, their performance in managing debt varies enormously.

112. The Croatian health system has a traditional structure where financing has little impact on the pattern of demand for health services. The revenue collection model relies heavily on cross-subsidization between contributors and non-contributors. The current health contribution rate, at 16.5 percent of earnings, is relatively high and there is limited space for further increases. With only a third of the population paying full mandatory health insurance premia, the burden is likely to increasingly fall on the budget.

113. Regulations allowing hospitals to commit to expenditures beyond the planned budget are at the root of health expenditure growth. Hospitals incur arrears, expecting financial rehabilitation at one point, while newly available funds are barely sufficient to clear one-year overdue arrears. The use of payment mechanisms to influence provider and patient behavior, so as to increase efficiency and optimize service utilization, is limited. A series of recent efforts aimed at linking an increasing share of hospital budgets to diagnosis-related group payment systems have been put on hold or rolled back.

114. The use of targeted co-payments to influence consumer behavior to reduce the utilization of inappropriate services is limited. Given the very good coverage and limited user charges, most patients do not have financial incentives to be cost-conscious when seeking care. Limited available data suggest there is a quite high utilization of emergency and primary care services, of which a sizable share is likely to be unnecessary or inappropriate.

115. Expenditures for pharmaceuticals and medical devices are reportedly the single highest contributor to hospital arrears. Expensive medication expenditures have also been growing quickly, outpacing economic and health expenditure growth. With the health technology assessment (HTA) application in the early development stages in the country, there are few structured processes in place to prioritize services based on cost and effectiveness.

116. The hospital network is very inflexible with regard to adaptation of the use of its facilities. For example, there is declining use of pediatric beds as the birth rate declines and an under-supply of long-term care. However, it is very difficult to change the purpose of the facility from servicing one area to the other under the current rules. In addition, systematic analyses of the under- and over-utilization of services so as to identify appropriate utilization levels are missing. This makes it difficult for the Ministry of Health to get a clear and detailed picture on the needed follow up actions at the hospital level.

117. The shift from provision of episodic acute care to continuous integrated care for complex chronic conditions has not taken place. Although specific interventions have been formulated to improve secondary prevention of chronic conditions (i.e. preventive panels), metrics for measuring and incentivizing continuity of care even within the primary care are limited.

118. The primary care system is relatively underfunded, although it plays a critical gatekeeping and hence cost containment role in the health system. Stronger and well-equipped primary care would have a beneficial impact on overall costs through improved quality of care and the provision of a wider range of services in a relatively low-cost environment.

119. Full integration across all levels of care remains a challenge. Different providers (hospitals, GPs, emergency services, public health institutes, etc.) continue to work in their own silo without systematic coordination mechanisms and shared incentives to collectively improve population health. Tracing and managing patients across care providers and along a care continuum using the existing health information structure is difficult and there seems to be a lack of structures, processes and incentives for providers to do so.

120. Rich individual level electronic health data routinely collected in the system have not been effectively utilized to monitor and improve the quality of the system. This is in part because the existing information systems were designed for different purposes, such as to facilitate the work of health insurance,

laboratories and e-prescribing. Re-designing the IT systems to collect data on quality will require an in-depth understanding of what is available and in what form and how it can be leveraged to improve quality, including emerging quality care areas such as patient experience.

121. The health care workforce has become one of the most critical issues for meeting current and future health care needs. Despite some growth in the ratio of physicians per population over the past two decades, shortages persist. These are pronounced in rural areas and in specific specialties such as primary care, psychiatrics, pediatrics, obstetrics and gynecology. Since EU accession, healthcare workers have been more inclined to work in other EU countries in order to benefit from higher wages and a more stimulating environment, resulting in a decrease of the quality of the overall healthcare system in Croatia. The Government's response needs to be all-encompassing. Improvement in working conditions, most notably in the level of wages, should be part of a wider and more complex set of actions. New approaches such as changes in the 'skill mix' of the workforce (e.g. the nurse to physician ratio), transfer of competencies, re-designing medical training, and using technologies to mitigate the effects of workforce shortages have had a limited application so far, insufficient to properly address the needs of the system. In order to prepare for a more systematic approach, a detailed national workforce strategy that takes a comprehensive planning approach to solving emerging workforce issues would be required.

122. Weak institutional capacity has led to the slow implementation of key reforms. Examples include the centralized procurement of medicines, commodities, and devices, for which, although evidence on its potential economic impact was available, the Ministry of Health had difficulty implementing it on a larger scale. There are challenges in getting full cooperation from hospitals and expediting the process to conclude framework agreements, in particular the advancements from the hospitals under the county ownership. Hospital functional integration and hospital arrears reforms have suffered from limited motivation on the part of hospital management and constrained the ministry from fully designing and implementing actionable policies.

123. There is little systematic effort to follow up and evaluate the reforms that have been initiated in order to inform future work. Routine use of data and evidence to inform reform design, implementation and continuous course correction is limited. There is a lack of general understanding about the relevance and necessity of the evaluation, as well as the specific knowledge on the evaluation practice.

B. Making growth inclusive

124. Higher social and economic cohesion as well as resilience to climate changes are among the most significant challenges for Croatia. Gains from economic growth need to be shared by providing equal opportunities and adequate protection to all social groups. Inclusion, therefore, must be at the heart of Croatia's new national development strategy. While sustained economic growth is the most effective way to fight poverty and social exclusion, Croatian authorities need to ensure that the social protection remains effective. This particularly refers to improvements in the design of social benefits and further strengthening of local social welfare centers. Furthermore, the vulnerabilities related to climate change call for additional urgency, with the country already facing significant threats, particularly from flooding, with economic consequences for tourism and agriculture.

Poverty and social protection

125. Even though trends are favorable, levels of poverty and social exclusion in Croatia remain high. After a sharp increase in poverty during the crisis (from 2008 to 2012), the recovery of growth and possibly also outmigration have reduced poverty rates back to pre-crisis levels. But the poverty level is still comparably high, and with 24.8 percent of the total population at risk of poverty or social exclusion in 2018, Croatia is above the EU average, which stands at 21.9 percent.

126. Poverty in Croatia disproportionately affects certain population groups. Unemployed persons, single-person households, and single parents with one or more dependent children are the groups most affected by poverty. Among them, unemployed males, single-person households aged 65 and over and female single households regardless of the age stand out as particularly vulnerable groups, with an at-risk-

of-poverty rate of over 40 percent.³² Croatia's strategy for combating poverty and discrimination for 2014-2020 also includes as highly vulnerable groups persons with disabilities, part of the Croatian Homeland War veterans and war victims, returnees, members of Roma national minority, and migrants.

127. Energy poverty is a concern and while some measures are available or in the pipeline, there is still a need to develop a comprehensive, more targeted policy. Due to concerns regarding energy affordability, Croatia has introduced measures in support of poor households. One such measure provides energy allowances to households that qualify for the Guaranteed Minimum Benefit (GMR). This is a useful measure, as it is means tested, and usage indicates that the funds distributed are heavily skewed in favor of the poorest. Despite the introduction of an energy allowance for the most socially endangered groups and recent VAT reduction, many households are still expected to suffer from energy poverty.

128. Poverty also has a distinct regional pattern. The Index of Multiple Deprivation³³ indicates a strong concentration of impoverished areas in the East and South-East of the country, in particular along the areas that border Serbia and Bosnia-Herzegovina. Such pattern has historical roots having in mind the devastations in this part of the country during the Homeland war 1991-1995 and for some part (particularly areas along the border with Bosnia and Herzegovina) decades of lagging behind the rest of Croatia. Government's efforts to support more territorially balanced development are challenged by the significant fragmentation of the administration at the local and regional level, which reduces its institutional capacity to undertake appropriate interventions. Geography plays a particularly important role in shaping local development of specific territories such as islands and hilly and mountainous regions. As for the role of urban areas as key growth centers, after a long period of neglect by national policy makers, major cities have received support thanks to improvements in the regional policy framework and use of specific EU-funded instruments, so called integrated territorial investments.

129. General government expenditures for social protection are lower than the EU average, but higher than in most of the new member states. In 2017, Croatia's government expenditure for social protection amounted to 14.3 percent of GDP, while the EU-28 average was 18.8 percent.³⁴ Estimates show that social protection expenditures have significant impact on poverty distribution, as poverty would have been 9 percent higher without social transfers.

130. Effectiveness of the current social protection system can be improved, especially with regard to the amount of the benefits and criteria for the selection of users. For example, the Guaranteed Minimum Benefit's impact on the poorest section of the population seems to be quite modest due to its very low monetary value in comparison to the poverty threshold. Similarly, reliefs for children in the income tax system are insignificant for families with low incomes, as they pay little or no tax, and thus they are highly regressive in nature. With regard to institutional capacity, social welfare centers, as the main social policy stakeholder at the local level, should be further strengthened by providing them with adequate working conditions i.e. strengthening their capabilities to become true coordinators of all social services in the local community.

Pension system

131. Croatia, like most EU countries faced with the problems of an ageing population, has undertaken serious reform interventions in its pension system over the last 20 years. The systemic pension reform started by the enactment of the Pension Insurance Act of 1998, whereby the foundations were laid for transition from a system exclusively based on public PAYG system to what is called a multi-pillar system. By the implementation of the second and third pension pillars in 2002 foundation was laid for the

³² Ibid

³³ Index of Multiple Deprivation (IMD) is a measure of relative deprivation in an area. It is based on three domains of deprivation: economic, social and access to services. IMD has been developed by MRDEUF with support of World Bank Group. Data on index can be found at <https://razvoj.gov.hr/karte-siromastva-republike-hrvatske/3585>

³⁴ Eurostat

present-day system. The system has been changed and upgraded by a series of subsequent parametric changes.

132. The share of public pension expenditure in Croatia has stabilized over the last ten years at the level of slightly more than 10% of the GDP, but according to the EC's 2018 Ageing Report it should decline in the future. The most relevant factor with an impact on the future decline in the share of public pension expenditures in the GDP is a decrease in the future relative pensions, that is, the replacement rate. Despite the decrease in public pension expenditure, the revenues from pension insurance contributions will continue to be insufficient to cover all public pension expenditures in the long run.

133. The projections from the Ageing Report 2018 show that the Croatian pension system will face a decrease in future public pension expenditure, but this decrease will occur along with a substantial decrease in the replacement rate. This decrease could have significant social implications, and accordingly the attention of economic and social policy actors should be focused on the issue of pension adequacy. Changes introduced in the pension system in 2019 should increase the relative pensions but they will remain low.

134. Although slowly extending, the working life duration in Croatia has remained short, the second shortest in the EU. That is one of the key challenges facing the Croatian pension system. Widely used early retirement options result in low pension adequacy. Approximately 45 percent of the new old-age pension beneficiaries in Croatia used one of the possibilities for early retirement in 2017. In addition, pensions regulated by special legislation most often enable early retirement under more favorable conditions than general legislation. These pensions account for a significant number of pensions, both in terms of the number of beneficiaries and the total pension bill paid.

135. The second pension pillar, that is, the mandatory privately managed fully-funded scheme, has generated adequate yields in the accumulation phase. The pension payment phase has remained almost non-existent due to policy choice that has created a favorable opt-out option for voluntary two-pillar participants. The third pension pillar (voluntary pension funds) is stable, but its potential for increasing the adequacy of future pensions is very limited because of its low coverage.

Inclusion

136. Croatia has made significant efforts with regard to the deinstitutionalization of care, but challenges remain. Deinstitutionalization has targeted the four priority groups traditionally placed in state social welfare homes/residential facilities: children with developmental difficulties, persons with disabilities, children without adequate parental care, and children and young people with behavioral problems. The process includes the transformation of large state residential institutions to deinstitutionalize beneficiaries and engagement of other social welfare providers from the private and non-profit sector. However, the completion of the deinstitutionalization process remains a challenge since these efforts were not reciprocated by sufficient efforts to develop modern community-based social services.

137. There are significant regional disparities in the availability of social care services. Historically, social welfare residential homes were not established based on local needs, but rather based on the number of available state-owned buildings that could accommodate a larger number of persons. A similar mechanism was applied to the provision of new social services, such as social services for homeless persons, addicts, victims of domestic violence and victims of human trafficking, which were similarly unequally distributed across the country. The regional distribution of these new services is primarily the outcome of how active counties, towns or civil society organizations are in a given area and not a reflection of actual needs.

138. Measures to decentralize certain social services and expand the network of service providers require the establishment of new mechanisms to control the quality of services provided at the national and/or regional level. There is still a lack of secondary legislation that would regulate more closely the compliance of service providers with quality standards and price determination in relation to service content.

139. Quality, accessible, formal elderly care is lacking in most places. This is especially the case in rural areas, where the elderly are aging in place. Civic and social engagement is low among the elderly, leaving many living in isolation and deprived of social interactions.

140. Fully 93 percent of Roma live below the national at-risk-of-poverty threshold in comparison to the overall rate of 19 percent. Only 30 percent of Roma women and men complete primary education. Upper secondary and above completion rates are 6 percent for Roma women and 24 percent for Roma men.

141. LGBTI people in Croatia experience high levels of discrimination, violence, and harassment, significantly exceeding the EU average. 60 percent of LGBTI respondents surveyed in Croatia in 2012 in a European-wide FRA-2013 survey reported being victims of violence and harassment, frequently in public places. More than half of LGBTI respondents reported that they avoid public places because they feel unsafe.

Balanced territorial development

142. Croatia's pattern of imbalanced regional development is similar to other countries in central and eastern Europe. It is characterized by a pronounced level of regional disparities, driven by strong dominance of the metropolitan region and highly challenging socio-economic circumstances in the lagging regions, mainly situated in the eastern parts of the country and bordering non-EU member states. According to the index of development, 12 out of 20 counties and 304 out of 556 local units are currently designated as lagging areas, clearly showing how widespread is this issue.³⁵ There is also a range of developmental issues and needs related to specific territories such as islands and hilly and mountainous areas. Weak transport connectivity between different geographic areas is one example of such issues, especially in the case of remote islands and some of the rural areas.

143. Most lagging regions in Croatia are faced with similar obstacles to those of the country as a whole, but in lagging regions these issues have greater influence on overall economic and social outcomes. The main issues include: an unfavorable economic structure marked by the weak role of the private sector and a high presence of the state sector, low human capital, low entrepreneurship culture, weak institutions and a shrinking and aging population. In addition to these bottlenecks that are common to the rest of the country, poor broadband connectivity and weak transport links aggravate the difficulties of rural areas. In many cases, root causes are directly connected to the extent of damages occurred during the Homeland war 1991-1995. Most notable example is the City of Vukovar, which has suffered terrible devastations of its physical infrastructure, as well as huge population loss during the war.

144. Investment in transport infrastructure, primarily in improved road connections, has been the most important regional development investment policy since 2000. Some of those investments, such as a highway network connecting the coastline to other EU member states, have brought significant benefits, particularly in terms of faster tourism development. However, some parts of the country like islands, mountainous areas, and Dubrovnik-Neretva county still suffer from poor connectivity due to their geography. Despite high level of investments, certain key complements are still missing that would enable reaping higher benefits for the economy and citizens. This includes an effective logistics sector (for domestic and international trade), efficient and integrated public transport, and traffic management and other investments to reduce congestion in major cities, at borders and in touristic areas.

145. Human capital development remains weak across Croatia, particularly in dense lagging areas. Even in leading cities, the share of the population with tertiary education ranges from 21 to 32 percent, while outside of leading cities only 10 percent of the population has tertiary education. Slavonia and the North East parts have the worst educational performance, with 1.7 to 6.4 percent having tertiary education, and there are many municipalities where 5 to 18 percent of the population has not completed primary education.

³⁵ See [https://vlada.gov.hr/UserDocsImages//2016/Sjednice/2017/12%20prosinac percent20prosinac/73%20sjednica%20VRH percent20sjednica percent20VRH/73%20-%2012%20b percent20- percent2012 percent20b.pdf](https://vlada.gov.hr/UserDocsImages//2016/Sjednice/2017/12%20prosinac%20prosinac/73%20sjednica%20VRH%20sjednica%20VRH/73%20-%2012%20b%20-%2012%20b.pdf)

146. Despite its small size and population, there are 20 regional units, 555 municipalities and towns and the City of Zagreb, each with their respective government structures. Some of the very small structures have very limited capabilities to provide services. A lack of capacity is particularly notable with regard to the implementation of major infrastructure projects, but also in formulating well-designed initiatives on projects and programs that could lead to stronger and faster improvements in various aspects of local and regional business environments and citizens' quality of life.

147. The impact of EU funds, and of the EU policies behind those funds, on improving the regions' competitiveness is still limited. The most crucial and immediate goals for which EU funds should be used are those aiming to support stronger private investments in lagging areas and to improve regions' connectivity and human capital. However, to secure a long-lasting success, EU funding needs to become highly incorporated into well-developed national and regional policy planning and implementation systems that will provide both general and tailor-made solutions to satisfy regions' needs and exploit emerging opportunities.

C. Ensuring environmental sustainability

148. Croatia has a strong national interest to promote sustainable production and consumption and to ensure a high level of environmental protection, prevention of pollution and reduction in energy intensity of the economy. Croatia needs to ensure the preservation of its natural areas and their protection system, both for environmental, climate and economic reasons. Namely, high dependence on tourism, which is mainly based on the natural beauty of the country, and obligations to meet EU requirements in this regard are only illustrative examples of the importance of an environmentally sustainable growth model.

149. Current efforts to plan for adaptation to climate change are insufficient. Croatia is highly vulnerable to the impacts of climate change and has identified water resources (consumption and irrigation), coast and coastal zones, forestry and land use change, agriculture, biodiversity, and human health as its most vulnerable sectors. National Adaptation Strategy (NAS) covering the period until 2040 with a view to 2070 and the National Action Plan (NAP) are being finalized and should be adopted in 2020. Climate adaptation actions are yet to be adequately embedded in sectoral strategies. Also, further development of national capabilities to monitor climate change and undertake research activities in this area is necessary.

150. The impact of climate change on the economy, especially agriculture production, is a matter of the highest importance. Projected climate change impacts and risks include biodiversity loss, lower yields, soil degradation, more pests and diseases, and forest fires, all of which bring potentially significant economic losses. Crops production will be particularly hit due to a lack of access to irrigation water and drying tendencies in precipitation. For the fisheries sector, mostly for capture fisheries and, to a lesser extent, for aquaculture, the impacts of climate change will appear through a variety of vectors: sea-level rise, increase in sea temperature, acidification and extreme weather events.

151. Growing tourism already exerts very strong pressures on the environment and results in many unintended consequences in major tourist centers. Negative effects include the devastation of the urban landscape due to the construction of accommodation facilities, congestion and increasing costs for the maintenance and construction of the supporting infrastructure. Some of the most valuable natural resources need to constantly improve visitors' management policy in order to prevent the negative impact of high numbers of visitors. A similar situation also occurs with many cultural attractions, which continuously receive more visitors and therefore need to find new management modes.

152. While high energy intensity of Croatia's economy is decreasing, it remains to hamper the country's overall sustainable growth prospects. Although per capita energy consumption in Croatia is a third less than the EU average, the energy intensity of the economy is 55 percent higher than the EU average. Energy intensity is affected by changes in the economic structure, such as the shifting of economic activity away from energy intensive industries, towards less intensive service sectors, and also by overall improvements in energy efficiency. The energy intensity in Croatia, driven by energy efficiency improvements, has been decreasing. The implementation of energy efficiency schemes for buildings is showing progress, but the overall advancement is still below target. In addition to buildings, transport is another sector with

major contributions to energy intensity. Electrification of Croatia's transport sector, and the expansion of rail and water transport, could positively impact energy intensity and efficiency of the sector. Moving ahead with adding state of the art combined-cycle gas turbines and increasing the efficiency of district heating systems could also lead to improvements.

153. The issue of air pollution in certain areas remains a matter of concern. About half of all households use biofuels for domestic heating and cooking (biomass, coal and wood fuel) because of their low cost and wide spread availability, especially poorer households. Biomass used in simple, inefficient, leaky stoves can produce high levels of smoke and particle emissions, leading to both indoor and outdoor air pollution. Households should be encouraged to replace inefficient wood stoves with efficient biomass ones. In 2016 the ammonia ceiling was exceeded by 18 percent, ranking Croatia as the EU member state with the second largest exceedance of the ceiling in the EU-28. Nearly 85 percent of ammonia emission originates from agriculture.³⁶ Open burning of municipal waste and/or agricultural waste is still being practiced in many rural and suburban areas.

154. Croatia needs to step up its support for a green cities concept. Cities, especially bigger ones, are missing a comprehensive, operational policy on how to implement the green cities concept in practice and monitor its environmental performance. Dedicated national programs supporting the implementation of such a concept are also missing.

Circular economy, waste management and water utilities

155. Croatia is behind other EU countries in transitioning towards a circular economy. Transitioning towards circular economy requires a system-wide thinking to consider all stages of life-cycle of products and services, from early designing stage. Even though the Croatian government has acknowledged the need to move towards CE, and national and local authorities have made some efforts focusing on waste management and green public procurement, this would only partially address actions needed for a circular economy. For example, the country's eco-innovation inputs index is 75% lower than the EU average due to limited R&D. The circular (secondary) use of material, a key indicator, was 4.4 % in Croatia in 2016, against the EU-28 average of 11.7 %. On resource productivity, i.e., how efficiently the economy uses material resources to produce wealth, Croatia performs below the EU average, at EUR 1.19/kg in 2017, against the EU average of EUR 2.04/kg. Currently, there is no comprehensive circular economy framework or strategy in Croatia.

156. A clear policy approach to a circular economy is missing. Frequent changes in policy directions over a short period of time, in particular in the waste management sector, have further slowed down the creation of a consistent policy framework. At the moment, there are no specific regulatory or economic policy instruments aiming to promote a circular economy. Neither the Ministry of Environment and Energy nor any other governmental organization has a department or focal point that is responsible primarily for the issue of circular economy. Low support for dedicated R&D, eco-design, and eco-innovation has further hindered the development of a circular economy. With recognizing the importance of resource efficiency for sustainability in the long-term, the EU has adopted the 'Circular Economy Package', resulting in amending several directives related to landfills and waste. Croatia needs to transpose these changes in to national legislation and revise its National Waste Management Plan (2017-2022), which is required to access EU fund in the next Programming period (2021-2027).

157. The implementation of the current national waste management plan is significantly lagging behind EU targets, putting Croatia at risk of infringement procedures as well as losing funding under the current EU operational program. The current recycling rate of municipal waste in Croatia remains still lower (24% in 2017) than the EU average (46%) and more than 70% of waste was landfilled in 2017. Moreover, with only two constructed and operational EU-standard compliant waste management centers (WMC), a significant fraction of the waste is being deposited on approximately 100 landfills that are still

³⁶ HAOP. *Izvešće o Proračunu Emisija Onečišćujućih Tvari u Zrak Na Području Republike Hrvatske 2018. (1990. – 2016.)*; Hrvatska agencija za zaštitu okoliša i prirode: Zagreb, 2018.

open. It is highly unlikely that Croatia would comply with the 2020 municipal waste recycling target of 50%. The delayed implementation of the National Waste Management plan partially due to very fragmented municipalities (average size 6000 people), lack of coordination between different responsible entities, insufficient capacity/ coordinating for policy making and planning for investment and weak enforcement.

158. One of the obstacles in the modernization of waste management policy is the low quality of the legislative framework and problems with its enforcement. There are inconsistencies between the key legislation and partial or missing secondary legislation. The instability of the regulatory framework hinders the private sector's participation and, equally importantly, makes legislation difficult to enforce. Deadlines for the adoption of secondary regulation are often missed, which also negatively affects implementation plans. The enforcement of legislation is weak, especially in the areas of fee implementation, introduction of the landfill tax, implementation of restrictions on the disposal of biodegradable municipal waste, and remediation and closure of landfills. In addition, key implementing documents –the National Waste Management Plan (NWMP) and Implementation Decision on NWMP – are in conflict in many areas, such as the timeline of implementation, number of WMCs, and the measures and actions to undertake.

159. A similar situation is present in the water sector, where Croatia has failed to meet the first deadline to satisfy the requirements of the EU Urban Wastewater Treatment Directive and will struggle to meet future deadlines. Croatia's slow progress in reaching EU targets in the waste water sector is also connected with the low investment capacity of the responsible organizations. Even though substantial resources from the EU budget have been secured to support relevant investments, progress in the preparation and implementation of large infrastructure projects has been limited.

160. Water utilities are being confronted with the largest investment program in their history to comply with EU directives on wastewater treatment facilities. One of the main difficulties is the lack of compatibility between the scale of these operations and the fragmented nature of the utilities. There are over 160 utilities in Croatia, many of which have insufficient capacity to efficiently manage large-scale infrastructure projects. Even though the first steps towards consolidation of water utilities have been made, the process is coming rather late and its effects will only be visible in a future period. Similar to the waste sector, implementation of key infrastructure projects is advancing very slowly.

161. Coverage of water services is high, but the supply network needs to be rehabilitated and upgraded. The average age of water pipes is more than 40 years, and the system suffers from maintenance backlogs. This poses a threat to water security due to high water losses, which undermine the financial sustainability of the system both in terms of increased cost of production and forgone revenues.

3. Conclusion

162. The preparation of Croatia's development strategy for the next decade is an opportunity to create a platform for an encompassing and productive social dialogue on the path Croatia wants to take in the fourth decade of its independence. The previous national goals of independence - integration into the international community and accession to the EU - have served as anchors for citizens' aspirations and main goals of policy making for more than twenty years. After these goals were achieved, and after the economy recovered from a long lasting and deep recession, Croatia now needs new goals and a new social consensus that will guide the country through the next decade. The preparation of the NDS 2030 is an opportunity to advocate for a new common ground, a new common vision and a new social consensus on the type of future Croatian citizens want for themselves and their children, as well as on the reforms and investments that need to be undertaken to achieve such a future.

163. This Roadmap report identifies key areas in need of reform and proposes policy options that can inform an open debate. In the context of the preparation of the National Development Strategy Croatia 2030, the World Bank has provided support to the Government of Croatia by producing 21 policy notes with rigorous sectoral diagnostic, backed up by lists of priority areas of reforms and required actions that Croatia could undertake during the next decade. The policy recommendations presented in this report are not designed to be an exhaustive list of reforms but are intended to identify possible priorities and inform the debate around the reform process.

164. A comprehensive reform program is essential to raise income levels, support the sustainability of the economic and social system, and resume convergence towards EU living standards. Without improving the quality of public policies and institutions that are crucial for boosting productivity growth, as well as the quality and quantity of labor and capital, Croatia will continue to lag behind its peers. Time is pressing as rapid technological change is enhancing productivity and increasing the returns to skills in more successful and sophisticated economies. The longer the delay in addressing constraints and inflexibilities in product and factor markets, the more difficult it will be to catch up. A comprehensive reform program will require careful timing and sequencing, and the establishment of a broad national consensus. In order to ensure successful implementation, it is necessary for the reform process to keep its momentum independently of the political cycle. Successful policy and institutional reforms require, in addition to identifying technical aspects of the reform, further efforts to induce coordination, and enhance cooperation among key stakeholders, while understanding the nature of power asymmetries at play, and identifying key entry points for reform realization.

165. Economic growth can only be sustainable if it translates into higher quality of life and prosperity for all citizens. If the benefits of economic growth are not felt by all members of the society, such growth, regardless of its pace, cannot be maintained in the long run. Equally relevant, while economic growth is an important prerequisite for improving welfare, it alone is not sufficient to achieve prosperity and better quality of life. Living conditions, opportunities for individuals and families, equal access to education and health services, personal safety, national identity, etc., all strongly affect well-being and are an important part of the social fabric. Dissatisfaction with limited economic prospects and continued barriers to inclusive development could increase political and social tensions, decrease trust in institutions and make reform implementation more difficult. Achieving strong and sustainable growth in the long run will also crucially hinge upon adoption of policies that protect the environment, mitigate the negative effects of climate changes and preserve Croatia's abundant natural capital.

166. Croatia is in a good position to leapfrog on multiple fronts during the next decade. While the reform and investment agenda is substantial, macroeconomic and financial stability, solid economic growth, access to EU funds, and the prospect to join the euro area and the Schengen zone in the foreseeable future create a solid ground for economic and social progress in Croatia. The economy is now growing at around 3 percent annually, the labor market is improving, public debt is firmly on a downward path, and advancement has been achieved in critical areas such as the business environment. This has created an environment where the return on further reforms can be substantial and could unleash Croatia's potential to achieve more inclusive economic growth, faster convergence with the EU and overall improvement in well-being.

ANNEX: A policy agenda until 2030

This annex proposes a policy agenda for growth to be implemented over the next decade. The list of reform actions is not exhaustive, but it can provide a roadmap for Croatian authorities. Success of this policy agenda is conditional on (i) preserving macroeconomic stability, (ii) building institutional capacity for successful implementation, and (iii) establishing an adequate investment management system.

Macroeconomic stability

Macroeconomic stability - including the sustainability of public finances, external sustainability and stability of the domestic financial sector - is essential to avoid boom-bust cycles, ensure public support for the reform and avert the risk of reform reversals.

Fiscal policy should support economic growth and be informed by equity considerations. Fiscal developments have been favorable since 2014, with significant improvement in the fiscal balance and public debt firmly on a downward path. But fragilities remain and Croatia should continue its debt reduction path, while ensuring growth and a more equity friendly composition of the budget. We recommend that the focus in the upcoming period should be on:

- *Rebalancing expenditures:* the share of public investment in overall government spending has been sharply reduced and investment will need to be expanded significantly to meet economic and social objectives in the next decade. This will require streamlining unproductive expenditures and improving the efficiency of spending to create room for investment without increasing total government expenditures. Furthermore, this could allow for more flexibility within the budget and fiscal space to adopt countercyclical measures in the event of another crisis.
- *Reducing the tax burden:* tax revenues are higher than in many other EU countries and are heavily dependent on VAT and other indirect taxes, disproportionately weighing on lower incomes, while property taxes are less developed. For the tax system to be supportive of Croatia's economic and social objectives, both the tax burden and the regressivity of the overall tax system should be further reduced.
- *Managing Public Debt:* while debt has fallen, it remains high for Croatia's current level of income. This makes Croatia highly vulnerable to the worsening of external borrowing conditions, including interest rate shocks. As three quarters of public debt is denominated in foreign currency, an element of exchange rate risk remains. A continued reduction of the ratio of debt to GDP, accompanied by further improvements in its currency composition and maturity profile, should be pursued.

Monetary policy over the next decade will be marked by the planned adoption of the Euro as the national currency. At the end of 2017, the Government of Croatia and the Croatian National Bank presented the "Strategy for the Adoption of the Euro in the Republic of Croatia". There are pros and cons related to joining the single currency area over the next few years, but the benefits for Croatia outweigh the cost. Euro adoption would eliminate currency risk, possibly lower borrowing cost for the public and private sector, and further promote financial stability. On the down side, Croatia will lose independent monetary and exchange rate policy. However, the room for active monetary and exchange rate policy has been very narrow over the years, due to the main features of the banking sector, which is characterized by high credit and deposit euroization (almost 80 percent of all saving and time deposits are in foreign currency) and dominance of foreign-owned banks. In 2019 Croatia sent a letter of intent to enter the European Exchange Rate Mechanism (ERM II), the first formal step toward euro adoption.

Institutional capacity

The quality of institutions responsible for reforms should be upgraded. Reforms need to be backed by high-quality analytical work, well-designed strategic and action plans and strong implementation capacity. Areas such as education reforms, the management of state assets, implementation of circular economy policies, to name but a few, are highly complex, require strong institutional capacity, close coordination across ministries and agencies, and significant resources for the preparation and implementation of the reform programs. More efforts are also needed to communicate the benefits of reforms to the general public

and engage in consultations with social partners and the broader public. This would facilitate the successful implementation and of the reforms, making them sustainable in the long run and increasing the level of trust in society.

Public investment management

The public investment management system should be enhanced. The availability of resources and of identified investment opportunities will bring weak results if the system to prepare, implement and manage investments is not improved. This is not merely an issue of employing more staff to work on projects and calls for project proposals under EU Funds. It rather concerns the country's capacity to manage the investment system as a whole, nationally and locally. Some such issues can be tackled through public administration reforms, others will require developing the appropriate human resources needed for investment management. Advanced analytical and planning skills at various levels, from strategic to project level, project preparation skills including enhanced public procurement procedures, high-level project management skills and strong monitoring and evaluation capacities are some of the priorities in this area. Much of this will require specific external and on-the-job training, but also mentoring by senior staff, and learning from relevant experiences in other countries. Of relevance to this, and especially for planning, monitoring and evaluation, will be the continued strengthening of the national statistical system.

The following sections outline the critical areas for policy interventions and required actions corresponding to the main economic and social challenges elaborated in Chapter 2.³⁷

A. Accelerating growth

A.1. Productivity

The regulatory environment

Broad areas for policy interventions

- Improve business support framework by advancing the quality of related services, fostering integration and interoperability among the agents involved in the business registration process and eliminating and streamlining unnecessary requirements for starting and conducting business activity.
- Reduce restrictions in the services sector, notably in network industries and professional services.
- Continue reducing the burden of parafiscal charges.
- Improve insolvency regime and company liquidation procedures.
- Continue to modernize the land administration and management system.
- Facilitate access to capital for SMEs and start-ups by supporting deeper financial intermediation including through non-banking institutions.
- Strengthen analytical competencies of staff in line ministries to improve implementation of regulatory management tools.

Required actions

- Develop a single integrated business registration process with a single point of contact, introduce interoperability of business registers and unique application form and integrate all business registries to

³⁷ The list of reforms and investment presented in this chapter is to a large extent based on sectoral Policy notes. The list stems from in-depth discussions between World Bank teams and thematic/horizontal working groups organized by the MRDEUF. It is not exhaustive and requires further prioritization and modification by Croatian authorities once the NDS 2030 is prepared. The list aims to point the authorities to areas in utmost need for reform and severe investment gaps.

establish a single integrated registry of all business types (e.g. craft registry, agricultural establishments – OPG, free professions).

- Map and review licenses/ex-ante authorizations required to start and conduct a business activity, automate licensing procedures and establish informational licensing platform.
- Systematically update the list of regulated professions to be liberalized and scrutinize existing and planned requirements for services providers in all regulated professions.
- Conduct a thorough review of the main practical shortcomings in the insolvency and liquidation processes to identify areas for improvement.
- Establish a functional regulatory framework for venture capital.

Public administration and fiscal policy

Broad areas for policy interventions

- Improve coordination and cooperation between different stakeholder in the process of public administration modernization.
- Assist local government viability by promoting mutual cooperation, building institutional links and formulating proposals for voluntary mergers as well as joint administration and/or shared services based on general and sectorial capacity benchmarks and targeted incentives.
- Consider incentives for voluntary amalgamations of local government units.
- Continue with digitalization of public services with clear targets and deadlines.
- Establish effective human resource management mechanisms, with particular attention to the establishment and strengthening of the senior civil service and its de-politicization.
- Pursue a comprehensive reform of the public sector wage-setting mechanism to improve its competitiveness, equitability, links to worker productivity and affordability.
- Improve budget planning, implementation and monitoring at the central and local government level.
- Promote open government approach and citizen-orientation of the public administration by enhancing legislation and services provision in areas of transparency, open data, access to information and citizen consultations.

Required actions

- Consider the establishment of the government coordination and national M&E mechanism at the Prime Minister's Office.
- Develop modern recruitment policies, based on merit, equal treatment and open competition in all phases, and free from political patronage and influence.
- Formalize client involvement in e-government design and implementation as well as administrative simplification program.
- Ahead of digitalization of services undertake business process reengineering to simplify regulatory and administrative requirements for the delivery of services so that inefficient procedures are not fully digitized in their current form.
- Continue with investments into digital services and necessary IT equipment for implementation of eGovernment program.
- Train civil servants in citizen-oriented service delivery for an effective, predictable, reliable and user-friendly administration.

Management of state assets and state-owned enterprises

Broad areas for policy interventions

- Develop a coherent long-term vision of state assets business model, with separate sub-models for SOEs in the financial sector and SOEs in non-financial sectors, including the corporate governance agenda, strategic assets, and other non-incorporated assets.
- Develop an ownership policy at the highest level, clarifying the rationale for state ownership.
- Prepare privatization/divestment policy, given the large number of companies in the state portfolio and its adverse effect on the overall productivity.
- Build effective SOE corporate governance regulatory framework and practices, with attention dedicated to transport sector SOEs and enterprises owned by local authorities
- Build institutional capacity for asset management both at central and local level. Support the transfer of real property to local government units through development and implementation of training plans for local asset managers and the implementation of performance measurement practices across entities.
- Speed up clarification of unresolved ownership issues (ownership disputes and restitution claims).
- Improve usage of government property, especially in less developed areas.

Required actions

- Further expand the ISUDIO – through integration with Land register, Cadaster, Concession register, Agriculture land register, Cultural heritage register.
- Invest in trainings on asset management both at central and local level.
- Reclassify the different forms of state assets in accordance with international public-sector accounting standards and budget regulations.
- Prepare guidelines and criteria for utilization of state property and provide support to local units with less capacity in elaboration of project proposals related to such property.

The judiciary

Broad areas for policy interventions

- Improve the stability, consistency and predictability of the legislative framework, especially in the case of key pieces of legislation in the justice sector. Changes of the legislative framework should be less frequent and better prepared.
- Modernize legislation procedures, especially for the litigious civil and commercial cases, to reduce time demanding steps and alleviate unnecessary burdens on judges. Consider removal of non-core judicial services from courts/judges to administrative units/entities.
- Develop a human resource management policy in the justice sector considering attrition rates, merit-based recruitment and promotion, professional development opportunities and retention policies.
- Advance transparency and objectivity of judicial selection and appointments.
- Further strengthen the scrutiny of judges' and prosecutors' financial declarations.
- Ensure accessibility of all landmark cases adopted by higher courts. Continue implementing best EU and international standards in harmonization of the case-law across the country.

- Strongly promote an active case management³⁸ approach in judiciary while further strengthen Monitoring and Evaluation (M&E) mechanisms in the justice sector.
- Alternative dispute resolution (ADR) concept should be popularized among citizens, court litigants, lawyers and other justice stakeholders.
- Transfer non-core service to administrative entities and develop effective fast-track procedures for resolving minor disputes.

Required actions

- Provide training for enhancing skills for active case management.
- Regularly upgrade the Integrated Case Management System (ICMS) to guide case management policy development and support backlog reduction.
- Revise Framework Criteria (“Okvirna mjerila za rad sudaca”) to include time-management standards, such as resolving certain percentage of cases within pre-set time frames, established for various types and sub-types of proceedings.
- Invest in improvement of work conditions for justice sector’s personnel, including judicial officials and staff, and experience and safety by court users.
- Modernization of physical facilities based on a design that promotes effective and efficient service delivery, and at the same time is family and environment friendly.
- Further enhancement of differentiated mechanisms to allow the right dispute to be dealt with by the adequate dispute resolution (ADR) mechanism, including mediation, both court-annexed and out of court mediation. Considering further expanding the scope of application and improvement of recognition and enforceability of mediation settlement.
- Measures for upgrading the quality of mediation and setting incentive system of mediators should be introduced. Continue promoting ADR procedures and its advantages among judges, mediators, and users.
- Continue with investments in digitalization of the justice system, automation of services and archiving systems, to improve efficiency and render it more citizen and business friendly.
- Advance the design and implementation of the system-wide IT based resource planning system for fixed and movable assets management in the justice sector.

Research, development and innovation

Broad areas for policy interventions

- Strengthen science, technology, and innovation policy governance by improving mechanisms for horizontal coordination among different institutions involved in planning, financing and implementation of science, technology and innovation policy.
- Improve legal framework and provide stronger incentives for the public research sector to seek and protect intellectual property.

³⁸Active case management encompass the following functions:

(a). to ensure that judges take an active case management role; (b) to enforce timescales for presentation of evidence;(c) to introduce strict policies to minimize adjournments;(d) to ensure that typical case procedures assume the need for only two hearings; (e) to ensure procedures are consistent with case complexity; (f) to apply early intervention techniques (i.e. early meetings between the parties); (g) to introduce standard formats for written judgments where possible; (h) to include performance monitoring and evaluation; (i) to encourage the use of information technology where available.

- Reduce the fragmentation of public research organizations in order to lower overhead costs, increase synergies and avoid duplication of research efforts.
- Strengthen the link between the research sector and industry in particular by fostering technology transfer and research commercialization.
- Enhance the performance of science and technology parks and incubators on productivity, competitiveness, and innovation.
- Support improvement of access to international public research infrastructure.

Required actions

- Establish an Innovation Agency that would support science, technology, and innovation policy implementation with specialized expertise and focused mandate for policy coordination, design, monitoring and evaluation.
- Invest in innovative projects in the business sector, in particular for new entrepreneurs in knowledge-intensive sectors. Special attention should be given to education, technical assistance, guidance and monitoring.
- Continue with investment in R&D in public institutions, to incentivize and reward excellent science, international collaboration, research commercialization, and similar performance criteria.
- Consolidate public research institutes and reinforce accountability policies.
- Significantly increase national funding for R&D from the current level of under 1 percent of GDP with the aim of reaching target of 3 percent by 2030.
- Increase funding for early stages of R&D to the business sector in order to foster the pipeline of innovation projects.
- Secure financing for investments in digitalization of Croatian industry and upgrade selected existing business support organizations to provide relevant services.
- Analyze the performance of science and technology parks, identify room for improvement, and assess regional demand and define criteria for the establishment of new science and technology parks.
- Improve working conditions for researchers to retain human resources in RDI and attract foreign researchers.

A.2. Physical capital and connectivity

Transport

Broad areas for policy interventions

- Strengthen the planning and coordination functions of MSTI and adopt an outcomes-based approach across sectors rather than sub-sector focused approach to transport.
- Establish new mechanisms for multi-annual funding and investment appraisal in transport sector that would increase the effectiveness of investments, and the accountability of responsible bodies to execute investments timely and in cost-effective manner.
- Strengthen the corporate governance and accountability regime of the SOEs in the transport sector.
- Improve the capacity of the railway sector to plan and implement investments more effectively and with increased efficiency.
- Use a National Railway Strategy to better govern the investment approach developing the new multi-year National Road Safety Program.
- Improve maintenance and contracting methods for motorways and state roads.

- Enhance the movement of people in Croatia by adopting a policy of integrated planning across passenger transport modes.
- Consider additional uses for tertiary airports (e.g. Osijek) that target markets other than air freight or passenger traffic such as Maintenance, Renovation and Overhaul (MRO) services. These markets may offer opportunities for additional job creation – particularly in lagging regions.

Required actions

- Further reduce motorway operational costs and introduce improved electronic tolling system for motorways.
- Expand and enhance suburban railway services in major urban areas to provide high quality lower emissions transport solutions that capture agglomeration benefits and increase access to both jobs and affordable housing.
- Operationalize the “Treaty establishing the Transport Community” from 2017 through a combined domestic and foreign policy effort to initiate transport network projects with South East European Countries. The treaty provides the basis for open, non-discriminatory access to important freight and passenger origins / destinations outside of the EU and can support further demand generation on Croatia’s key corridors.
- Pursue divestiture of HZ Cargo by seeking synergies with an acquiring firm that enhance chances for long term viability and competitiveness in both Croatia and international markets.
- Further support for road safety projects (e.g. speed cameras, removal of “black spots”) as well as significant public education to decrease Croatia’s exceptionally high accident rates.
- Enhance the program of railway maintenance and safety enhancement with a view to aligning Croatia’s railways safety record more closely to EU best practice.
- Increase investment in railways to address maintenance and renewal backlogs that impeded competitiveness relative to road-based modes.
- Prioritize modernization of traffic control and signaling assets in Croatia’s railway sector in order to reduce labor intensity of operations and associated operating costs that currently impose high fiscal burdens.
- Augment investment resources that are supporting rehabilitation, and modernization of railway infrastructure on core TEN-T network and ERTMS / ETCS implementation. This should include financial resources beyond EU funds to scale up the railways capital program.
- Continue with investments into modernization and extension of seaports and connected railway freight transport infrastructure that can support greener and safer freight movements relative to roads.
- Modernize floating stock and the governance regime that applies to Jadrolinija to improve the connectivity to the islands.
- Continue to support the transformation of Port of Rijeka, including through ensuring higher available handling capacity and better multimodal hinterland connectivity.
- Enhance investments supporting suburban railway services in major urban areas. This would include: (i) expanded rolling stock fleets to deliver new timetables; (ii) infrastructure investments to improve reliability, increase passenger amenity, and reduce operating costs, (iii) timetable revisions to increase service frequency and quality.
- Support projects enhancing multi-modal transport such as points of physical integration, integrated ticketing and fares, and intermodal facilities.
- Continue with investments supporting more sustainable modes of public transport and development of integrated passenger transport.

- Continue with development of secondary airports with a view to enhance point-to point connections with major origin /destination cities in the EU and elsewhere.
- Ensure better connectivity between urban and rural areas. Consider solutions such as Demand Responsive Transport (DRT) feeder service, road-based public transport alternative that typically uses smaller buses / vans that do not operate according to a fixed schedule and integrate those services with passenger rail operations in order to improve the connectivity in rural areas and ensure higher quality of the service.
- Improve navigability of rivers Sava and Danube and enhance related port facilities, including through projects promoting regional and transboundary water cooperation and dialogue.

Broadband development

Broad areas for policy interventions and required actions

- Streamline investments in very high capacity networks (VHNC) to achieve EU Gigabit Society targets.
- Ensure fast broadband Internet access throughout the country as the basis for digitization and deeper integration of the country.
- Support more demand for use of fast broadband infrastructure through faster development of digital services in the public sector.
- Continue and speed up the rollout of the projects for the development of broadband infrastructure in areas lacking from the sufficient commercial interest for investment, covering both access and back-haul networks.

Energy policy

Broad areas for policy interventions

- Enhance energy system flexibility by renewable energy integration, improving electric connectivity with neighbours and increasing the liquidity of the Croatian Power Exchange.
- Stimulate larger renewable energy penetration by investing in smart energy systems including off-grids and mini-grids, prosumers, and producers aggregation, and the management of intermittent renewable sources. Croatian islands specifically can benefit from investments in third-generation mini-grids, in line with the framework supported by the Clean Energy for EU Islands Secretariat.
- Address deficiencies of current incentive framework to attract new private investment in renewables, including by the implementation of the auctions system.
- Support integration of emerging technologies (such as solar cooling, battery and thermal storage) and integrated solutions (such as district cooling networks, and new cooling solutions) into the national energy system.
- Establish targeted social support mechanisms and further refine existing measures to better support the energy poor.
- Establish enabling conditions for implementing active demand-side management (e.g. demand-response) to curb peak power demand and incentivize positive behavioral change.
- Assess the interactions between transport systems decarbonization and ancillary energy sector investments and reforms, in order to prepare for the expected increase in the electrification of road transport and expanding rail and water transport.

Required actions

- Continue with investments in cogeneration and district heating systems for efficiency improvement, service expansion, promote renewable energy sources (e.g. geothermal and biomass in district heating).
- Launch long term residential energy efficiency programs based on a prioritization of categories of building to be rehabilitated.
- Further develop long-term financing instruments and models, alongside the traditional financing, grants and other support schemes. Consider an upgraded ESCO model to deepen and expand ESCO services.

Waste management and water utilities

Broad areas for policy interventions

- Speed-up progress on improving waste management by strengthening regulatory and fiscal incentives for regional and local units to move forward with the implementation of the waste management plan, accelerate investments into waste management facilities and build capacities to achieve recycling targets.
- Implement comprehensive water utility reorganization process, based on aggregation of water utilities, aimed at efficiency improvement, sustainability and affordability of service provision.
- Ensure provision of reliable and safe water supply for the entire population and economy.
- Strengthen capacity for project preparation and implementation of EU financed investments in the water sector by centralizing a larger part of project preparation activities
- Prepare and execute an action plan fostering transfer from linear to circular economy comprising a set of regulatory, economic and informative policy instruments.
- Fulfil the Urban Wastewater Treatment Directive (UWWTD) requirements, through investments into development and expansion of wastewater collection and treatment facilities, with a particular focus to sensitive areas with rapidly growing environmental pressure.

Required actions

- Introduce landfill tax to incentives separate waste collection and recycling and influence behavior to minimize waste.
- Implement a water utility reorganization process including utility aggregation, focused on efficiency improvement and capacity development.
- Provide incentives for efficiency improvements of service provision through the establishment of an effective benchmarking system in the water utility sector.
- Continue and speed-up the work on the construction of waste management centers and other related activities.
- Prepare and implement national water loss (NRW) reduction program. Intensify the investments in modernization and expansion of the water supply network.
- Assess steps to ensure compliance with EU Water Framework Directive (WFD) and EU Floods Directive (FD), including support in strategic WFD and FD planning and implementation.
- Develop and implement strong educational and communication campaigns in order to increase the awareness of all key stakeholders at local and regional level on the regional waste management system.

Agriculture and fisheries

Broad areas for policy interventions

- Improve linkages between producers and agri-food markets, particularly through advanced cold chain logistics for fresh produce.
- Improve access to finance, especially for small farmers by introducing the innovative risk-sharing instruments and matching grants specialized for agriculture.
- Enhance and incentivize collaboration between small and fragmented producers for large capital-intensive resource sharing, mainly machinery, processing, logistics, knowledge and R&D.
- Increase institutional capacity for evidence-based strategic planning, implementation, and monitoring. In particular, undertake a review of current public spending patterns in agriculture and fisheries and establish mechanisms for smarter targeting of public agriculture and fishery expenditures.
- Develop a new integrated agriculture knowledge and innovation system (AKIS).
- Improve vocational agricultural education to better match agri-food sector needs.
- Improve land administration and develop incentives for land consolidation.
- Mainstream climate change concerns in agri-food sector strategies, programs, and impact evaluations.

Required actions

- Provide support for high value production systems and strategic value chains, including fruit and vegetables and animal husbandry.
- Invest in knowledge, digital agriculture, market intelligence, certification, centers of excellence and R&D to improve productivity as well as access to markets and exports.
- Support investments in advanced cold chain logistics and shared advanced machinery for food production and processing.
- Increase support for agri-food producers and processors for new product development to differentiate and personalize their product offerings in response to shifting consumer demand as well as stricter regulations.
- Stronger support for a shift towards organic farming through investments in education and marketing. Develop long-term program to improve the resilience of the agri-food system in Croatia. In particular, promote agricultural practices such as crop rotations, conservation tillage, cover cropping, composting, and integrated pest and weed management.
- Focus on young farmers. Invest in infrastructure, services, innovation and facilities necessary to attract and retain young farmers in rural areas.
- Provide support for (i) sustainable increase of biomass production; (ii) circular („zero waste“) processing of available biomass; (iii) viability of rural areas by helping them to develop an innovative, inclusive and climate ready growth model through increased diversity of production systems.
- Revamp the existing National Irrigation Program, including through (i) the construction, rehabilitation, and modernization of irrigation and drainage infrastructure on existing agricultural land; (ii) adoption of new technologies in irrigated agriculture; and (iii) the introduction of participatory approaches to water management and the strengthening of water resource management institutions.
- Support the development of integrated, sustainable and healthy marine and coastal resources in Croatia by tackling the underlying causes of overfishing and addressing aquaculture sustainability, addressing threats posed to the health of marine and coastal resources by marine pollution, sustainable development of key sectors in coastal areas such as tourism, maritime transport and off-shore renewable energy; and by building government capacity to manage marine resources.

- Continue with support for modernization of fishing vessels to address an outdated and relatively small fishing fleet constraining fishing sector productivity.
- place.

A.3. Labor and human capital

Labor market

Broad areas for policy interventions

- Assure greater flexibility of the labor law, especially related to dismissals, working hours regulation, work place probationary work. Combine greater flexibility with the provision of security and re-employment support measures for workers.
- Pursue a more integrated and individualized approach to active labor market policies and social welfare policies. Integrate the systems and the platforms of the public employment offices and social welfare departments to allow for a more holistic and individualized approach to social welfare and labor reintegration policies.
- Deepen and increase the coverage of Active Labor Market measures, based on evaluations on the effectiveness of the current measures, and with a renewed focus on the non-participating populations; notably, women and the long term unemployed over the age of 45.
- Support employment of youth with less education to provide care and other services and offer on-the-job training to facilitate mobility in the labor market.

Required actions

- Reduce the complexity and costs of dismissals without lowering the level of employment protection. Revise the priority rules for redundancies, shorten the time needed for courts to adjudicate on cases of dismissals.
- Undertake measures to reduce excessive use of temporary contracts in the labor market.
- Further develop the Croatia's Employment Service to enhance their capacities to profile and serve beneficiaries, including by providing staff with needed skills (psychologists and career guidance counsellors).
- Expand the network of services supporting women in the workplace or wanting to enter the labor market.
- Enhance gathering labor market and education system data and analytical capabilities. Develop Labor Market Information System able to assess current and future skills needs and gaps.
- Increase efforts in combating undeclared work, particularly by raising the awareness of citizens and strengthening the capacity of the state inspectorate.

Family policies and demography

Broad areas for policy interventions

- Systematically promote a more family-friendly society and facilitate access to employment and decent living conditions for young people and couples.
- Develop parental leave system that adequately compensates for the opportunity cost of work and allows for more flexibility in the implementation of the parental leave and encourage father's uptake in parental leave.

- Improve access to reproductive services.
- Promote corporate social responsibilities for children's rights, including enabling mothers to return from maternity leave into a safe workplace, respecting parents' working hours framework and provide flexible sick leave to take care of a sick child.
- Improve the overall equity of the child allowance system, including through the reform of existing tax policies for families with children in order to make it progressive, i.e. distributed in favor of lower income families with children.
- Develop a national policy to encourage in-migration. Liberalize inflow of foreign workers and their families.

Required actions

- Pursue investments in kindergarten facilities, staff and services to improve the availability of quality and affordable formal childcare services for all families and reduce geographical and income inequalities in access (to be developed in relation to education sector policies).
- Improve availability of care services for children and elderly, including through providing support to business service providers, in order to decrease unemployment due to care obligations. Introduce incentives for employers who provide kindergarten services to their employees.
- Increase public awareness about: (i) the importance of promoting the labor market inclusion of women and its positive association with fertility; (ii) the necessity to favor gender equality in the distribution of child-rearing responsibilities; and (iii) the evidence of the potentially positive effects of formal childcare for children 0-3 years old.

Education

Broad areas for policy interventions

- Early Childhood Education and Care: (i) increase territorial and social balance in access and quality of ECEC; (ii) change the funding model and strengthen the role of central government in key ECEC decision-making.
- Basic and secondary level education: (i) increase instruction time by raising the number of hours in the school day or making compulsory education longer; (ii) optimize the school network to improve efficiency and allow for increased instruction time; (v) strengthen support to struggling students to improve learning outcomes; (vii) make greater use of data to inform policy-making and employ soft policy instruments to support reform implementation; (viii) increase autonomy to local education authorities and schools, accompanied by greater accountability for results.
- Vocational Education: Ensure strong coordination and key-decision making in VET and adult education at the national level. Improve VET and adult education programs to better respond to the needs of the labor market and improve overall learning outcomes. Improve certification framework in adult education by ensuring stronger quality assurance mechanisms.
- Higher education: (i) improve legal framework for HE; (ii) develop policies for improvement of managerial and leadership capacity of middle and top management in HE institutions; (iii) strengthen links between market needs and offered courses; these should be brought about through reforms in higher education financing and use of Croatian Qualification Framework to improve HE qualifications and curriculum (iv) increase HE attainment rate by introducing policies for enhancing quality teaching and learning in HE and by securing stronger state support for disadvantaged students and part-time students; (v) establish coherent monitoring and evaluation system able to assess state funding effectiveness; (vi) undertake measures to increase the level of internationalization of HE programs.

- Invest efforts in closing the gender gap in STEM (science, technology, engineering, mathematics) higher education and help women enter careers in the STEM fields, including through scholarships and career counselling centers.

Required actions

- Invest in infrastructure to move towards universal access to ECEC for 4-6-year-old and access to at least 33 percent of children up to 3 years of age but link those investments to local authorities making progress on consolidating their oversized network on basic education schools.
- Link the large capital investments needed to transition from double-shift to single-shift schools (with single shift schools offering “whole day schooling”) to local authorities making progress in downsizing the number of classes and schools.
- Increase investments in the general secondary, VET and higher education facilities.
- Continue with investments into infrastructure and human resources in RDI sector and research programs, but dominantly on the basis of the potentials for collaboration with the private sector and for commercialization of the innovations.
- Invest more in competencies and professional development of teachers at all levels.
- Invest in lifelong learning opportunities and adult education
- Provide support for educational institutions in raising the entrepreneurial culture among students, especially through strengthening the cooperation with local and regional businesses and business associations.

Health sector

Broad areas for policy interventions

- Improve financial sustainability of the health system by addressing both revenue and spending side.
- Modernize service delivery by developing more continuous and closer to home primary care services that focus on risk management, continuous care and fewer inpatient services compared to current hospital-centered, relatively inflexible and fragmented health system.
- Develop a comprehensive national health workforce plan to meet today’s and future health care challenges, in particular with regard to occupations in shortage of workforce, partly also due to outmigration of doctors and nurses since the EU accession.
- Strengthen health care quality measurement and improvement framework.
- Set up a national health information governance system.
- Promote cross-sectoral collaboration across health, education and social services on public health issues and interventions.
- Ensuring healthy and active ageing through collaboration with other sectors and a life-course approach.
- Improve institutional capacity to plan and implement reforms in health sector, in particular within the Ministry of Health and ensure that all health systems initiatives are planned and implemented as part of the wider, comprehensive national framework.

Required actions

- Review existing revenue collection policies and identify additional revenue sources such as widening of the payers base and/or increasing contributions from general tax revenue or earmarked taxes.
- Review distribution of funds among different levels of care and services and secure more funding for primary care and prevention activities.

- Use targeted co-payments to control inappropriate utilization of medical services.
- Adjust the current payment system for hospital care (possibly starting with a pilot coupled with impact evaluation and ongoing monitoring) for improving efficiency, optimizing care delivery networks and data driven service planning.
- Improve public procurement process and increase coverage of centralized procurement of medicines, commodities, and devices as well as general supplies in the health sector.
- Increase application of health technology assessment (HTA) to prioritize services based on cost and effectiveness results.
- Conduct comprehensive evaluation of service delivery across all levels of care including primary, emergency, inpatient and long-term care to identify gaps and future directions to improve care integration, health system costs, efficiency, access and quality.
- For primary care, mapping and evaluation of preventive activities should be considered within the larger framework of NCD prevention and control
- Identify options for the reconfiguration of the hospital sector, considering different models (merger, functional integration, reshaping etc.), and assess readiness against preconditions for reconfiguration (IT tools, human resources, required legal changes, payment mechanisms, clinical pathway, training materials etc.).
- Use rich information basis collected in different parts of the system, to connect and integrate treatments between different care providers.
- Engage professional associations on curriculum for on-the-job training and continuing professional development.
- Clearly define roles and responsibilities of institutions in charge for quality measurement and improve their capacity and use more effectively available health data to monitor and improve quality of care providers.
- Pilot new quality improvement initiatives to address quality gaps in priority areas (i.e. diabetes, heart conditions, cancer).
- Build national capacity in data analytics including integration of provider and patient dashboards into the existing infrastructure and practices.
- Develop or update nationally adapted clinical guidelines and patient pathways for the prevention and control of selected high burden NCDs.
- Expand primary care facilities at local level.
- Continue with investments in advanced facilities for “modern” diseases, such as cancers, addictions, cardiovascular diseases, and dementia.
- Support investments in IT tools and specialized trainings enabling more effective use of data, to steer the health care system and improve governance capacity.
- Provide support for projects aiming to increase the effectiveness of the health care delivery systems at a local level to support the poorest and most vulnerable elderly citizens.
- Design and implement national level public health interventions to reduce NCDs and other age-related health issues.
- Develop an evidence-based Active and Healthy Aging Strategy and Action Plan with inputs, with a clearly defined whole-of-government approach to aging with age sensitive policies and programs in

B. Assuring sustainability in the domestic economy

Poverty and social protection

Broad areas for policy interventions

- Strengthen social safety nets for the most vulnerable groups. Assess and revise amounts of social benefits and allocation criteria to increase their effectiveness.
- Incorporate to greater extent territorial aspect to measures tackling poverty. Use the Index of Multiple Deprivation to assist in the deployment of the right mix of policies targeted to the correct areas, tailoring policies to each place's characteristics and competencies.
- Improve the governance in the sector. Strengthen vertical and horizontal coordination in social service planning, through cross-sectional cooperation of local, regional and national services. Ensure the continuity of previously initiated reforms.
- Strengthen the role of social welfare centers as key policy stakeholder at local level.
- Increase publicly available sources of information (databases) on social services provided. Ensure the timely delivery of statistical data by social service providers.
- Determine social service prices according to a unique methodology and ensure equality in the market of state and non-state providers (especially in case of homes for elderly people). Estimate costs and pricing to facilitate the development of new community-based services.
- Continue the transformation of institutions providing institutional care and exercise strict admission control.
- Review gender-based violence reporting and monitoring and strengthen gender-based violence prevention programs.

Required actions

- Increase the social assistance program's coverage among the poorest 20 percent of the population. Increase the resources devoted to means-tested programs to achieve even larger impacts on poverty.
- Improve housing conditions for vulnerable groups and accommodation for the elderly who are not covered by the process of deinstitutionalization, especially in the lagging regions.
- Provide adequate working conditions for the social welfare centers, including through infrastructure investments.
- Support investments in skill development of social services providers' employees.
- Reallocate part of budget sources for institutional care to financing of non-institutional services. Emergency residential care in social welfare homes should be replaced by emergency residential care in foster families.
- Support training of public service servants in gender-based violence response. Strengthen counseling services and intensify outreach to vulnerable women that are susceptible to exploitation.

Pension system

Broad areas for policy interventions

- Tighten early retirement conditions and increase pension decrement rates for early retirement.
- Link the statutory retirement age to life expectancy.

- Correct minimum pension formula to ensure that minimum pension beneficiaries in two-pillar regime are as well-off as beneficiaries of one-pillar regime.
- Introduce zero pillar (national pension) scheme for senior citizens without pension benefits, preferably subject to income and means testing.
- Improve the institutional setup of the second pillar to facilitate a more active asset management for pension funds and an integration of accumulation and pension payment phases.
- Strengthen the third pension pillar; consider introduction of auto-enrolment with opt-out option.
- Rationalize the categories of pensions under special regulations and accelerate their convergence to general rules.

Balanced territorial development

Broad areas for policy interventions

- Further strengthen regional planning and monitoring system, including strong multi-level coordination mechanisms and partnerships. Move beyond the fragmented county level planning and emphasize more the role of the leading cities as poles for regional growth.
- Embed contribution to balanced territorial development as a relevant policy goal across the range of sectoral policies with highest impact on the regional development.
- Further develop and upgrade integrated development approach as a policy approach to development of urban and rural areas. Develop new tools for development of islands and hilly and mountainous areas based on integrated development approach. Use EU funds to increase the impact of such approach.
- Improve investment policy for lagging areas: (i) increase incentives for investments into lagging areas; (ii) increase the institutional capacity of lagging areas for investments' attraction; (iii) in collaboration of central, regional and local level prepare a range of investment opportunities for investors into lagging areas.
- Use knowledge and experience gained during the implementation of Slavonia, Baranja and Srijem Project for targeted interventions in other lagging regions in Croatia.
- Strengthen the capacity to implement smart solutions on islands through the establishment of a specialized, inter-disciplinary, coordination body that will assist island authorities and actors through establishing strategic partnerships with entrepreneurs, universities and civil society to develop smart solutions for islands that are sustainable, integrated, transferable and scalable.
- Improve knowledge and strengthen the capacities of city authorities to implement smart cities solutions
- Strengthen competencies of the local authorities on islands to implement smart islands solutions.

Required actions

- Implement a grant scheme for the "Development of Smart City Labs" with the purpose of creating a platform that enables the development of joint smart cities solutions by entrepreneurs, the public sector, the scientific community and citizens at the local level
- Implement "Smart City HUBs" strategic project in at least four macro-regional centers, aimed at bringing together major universities and business community in providing project ideas of smart solutions on a wider regional scale.
- Define several major strategic projects that would address basic needs of the islands by applying smart solutions on the entire island area of Croatia in areas of basic infrastructure and services such as availability of drinking water, the management of risks resulting from the islands' current climate characteristics, and the unavailability of broadband infrastructure.

- Develop an Island Integrated Territorial Investments (ITI) –Integrated Projects program to improve functional and territorial linkages between islands as well as the islands and areas on the mainland.

Environmental sustainability

Broad areas for policy interventions

- Reduce air pollution and greenhouse gas emissions by incentivizing the adoption of cleaner production processes, reduction of air pollution and carbon emissions from non-industrial furnaces and the transport sector, implementation of new demonstration projects and through other related measures.
- Strengthen multisectoral cooperation to reinforce existing economic and regulatory tools for promotion of green economy and reduction of national carbon footprint such as Green Public Procurement, multimodal transport, sustainable urban development (green cities), and more.
- Strengthen the capacity for the implementation of non-structural measures for protection from flood and drought in case of extreme hydrological conditions (whose increase in intensity and frequency of occurrence is conditioned by climate change).
- Provide an impetus for green spatial planning and the creation of green cities
- Enhance valorization and management of Natura 2000 network (preparing and promulgating management plans preserving ecosystem services) with particular attention to nature protected area under greatest pressure from the visitors.
- Enhance a multi-sectoral approach to integrated protection and management of the marine environment and coastal areas.
- Prepare and implement plan for reducing nitrogen and phosphorous discharge into aquatic environment
- Further development of capacities to monitor and analyze climate impact and adaptation requirements and mainstream approaches across sectors by systematically including for risks inter alia of floods, forest fires, droughts and sea level rise.

Required actions

- Continue with projects enhancing climate change resilience (focus on water supply and sanitation (WSS), forest-fire and flood protection; implementation of WSS and flood protection climate change resilience measures.
- Establish a climate monitoring and early warning system for protected areas and ecological network and monitoring of protected wild habitat types and wild species.
- Develop and promote green cities concept – launch multiple pilot that clearly articulate how urban areas will combat climate change, manage solid waste, reduce its GHG emissions and other air pollution, increase green spaces, improve biodiversity and manage wastewater and rain water in its local planning system.
- Prepare a Sustainable Cities Framework and indicator system including national standards, guidelines and indicators for green urban infrastructure and circular economy approaches in urban areas.
- Expand the Croatian Platform for Disaster Risk Reduction to include climate change-related indicators for the development of an early warning system.
- Modernize hydro-met and early warning services, particularly for wildfire management and enhanced early warning for flood, drought and fire.
- Establish monitoring system to identify types and locations of greatest pressure stemming from tourism activity on the infrastructure, environment and quality of life in general.
- Continuously upgrade visitors' management regime in national parks under heaviest pressure.