



Sources of growth

How do capital, labour and technical progress contribute to growth? The EUKLEMS database of the Federal Planning Bureau provides an answer to this question.

Three ingredients for growth: capital, labour and technical progress

Economic growth depends on production factors, capital and labour, and technical progress. It is influenced by both the quantity and the quality of the production factors used:

- The increase in invested capital or the installation of new equipment that integrates new technologies, such as *information and communication technologies (ICT)*, (embodied technical progress) is in principal conducive to growth.
- When *the hours worked* increase or when *workers' characteristics* change (qualifications, gender, age), this also has a positive impact on growth.
- Finally, improved efficiency with which labour and capital are combined in the production process can also support growth. This last element, called *total factor productivity (TFP)*, includes organisational and process innovations in a broad sense.

Over the 2000-2018 period, the value added growth was mainly explained by the contribution of capital and, more specifically, non-ICT capital (buildings, equipment, infrastructure). The increase in hours worked explains another large part of the value added growth. Improvements in total factor productivity and in the combination of workers' characteristics only marginally contributed to value added growth.

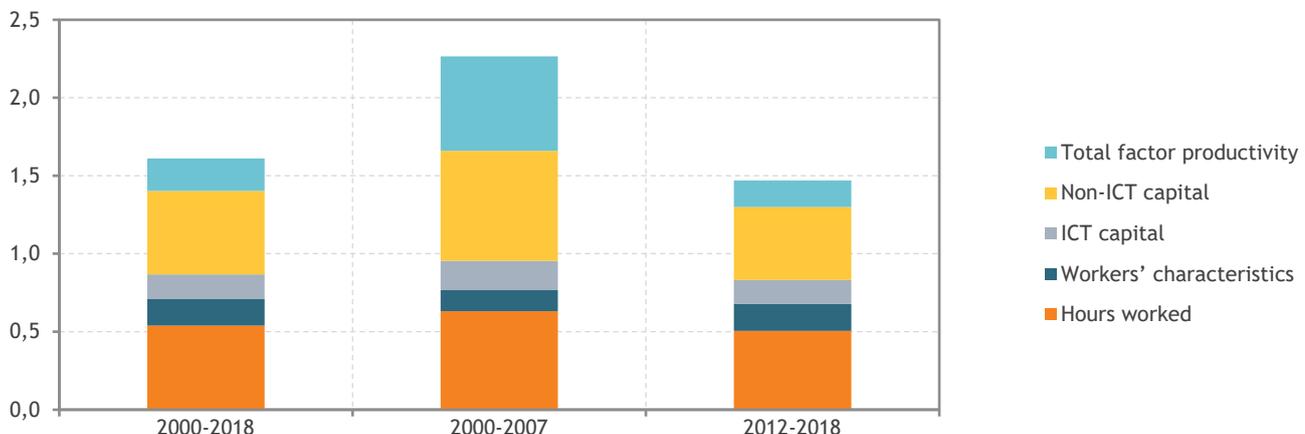
Slowdown in Belgian growth: decrease in the contribution of capital and technical progress

Growth fell sharply after the financial and economic crisis of 2008.

What happened to the contributions?

The contributions of TFP and capital, especially non-ICT, substantially decreased. The contribution of the hours worked decreased to a more limited extent. The hours worked increased, but at a slower pace than before the crisis. The contribution of improved workers' qualifications was not impacted by the crisis and even increased.

Contributions to value added growth of the total economy
In %



Source: EUKLEMS database, file Belgium_Growth accounting_June2020, <https://www.plan.be/databases/data-24-en-euklems+databank>