

Overview

Croatia Country Economic Memorandum

Laying the foundations:
Boosting productivity to ensure
future prosperity





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Laying the Foundations: Boosting Productivity to Ensure Future Prosperity in Croatia

Overview¹

Introduction

Croatia has made significant progress in living standards over the last two decades, with **Gross Domestic Product (GDP) per capita (in Purchasing Power Parity nominal terms) reaching 70 percent of the average EU27 level in 2021, from 50 percent in 2001**. During this period, the country has improved its resilience by achieving advancements in the business environment and institutional quality, liberalizing labor and product markets and maintaining macroeconomic and financial stability. By entering the EU in 2013 and the euro area and Schengen zone in 2023, Croatia has achieved its key objective of Euro-Atlantic integration and gained access to abundant EU resources and a safety net for its financial system.

Further improvements in living standards of Croatians would be critically dependent on productivity improvements. Headwinds to long-term growth arising from limited improvements in productivity and an ageing population would limit Croatia's GDP per capita growth to 1.6 percent a year over 2025-50. Croatia's productivity is lagging not only the developed EU countries, but also its regional peers. This reflects low levels of Research & Development (R&D) investments, innovation and technology adoption, weaknesses in managerial and organizational practices, and constraints on competition. In addition, while institutions have improved, some lingering issues remain.

An ambitious and comprehensive set of reforms could almost double Croatia's GDP per capita growth from 1.6 percent to 3 percent a year over 2025-50 period. This would imply that Croatia's per capita income could exceed the EU27 average by the end of the period. While tackling constraints, particularly firms' productivity, requires significant efforts by both the private and the public sector, the goal of this overview and the detailed report is to focus on a subset of the policy measures related to the service sectors and reforms in the domain of public policies and institutions.

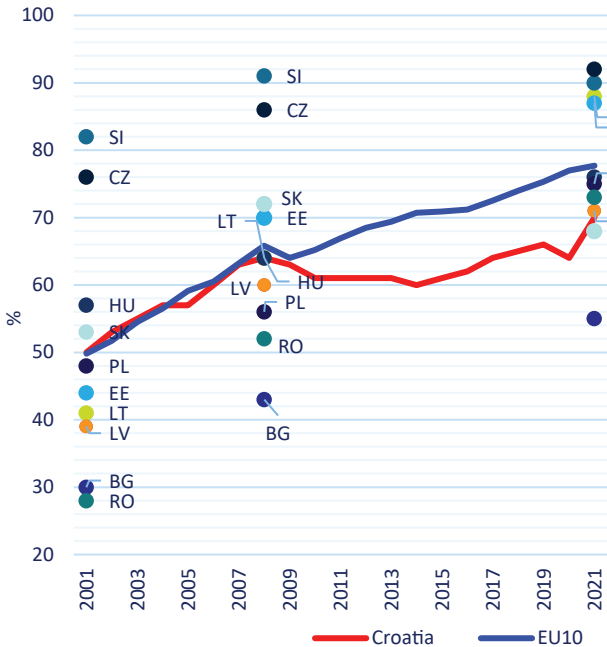
This overview summarizes the main findings of the Croatia Country Economic Memorandum (2023), which focuses on long-term growth prospects and productivity of its economy. The overview first reviews Croatia's economic developments over the last decade. It then applies the World Bank's Long-Term Growth Model (LTGM) to estimate Croatia's growth prospects until 2050 in the baseline, business-as-usual, case. It then simulates different policy reform scenarios—including improvements in pre-tertiary education, labor market participation, and productivity—to estimate the growth dividend from these reforms and the impact on convergence towards higher levels of income. Thereafter, it focuses on productivity performance using both aggregate and firm-level data and compares Croatia to the regional frontier economy and its EU peers. It also aims to link productivity with the most relevant institutional constraints faced by firms and provides recommendations for improvements.

¹ This paper is a summary of the Croatia Country Economic Memorandum report issued by the World Bank in January 2023.

Croatia’s solid growth after 2015 was interrupted by the COVID-19 pandemic and Russian Federation’s invasion of Ukraine

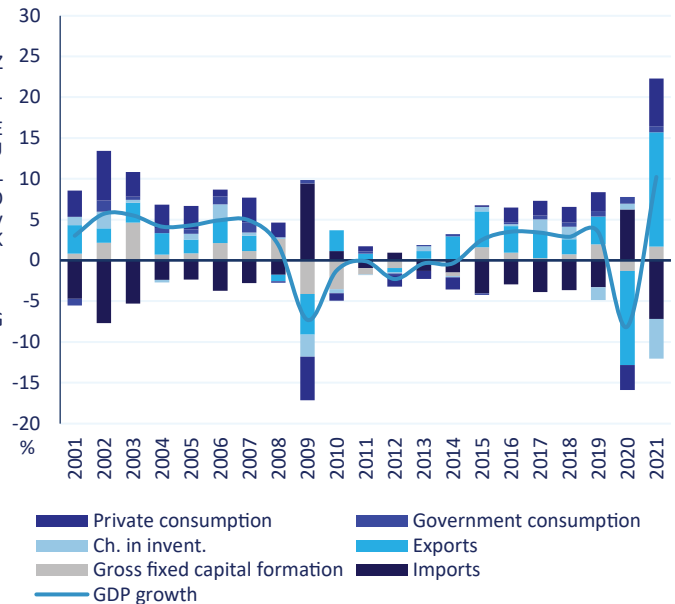
Croatia GDP growth after 2015 has been solid with steadily improving composition, that shifted away from debt-financed domestic demand towards more export-led growth. Over the last two decades Croatia’s growth and its composition have varied. Over 2002-2008 period, GDP growth averaged a robust 4.5 percent a year, accelerating per capita income convergence with the EU to a pace comparable with Croatia’s peers of Central and Eastern Europe (CEE) (Figure 1). However, the rise in consumption and investment during this period was largely financed by debt, leading to a significant increase in financial liabilities of households and firms. Investments were, to a larger extent, directed toward non-tradable sectors with limited spillovers to overall productivity growth. Export performance remained modest while the rapid increase in domestic demand drove a surge in imports, with the current account deficit as a share of GDP reaching double digits by 2008. These macroeconomic imbalances left Croatia vulnerable at the onset of the Global Financial Crisis (GFC) and the European sovereign debt crisis and resulted in recession that lasted until 2014. Income convergence was derailed, the unemployment rate more than doubled, and both external and public debt reached the highest levels relative to GDP in the country’s history. A more favorable external environment, along with the positive effects of EU accession in 2013, helped to reignite growth in the 2015-19 period and to reduce unemployment. While average GDP growth was lower compared to pre-GFC period, averaging slightly above 3 percent, the growth composition became more balanced, shifting from debt-financed domestic demand toward more export-led growth (Figure 2). Croatia reached about 70 percent of the average EU27 income per capita level in 2021—this, however, also reflected a fall in population.

FIGURE 1. GDP per capita, percent of EU27 GDP per capita, in Purchasing Power Standards



Note: EU10 includes Bulgaria, Czechia, Estonia, Latvia, Lithuania, Hungary, Poland, Romania, Slovenia and Slovakia. Source: Eurostat, World Bank staff calculations.

FIGURE 2. GDP growth and contributions to growth in Croatia, percentage points



Source: Eurostat, World Bank staff calculations.

The COVID-19 pandemic, however, derailed Croatia’s growth path and caused the deepest recession in the country’s history, given its dependence on tourism. The country was hit hard by the pandemic and consequent social distancing restrictions. Real GDP fell by 8.1 percent in 2020—one of the worst recessions in the EU. The relatively sharp decline can primarily be attributed to Croatia’s large reliance on tourism, an industry that bore the brunt of the COVID-19 induced recession.² The country also suffered from two earthquakes in 2020, with significant damage to infrastructure in the central-north part of the country, including the capital Zagreb.

² According to the World Travel and Tourism Council (WTTTC), total contribution of travel and tourism to Croatian GDP nearly halved because of the pandemic, from 24.8 percent of GDP in 2019 to 13.2 percent of GDP in 2020.

Nevertheless, Croatia's economy rebounded rapidly in 2021, with economic activity reaching pre-pandemic levels by the second half of the year amid the reopening of the economy and a large fiscal stimulus package. The improvement in economic activity in 2021 reflected a significant pick-up in tourist arrivals, owing to easing COVID-19 outbreaks during the summer months, the rollout of COVID-19 vaccines, and close proximity to large tourist-originating markets. As a result, revenue from tourism in 2021 reached nearly 90 percent of its pre-pandemic level, which gave a substantial boost to the overall economic recovery. Croatia was also less affected by global supply chain bottlenecks given its export structure, which, together with the strong global recovery, led to a marked rise in its exports of goods. Finally, a large fiscal stimulus package, which focused on protecting employment, prevented a sharper fall in household consumption.

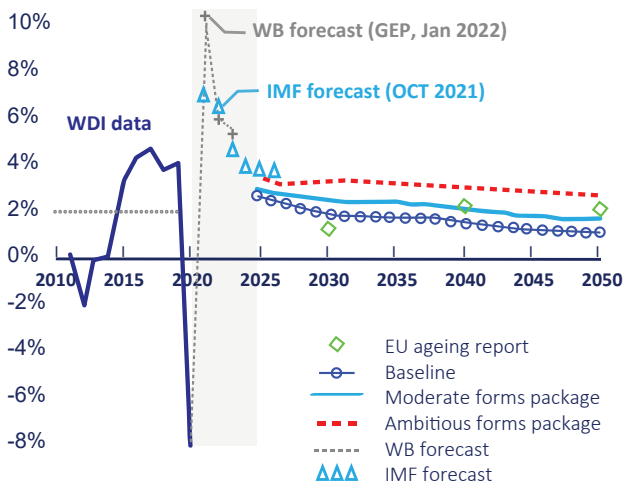
Despite the headwinds to growth arising from the Russian Federation's invasion of Ukraine in early 2022, economic activity has been resilient in Croatia. The war in Ukraine initially caused a sharp spike in global commodity prices, which exacerbated inflationary pressures, including in Croatia despite its economy being less reliant on natural gas from Russia relative to other CEE countries. The war has also disrupted trade and financial flows and sharply increased uncertainty. Nevertheless, Croatia's economy has continued to experience rapid expansion, with output growing at around 6 percent in 2022. Strong economic growth in 2022 reflected double-digit export growth and robust domestic demand, with firm and household activity supported by government fiscal support schemes that prevented major increases in energy prices.

Over the medium term, Croatia's growth is expected to benefit significantly from the Recovery and Resilience Facility (RRF), as well as the structural and investments funds from the new financial perspective (2021-2027). The RRF was introduced by the EU to address the economic and social impact of the COVID-19 pandemic and to make European economies more resilient in the future. Until 2026, Croatia has at its disposal grant funding from the RRF, totaling EUR 5.5bn (close to 10 percent of 2019 GDP), to finance important reforms and investments. However, the disbursement of RRF grants will take place only if the agreed reforms and investments set out in the National Recovery and Resilience Plan (NRRP) are fulfilled and implemented. A large part of the investment is focused in areas that advance digital infrastructure and the ambitions of the green transition, through investments that support energy efficiency, sustainable mobility, lower carbon energy and the green transition of businesses. An additional EUR 9.1bn of cohesion policy funding from the new Multiannual Financial Framework of the EU, 2021-2027, is available for public and private investments and programs. Growth is expected to be supported by these investments, as well as by NRRP reforms that aim to tackle challenges related to education, productivity, and the business environment in a sustainable manner. In turn, these reforms could boost Croatia's potential growth by lifting gains from physical and human capital accumulation and productivity—the latter of which is low by EU standards.

Along with the EU funds, further reforms will be critical to accelerate growth and income convergence over the longer term. GDP growth is expected to remain relatively robust over the next three years, supported by strong investments, in part financed by the EU. However, based on the WB's LTGM, GDP per capita growth is expected to decline gradually thereafter, falling to just 1.1 percent by 2050 (Figure 3), which would not be enough to further increase Croatia's income per capita compared to the EU27 average. The long-term growth slowdown arises from various structural headwinds. The long-term growth slowdown arises from various structural headwinds. Croatia is aging rapidly, and the share of the working age population is forecast to fall from 64 percent in 2020 to 57 percent in 2050. Human capital growth is expected to be sluggish due to only weak improvement in pre-tertiary education. The contribution from capital deepening is set to decline toward its historical average after 2030 as the boost from one-off EU funds wanes (Figure 4). Finally, total factor productivity (TFP) growth, which has been already comparably low in the past, is projected to decline further, from 0.6 percent in 2020 to 0.4 percent in 2050, based on expected trends in innovation, education, market efficiency, infrastructure, and quality of institutions. Although the outlook is weak, growth scenarios suggest that Croatia's economy could benefit significantly from reforms that improve the quality of education, labor market participation, and productivity of the economy.³ Such reforms would lift Croatia's per capita growth and accelerate income convergence with the rest of the EU.

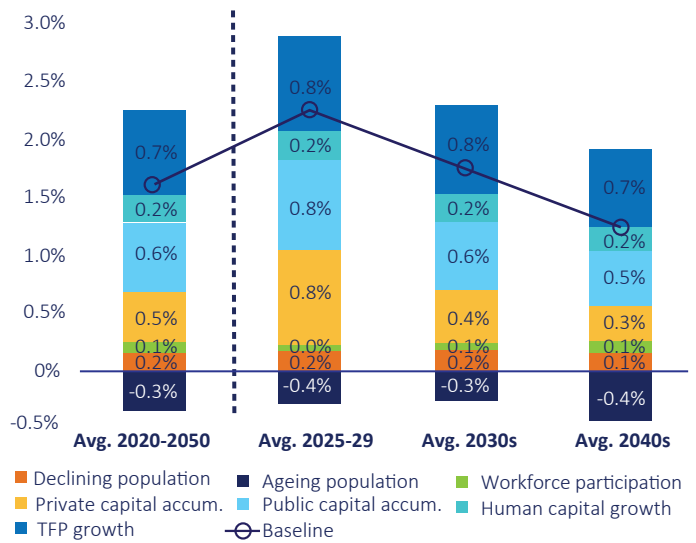
³ The report focuses on productivity and institutional reforms that could support higher productivity growth and is therefore not exhaustive in terms of the reforms that could potentially have large growth effects in the long run. These include reforms that would improve the quality of pre-tertiary education, increase the labor-force participation rate, improve the efficiency of the justice sector, as well as the activities of the private sector such as increased investments in R&D, innovation and technology adoption, and managerial and organizational practices.

FIGURE 3. Baseline GDP per capita
Annual growth rate, Percentage



Source: Author's calculation based on the LTGM-PC.

FIGURE 4. Drivers of growth



Notes: the decomposition is an approximation which abstracts from the interaction between the growth drivers. In this case, the sum of contributions of each driver does not match exactly the actual baseline growth rates.
Source: Author's calculation based on the LTGM-PC.

Croatia can strengthen potential growth through addressing weaknesses in total factor productivity

Croatia's potential growth is among the lowest in the CEE region, with productivity contributing the least to potential growth.⁴ Despite relatively high growth rates in the 2002-08 boom period, potential growth averaged 3.2 percent, compared to 4.9 percent in the CEE region—the weakest rate in the region (Figure 5). This largely stemmed from sluggish productivity growth, measured as TFP, which made the smallest contribution to potential growth in Croatia, at only 0.9 percentage points on average, compared to 3 percentage points (out of 4.9 percent) in the CEE region. The level of TFP in 2021 was only around 10 percent higher than in 2001, while the cumulative average increase in TFP in other CEE countries over the same period was about 30 percent, albeit with significant differences among countries. Potential growth has remained low even during the recovery leading up to the pandemic. The European Commission (EC) estimates that potential output grew only 1.6 percent per year on average over 2015-19—the slowest pace among regional peers and about half of the average growth rate for the CEE region (Figure 6).

Labor productivity has been on a rise but significant gaps between Croatia and its peers as well as more advanced frontier economies persist. Although Croatia has made progress in labor productivity over the last two decades, it remains among the lowest compared to its EU peers. Also, in this period Croatian labor productivity has risen by 27 percent compared to an average of 73 percent for other CEE economies. Furthermore, while there has been some catch-up with Germany, which is considered to be the regional frontier economy, it took on average almost three Croatian workers to produce the same value-added generated by a single German worker in 2019 (Figure 7). Croatia's gap with other countries has partly reflected sluggish improvement in key drivers of labor productivity, including business dynamism, competition, management practices, and the use of technology.

⁴ Potential growth is the rate of growth that an economy can sustain over the medium term without generating excess inflation. While the LTGM used in this paper and report does produce year-to-year movements in growth, in the short term these should be interpreted as the growth rate of potential gross domestic product (GDP), not actual GDP.

FIGURE 5. Potential Growth (Contribution to potential growth, percentage points), 2002-2008 average

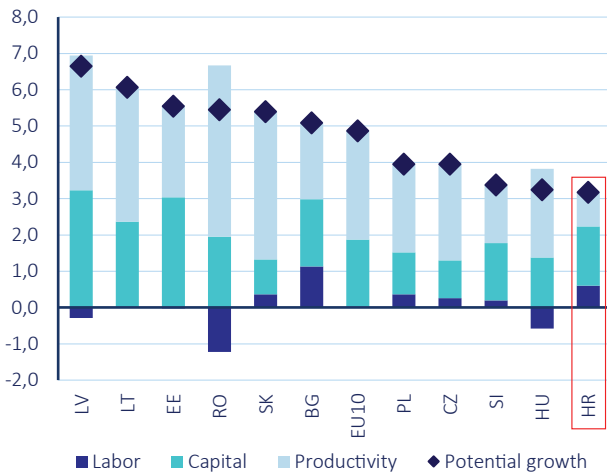
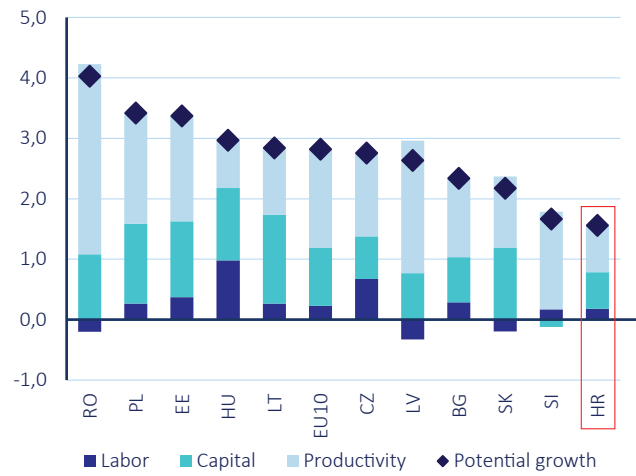


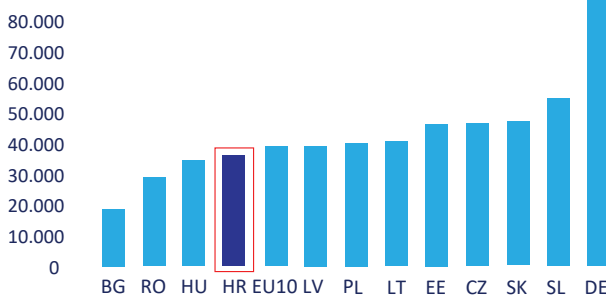
FIGURE 6. Potential Growth (Contribution to potential growth, percentage points), 2015-2019 average



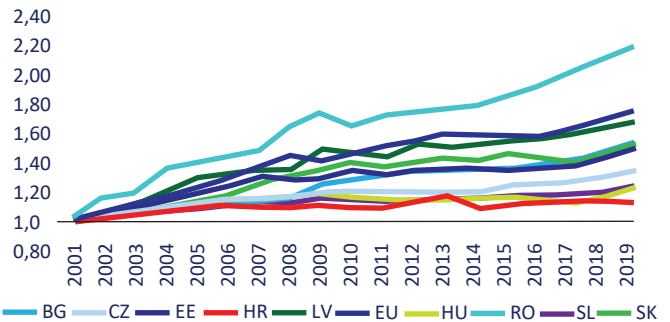
Source: EC, WB staff calculations.

FIGURE 7. Labor productivity, value added (constant price, 2015 EUR) per worker

Labor productivity in 2019 (2015 EUR)



Labor productivity relative to Germany (2001=1)

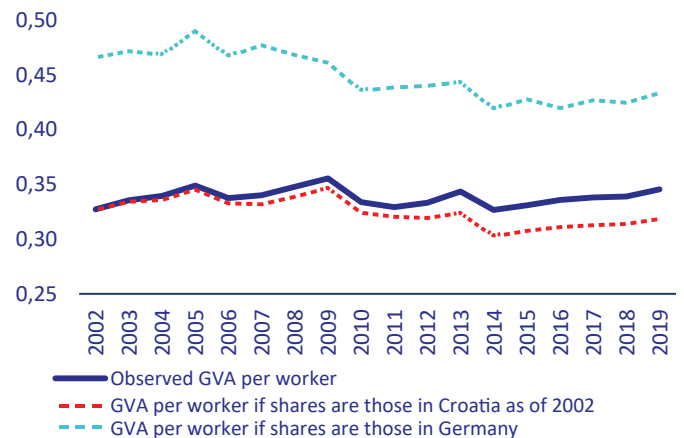


Note: Labor productivity is measured as gross value added in euro (constant prices, 2015) per worker.

Source: Eurostat.

The labor productivity shortfall in Croatia relative to Germany as the regional frontier economy is mainly accounted for by differences in productivity within sectors, and only partly the composition of the economy. The low level of productivity in Croatia relative to Germany is not fully explained by Croatia's larger share of low-productivity sectors, including those related to tourism, and lower share of sectors with the potential for high productivity, such as manufacturing. Differences in the economic structure account for only a modest amount of the productivity gap between Croatia and Germany (Figure 8). Even if Croatia had the same sector composition as Germany, it would still be 57 percent less productive. Differences in within-sector productivity—for example, differences in the productivity of firms in the manufacturing or transport sector in the two countries—are large and explain almost 90 percent of the productivity gap between the two countries.

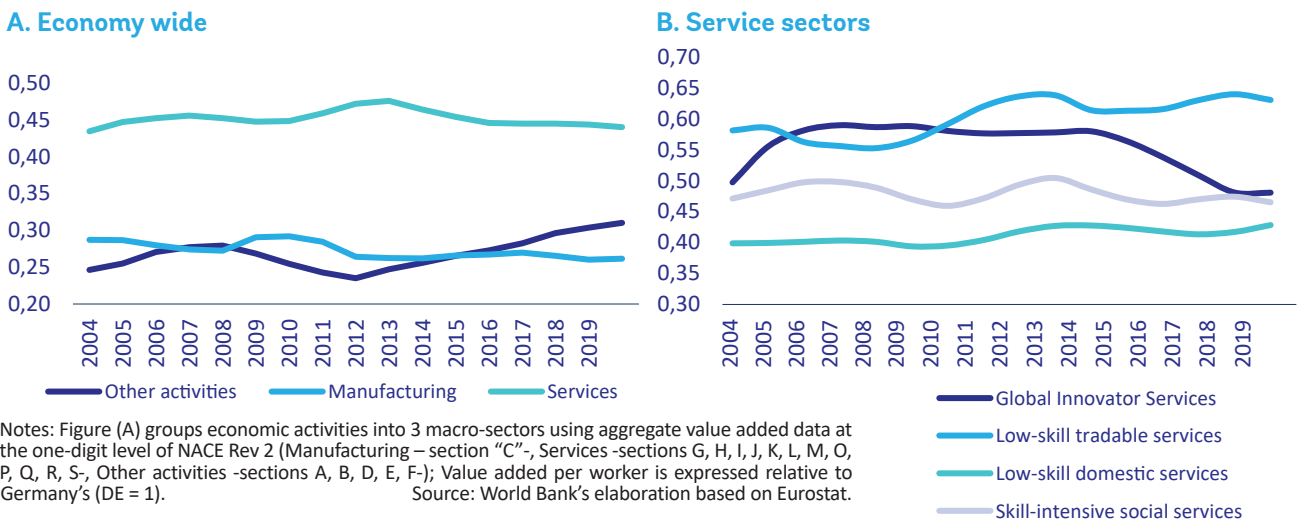
FIGURE 8. Structural transformation and the labor productivity gap, 2002-19, percentage of Germany aggregate labor productivity



Notes: Figure computes the observed labor productivity gap (i.e., relative gross value added per worker between Croatia and Germany) and estimated productivity gap if employment shares in Croatia are those as of 2002 (i.e., no change in the employment distribution across sectors) and if Croatia has Germany's employment shares (i.e., the same employment distribution for each year as in Germany). Source: World Bank's calculations based on Eurostat.

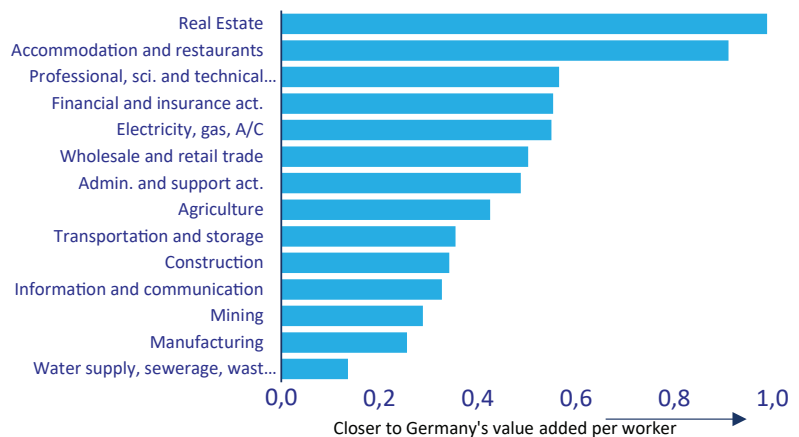
Manufacturing and ICT are among the sectors with the largest gaps in labor productivity, while Croatia’s real estate and tourism sectors perform comparatively well. Croatia’s labor productivity in manufacturing lags that of Germany’s by a wide margin (Figure 9 and 10). A worker in the Croatian manufacturing sector produces roughly one-quarter of the value added produced by a German manufacturing worker. Croatia performs better in several services sub-sectors, however, particularly in low-skill tradable services. Labor productivity in real estate and accommodation and restaurants – two sectors that benefited from the recent recovery in tourism – is less than 10 percent lower than that observed in Germany. In contrast, many of the knowledge-intensive service industries with high export potential, such as ICT, have been losing competitiveness relative to the productivity frontier. These service activities are critical for driving future productivity growth and play a key role as intermediate inputs for other downstream sectors of the economy, including manufacturing.

FIGURE 9. Labor productivity in Croatia relative to Germany, by sector 2004-2019, 3-year moving average (Germany labor productivity = 1)



Notes: Figure (A) groups economic activities into 3 macro-sectors using aggregate value added data at the one-digit level of NACE Rev 2 (Manufacturing – section “C”, Services -sections G, H, I, J, K, L, M, O, P, Q, R, S-, Other activities -sections A, B, D, E, F-); Value added per worker is expressed relative to Germany’s (DE = 1). Source: World Bank’s elaboration based on Eurostat.

FIGURE 10. Differences in labor productivity across sectors between Croatia and Germany 2019, value added per worker relative to Germany (DE = 1)



Notes: Labor productivity is calculated as the sum of the value added divided by the number of employed persons in each sector. Source: World Bank based on Eurostat.

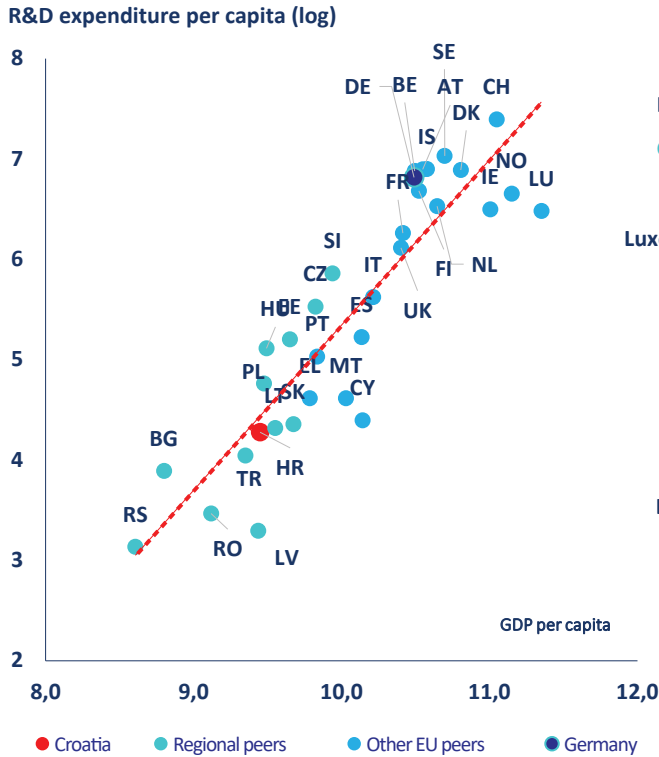
Low firm productivity in Croatia reflects insufficient R&D investments and innovation and technology adoption, lagging managerial and organizational practices, as well as the constraints on competition

Ample opportunities remain to continue the increase in firm productivity that has been seen over the past decade. Firms in Croatia have higher rates of advanced-technology adoption than their peers but lower compared to advanced EU countries. They also invest little in R&D, with a total of 72 euro per inhabitant—less than 10 percent of Germany (913 euro per inhabitant) and below the level in most EU peers (Figure 11). Finally, Croatian firms lag peers in the quality of managerial and organizational practices that they adopt. This points to

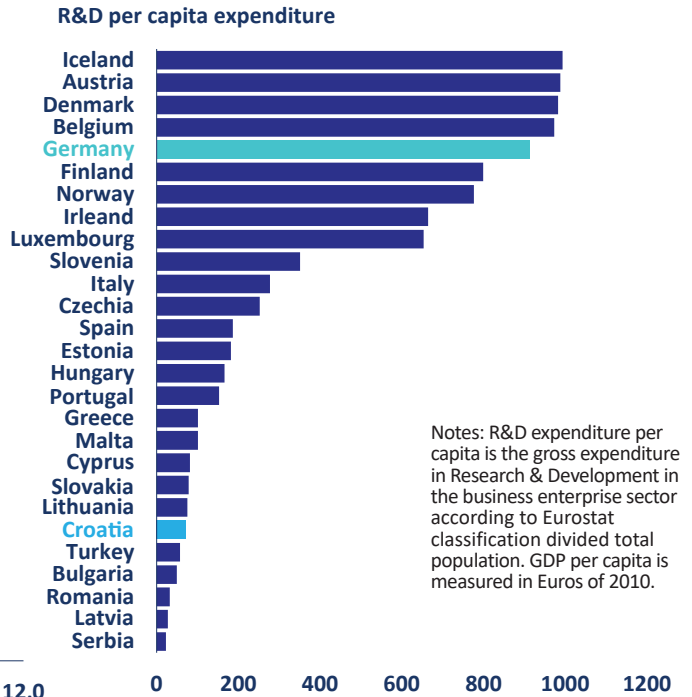
the possibility of lifting productivity growth by encouraging innovation and upgrading internal capabilities. Managerial practices are a particularly important area of improvement as it is unlikely that a poorly managed firm would be able to gain the full productivity benefits of adopting new advanced technologies.

FIGURE 11. R&D expenditure per capita (€) and GDP per capita (€, 2010), 2019

A. R&D expenditure and economic development



B. R&D expenditure per capita (in EUR)



Source: World Bank's elaboration based on Eurostat.

The productive potential of Croatian firms can be further raised by addressing market frictions and inefficiencies, which feed into a misallocation of resources. A decomposition of productivity growth using firm-level data shows a negative impact from the reallocation of resources between sectors, implying more productive firms are unsuccessful at capturing market share from less productive ones. This finding is consistent across several different aspects of firm and market characteristics. Business dynamism is low, with exit rates well below average and productivity higher in exiting firms compared to incumbents. Moreover, management of Croatian firms is far from the frontier, especially for performance management and data driven decision making and does not seem to improve with the age of the firm. Finally, competition appears to have deteriorated in Croatia, as evidenced by rising markups for firms.

Market frictions and inefficiencies are also key issues for the services sector, which plays an important role in Croatia's economy. While Croatia has a clear comparative advantage in some services industries, several constraints slow down the development of knowledge-intensive, high-productivity services. For instance, restrictive regulations remain in place in several professional services industries—such as estate agents, civil engineers, notaries, and lawyers—and regulatory barriers to services trade remain high. In turn, these constraints can affect broader productivity in the economy, as they reduce the availability of high-quality intermediate services for firms that use them in their production process.

Ineffective institutions also impede productivity growth

Institutional quality is strongly related to productivity growth, raising the potential for enhancing productivity and business dynamism through further strengthening national institutions. Efficient institutions support structural changes that generate growth in quality jobs through economic diversification

and higher productivity. Historical experience suggests that a wide range of deep institutional reforms, such as strengthening checks and balances and building effective public integrity and anti-corruption institutions, can improve contract enforcement and create a level playing field among firms. Strengthening institutions thus facilitates the competition necessary to ensure that resources are allocated to their most productive use, thereby contributing to long-term productivity gains. Institutional quality is strongly related to TFP growth in a cross-country sample, and Croatia is among the countries with the slowest TFP growth and lowest rankings of institutional quality in the sample (Figure 12).

A benchmarking exercise identified the most relevant institutional constraints experienced by firms and how they affect productivity growth, setting the stage for selecting and prioritizing institutional reforms. A benchmarking exercise was conducted to highlight the institutional strengths and weaknesses of Croatia relative to its peers. Croatia's transition to a market economy included gradual institutional reforms, with significant improvements made during the EU and the euro area accessions. Despite these improvements, Croatia scores relatively poorly in institutional quality compared to its peers in CEE. Croatia's performance varies by institutional segment but, overall, institutional quality in Croatia lags frontier economies according to the 2019 Global Competitiveness Index. Croatia performs comparably well when it comes to the regulatory framework of labor market institutions and SOE corporate governance framework (even though there is scope for further improvement here as well). However, "weak" performance is found with respect to public sector and business and trade institutions, including areas such as government bureaucracy, policy instability, burden of government regulations, and anti-monopoly policy. Other institutional functions, including accountability, political, financial market, and justice institutions, are classified under the "emerging" institutions category, suggesting mixed performance.

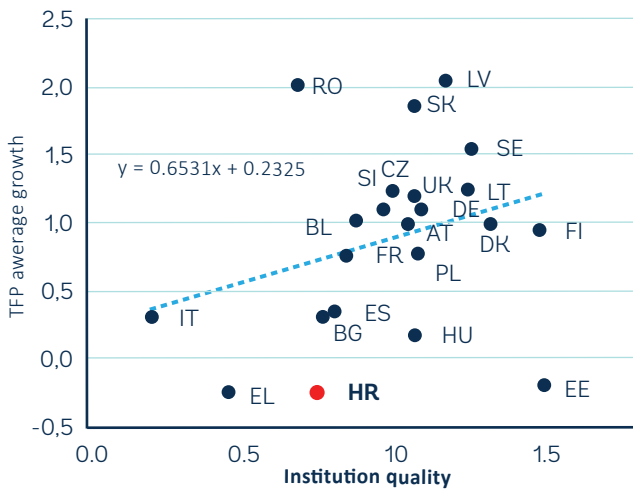
A review of selected public sector institutions and business & trade institutions suggests room for improvement

Underperforming public sector institutions are a constraint on business dynamism and market entry. Inefficient government bureaucracy and policy instability are repeatedly raised by firms as the "most problematic factor for doing business" (World Economic Forum 2019), and it is estimated that time spent by management on processes related to government regulations in a typical week is associated with a reduction of 12.2 percent in firm TFP (World Bank 2020b). According to the World Bank (WB, 2018), after years of progressive steps towards public sector reform largely related to the EU accession process, progress has been limited since 2015 by the capacity and commitment of key actors to cooperate and coordinate their actions to achieve socially desirable goals. The slow legislative process from proposals to adoption and the lack of specialized capacity in the public administration also contribute to inefficiencies. European Commission, in its 2020 country report for Croatia (EC, 2020) also concluded that there has been a limited progress in the administrative capacity to design and implement public projects and policies.

Inadequacies of the business environment and trade institutions have the largest scope for improvement and are a major constraint to firm growth and productivity. Croatia scores worse than comparator countries in burden of government regulations, property rights, administrative burdens on start-ups, barriers to trade, anti-monopoly policy, and the extent of market dominance indicators. This is despite Croatia largely aligning national regulations, especially on trade, with those of other EU countries. Burdensome administrative procedures, taxation frameworks, and competition regulations were identified as key concerns for actors in Croatia's private sector (Figure 13). The World Economic Forum Survey highlighted inefficient bureaucracy, policy instability, and tax regulations as core impediments to doing business (World Economic Forum 2019).

Improved public sector and business and trade institutions can support firm growth. These institutions are critical for firms' growth and productivity, and include, among others, (i) competition and anti-monopoly policies; (ii) compliance with regulations; (iii) business permits; (iv) tax administration; (v) EU funds, and (vi) public procurement. The results of the institutional benchmarking were used to select the most relevant areas for the focus on firm growth and productivity, and for which novel insights from a survey with firms would contribute most significantly to expanding the existing knowledge space.

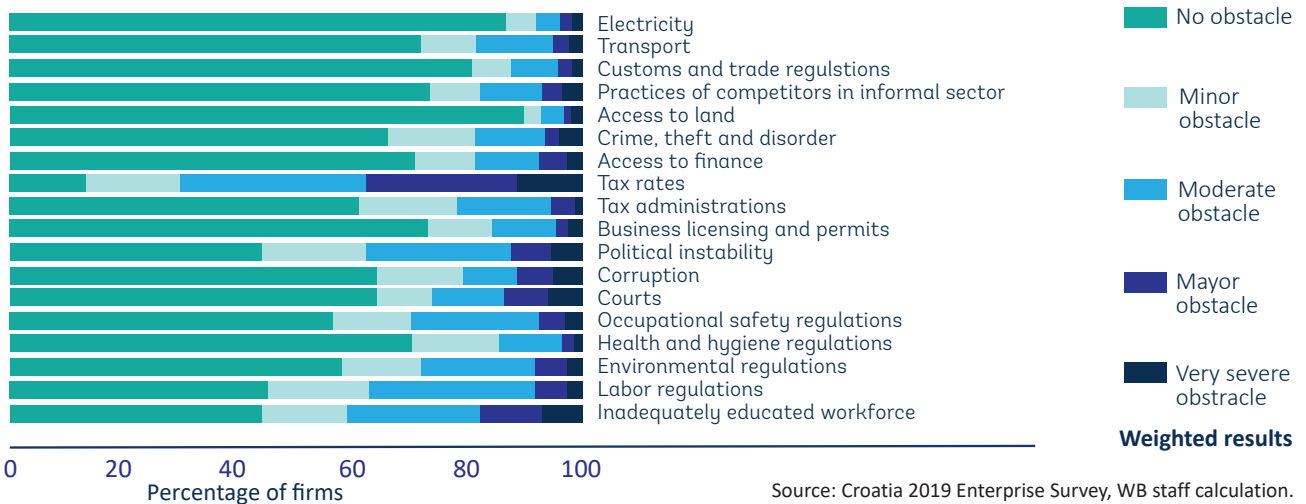
FIGURE 12. Institutional quality and TFP growth



Source: WB Worldwide Governance Indicator, Eurostat, WB staff calculation.

Despite considerable progress made in judicial institutions, further improvements are necessary, especially in those related to the interaction between firms and the justice system. The rate of resolving civil and commercial cases in Croatia remains one of the lowest in the EU, while the number of incoming civil and commercial cases is among the five highest. The disparity between disposition time and caseloads may further strain an already inefficient justice system. At the same time, Croatia lags its peer in judicial accountability and settling disputes. Justice officials and public stakeholders perceive frequent legislative changes, dilapidated court facilities, deficient use of technologies, and other organizational gaps as sources of weak institutional performance.

FIGURE 13. Perceived obstacles to the operations of firms



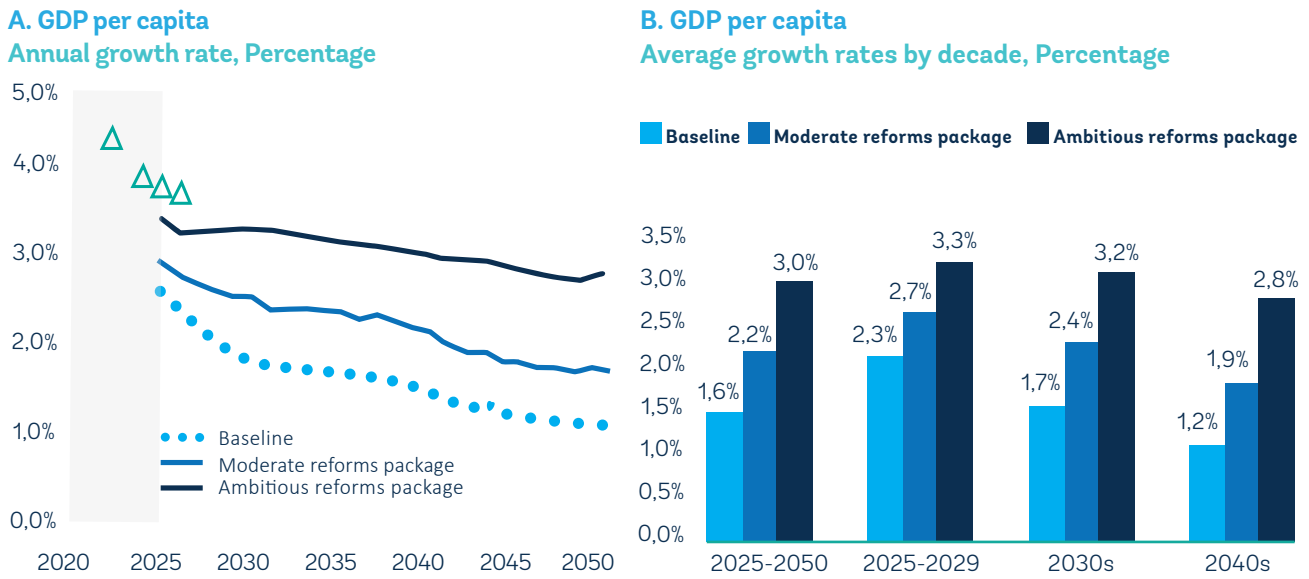
Source: Croatia 2019 Enterprise Survey, WB staff calculation.

Comprehensive reforms, partly included in the NRRP, can boost productivity, and accelerate growth and income convergence with the EU27 average

A comprehensive reform package could yield a significant improvement in the country’s growth rate and ability to converge with the EU. In the absence of major reforms to the key drivers of growth, Croatia GDP growth will decelerate over time, falling to just 1.1 percent by 2050 and averaging 1.6 percent over 2025-50. The projected pace of growth will not be sufficient to sustain income convergence, causing Croatia’s income per capita to plateau at 80 percent of the EU27 average. However, bold reform packages could yield significant growth dividends, as shown by scenario simulations using the LTGM. Two growth scenarios are developed based on improvements in the major drivers of GDP growth, including TFP, labor force participation, education, and the investment rate. The moderate reform scenario targets the 50-75th percentile of the distribution of the EU27 for each growth driver, while the ambitious reform scenario targets the achievements of top-performing economies, especially in CEE. Collectively, the reforms under the moderate scenario could boost Croatia’s potential annual GDP per capita growth rate by 0.6 percentage points until 2050, while an ambitious reform package could increase the annual GDP per capita growth rate by 1.4 percentage points (Figure 14).

Boosting productivity, partly through institutional reforms, would yield the highest growth dividend and generate positive spillovers for investment (Figure 15). The positive impact from reforms that raise TFP would build over time as higher TFP encourages additional investment and more efficient/productive investment as the marginal product of capital rises. Additionally, improving the quality of the pre-tertiary education system and raising the labor force participation rate would have significant benefits for Croatia given demographic headwinds related to a shrinking working-age population. The ambitious package of reforms generates substantial complementarities because incremental growth under the ambitious reforms package is noticeably larger than the cumulated effect of individual reforms.

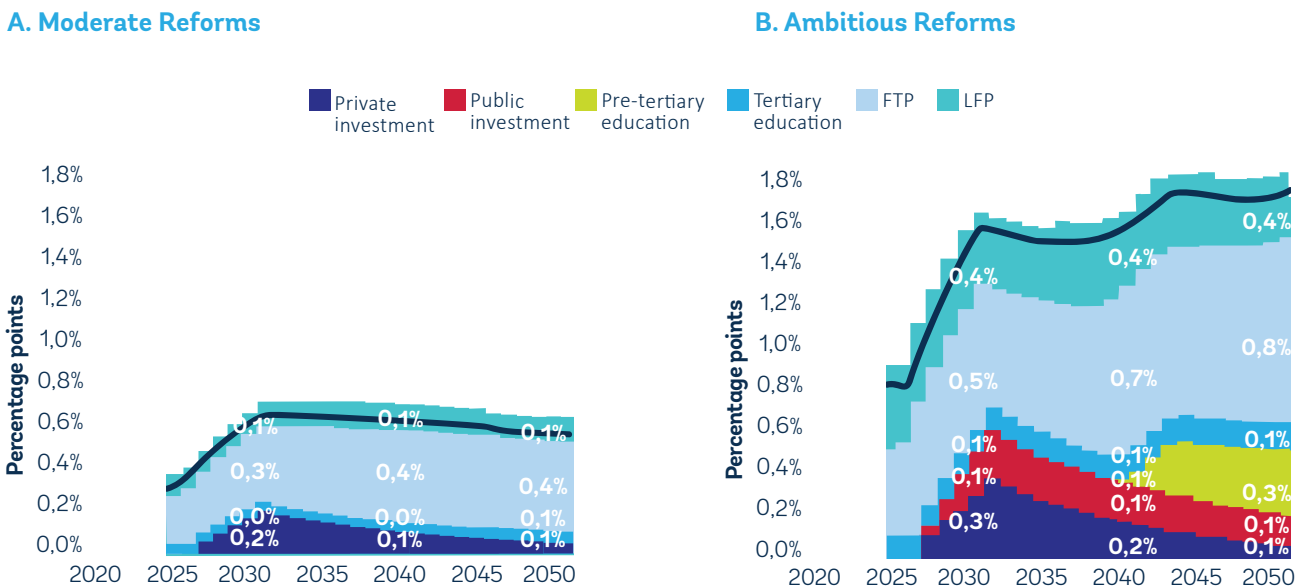
FIGURE 14. Reforms Packages (LTGM-PC simulation)



Source: WB calculations based on the LTGM-PC.

Source: WB calculations based on the LTGM-PC.

FIGURE 15. Reform packages scenarios: decomposition of incremental GDP PC growth
Percentage points of incremental growth due to each reform



Note: Panel A shows fewer incremental growth determinants because some of the determinants are set at baseline levels in the moderate reform scenario. Source: WB calculations based on the LTGM-PC. Source: WB based on the LTGM-PC.

Improving the drivers of long-term growth would markedly speed up economic convergence, allowing Croatia to close the gap with the EU27 average in the late 2030s. With a moderate reform package, per capita income in Croatia would only converge to the EU27 average in the long run, reaching 97 percent of the EU27 average by 2050. In contrast, the ambitious reforms packages would enable Croatia to close the gap in the late 2030s and potentially exceed the EU27 average by 2050.

How can policymakers further advance Croatia's institutional environment for lasting economic impact?

Boosting productivity in the long-term calls for great ambition in strengthening institutions, reducing market inefficiencies and upgrading firms' capabilities. Fostering competition and entrepreneurship is necessary through the removal of constraints that tend to stifle the dynamism of firms. Working to reduce entry costs and barriers, to remove existing privileges that protect firms from fair competition, and to improve the enforcement of antitrust regulations are essential steps to alleviate excessive burdens on firms and reduce the costs of doing business. Based on the analysis in the main report, specific reforms should include improvements to institutions, which would help unlock the positive effect of higher institutional quality on businesses and productivity, as well as measures to increase services sector growth. The list, however, is not exhaustive. Other reforms related to the education system, labor market, pension system, and tax policy could also generate significant returns in terms of growth and productivity but are not discussed in the report.⁵ Some of the reforms that could contribute to productivity growth are included in Croatia's NRRP. According to EC estimates, Croatia's GDP could be 2.9 percent higher by 2026 than in the no-NRRP baseline scenario just through higher investments (implications of structural reforms are not considered), while after 20 years GDP could be 1.1 percent higher. Besides reforms to improve the business environment and provide financial support to the private sector, the NRRP also puts a large emphasis on strengthening human capital. The measures aim to improve education outcomes and reduce skills gaps and mismatches in the labor market with the view to increase employment and labor participation rates.

There are eleven broad areas where policymakers should focus efforts on reforming institutions to spur productivity and enable income convergence with the EU. Suggested reforms, in no specific order, aim to tackle the areas of concern highlighted by businesses in the survey conducted in the preparation of the report.

- **Advance accountability of the competition authority.** The competition authority should increase the accountability and transparency of its work. This includes strengthening the available tools and programs in order to exercise its enforcer role and introducing targeted training on competition law for judges.
- **Improve the legislative drafting process.** The government should adopt a uniform methodology and nontechnical rules for drafting legislation to be utilized at all levels of government. This could be complemented by strengthening regulatory transparency and clarity and upgrading the current regulatory impact assessment (RIA) framework.
- **Strengthen the business licensing process.** The government should improve transparency by setting up a comprehensive and user-friendly registry of information on licensing requirements, reviewing the minimum technical requirements and transition towards a goals-based approach, replacing ex-ante licensing and inspections with an online notification procedure, and developing and publishing user-friendly guidance for businesses on how to comply with regulations.

⁵ See recent World Bank analytical reports related to the Croatian labor market, education sector, and the pension system with proposed reform actions improving the quality and quantity of human capital in Croatia. For example, the report *Boosting Croatia's Economic Resilience (2020)* takes a deep dive into Croatia's labor market and suggested how the country's labor market regulation could be adjusted. The report also analyzed in detail the bankruptcy and liquidation procedures in Croatia and suggested changes to improve efficiency. The *Adequacy of Pensions report (2019)* discussed longer working lives as the main way to increase labor supply and improve adequacy of pensions in the long run. Finally, the project *Croatia: Towards Sustainable, Equitable and Efficient Education project (2021)* supports the introduction of the whole day school model in Croatia that should improve the learning outcomes in primary education.

- **Simplify tax administration.** The government should invest additional efforts in developing and maintaining a relationship of partnership with the taxpayers, improving the transparency and openness of tax administration. Key goals would be to prevent tax avoidance/evasion and to lower tax compliance costs, improve the transparency and openness of tax administration, and reform the system for the resolution of tax disputes to attain higher levels of efficiency in tax proceedings, as well as to secure predictability and legal certainty for taxpayers.
- **Improve absorption and impact of EU funds.** The government should strengthen the capacities of all stakeholders included in the EU funds governance framework, streamline the project generation and selection process, and further align national procedures to reduce delays and overregulation.
- **Reduce administrative burden in public procurement.** The government should decrease administrative barriers that affect the tendering and bidding process for public procurement, take steps to further increase trust in the public procurement process, and reduce challenges and procedural complexities during contract execution.
- **Reduce professional services restrictions.** Restrictive regulations in professional services such as estate agents, civil engineers, notaries, and lawyers may stifle competition in the sector and reduce its productivity and the quality of the service. Enabling an efficient allocation of resources and promoting quality upgrading in this sector is particularly important given the key role of these services as intermediate inputs in the downstream production of services and goods.
- **Invest in R&D and technology.** Investments in R&D and technology adoption among knowledge-intensive services, especially in the ICT industry, would contribute to aggregate productivity growth while generating high-wage jobs.
- **Remove barriers to trade.** Reducing regulatory barriers to services trade would facilitate scaling up of domestic services firms and the import of high-quality intermediate services inputs. Barriers to trade restrict competition faced by domestic services firms, reducing their incentives to upgrade and increase efficiency. Barriers to services trade also reduce the availability of high-quality intermediate services that can enable increases in productivity, quality upgrading, and growth of downstream industries.
- **Invest in a skilled workforce.** Efforts are needed to equip the Croatian workforce with the skills necessary to support the development of knowledge-intensive services industries. Ensuring that the Croatian workforce possesses the right set of technical and digital skills demanded by a knowledge-intensive services economy is a key enabler of robust services-led growth that could increase both productivity growth and high-wage job creation. Helping current and future Croatian workers to upskill will provide the right supply of human capital to enable the growth of high-productivity, knowledge-intensive sectors.

Attaining higher living standard for its citizens and accelerating convergence with the average EU income levels is well within Croatia's reach with continued strengthening of its reform agenda. Over the last twenty years Croatia has improved its policy and institutional framework, it has maintained macroeconomic and financial stability, and it now has access to abundant EU funds. This creates an environment where the returns on further reforms can be high. Many of the reforms critical for growth are already envisioned in the NRRP 2021-26, and once implemented, these reforms could provide a major boost to the country's growth potential. Nevertheless, for Croatia to accelerate its path to higher prosperity, a deepening of the reform program will be necessary. Key elements to accelerate sustainable growth will include increasing productivity, including through digitalization and R&D; improving human capital and its utilization in the labor market; and greening growth in line with national energy and climate ambitions and the broader ambitions of the European Green Deal. This overview and the detailed report have focused on constraints to productivity and on several key institutional reforms required to improve the overall productivity of the economy. Increasing productivity through such reforms will have a significant impact in accelerating Croatia's growth and convergence with average EU income levels.

Overview

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