



CROATIAN NATIONAL BANK

Investment as engine for growth – prospects and challenges

Zagreb, 7 March 2018

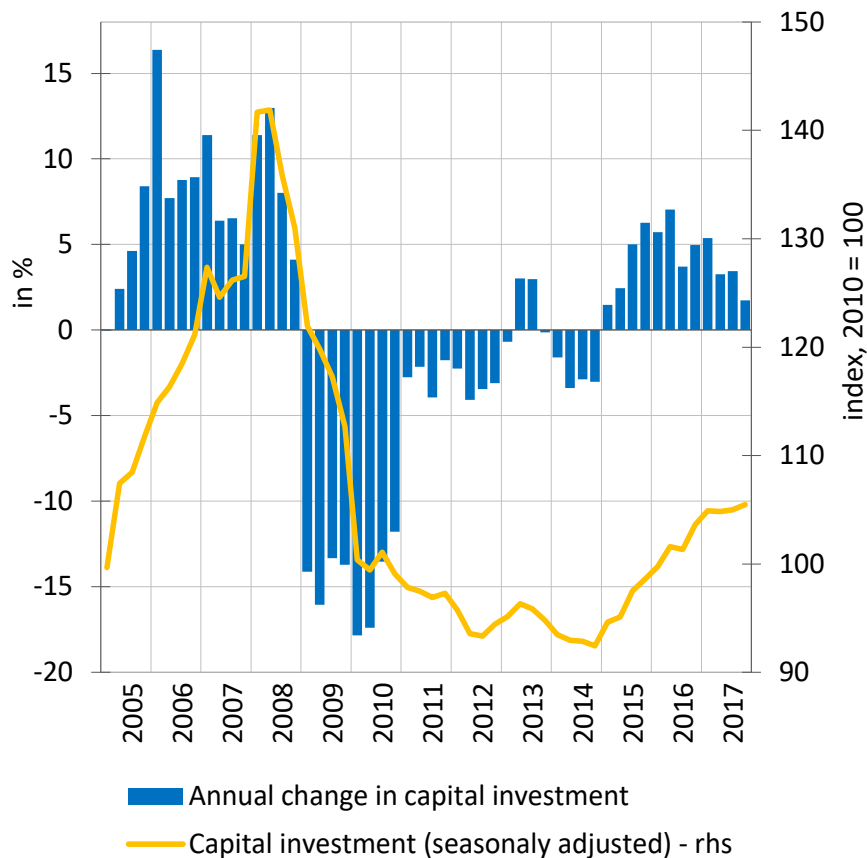
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Highlights

- ❑ **Investment dynamics – recovery underway**
 - ❑ **Better fundamentals, improved access to finance**
- ❑ **Can investments do better in lifting potential growth?**
 - ❑ **Capital allocation**
 - ❑ **Structural barriers**

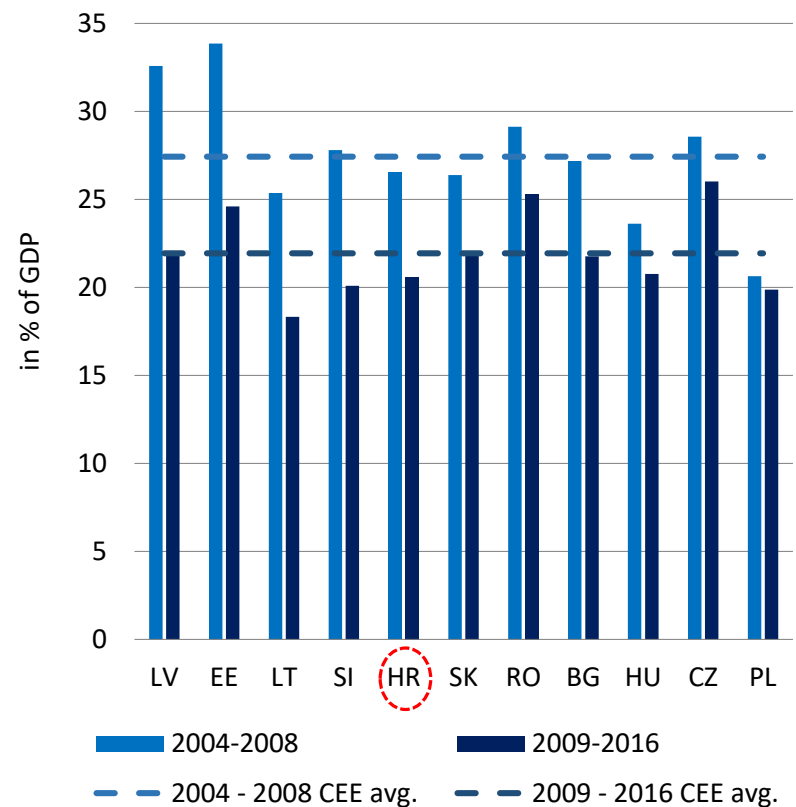
Investment accelerates, but remains below pre-crisis level

Investment dynamics



Source: CBS

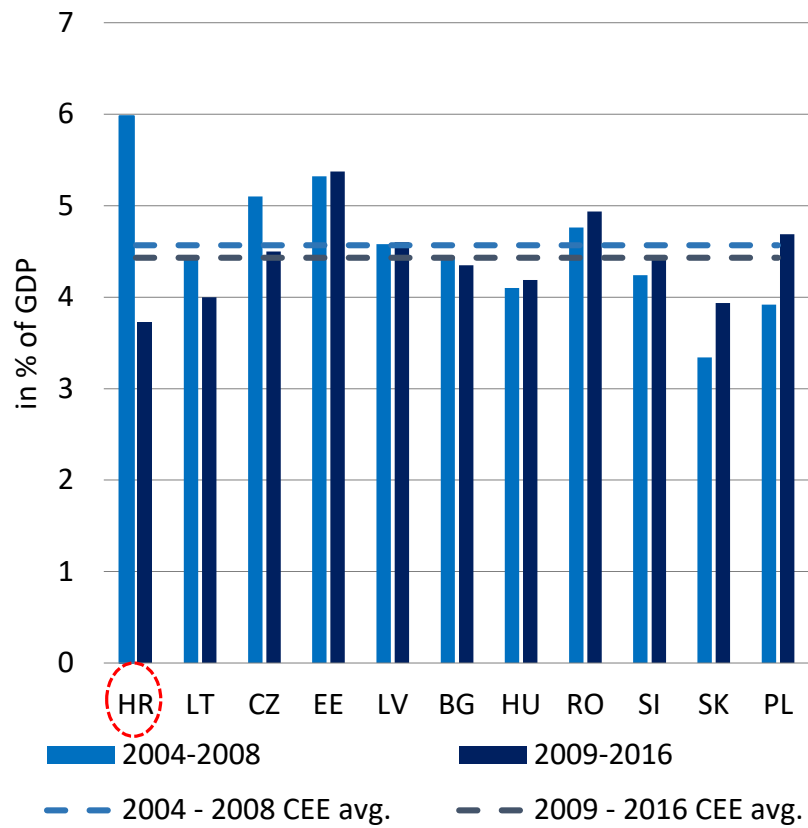
Croatia vs. peers



Source: Eurostat

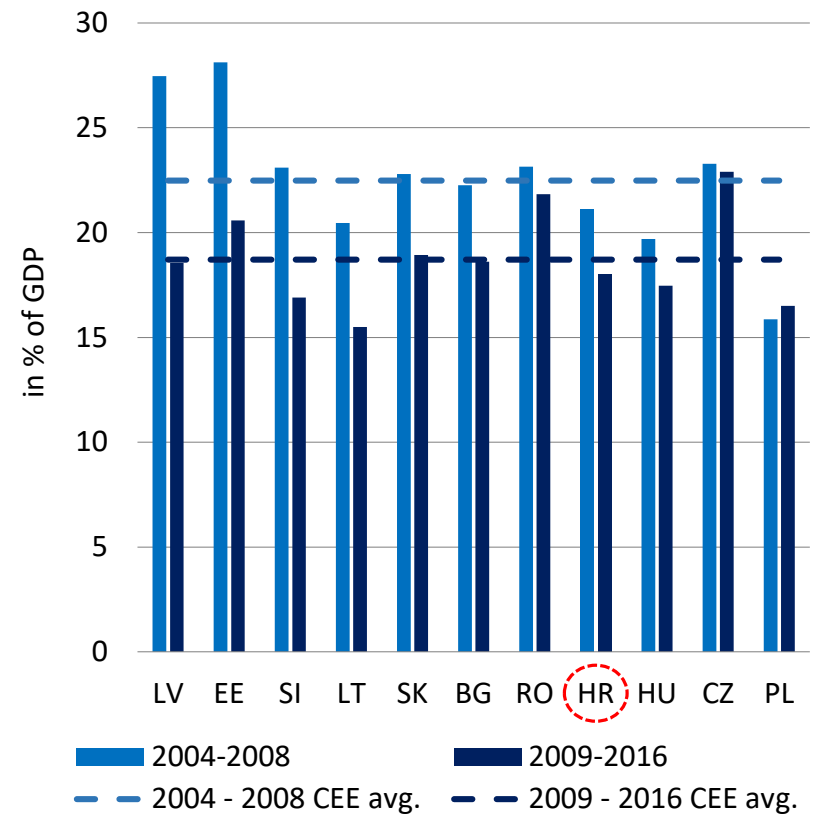
Adverse developments more pronounced in the private sector, except for Croatia

Public investment



Source: Eurostat

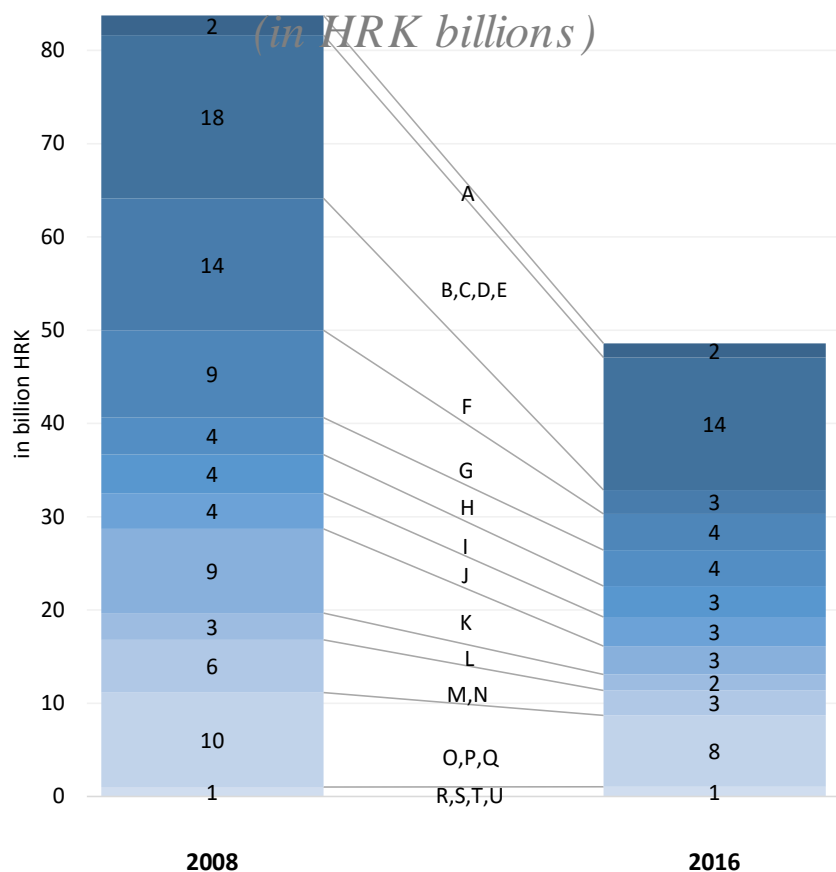
Private investment



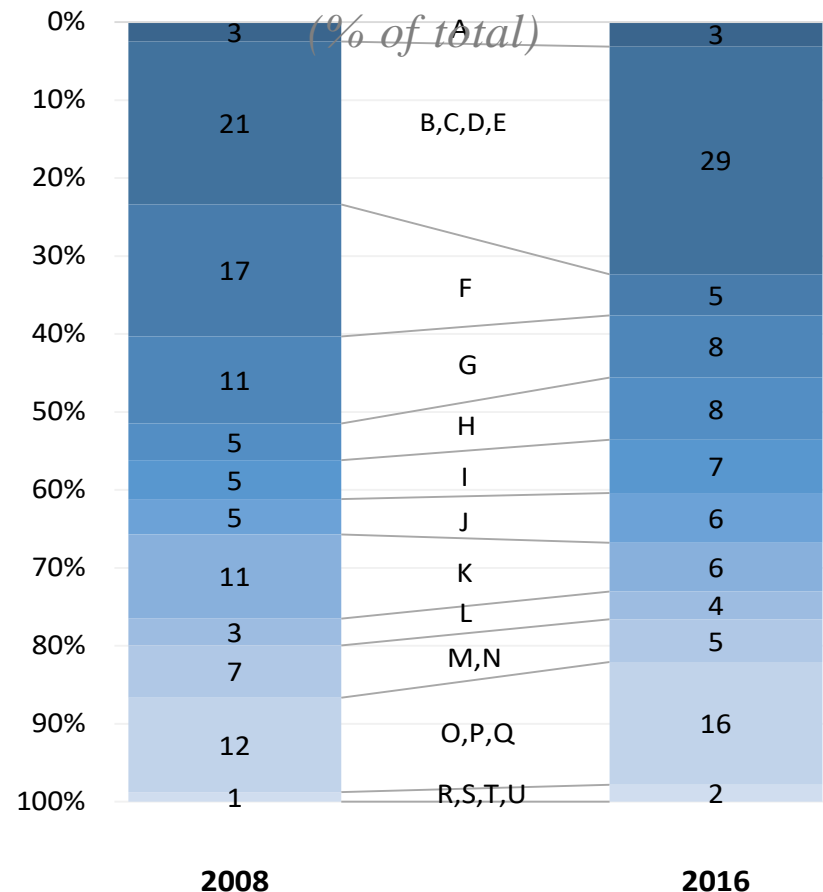
Sources: Eurostat, CNB estimate.

During the crisis investments dropped across the board, but share of tradables increased

Investment structure by sectors, 2008 - 2016



Investment structure by sectors, 2008 - 2016

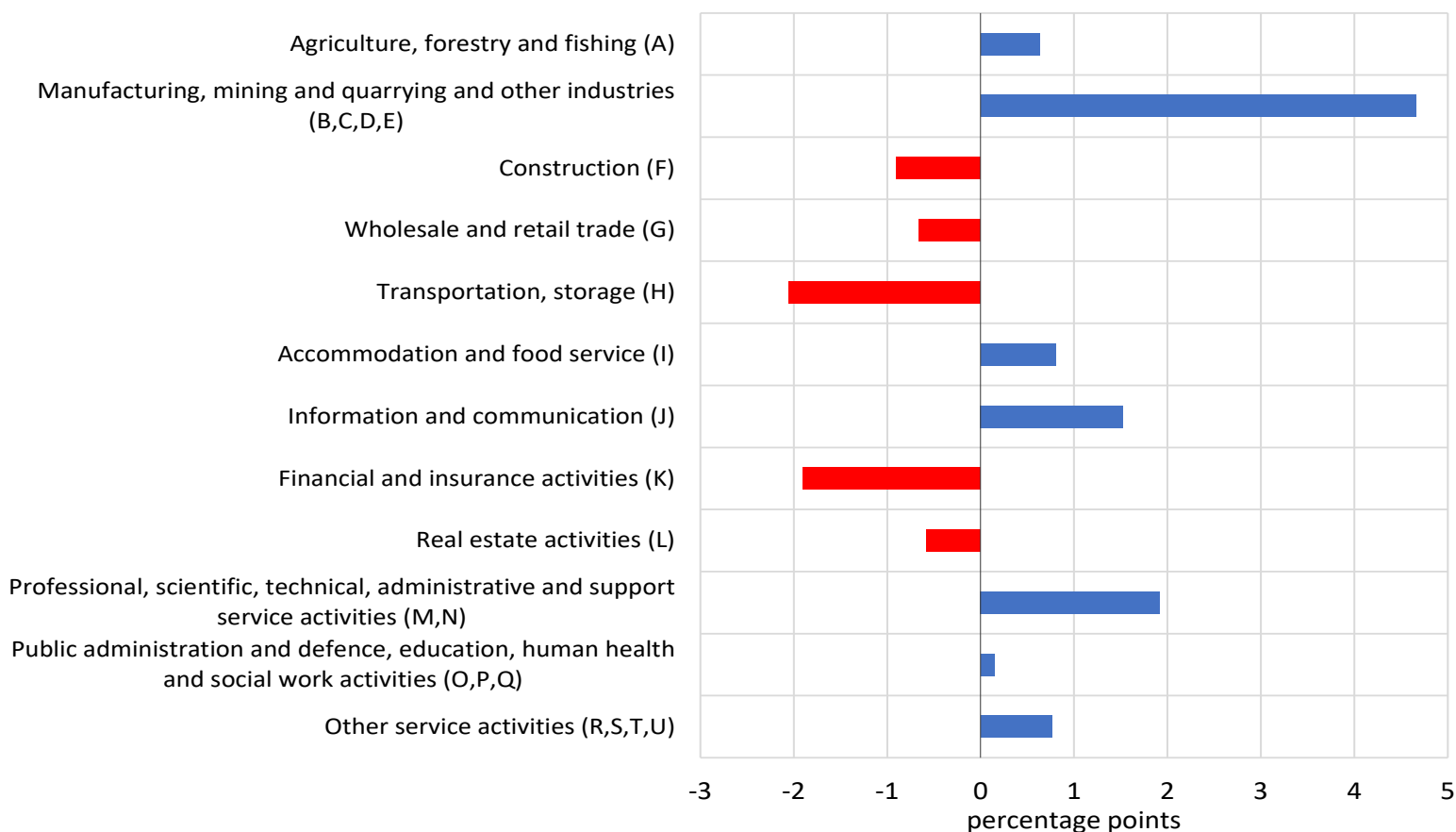


Notes: The data pertains to gross nominal investment in new and existing fixed assets of legal entities by activity of investor.

Source: CBS

Investment recovery driven by tradable sectors

Contributions to investment growth by sectors (2015-2016 period)

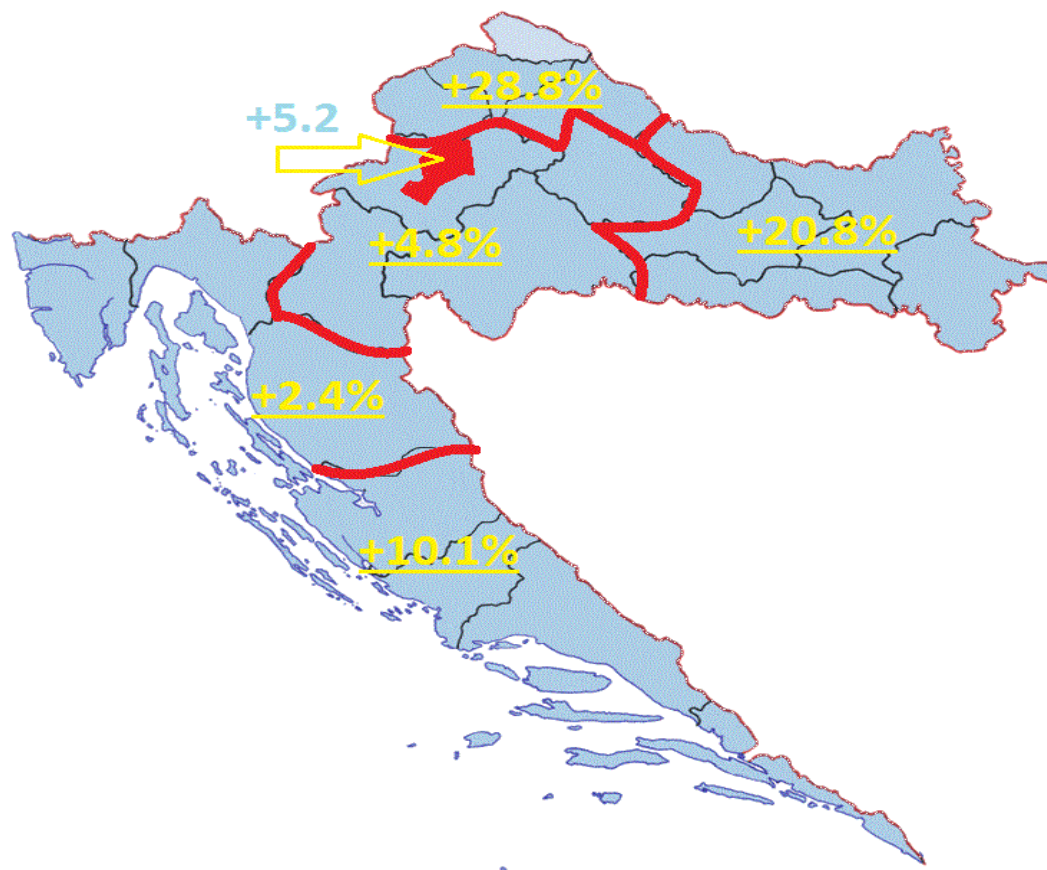


Notes: The data pertains to gross nominal investment in new and existing fixed assets of legal entities by activity of investor.

Source: CBS

Broad based recovery of business investment from regional perspective

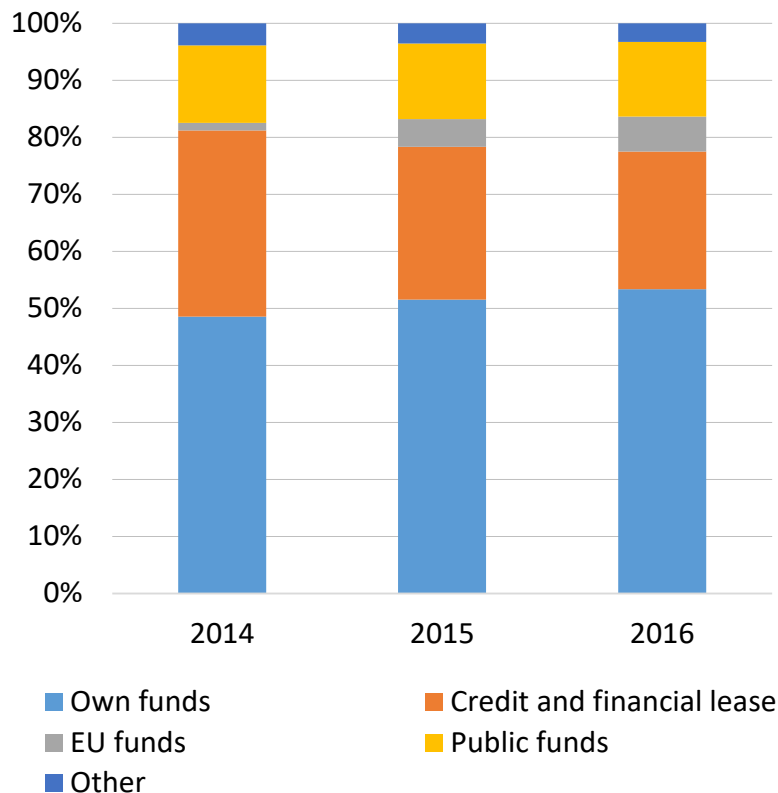
2015 -2016 cumulative growth



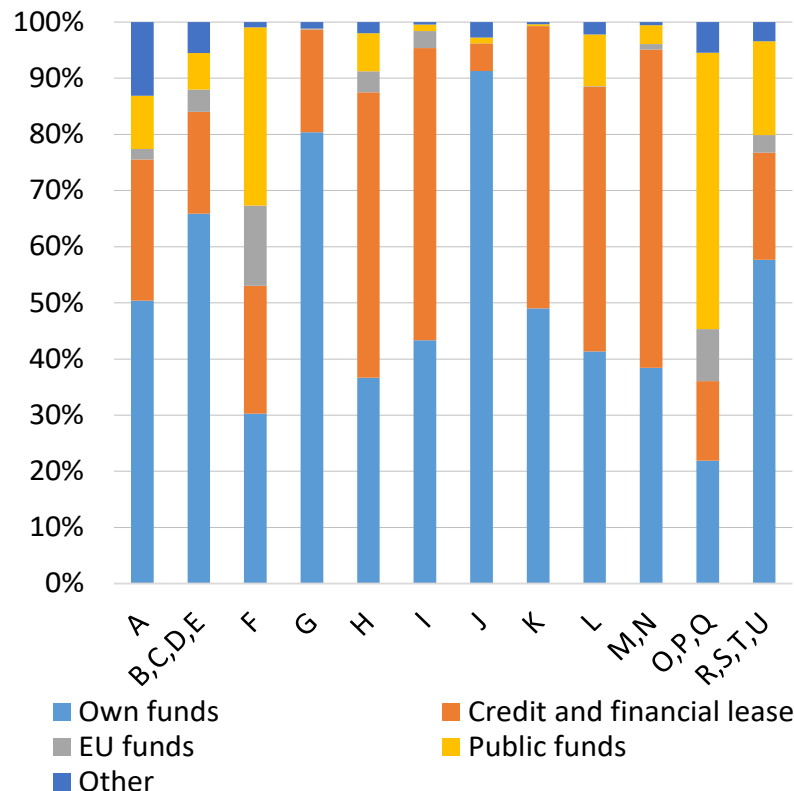
Note: The data pertains to gross nominal investment in fixed assets of legal entities by location of investment.
Source: CBS

Own funds still the most important source of finance, EU funds importance gradually grows

Sources of financing of investment



Sources of financing across sectors: 2016



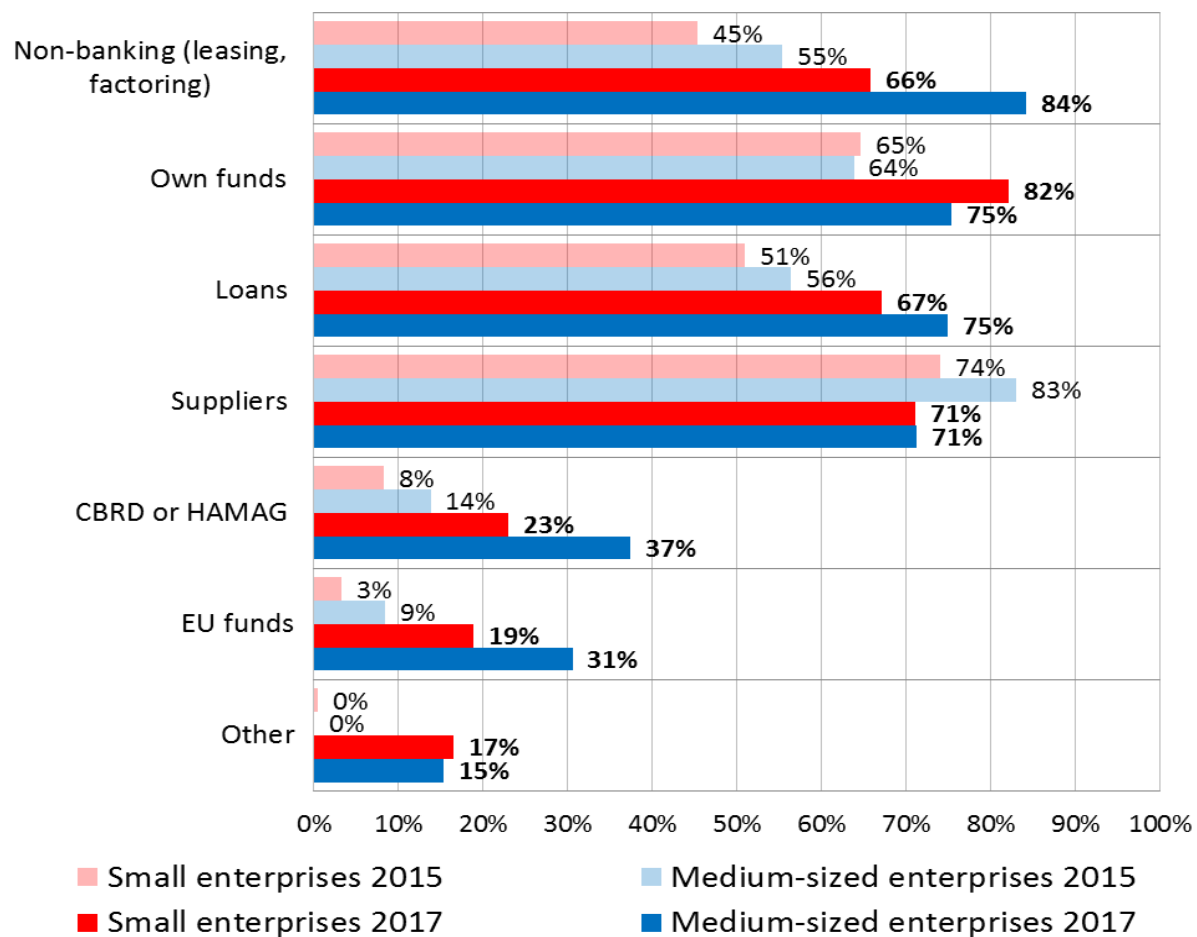
Note: The data shows the sources of financing of investment in fixed assets of legal entities.

A – Agriculture, forestry and fishing; B,C,D,E – Manufacturing, mining and quarrying and other industries; F – Construction; G – Wholesale and trade; H – Transportation and storage; I – Accommodation and food service; J – Information and communication; K – Financial and insurance activities; L – Real estate activities; M,N – Professional, scientific, technical, administrative, and support service activities; O,P,Q – Public administration, and defence, education, human health and social work activities; R,S,T,U – Other service activities

Source: CBS

Access to finance improves and financing sources diversify

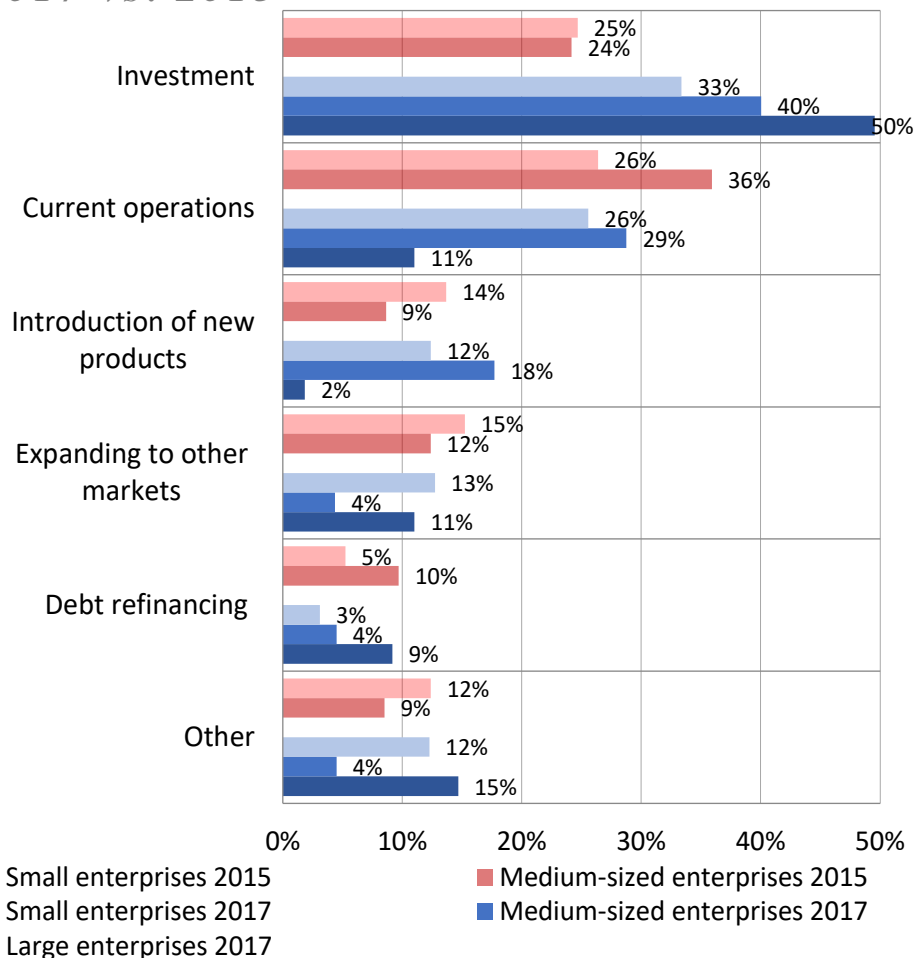
Croatian SMEs' financing sources, 2015 and 2017



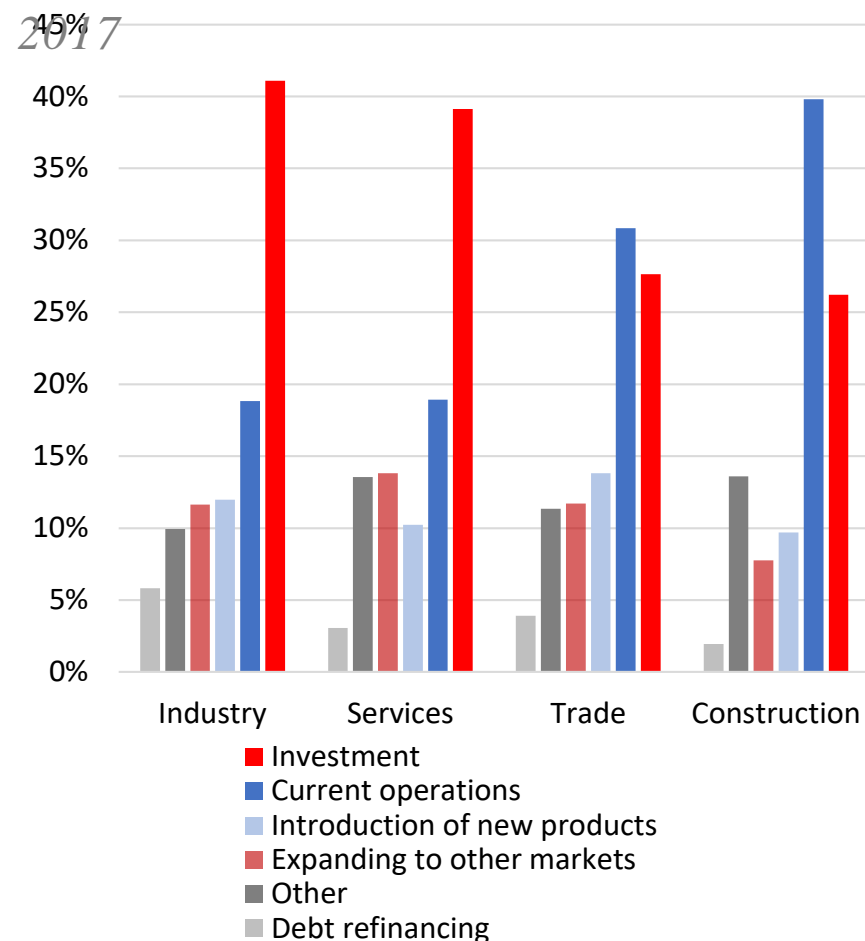
Source: SAFE (CNB, 2017, 2015)

Increasing demand for investment finance mostly driven by manufacturing and services

Reasons for external financing, by firm size 2017 vs. 2015

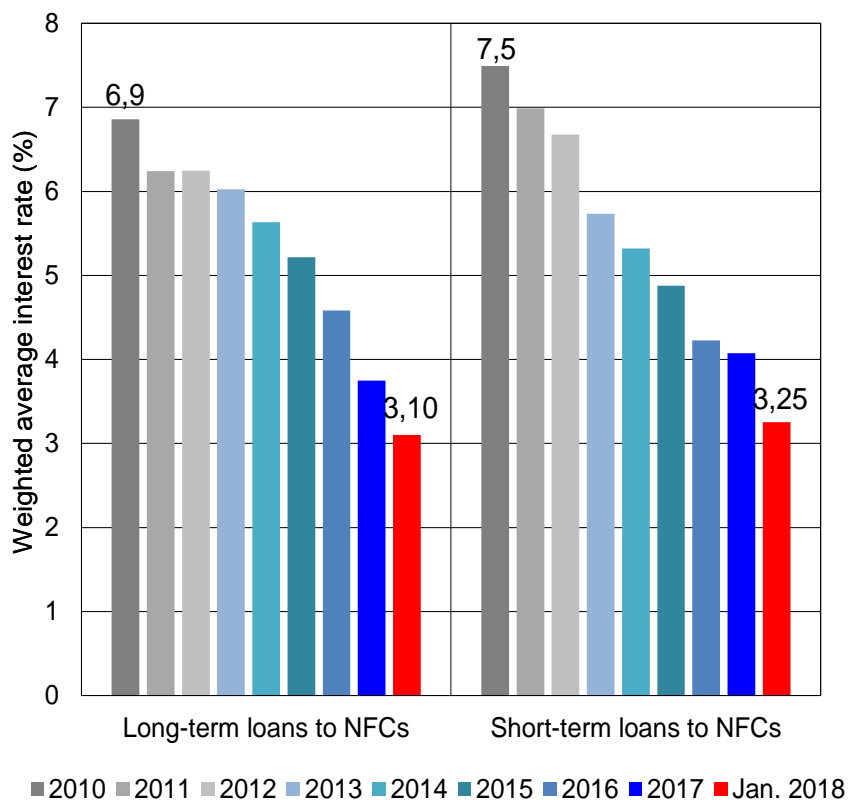


Reasons for external financing, by sectors 2017



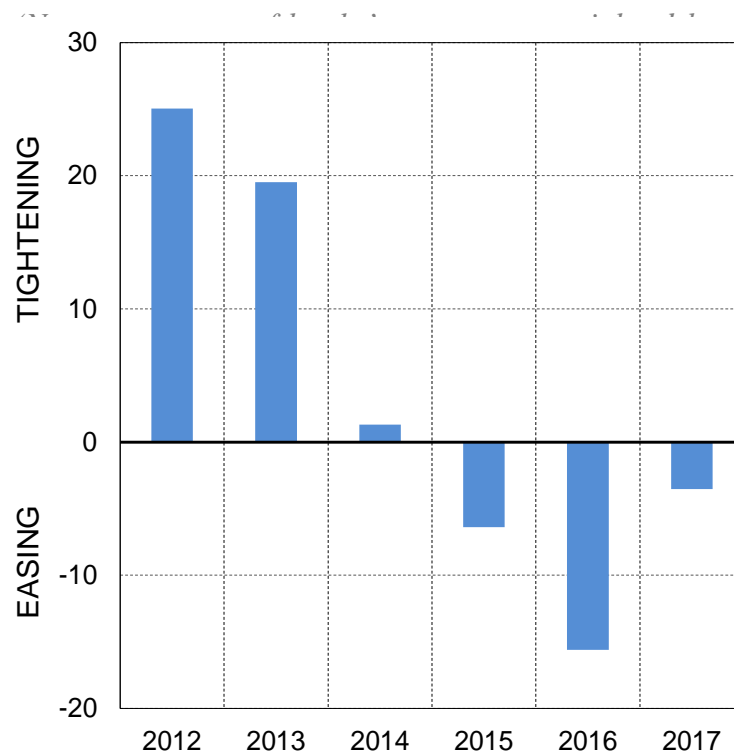
Bank interest rates falling, lending standards easing

Bank interest rates on loans to enterprises



Source: CNB.

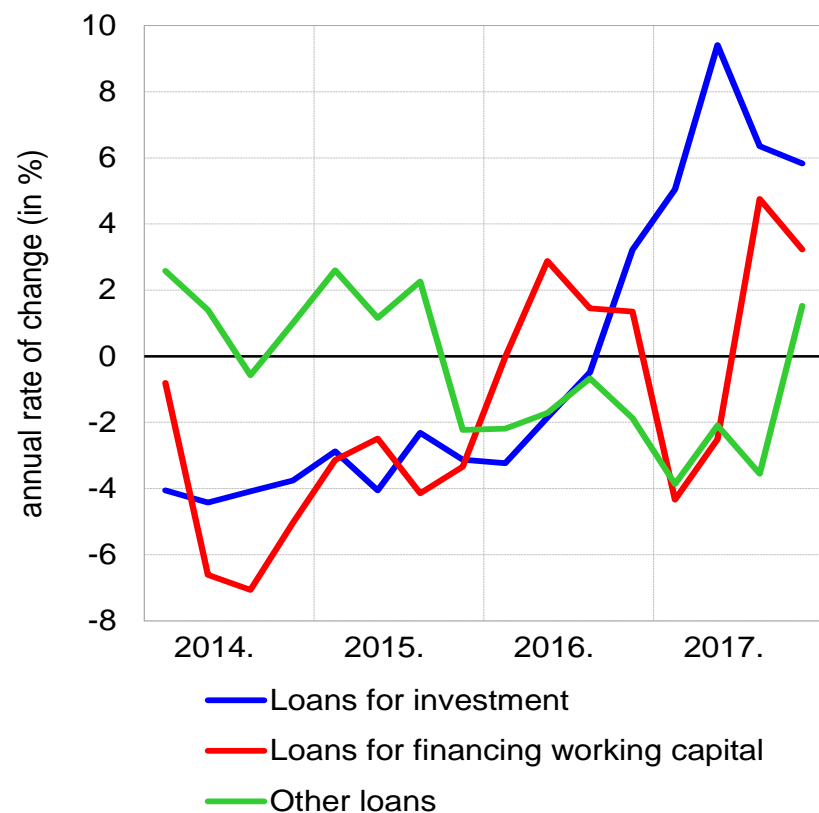
Bank lending standards for enterprises



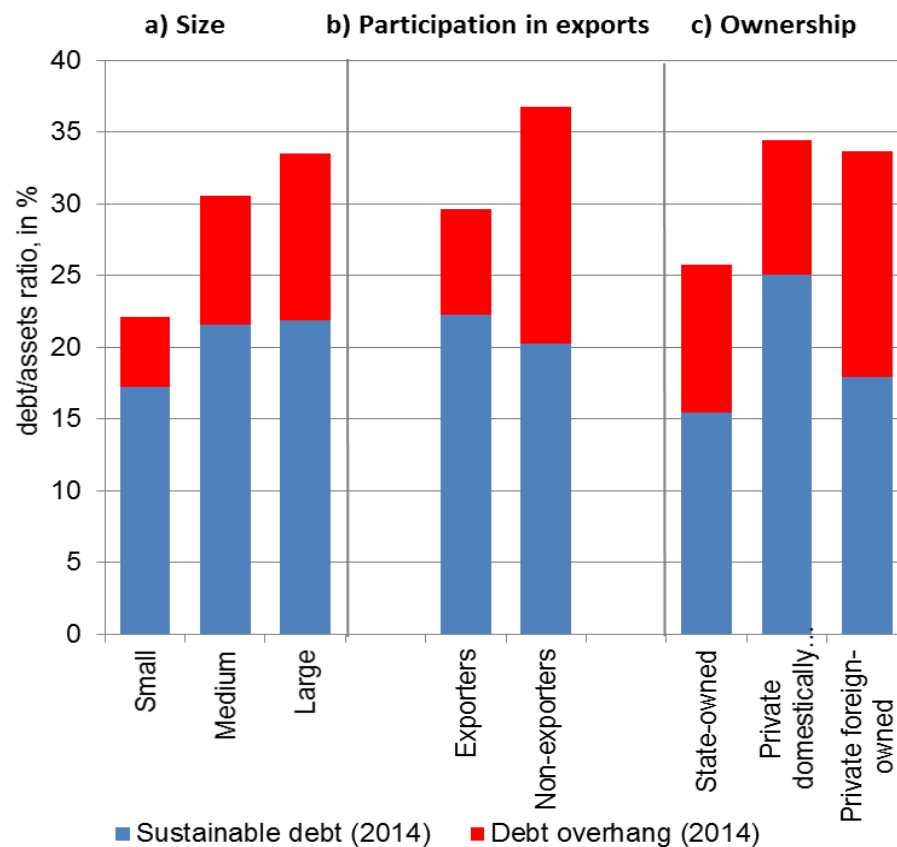
Source: Bank Lending Survey - CNB.

Deleveraging pressures have abated, though firm-level look reveals remaining vulnerabilities

Recovery of bank lending for investment



Debt overhang still sizeable, concentrated in large, non-exporting, foreign-owned firms; construction



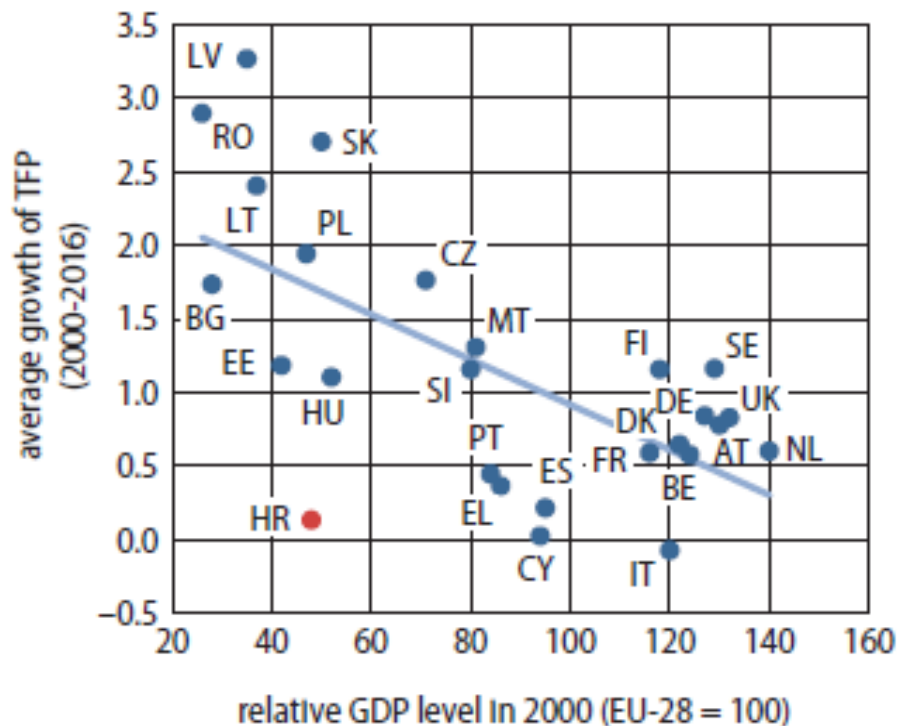
Note: Rates of change based on transactions data.
Source: CNB

Source: Martinis and Ljubaj (2017), data obtained from FINA.

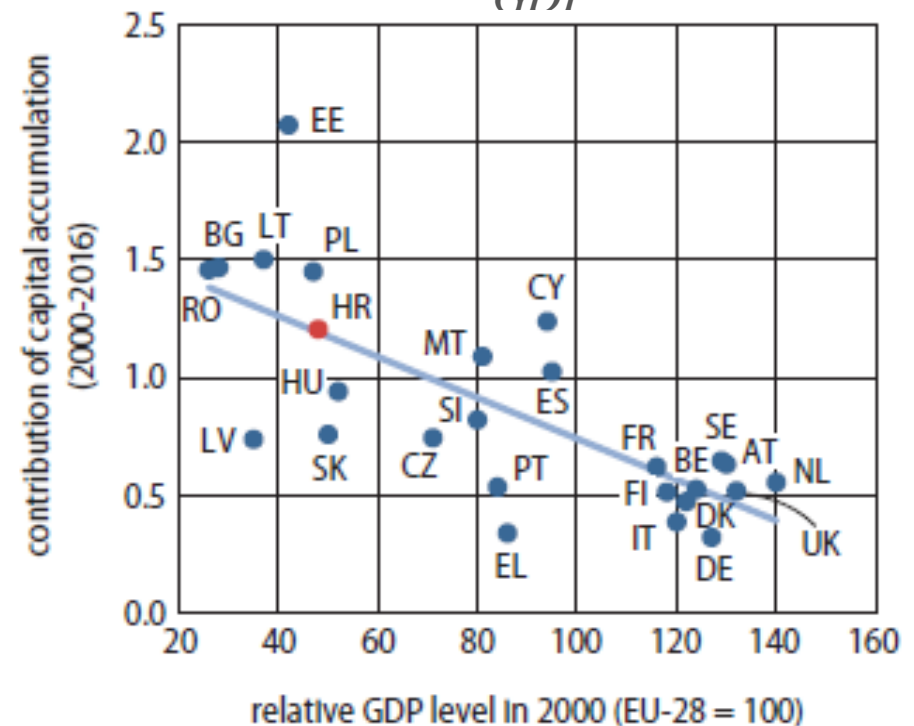
**How can investments do better in
lifting potential growth?**

The level of investments is not so much of a problem, productivity much more so

Average TFP growth



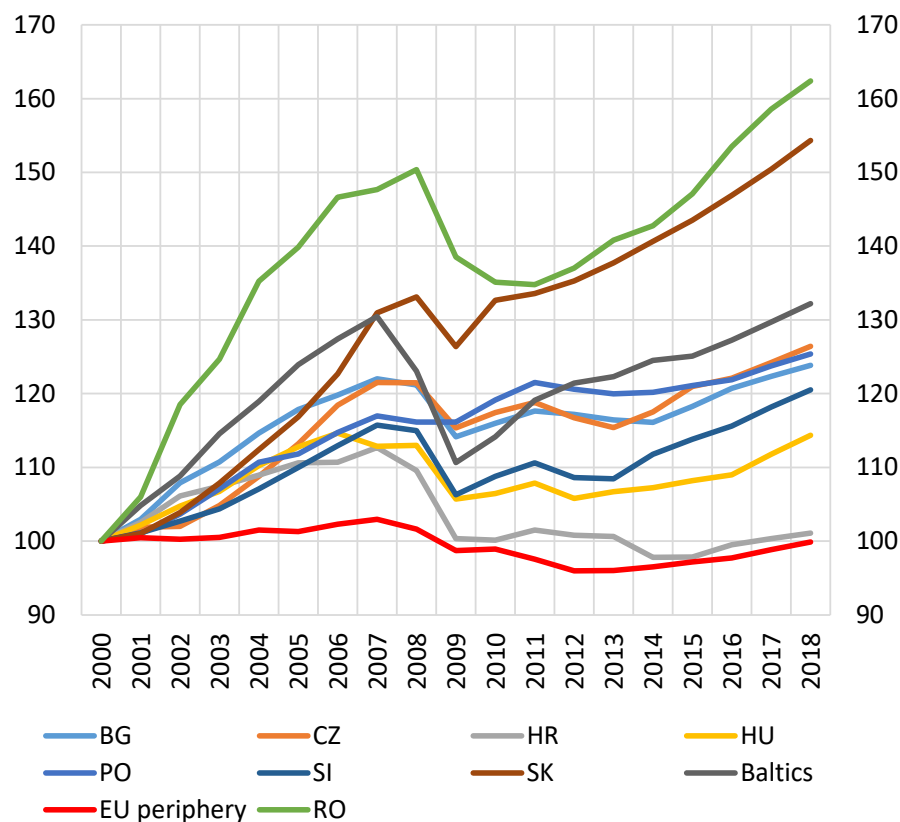
Contribution of capital accumulation to potential GDP



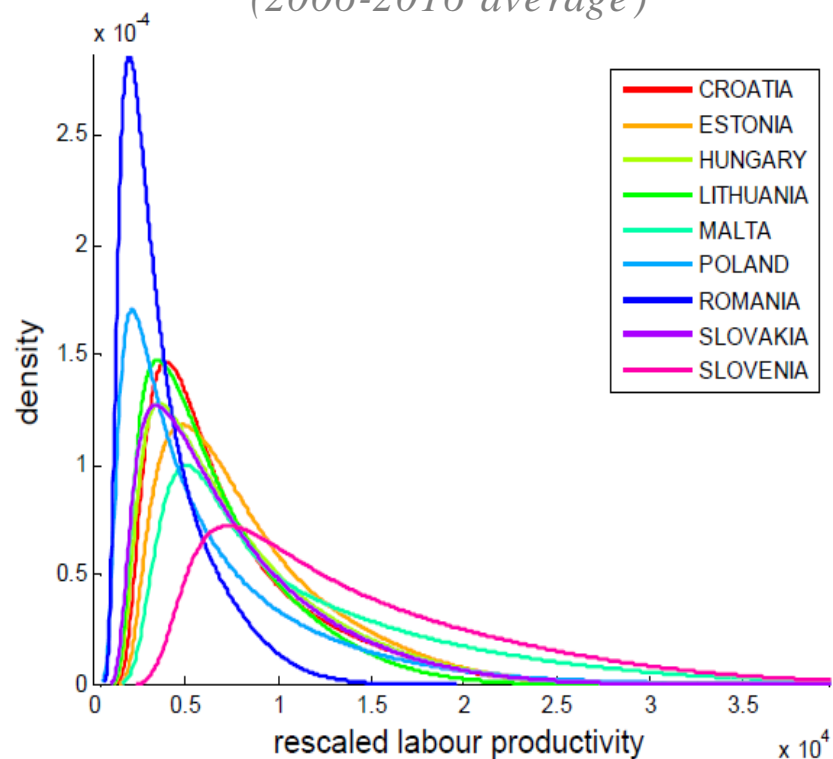
Izvori: Eurostat; izračun HNB-a

Croatia's productivity growth weak, driven by a few highly productive firms

Total factor productivity, 2000 = 100



Highly skewed distribution of labour productivity in manufacturing (2006-2016 average)

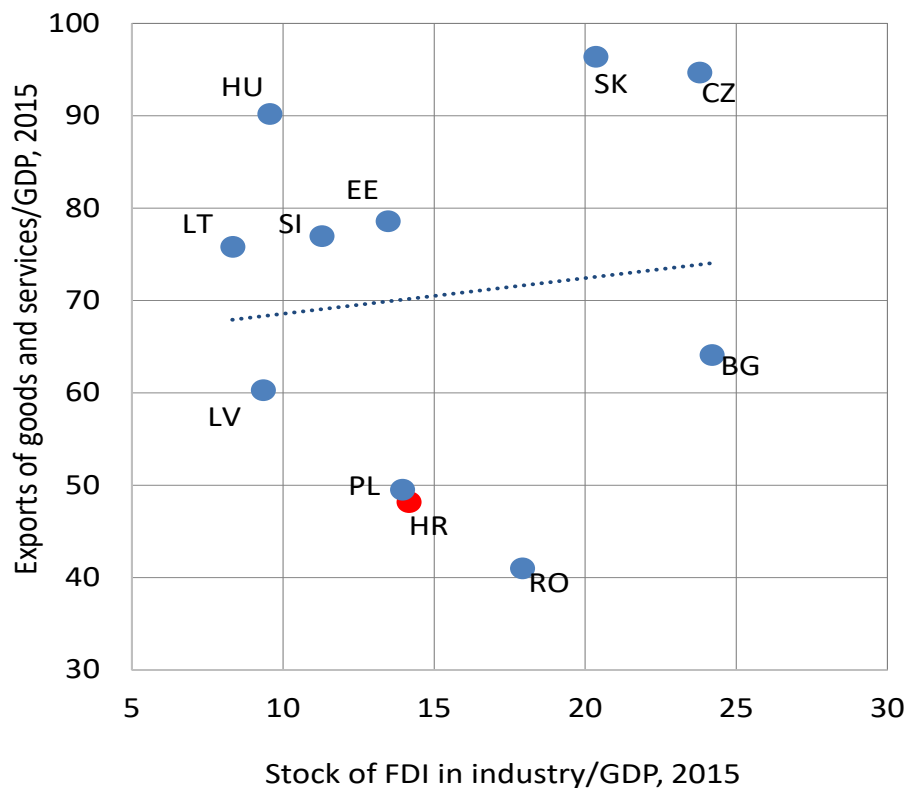


EU periphery – Italy, Spain, Portugal, Greece
Source: AMECO

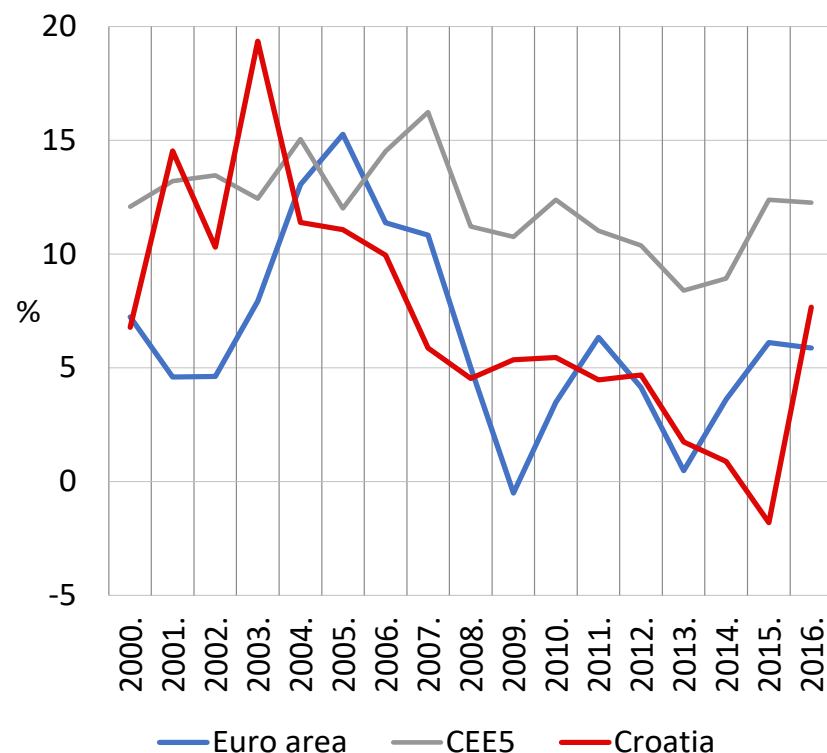
Source: Lopez-Garcia *et al.* (2015.): *Assessing European competitiveness: the new CompNet micro-based database*, ESB WP N 1764

FDI inflows directed to non-tradeables, providing low contribution to exports

Positive correlation between FDI in tradable sector and exports



Implicit yields on equity FDI



Notes: Tradable sector defined as mining and quarrying, manufacturing, electricity, gas and water supply. Economic activities for BG and HR are based on NACE Rev.1 and for other countries on NACE Rev. 2 classification.
Sources: WiiW; CNB calculations

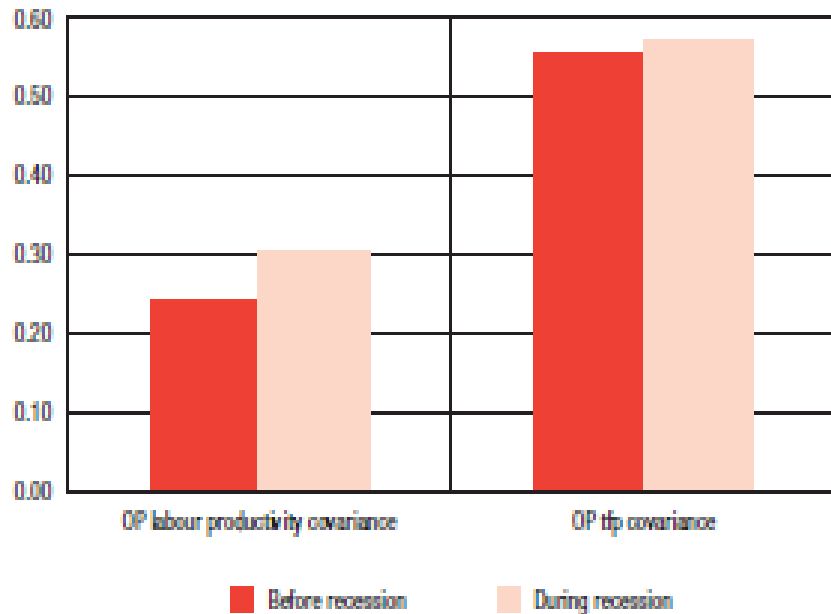
Note: Euro area excluding Ireland and Luxembourg.
CEE5 includes CZ, HU, PL, SK, SI.
Sources: Eurostat, CNB calculation.

Allocative efficiency increased modestly during recession, but capital was increasingly misallocated

Allocative efficiency of the economy increased during recession

Dispersion of marginal revenue products of labour (MRPL) and capital (MRPK)

Olley-Peakes gap in overall economy



Note: Before the recession refers to the years between 2002 and 2008, while during the recession refers to the years between 2009 and 2014.

Source: Valdec and Zrnc (2017)

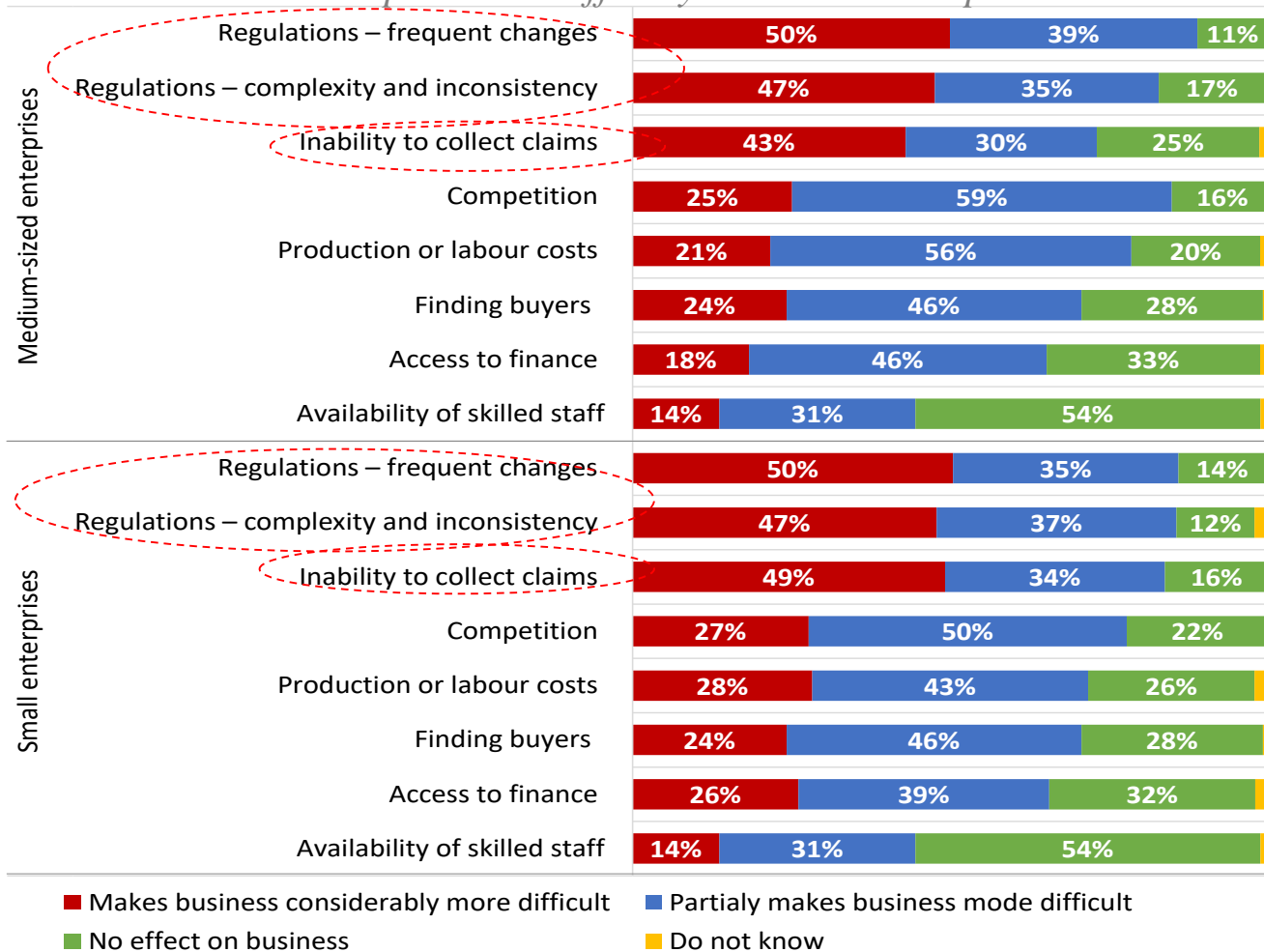
Source: Valdec and Zrnc (2017)

Poor resource allocation points to structural barriers

- ❑ The Great Recession had diverse effects on labour and capital allocation in Croatia – increasing misallocation of capital was accompanied by a decline in misallocation of labour
- ❑ Growing misallocation of capital adversely affected productivity dynamics across all sectors
- ❑ This stresses the importance of the economy's ability to reallocate resources to more productive firms
- ❑ Labour and capital market regulation can have substantial effects on aggregate productivity

In 2015, regulatory environment and inability to collect claims were key obstacles to doing business

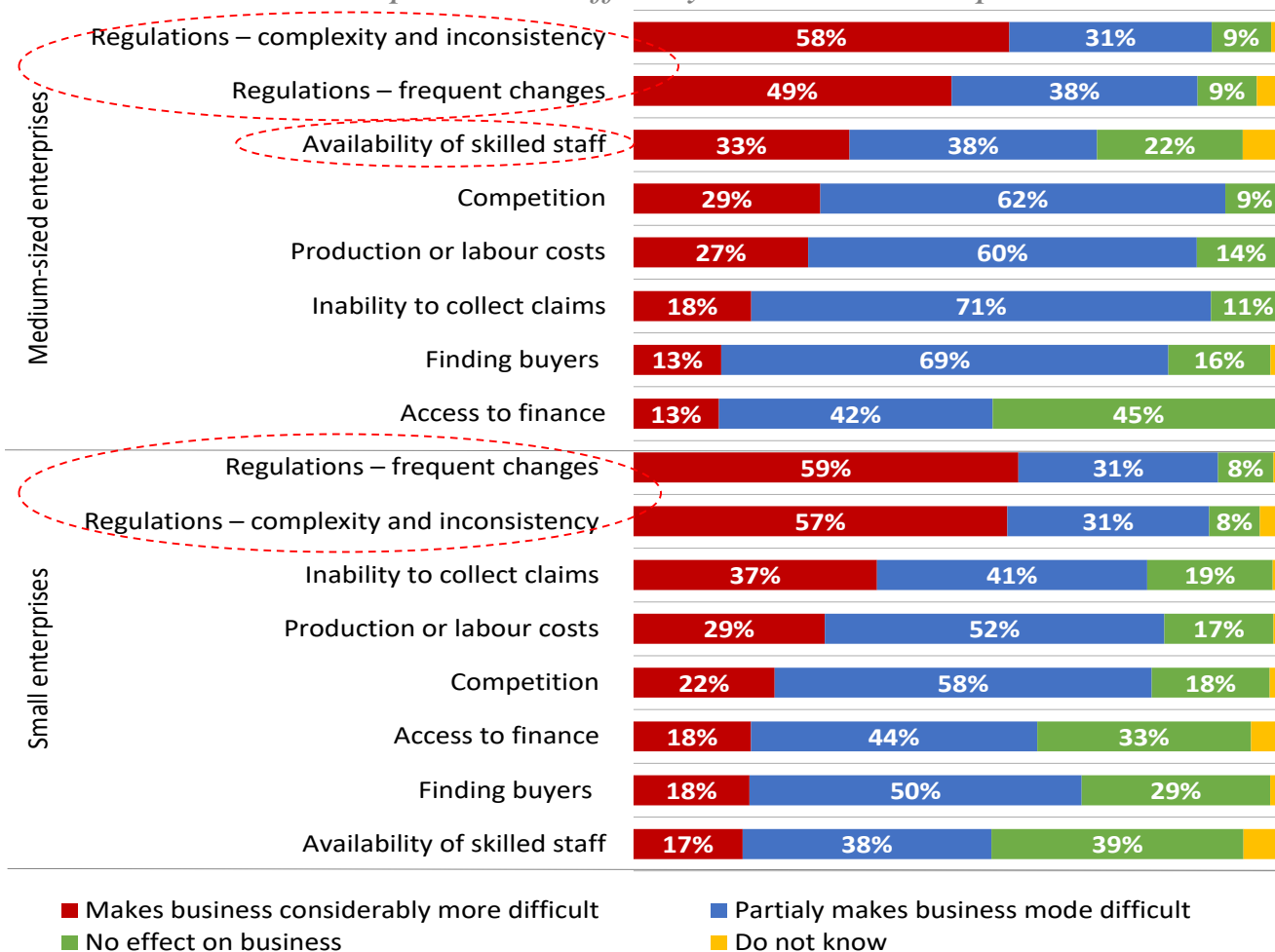
How do the listed problems affect your business operations?



Source: Survey on the access to finance of SMEs, CNB and Ipsos (2015).

In 2017, regulatory environment still a key obstacle, but labour shortage becoming more severe

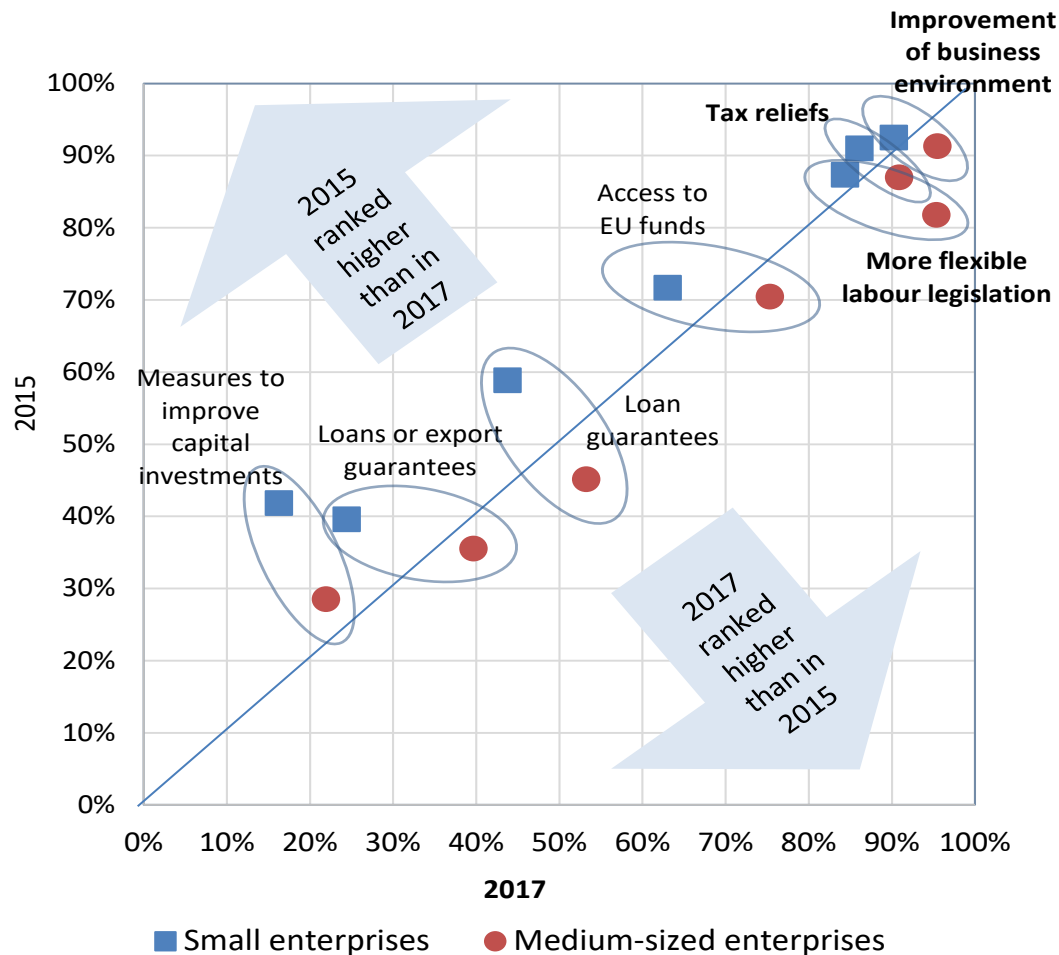
How do the listed problems affect your business operations?



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A look forward - business environment and legislation improvements are crucial

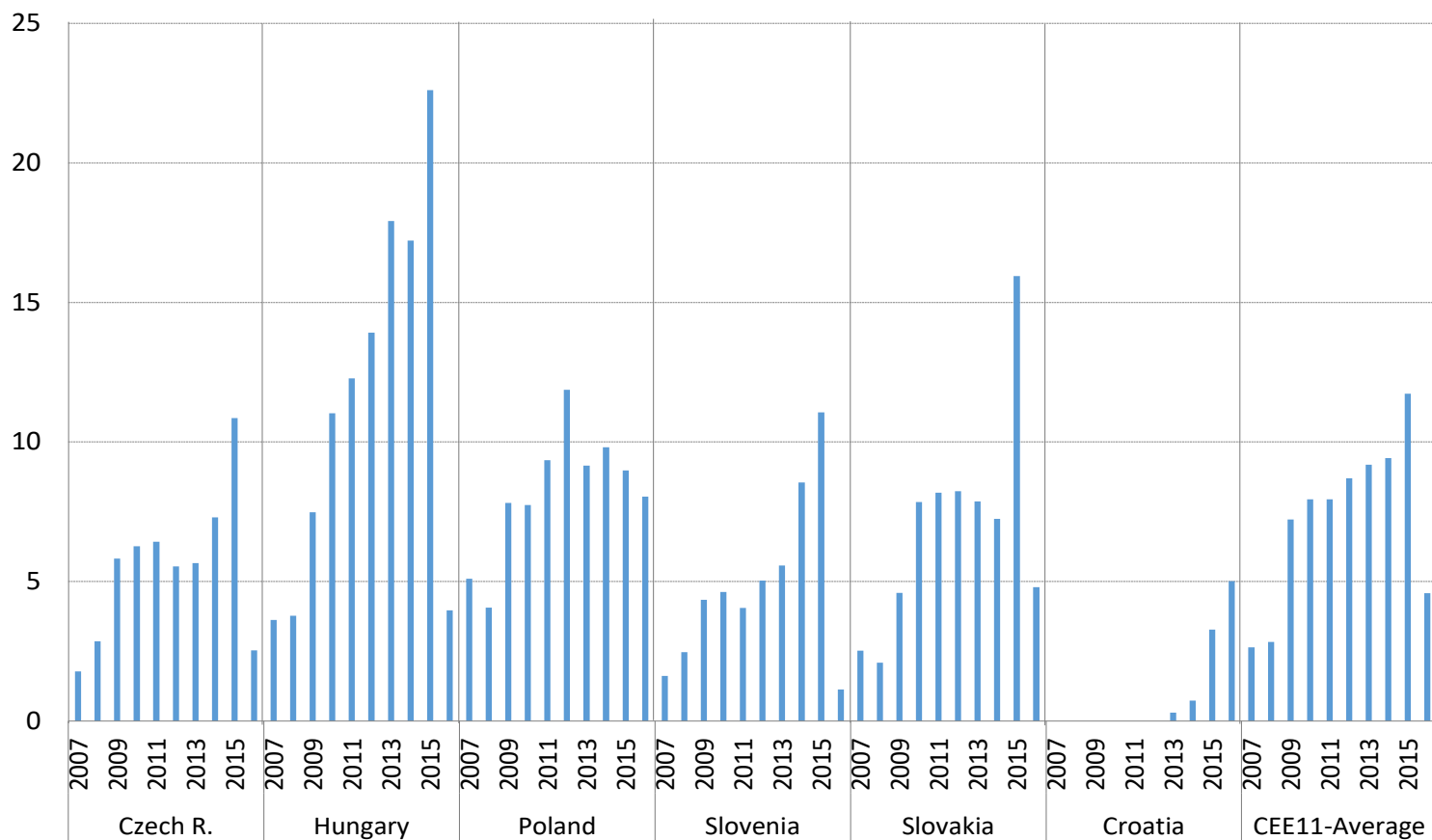
What do you find important for your enterprise in the future?



Source: Survey on the access to finance of SMEs, CNB and Ipsos (2015, 2017).

Much scope to increase utilization of EU funds

*Share of capital transfers from EU funds to final beneficiaries
in gross fixed capital formation (%)*



Sources: ECB, Eurostat

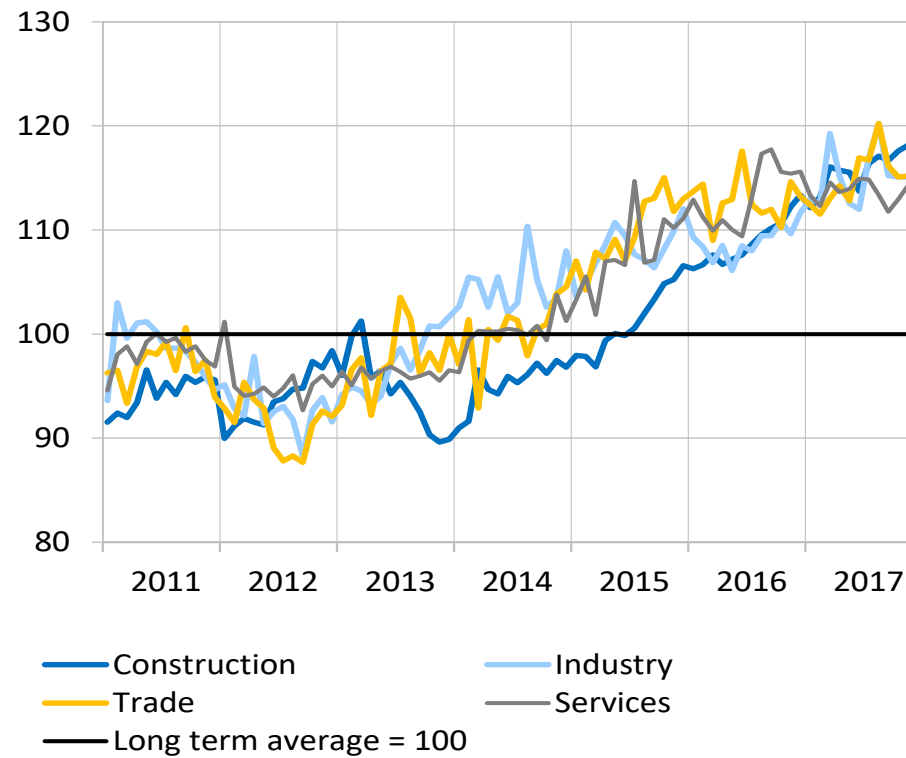
Key takeaways

- ❑ Investment recovery underway, but still below pre-crisis level
- ❑ More investment into tradables
- ❑ Access to finance improved and financing sources diversified
- ❑ However, structural impediments hinder stronger investment growth
- ❑ EU funds still an under-tapped potential for lifting investment growth

Thank you!

Business optimism growing steadily

Business optimism



Sources: Ipsos; CNB seasonal adjustment