



# **BANK OF FINLAND BULLETIN**

**BANK OF FINLAND ARTICLES ON THE ECONOMY**

# Table of Contents

---

Alternative scenario: What if growth in exports and productivity were actually higher?	3
--	---

---

## ALTERNATIVE SCENARIO

---

# What if growth in exports and productivity were actually higher?

YESTERDAY 3:00 PM • BANK OF FINLAND BULLETIN 3/2017 • ECONOMIC OUTLOOK

Finland's export performance has been weak in the 2010s and has lagged behind growth in the export markets. Structural change in manufacturing, subdued demand for capital goods and intermediate goods in the global economy and the geographical composition of Finnish exports have weakened the trend in exports in structural terms. In addition, as investment in new products and production capacity remained low in the recession that followed the financial crisis and costs rose at a rapid pace, Finland's cost-competitiveness weakened notably.



## In the immediate years ahead, export growth may surprise on the upside

Overall, the trend in Finnish exports has been fairly sluggish since the drop witnessed in 2009. The weakness of exports in recent years is illustrated by the fact that the volume of exports in 2016 was only some EUR 3 billion larger than in 2010. As a result of subdued developments in the export sector and the protracted recession, Finland's current account has turned negative. The situation has been facilitated by the fact that economic growth has been based on brisk domestic demand, which has boosted imports. Both household and general government debt levels have been rising rapidly.

Moderate performance on the export markets combined with strong domestic private demand and the significant imported inputs required by exports have sustained the

weakness in net exports. Exports have, however, started to pick up slowly since 2015. The favourable trend in exports continued in 2016, reflecting the gradual improvement in the outlook for the international economy and the pick-up in global trade. Export growth remained strong in early 2017.

The accommodative stance of monetary policy will boost the recovery in investment demand both in the euro area and globally. The acceleration in exports has also been supported by the moderate developments in costs in recent years. In the immediate years ahead, export growth may therefore be significantly higher than envisaged in the baseline forecast. Particularly in the short term, and on the basis of recent actual performance, export growth is subject to a notable upside risk.

This alternative scenario assesses the effects of exports on the Finnish economy in a situation where export growth is considerably higher than in the baseline forecast. In the scenario, export growth accelerates considerably and exceeds the growth rate in the export markets. The downward trend in export market share comes to an end and Finnish exports gain market share. The alternative scenario has been prepared using the Bank of Finland's dynamic general equilibrium model (Aino) and covers the years 2017–2019.

Export growth may pick up if firms operating in the export sector manage to increase their market share. A favourable trend in market share, in turn, may be the result of a number of factors. The improvements in Finland's cost-competitiveness may support these developments. Export demand may also begin to favour the composition of Finnish goods exports if global demand for capital goods and intermediate goods strengthens further.

Brisk growth in exports has historically been linked also with rapid improvements in productivity. The increasing importance of the export sector to the economy has been accompanied by a pick-up in productivity growth. The opening of new export markets boosts companies' production outlook and profit expectations, which may encourage investment. Investment in research and development and new means of production, in turn, improve corporate productivity. The alternative scenario thus assumes that an increase in export market share is accompanied by slightly higher productivity growth compared with the baseline scenario.

## **Increase in market share makes the structure of the economy healthier**

The alternative scenario assumes a stable and higher growth in both export market share and productivity in 2017–2019 compared with the baseline. At the same time, however, growth in the export markets is assumed to remain as foreseen in the baseline. This means that export countries important for Finland do not increase their volume of total imports, but goods and services provided by Finnish export companies better meet demand in export countries. The scenario envisages that the trend in costs and earnings is determined based on the dynamics of the model.

The increase in export market share is by nature a positive shock to demand, which typically pushes up costs and prices. In contrast, higher productivity boosts supply by increasing the efficiency of production. This, in turn initially slows the rise in costs and prices. However, stronger export demand gradually begins to push up costs and prices, despite the pick-up in productivity growth. The alternative scenario assesses two separate factors and their combined effect on the Finnish economy: higher than expected growth in export demand and in productivity compared with the baseline scenario.

The alternative scenario envisages exports starting to grow as a result of increased market share. Export growth is on average 2 percentage points higher than the baseline, and notably stronger than growth in the export markets (Chart 2). The export volume envisaged in the scenario for 2019 is nearly EUR 5 billion larger (Table 1). Both in the alternative scenario and the baseline scenario, export growth is supported by improvements in cost-competitiveness. Given that not only domestic inputs but also imported goods are used in export production, imports also grow. However, growth in net exports accelerates notably.

The stronger export and productivity performance gradually start to boost investment, too. Greater aggregate demand leads to higher demand for labour input, and wages begin to edge up. Improved productivity, however, dampens wage growth, as the same volume of production now requires a smaller labour input. The pace of rise in real wages remains initially slow, while at the same time productivity growth moderates the increase in hours worked. The rise in real wages is dampened by the slow response of nominal wages to changes in export demand.

However, total hours worked increases, reflecting the pick-up in output. Growth in private consumption also accelerates gradually, albeit at a moderate pace.<sup>[1]</sup> The structure of the economy becomes more sustainable: the share of exports in GDP increases and the historically large share of consumption decreases slightly.

## Strong export growth will not resolve fiscal problems

Overall, the composition of GDP growth is gradually shifting towards exports. The alternative scenario foresees GDP growth that is, on average, 0.5 percentage points higher than the baseline (Chart 1). Overall, GDP is 1.5% higher in 2019. In other words, GDP volume is more than EUR 3 billion higher than the baseline.

The rise in prices and costs remains moderate in the scenario, as a result of higher growth in productivity. The imbalances in the economy begin to fade over time, amid an increase in income and moderate private consumption, accompanied by slow inflation. The household savings ratio rises and the current account deficit gradually melts.

Without the assumption of a pick-up in productivity growth, favourable export performance would boost the upward trend in domestic prices and the effect of changes

---

1. The scenario probably underestimates the growth in private consumption to some extent, because for technical reasons the Aino model does not include 'hand-to-mouth consumers'.

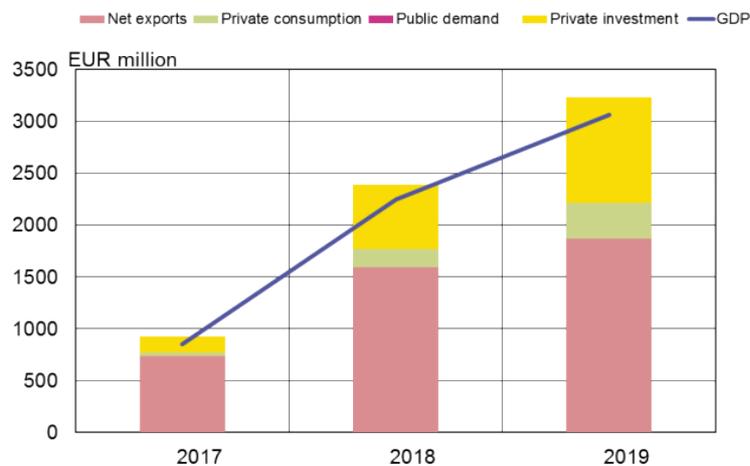
in demand on the real economy would remain very small. This reflects the sensitivity of Finnish inflation to external demand shocks. It should also be stressed that a more favourable trend in exports than envisaged in the forecast is conditional on wage moderation. Higher growth in wages would weaken cost-competitiveness and thus cut part of the increase in wellbeing resulting from the pick-up in export growth.

Despite the upturn in exports, and even if exports were to grow in the immediate years ahead as assumed in the alternative scenario, i.e. at a notably higher rate than the baseline, this would not suffice to resolve the fiscal sustainability problems. The alternative scenario envisages that the general government deficit remains considerable and that the debt ratio grows at broadly the same pace as in the baseline scenario. In the alternative scenario, general government debt relative to GDP is 65.9% in 2019, i.e. approximately 0.8 percentage points lower than the baseline.

The general government structural deficit remains the same as in the baseline scenario, even though the composition of economic growth becomes healthier as exports serve as the engine of growth. Structural problems thus require the strengthening of supply-side factors in the economy because even a significant temporary improvement in the cyclical situation will not suffice to solve them. In addition, general government expenditure is largely dependent on economic policy decision-making.

Chart 1.

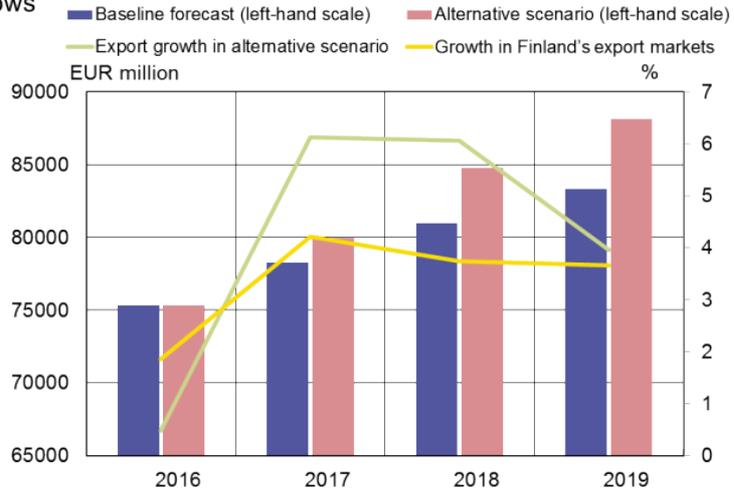
### Contribution of net exports to GDP larger in alternative scenario



Source: Bank of Finland.  
bofbulletin.fi  
13 June 2017

Chart 2.

Developments in exports and export markets when export demand grows



Sources: Statistics Finland and Bank of Finland.  
bofbulletin.fi  
13 June 2017

Table.

---

## Supply and demand 2017–2019 at 2010 prices

		2016	2017	2018	2019	2019 deviation, %
<b>% change on previous year</b>						
GDP	Baseline forecast	1.4	2.1	1.7	1.4	199,571
	Alternative scenario	1.4	2.5	2.4	1.8	202,631
	Deviation	<b>0.0</b>	<b>0.4</b>	<b>0.7</b>	<b>0.4</b>	<b>1.5</b>
Imports	Baseline forecast	2.5	2.7	2.3	2.1	84,778
	Alternative scenario	2.5	3.9	3.8	2.9	87,719
	Deviation	<b>0.0</b>	<b>1.2</b>	<b>1.5</b>	<b>0.8</b>	<b>3.5</b>
Exports	Baseline forecast	0.5	3.9	3.4	2.9	83,326
	Alternative scenario	0.5	6.1	6.1	4.0	88,138
	Deviation	<b>0.0</b>	<b>2.2</b>	<b>2.6</b>	<b>1.1</b>	<b>5.8</b>
Private consumption	Baseline forecast	2.0	1.3	1.3	1.2	110,878
	Alternative scenario	2.0	1.4	1.4	1.4	111,222
	Deviation	<b>0.0</b>	<b>0.0</b>	<b>0.1</b>	<b>0.2</b>	<b>0.3</b>
Private investment	Baseline forecast	6.1	5.2	3.0	2.8	37,444
	Alternative scenario	6.1	5.6	4.3	3.8	38,459
	Deviation	<b>0.0</b>	<b>0.4</b>	<b>1.3</b>	<b>1.0</b>	<b>2.7</b>
Private sector output price	Baseline forecast	0.8	0.5	1.2	1.3	115.1

## Supply and demand 2017–2019 at 2010 prices

	Alternative scenario	0.8	0.4	1.1	1.4	115.1
	Deviation	<b>0.0</b>	<b>-0.1</b>	<b>-0.1</b>	<b>0.1</b>	<b>0.0</b>
Real average wages ( Private consumption deflator)	<i>Baseline forecast</i>	0.1	-1.6	-0.4	0.0	22.2
	<i>Alternative scenario</i>	0.1	-1.6	-0.4	0.2	22.2
	<i>Deviation</i>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.2</b>	<b>0.2</b>
Hours worked	Baseline forecast	1.0	1.0	0.9	0.4	4,241
	Alternative scenario	1.0	1.4	1.4	0.6	4,288
	Deviation	<b>0.0</b>	<b>0.4</b>	<b>0.6</b>	<b>0.2</b>	<b>1.1</b>
Average labour productivity	<i>Baseline forecast</i>	1.0	1.5	1.0	1.0	20.0
	<i>Alternative scenario</i>	1.0	1.7	1.1	1.1	20.1
	<i>Deviation</i>	<b>0.0</b>	<b>0.2</b>	<b>0.1</b>	<b>0.1</b>	<b>0.5</b>
Real disposable household income	Baseline forecast	0.8	2.0	1.0	1.2	27,314
	Alternative scenario	0.8	2.4	1.7	1.6	27,713
	Deviation	<b>0.0</b>	<b>0.4</b>	<b>0.7</b>	<b>0.4</b>	<b>1.5</b>
Current account	Baseline forecast	-1.1	-1.2	-0.9	-0.8	-1,820
	Alternative scenario	-1.1	-0.8	-0.2	0.1	166
	Deviation	<b>0.0</b>	<b>0.3</b>	<b>0.7</b>	<b>0.9</b>	<b>0.9</b>
Household savings ratio	Baseline forecast	-1.9	-1.2	-1.4	-1.5	-1.5
	Alternative scenario	-1.9	-0.8	-0.5	-0.3	-0.3

---

## Supply and demand 2017–2019 at 2010 prices

---

	Deviation	0.0	0.4	0.9	1.2	1.2
General government debt	Baseline forecast	63.6	65.1	66.1	66.8	66.8
	Alternative scenario	63.6	64.9	65.5	65.9	65.9
	Deviation	0.0	-0.2	-0.6	-0.8	-0.8
General government net lending	Baseline forecast	-1.9	-2.4	-2.2	-2.0	-2.0
	Alternative scenario	-1.9	-2.4	-2.1	-1.9	-1.9
	Deviation	0.0	0.0	0.1	0.2	0.2

Source: Bank of Finland.

---

### Tags

- [alternative scenario](#)
- [gross domestic product](#)
- [public finances](#)