



CONFERENCE

Raising Croatia's Long-term Growth and Productivity

Zagreb, February 1, 2023

CONFERENCE

Raising Croatia's Long-term Growth and Productivity

Zagreb, February 1, 2023

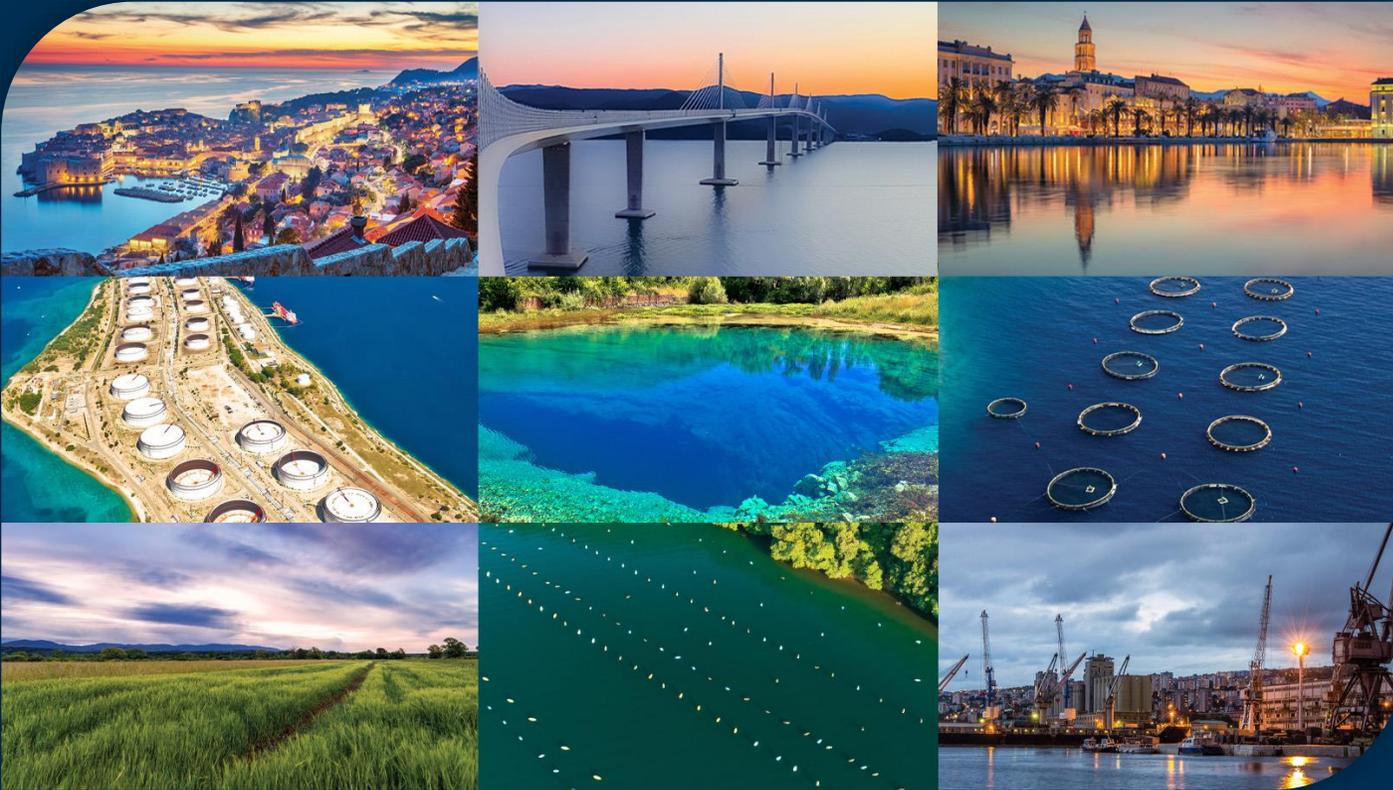


The **Country Economic Memorandum** is a key growth diagnostic prepared by the World Bank to analyze drivers of growth in the long term. The growth diagnostic for Croatia provides a comprehensive analysis of key challenges and opportunities for sustaining economic development.

CONFERENCE

Raising Croatia's Long-term Growth and Productivity

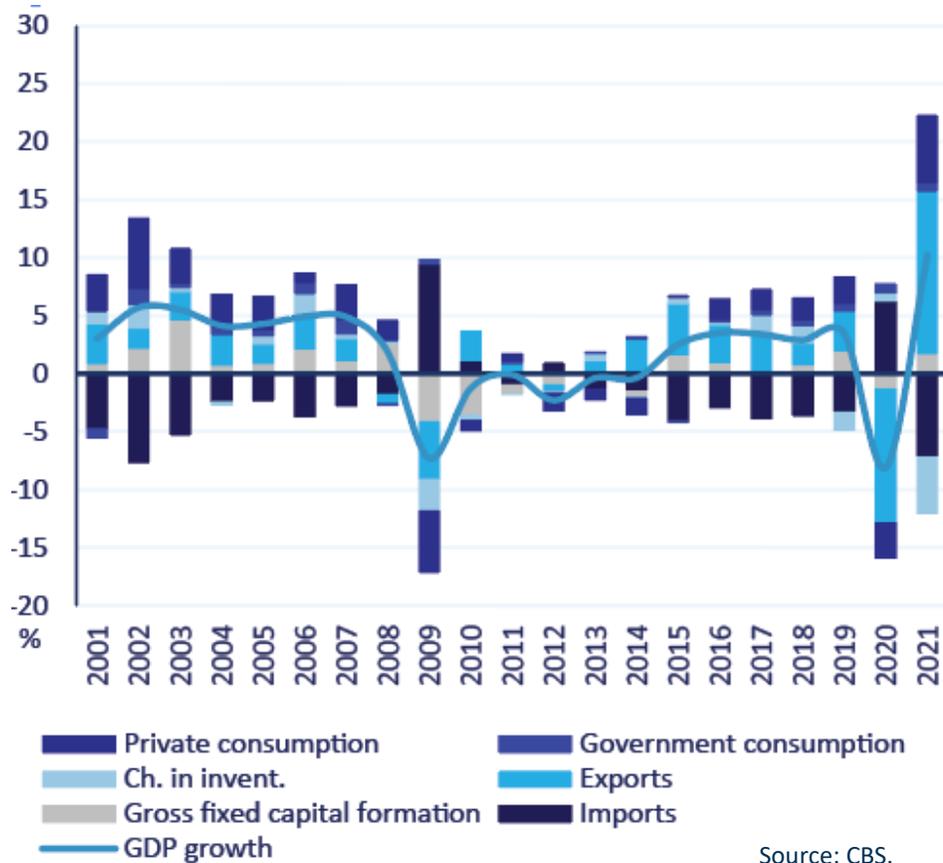
Zagreb, February 1, 2023



Prevailing macroeconomic trends over the last two decades

Croatia's growth path over the last two decades has been bumpy, in part reflecting the negative impact of large external shocks

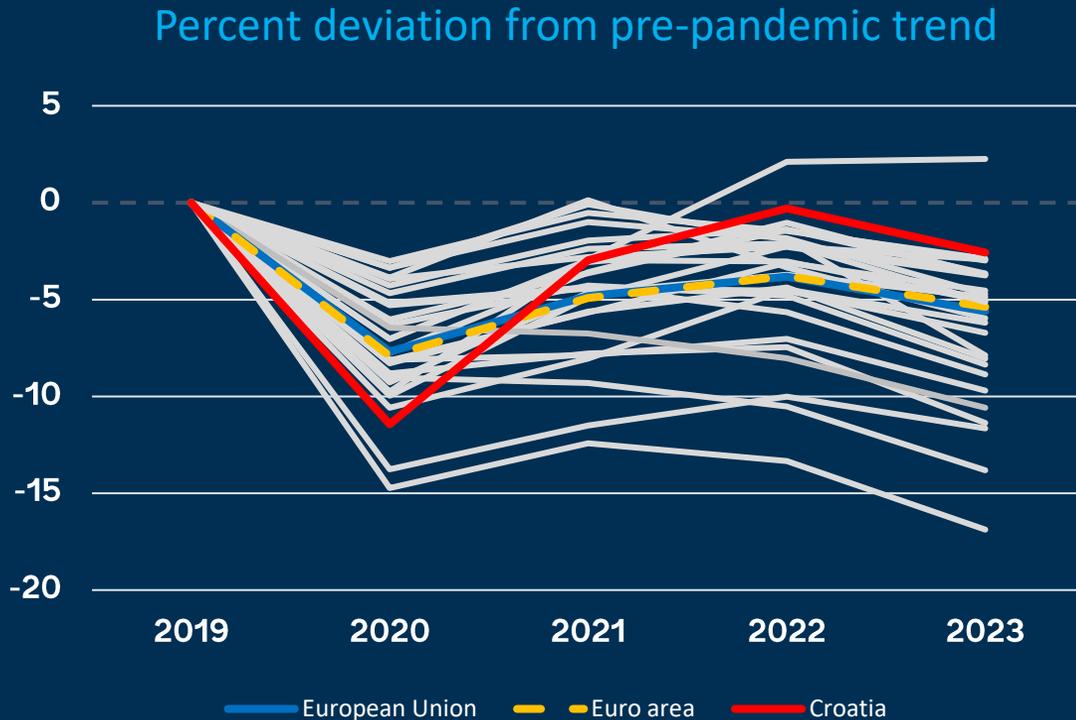
Contributions to GDP growth



- Growth was robust prior to the Global Financial Crisis (GFC), averaging 4.5 percent over 2002-08.
- Strong domestic demand, however, was mostly financed by debt, which generated sizable macroeconomic imbalances.
- The GFC and European debt crisis triggered a recession that lasted until 2014 in Croatia.
- Over 2015-19, growth firmed to above 3 percent a year, supported by improving external conditions and positive effects from EU accession in 2013.
- Croatia's recovery was interrupted by the COVID-19 pandemic and then again by the Russian Federation's invasion of Ukraine.

Source: CBS.

Although Croatia's recovery from the pandemic shock was swift, Russia's invasion of Ukraine and tighter global financial conditions bring new challenges

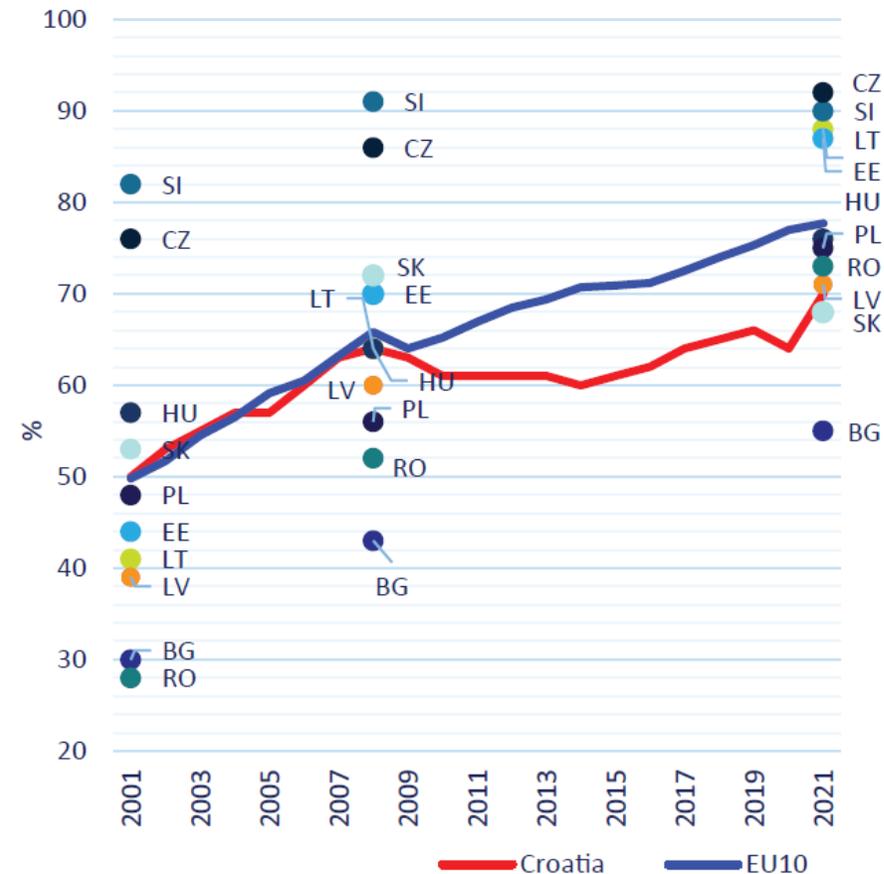


- Although Croatia's recession was deeper than the EU average during the onset of the pandemic in 2020, its recovery was far more robust.
- Croatia's output nearly recovered to pre-pandemic trends by 2022, whereas the EU average trailed, with output remaining nearly 4 percent below pre-pandemic trends.
- The Russian invasion of Ukraine and subsequent energy shock, alongside tightening global financial conditions to dampen inflation, pose serious downside risks to the outlook.

Despite wins in many different areas, living standard in Croatia is still far from the EU average

- GDP per capita (in PPS terms) rose from 50 percent of the average EU27 level in 2001 to 70 percent in 2021.
- The GFC and subsequent European debt crisis saw convergence progress reverse and then stall until 2015.
- Convergence also backtracked slightly at the onset of the COVID-19 pandemic, but the recovery that followed in Croatia was strong relative to the EU27 average and helped close some of the per capita income gap.

GDP per capita in PPS terms (EU27 = 100)

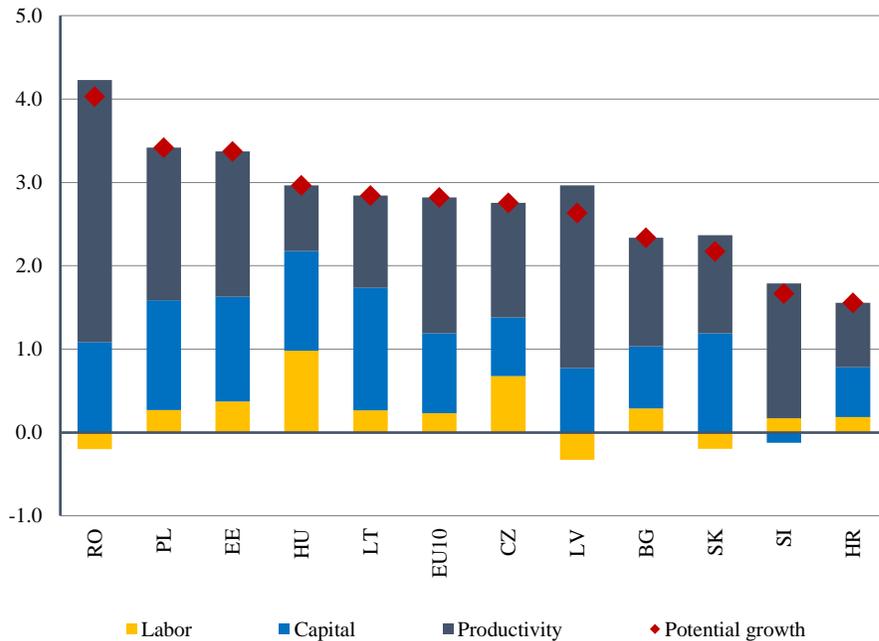


Note: EU10 includes Bulgaria, Czechia, Estonia, Latvia, Lithuania, Hungary, Poland, Romania, Slovenia and Slovakia.

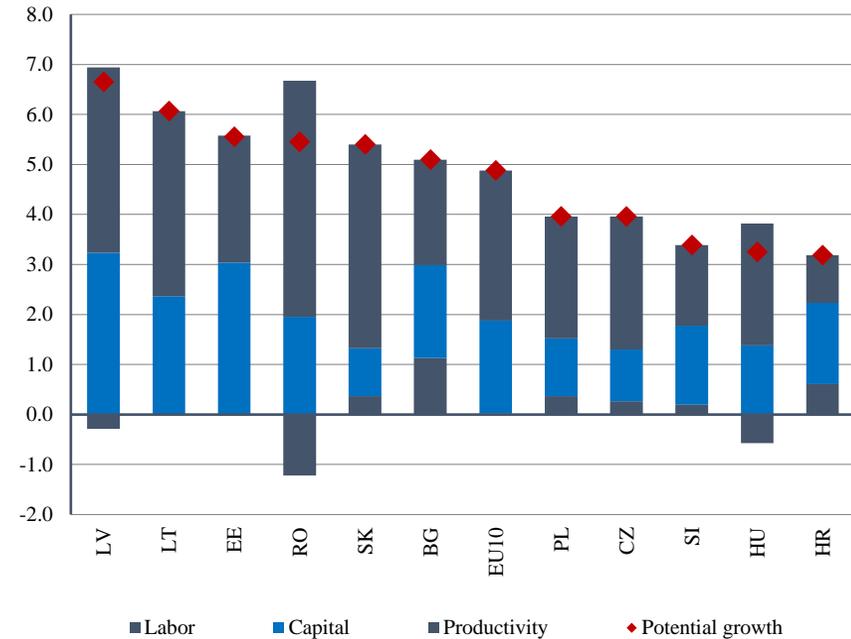
Source: Eurostat, World Bank staff calculations.

Over the last two decades Croatia's average growth was one of the lowest among CEE peers, primarily reflecting weak productivity performance

Contributions to potential growth
(2002-2008 average)



Contributions to potential growth
(2015-2019 average)



Sources: EC, WB staff calculations.

CONFERENCE

Raising Croatia's Long-term Growth and Productivity

Zagreb, February 1, 2023



THE WORLD BANK

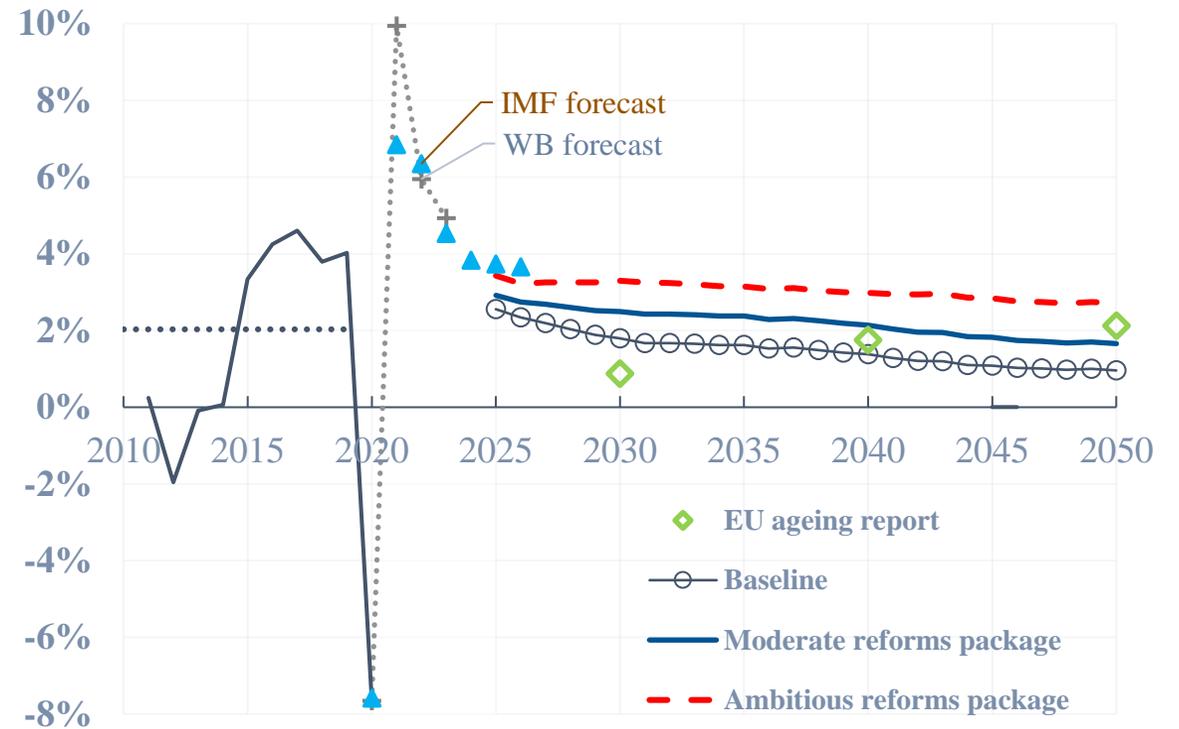
IBRD • IDA | WORLD BANK GROUP

Long-term growth challenge

Growth is expected to remain robust in near term, but to significantly decelerate over the longer term

- Growth is projected to remain relatively robust over the next years, supported by strong investments, in part financed by the EU.
- Per capita income growth is expected to slow thereafter, falling to just 1.1 percent by 2050 absent reforms.

GDP per capita, baseline scenario



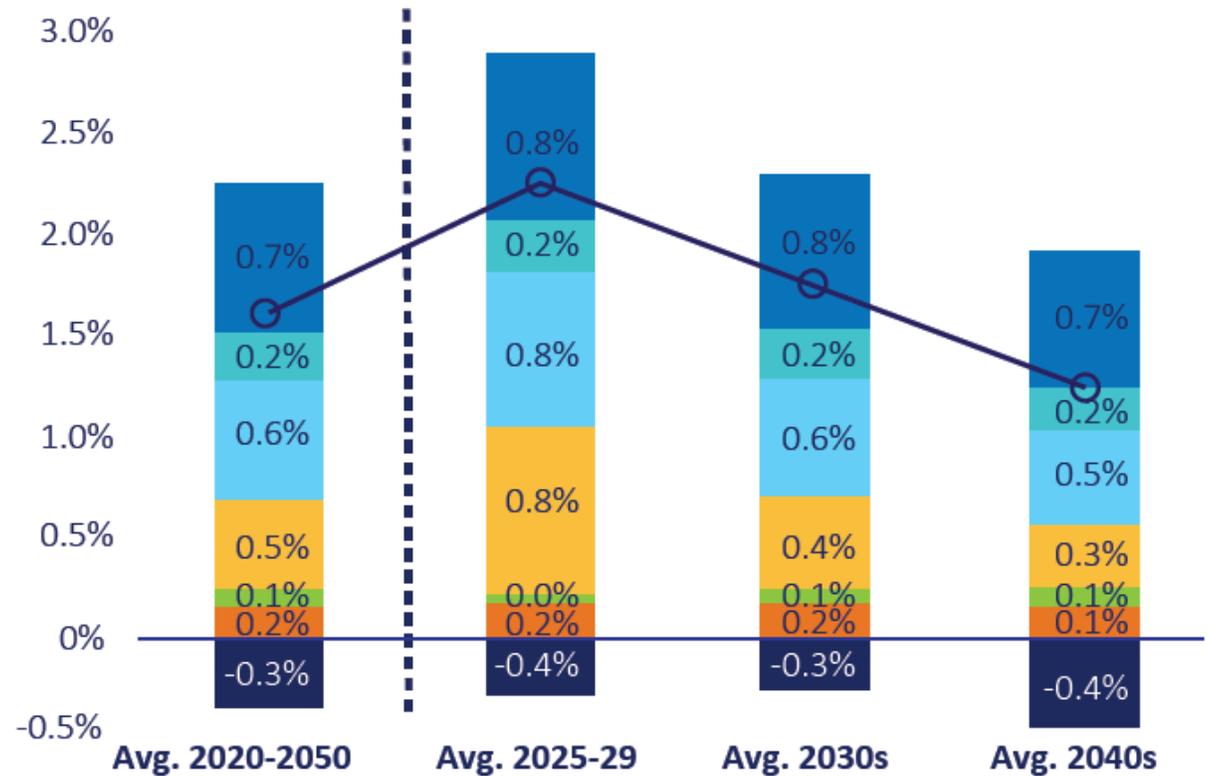
Source: Author's calculation based on the LTGM-PC.

The slowdown in growth reflects various structural headwinds

Among these headwinds are:

- Rapid ageing, with the share of the working-age population forecast to fall from 64 percent in 2020 to 57 percent in 2050.
- Smaller capital deepening contribution after 2030.
- TFP, which is already relatively modest, is projected to fall further, from 0.6 percent in 2020 to 0.4 percent in 2050.

Contributions to GDP per capita growth, percentage points



Source: Eurostat, World Bank staff calculations.

CONFERENCE

Raising Croatia's Long-term Growth and Productivity

Zagreb, February 1, 2023



THE WORLD BANK
IBRD • IDA | WORLD BANK GROUP

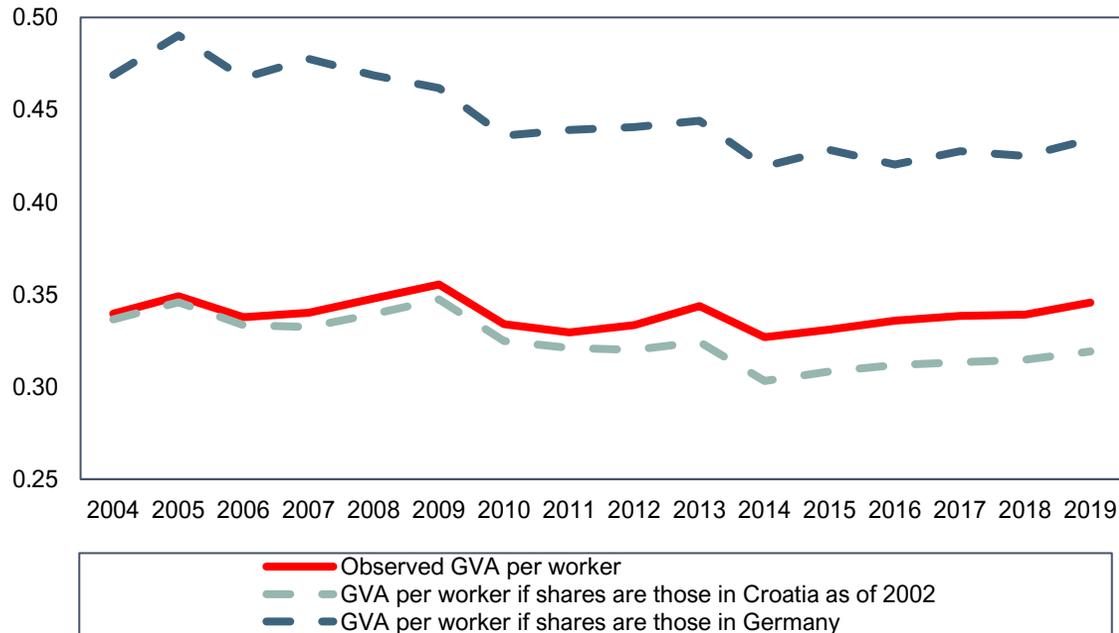
Productivity gap explained

” Productivity isn’t everything, but, in the long run, it is almost everything. ”

— *Paul Krugman*

The structure of Croatia's economy only explains a small share of the labor productivity gap with Germany—the regional frontier

Labor productivity gap, 2002-19, percentage of German aggregate labor productivity

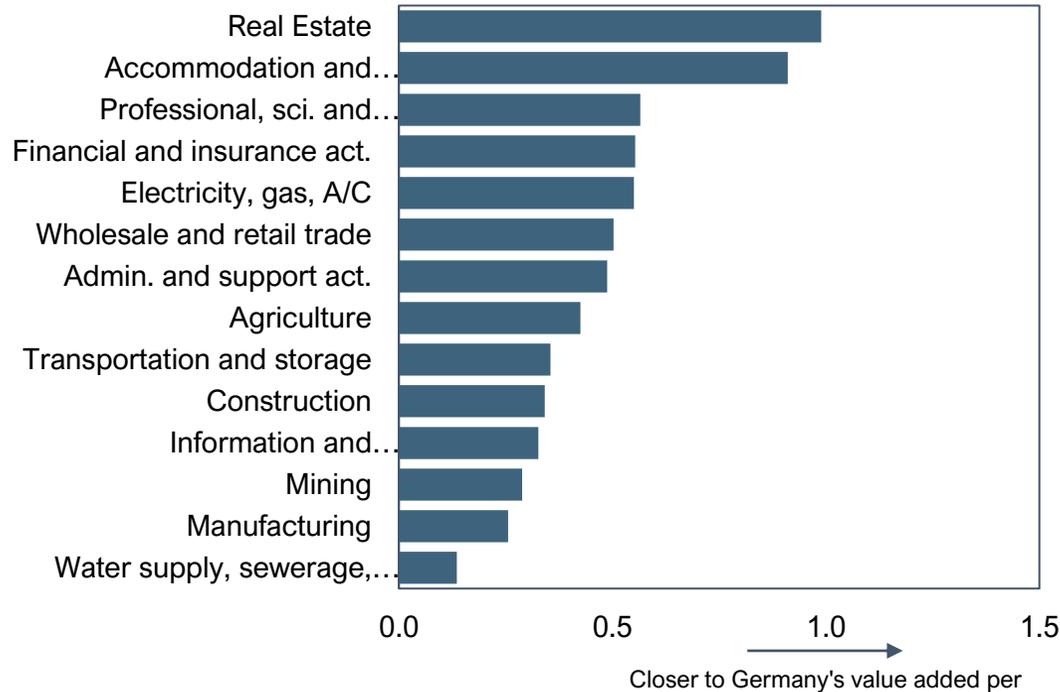


- Croatia's gap in labor productivity with Germany largely reflects productivity differences within sectors rather than the composition of the economy.
- Even if Croatia had the same sector composition as Germany, it would still be 57 percent less productive.

Source: Eurostat, World Bank staff calculations.

The labor productivity gap with the regional frontier is primarily due to large differences within sectors, especially manufacturing

Differences in labor productivity across sectors between Croatia and Germany

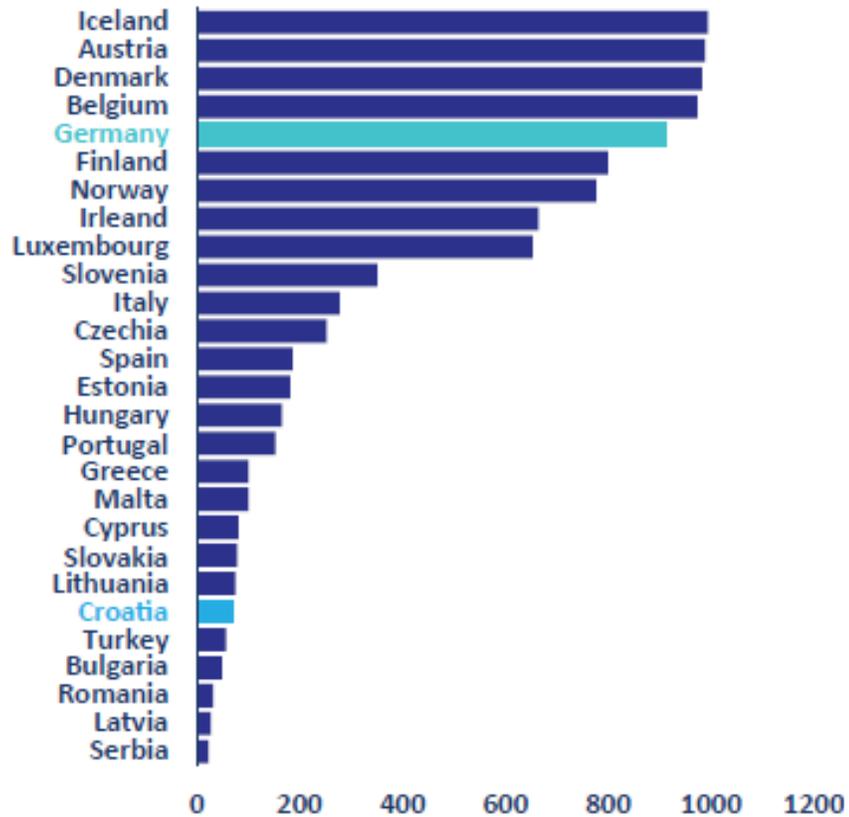


- Differences in within-sector productivity are large and explain almost 90 percent of the productivity gap between the two countries.
- A worker in the Croatian manufacturing sector produces roughly one-quarter of the value added produced by a German manufacturing worker.
- Croatia, however, performs well in several services subsectors, particularly in low-skill tradable services.

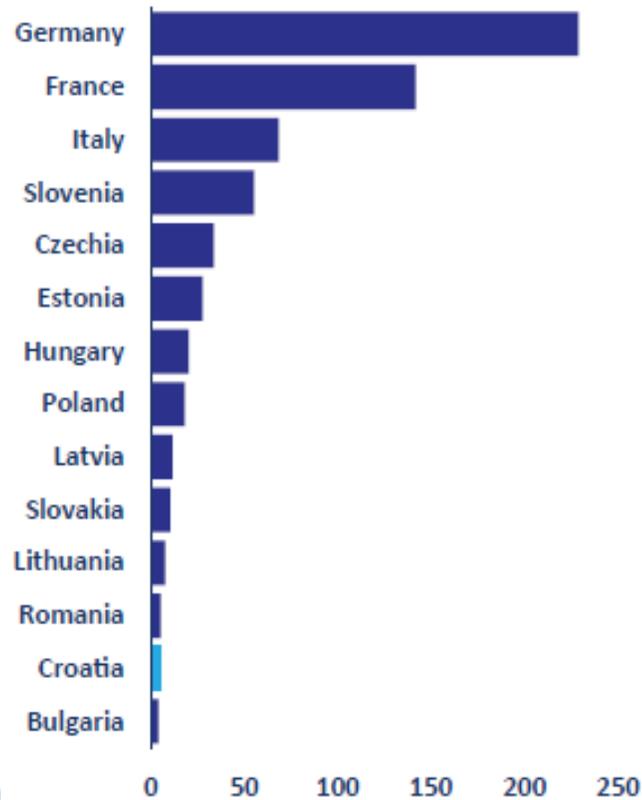
Source: Eurostat, World Bank staff calculations.

Private sector investment in R&D in Croatia is low compared to most EU countries

R&D per capita expenditure (in EUR)



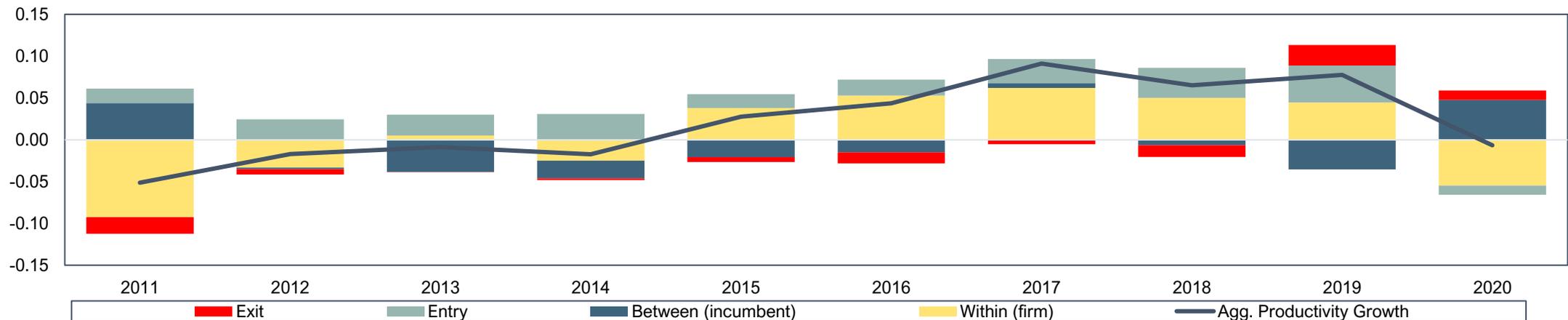
Patent application per million inhabitants



- Low firm productivity in Croatia reflects insufficient R&D investments and innovation and technology adoption.
- Firms in Croatia invest only 72 euros per inhabitant—less than 10 percent of Germany and below most EU peers.
- Croatia's patent applications per million inhabitants was the second lowest in the EU across in 2017.
- Sluggish firm productivity also reflects lagging managerial and organizational practices, as well as constraints on competition.

Beyond labor productivity, the decomposition of aggregate TFP growth points to an inefficient reallocation of resources

TFP growth dynamic decomposition



- Firm level data indicates a negative impact from the reallocation of resources between sectors.
- This essentially means that more productive firms are not successful at capturing market share from less productive ones.
- This in part reflects low business dynamism, below-average exit rates, and higher productivity in exiting firms compared to incumbents.

CONFERENCE

Raising Croatia's Long-term Growth and Productivity

Zagreb, February 1, 2023

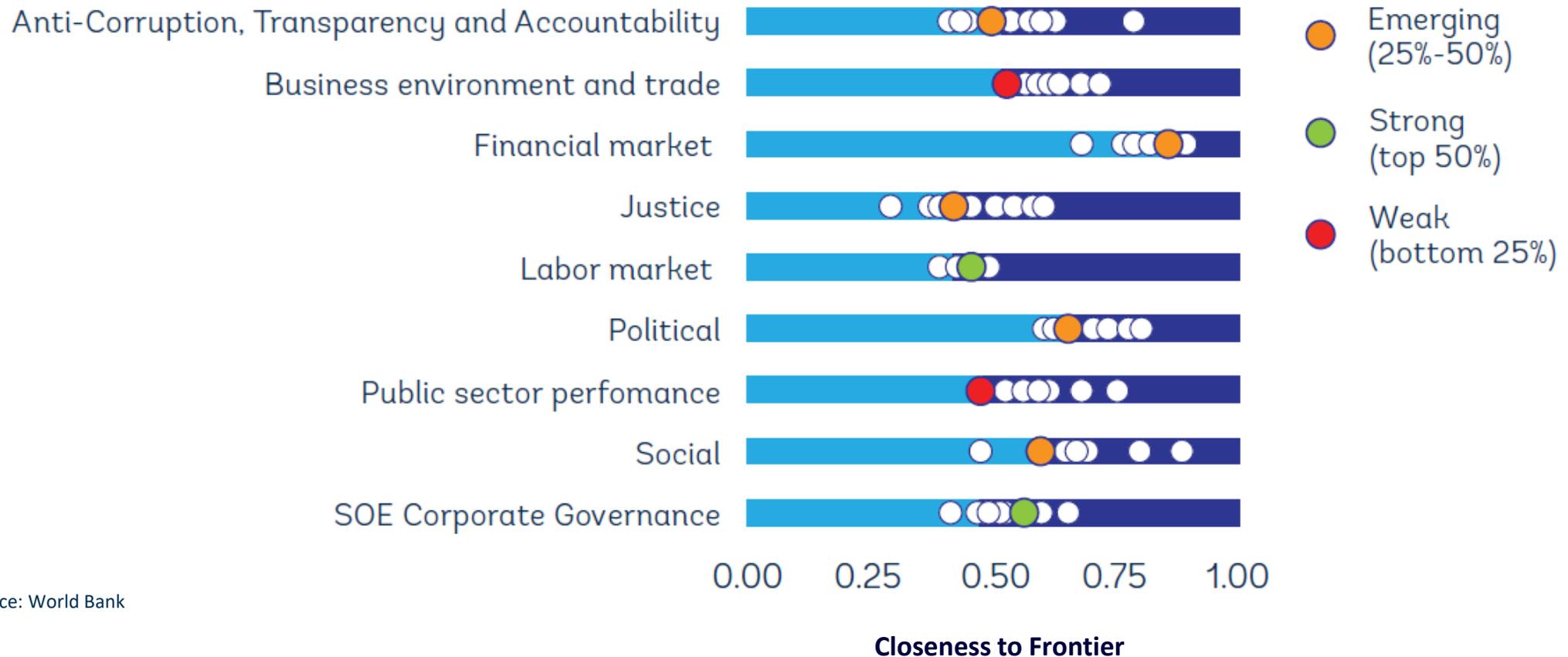


Institutions and productivity



Institutional benchmarking suggests relatively weak performance with respect to public sector institutions, social institutions, and business and trade institutions

Overview of Croatia Institutional Assessment benchmarking by institutional family



Source: World Bank

Institutional areas – survey of Croatian companies

Competition and anti-monopoly policies	Compliance with regulations	Business permits
<ul style="list-style-type: none"> ▪ Lack of trust towards the authorities enforcing competition rules ▪ Competition rules difficult to understand or comply with ▪ Low ability of the Competition Agency to effectively sanction dominant companies 	<ul style="list-style-type: none"> ▪ Conflicting rules ▪ Lack of trust in the process, mainly due to unequal treatment of firms, especially SMEs ▪ Lack of clarity of regulations ▪ Complex process for disputing claims or decisions 	<ul style="list-style-type: none"> ▪ Length of procedures for obtaining business permits and licences ▪ Unequal treatment of firms and lack of knowledge of public officials and inspectors ▪ Lack of consistency between inspectors and rules of implementation, and limited feedback in case of rejection ▪ Too many details in definition of minimum technical requirements and standards
Tax administration	Public procurement	EU funds
<ul style="list-style-type: none"> ▪ Frequency of submitting payments ▪ Length of procedures for obtaining tax refunds and required documentation for getting a refund ▪ Long process in case of dispute with tax administration ▪ Unequal treatment of firms 	<ul style="list-style-type: none"> ▪ Administrative procedures before contract signature ▪ Too many administrative processes during contract execution and complicated regulations on subcontracting 	<ul style="list-style-type: none"> ▪ Unclear guidelines on how to participate and not enough information on the exact time of a call announcement ▪ Lack of transparency, too long evaluation of application and no relevant feedback in case of rejection ▪ Complex procurement rules that firms need to follow when subcontracting and difficulties in securing co-financing and bridge financing due to changes in the project ▪ Reporting requirements are perceived as too demanding ▪ Firms perceive that grant contracts are typically awarded to politically connected firms

CONFERENCE

Raising Croatia's Long-term Growth and Productivity

Zagreb, February 1, 2023



THE WORLD BANK

IBRD • IDA | WORLD BANK GROUP

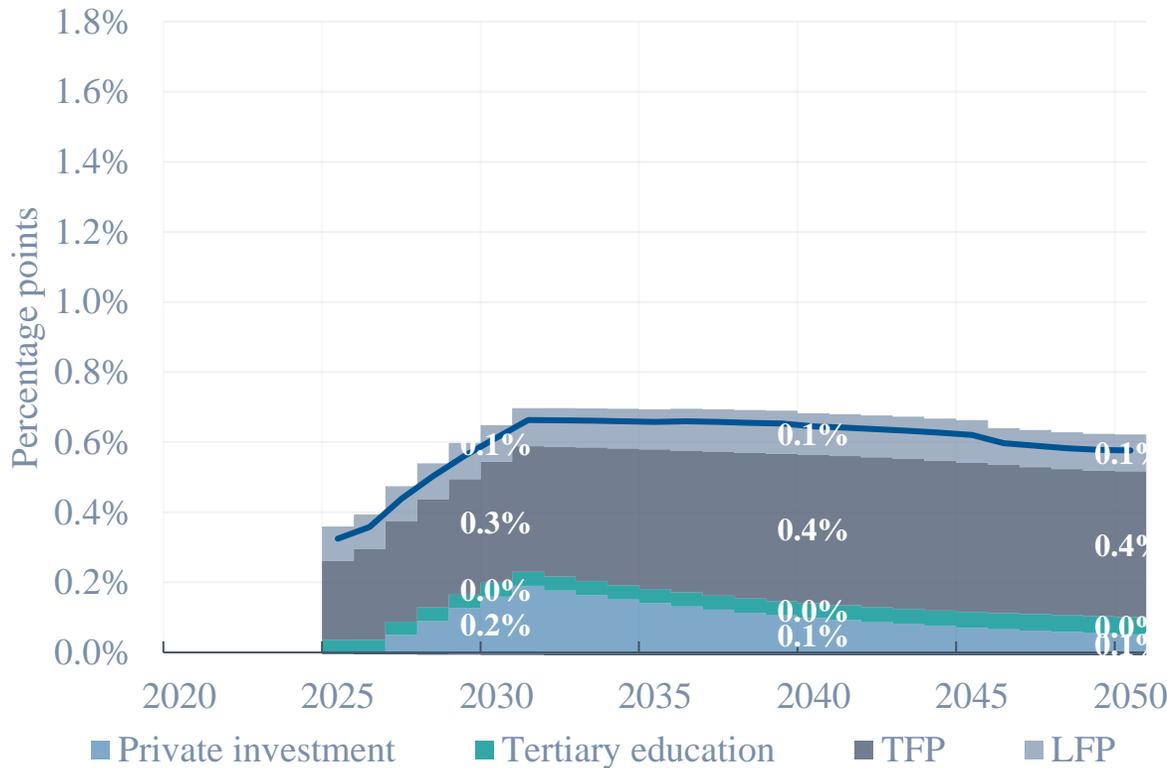
A large cable-stayed bridge spans across a wide body of water. The bridge has multiple tall pylons with numerous stay cables. The scene is set at sunset, with a warm orange and yellow sky transitioning into a darker blue. The water is calm, reflecting the bridge and the sky. In the background, there are dark, silhouetted hills or mountains.

Better future in reach?

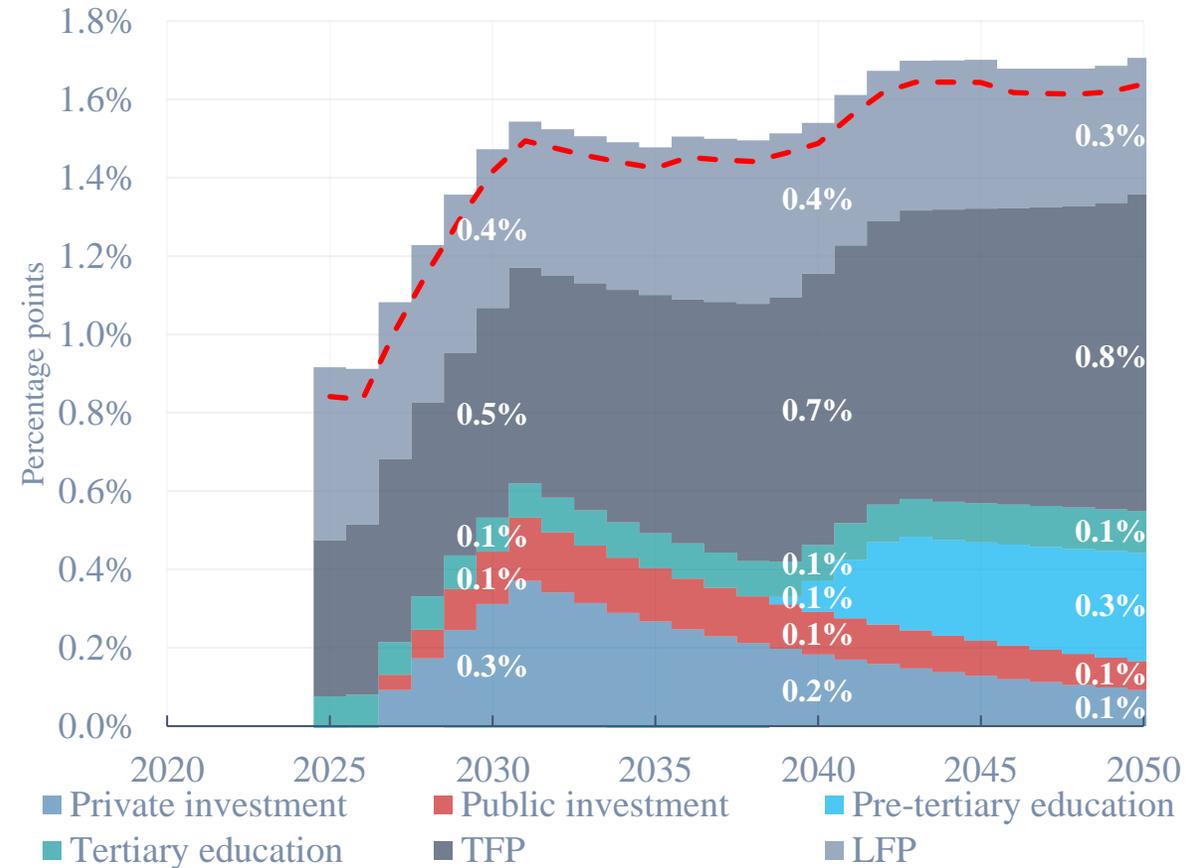
Benefits from improvements in growth drivers are large, especially productivity

Reform package scenarios

Moderate reforms



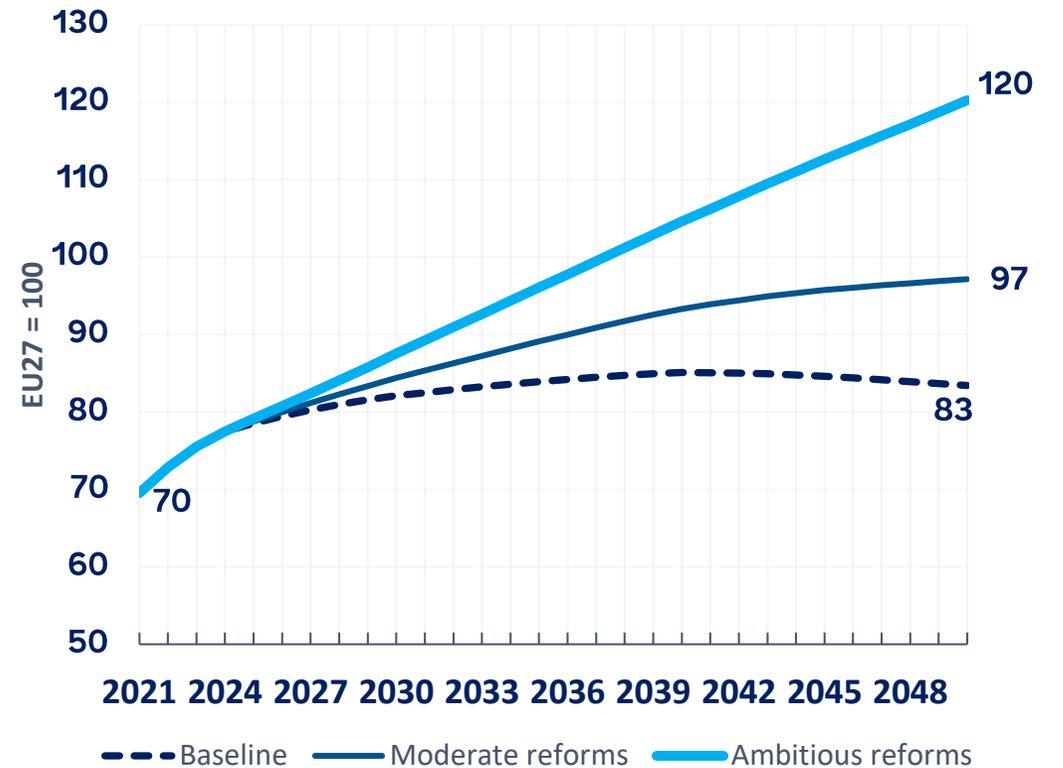
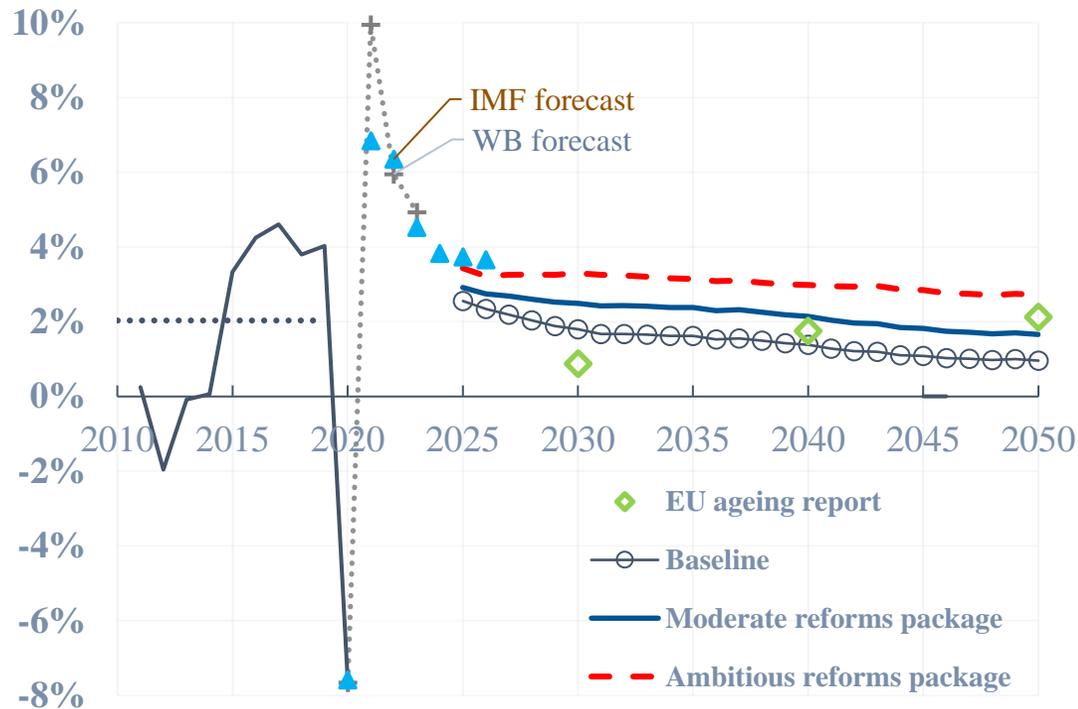
Ambitious reforms



Ambitious reform agenda can significantly raise Croatia's growth pc and potentially close the income gap with the EU over the next two decades

GDP per capita, baseline scenario

GDP per capita, baseline scenario



Sources: World Bank.

Sources: World Bank.

Key takeaways

Increasing productivity is key for raising living standards in Croatia.



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.



Reforms should target productivity, labor force participation and quality of human capital.



Croatia could reach average EU27 level of income within next two decades.



Key takeaways 2/2

Institutional areas that deserve the most attention are competition and anti-monopoly policy, business permits and public procurement.



Joint work of the private sector and the government is needed to accelerate productivity growth.



NRRP already includes a bold reform agenda and will have a major impact if fully implemented.



Don't forget about demography, green agenda and inclusion.



CONFERENCE

Raising Croatia's Long-term Growth and Productivity

Zagreb, February 1, 2023



Thank you

Josip Funda

World Bank Senior Country Economist for Croatia