Productivity in Europe

Trends and drivers in a service-based economy

FACTSHEET - CROATIA (HR)
Contents

Key messages .............................................................................................................................................. 1
1 Productivity growth in innovative sectors ................................................................................................. 1
2 Firm size distribution and sectoral labour productivity .................................................................................. 2
3 Role of firm demography in productivity growth ......................................................................................... 3
4 Policies for addressing low productivity growth ......................................................................................... 3
Key messages

- In the period 2009–2016, knowledge-intensive activities in Croatia recorded an average annual growth rate of 10.3% in terms of productivity per hour. After spiking in 2014, due to Croatia’s accession to the EU. Labour productivity growth in these sectors declined in the period 2015-2016, most likely due to working hours outgrowing economic output.

- Labour productivity in the market economy in Croatia was 26.3% below the EU28 figure in 2016. This is mainly due to lower intrinsic productivity levels in Croatian firms relative to their European peers. Moreover, labour productivity growth in Croatia is mainly determined by intrinsic productivity growth at the firm level, while both the economy's sectoral and firm size distributions play a negligible role.

- Croatia performs better than the EU average in terms of business dynamism, especially for the larger-than-micro firms, a segment of the corporate sector where entry rates have been shown to be relevant for aggregate productivity growth.

- The period 2010-2016 witnessed a rapid catch-up process in the productivity levels of small companies towards that of larger ones. This convergence was possibly a consequence of increased outputs due to increased exports after 2014.

1 Productivity growth in innovative sectors

![Figure 1. weighted arithmetic mean of annual growth rate in knowledge-intensive sectors](image)

The growth rate of labour productivity in Croatia is characterized by relatively high volatility. This is also characteristic for knowledge intensive sectors, which are generally regarded as facilitators of innovation. Negative or low levels of labour productivity growth rate in knowledge intensive sectors in the period 2009–2013 (with the exception of 2012) were most likely caused by the negative economic environment, while the spike in 2014 owes probably to increased exports, due to Croatia’s accession to the EU. The negative growth rates observed in the period 2015-2016 were most likely caused by an increasing labour force and working hours which grew more intensely than the economic output.

According to Eurostat data for 2016 on apparent labour productivity in knowledge-intensive sectors, measured in terms of gross added value per person employed, the highest levels of productivity were recorded in telecommunications (€84,200 per person employed), followed by manufacture of basic pharmaceutical products and pharmaceutical preparations (€61,900 per person employed), and air transport (€38,600 per person employed).
2 Firm size distribution and sectoral labour productivity

Apparent labour productivity in a representative aggregate of the market economy in Croatia was 30.8% below the EU28 figure in 2016. This difference is the result of lower intrinsic productivity levels than peers, whereas a small positive sectoral composition effect is compensated by a negative firm size distribution effect of a similar magnitude (-1.5 percentage points, pp).

On a sectoral basis, the impact of size distribution on productivity is rather heterogeneous. While having a positive contribution in a few economic activities, particularly in construction activities (NACE section F), the opposite happens for some service sectors, such as information and communication (J), and professional activities (M).

The most noticeable case is accommodation and food services (I), for which the negative firm size distribution effect – with a higher employment share than the EU benchmark in smaller firms – is widely offset by higher intrinsic productivity levels than peers across firm size classes.

On a dynamic perspective, recent developments (2012-2016) suggest an aggregate negligible contribution of firm size distribution (-0.3 pp) to strong productivity growth (20.5%). On a sectoral basis, the most noticeable exceptions are information and communication, and professional activities – two of the activities aforementioned as having a larger gap relative to the EU28. In both cases, the negative size distribution effects fully compensated pure productivity gains.

---

1 C: Manufacturing; F: Construction; G: Wholesale and retail trade; repair of motor vehicles and motorcycles; H: Transportation and storage; I: Accommodation and food service activities; J: Information and communication; M: Professional, scientific and technical activities; N: Administrative and support service activities.
3 Role of firm demography in productivity growth

Figure 4. HR – Entry rates in business services (without sole proprietors).

Figure 5. HR – Entry rates for firms with at least 10 employees in business services, percentages.

The entry rate (without sole proprietorships) in services was above EU average in Croatia in 2017 (11.8% versus 9.2%). The level of entry rate is also well above the average of EU countries for larger-than-micro firms (3.1% versus 1.5%), a segment of the corporate sector where entry rates are shown to be relevant for aggregate productivity growth. Thus entry does not seem to be an impediment to productivity growth in Croatia.

4 Policies for addressing low productivity growth

In Croatia there exist several strategies and national policies which address the productivity growth are. The main programmes include:

- Three strategies which serve as sub-strategies of the Smart Specialisation Strategy (S3 Strategy) - such as the Industrial Strategy of the Republic of Croatia 2014–2020, Strategy for Fostering Innovation of the Republic of Croatia 2014–2020 and Strategy of Education, Science and

---

Technology\(^5\). Each of these focuses on different areas of the economy and serves as a basis for the development of the S3 Strategy.

- The **Entrepreneurship Development Strategy\(^6\)** of the Republic of Croatia 2013 – 2020 sets measures to increase the competitiveness of small economy in Croatia within five strategic goals:
  - Improving the economic performance;
  - Improving access to finance;
  - Promotion of entrepreneurship;
  - Improving entrepreneurial skills;
  - Improving the business environment.

- The **Investment Promotion Act** (OG 102/15, 25/18, 114/18) regulates granting of state aid to encourage investment, with the goal to foster economic growth and realisation of the Croatian economic policy, its involvement in international exchange flows and increasing the investment ability and competitiveness of the Croatian entrepreneurship.

While all of the above strategies set important priorities and measures for the development of different economic areas, it is the Operational Programme Competitiveness and Cohesion 2014 – 20207 (OPCC) that has the strongest impact on enhancing the productivity of Croatian firms, especially in the case of innovative and knowledge-intensive sectors, due to the fact that, all major initiatives for increasing competitiveness and overall business environment involve ESIF funds. However, a large share of these funds remains underutilised, and further efforts are necessary to increase the absorption of the EU funds for Croatian investments. Some improvements have been made in the direction of enhancing the business environment, but additional actions are necessary to efficiently boost productivity growth (e.g. additional decrease of administrative and financial burdens of doing business, reducing the negative impact of NPLs, etc.). Evaluation culture should also be strengthened to enable timely identification of efficiency of different policies and measures, as well as their improvements and adaptation to changes in the environment.

---


\(^7\) [https://strukturnifondovi.hr/wp-content/uploads/2017/03/OPKK_eng_1.pdf](https://strukturnifondovi.hr/wp-content/uploads/2017/03/OPKK_eng_1.pdf)
The European Commission's science and knowledge service
Joint Research Centre

JRC Mission
As the science and knowledge service of the European Commission, the Joint Research Centre’s mission is to support EU policies with independent evidence throughout the whole policy cycle.