

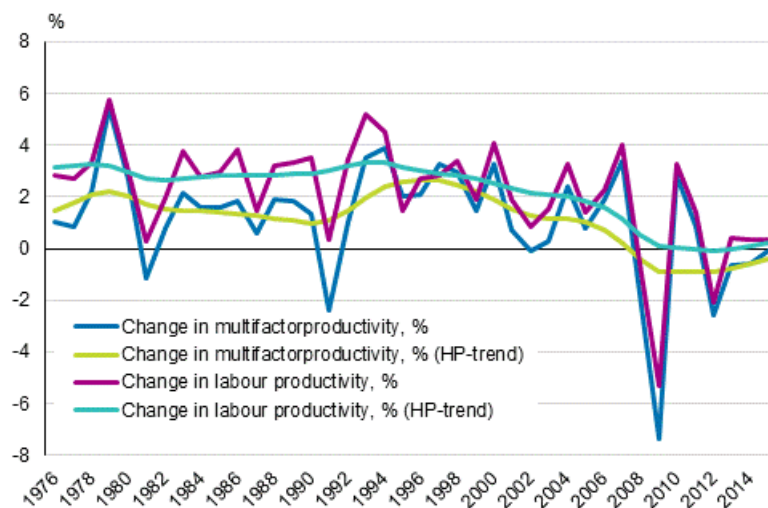
Productivity surveys 2015

Development of productivity in the national economy in 1976 to 2015

Productivity surveys that are based on volume change in the value added calculate the changes in total productivity and labour productivity in the national economy. Labour productivity consists of capital intensity, the contribution of labour composition and total productivity. Total productivity in turn is generated when the contributions of labour composition and capital input are subtracted from the value added. In connection with this year's publication, the contributions of various components of the capital inputs are reported in addition to the data from previous years. The contributions have been separately calculated for ICT and R&D assets, machinery and equipment, residential buildings and other capital resources. The data can be found in Statistic Finland's database tables.

After three years of decline, the change in the volume of value added based on the preliminary data of the national accounts made a slightly positive turn in 2015, amounting to 0.1 per cent. The average change in the volume of value added in 2012 to 2014 was -1.3 per cent. Based on preliminary national accounts data, the growth rate of labour productivity in the whole national economy was 0.3 per cent in 2015 and 0.3 per cent in 2014. The change in total productivity of the national economy was -0.1 per cent in 2015 having been -0.6 per cent in 2014.

Development of productivity in the whole national economy 1976 to 2015, %



The Hodrick-Prescott filtered long-term growth trend indicates that the pace of growth in labour productivity has slowed down strongly in the whole national economy since the mid-1990s from good three per cent to 0.3 per cent in 2015. Although the annual growth rates for individual years (2000, 2004, 2007 and 2010) have been around three to four per cent, the trend in labour productivity has been declining continuously since the mid-1990s. Since 2008, the change percentages in labour productivity have been very close to zero. The drop in labour productivity after the mid-1990s has been affected in particular by the steep decline in total productivity. During the period in question, the effect of the contribution of labour composition on labour productivity has been minor and the effect of capital intensity has been clearly positive. During 1995 to 1999, the effect of capital intensity was still on average zero, while in the 2000s the average contribution has been 0.7 percentage points.

The Hodrick-Prescott filtered long-term growth trend for total productivity shows that the average annual growth of total productivity was around one to two per cent in 1976 to 1990. In the first half of the 1990s, total productivity grew clearly and was at its highest at over 2.5 per cent in the mid-1990s. After 2000, the growth trend of total productivity has made a clear downturn. The average growth rate of total productivity in 2000 to 2007 was still 1.6 per cent after which the average annual change in total productivity has been -1.2 per cent in 2008 to 2015.

The contribution of labour composition to value added growth was strongest during the first half of the 1990s, on average, 0.7 percentage points per year in 1990 to 1994. After this, the contribution of labour composition has been minor. The average contribution has been 0.1 percentage points in 1995 to 1999, in 2000 to 2007 and in 2008 to 2015.

The effect of the contribution of capital input to value added growth was, on average, 1.1 percentage points per year in 1976 to 1990. In the 1990s the effect decreased to an average of around 0.5 percentage points per year. In 2000 to 2007 the average contribution of capital input was 1.0 per cent and in 2008 to 2015 the average contribution was 0.5 per cent, which corresponds to the average annual change of the 1990s.

The contribution of hours worked on the change in value added decreased heavily during the recession in the 1990s. In 1991 to 1994, the average annual change was -3.1 percentage points. In 1995 to 2007, the average annual change in hours worked was 0.9 percentage points. During 2008 to 2015, the average annual change in hours worked again turned negative to -0.3 percentage points.

The table shows the average annual growth percentages of total productivity and labour productivity in different time periods. In addition, the table shows capital input, hours worked and labour composition contributions to value added growth, as well as capital intensity change and labour composition change contributions to labour productivity growth.

Average growths of productivity in the whole national economy, 1976 to 2015*

	1976-1989	1990-1994	1995-1999	2000-2007	2008-2015	2015 ¹⁾
Value added volume, change, %	3.4	-0.7	4.7	3.4	-0.9	0.1
Contribution of total capital input, %	1.1	0.3	0.8	1.0	0.5	0.3
Contribution of hours worked, %	0.3	-3.1	1.4	0.6	-0.3	-0.1
Contribution of labour composition, %	0.3	0.7	0.1	0.1	0.1	0.0
Contribution of Multifactor productivity, %	1.7	1.5	2.3	1.6	-1.2	-0.1
Contribution of Total capital intensity, %	1.0	1.3	0.0	0.7	0.8	0.4
Change of labour productivity, %	2.9	3.4	2.5	2.4	-0.3	0.3

1) The figures concerning 2014 and 2015 are based on preliminary data.

The productivity indicators presented in these statistics are based on the KLEMS method and on the same raw data as EUKLEMS. Further information can be found in the methodological description of the statistics.

Contents

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Source: Productivity surveys 2015, Statistics Finland.