



# KOF Bulletin

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# EDITORIAL

Dear readers,

One thing is clear: 2019 is going to be a challenging year for the Swiss economy. KOF has just lowered its forecast for GDP growth from 1.6% to 1%. For the first time, it has calculated the output gap for Switzerland – a measure that reveals the capacity of the economy. The calculation shows that the economy ran at almost full capacity last year, but this could change in 2019. Find out more in the first article. Workers should not expect to be able to afford many luxuries this year. Once price rises have been deducted, they will only see a slight increase in their wages. And this comes after shrinkages in 2017 and 2018. Find out in the second article which further discoveries have been made about wage-setting in Switzerland. In the third article, we shift the focus onto the euro area. The European Central Bank has taken unprecedented measures in recent years to prevent a credit crunch, with the focus on quantitative easing. A recent study by KOF concludes that this has actually benefited SMEs. However, they have not benefited to the same extent in all countries. The fourth article deals with a topic that is currently the subject of heated debate: taxes. KOF researchers have investigated the influence of globalisation on taxation. They show that there have been shifts in recent decades. While the tax burden fell for companies and high earners, it rose for the middle classes.

We hope you enjoy reading this issue!

Franziska Kohler and Anne Stücker

# ECONOMY AND RESEARCH

## KOF Economic Forecast: Swiss Economy Faces Tough Conditions



**KOF has lowered its GDP growth forecast for this year from 1.6% to 1%. This correction is due to the international framework conditions which have deteriorated further in the last few months. In line with the subdued economic outlook, KOF expects the Swiss economy to operate slightly below capacity in 2019.**

For the time being, the strong economic trend recorded by Switzerland in 2017 and early 2018 seems to have come to an end. This is largely due to the international environment, which is currently dominated by uncertainty. Cyclical dynamics in the eurozone are likely to be weak in the first six months of 2019, and the economic slowdown looks set to continue in China. The current value of the KOF Economic Barometer, which predicts the performance of the Swiss economy in the near future, is also below average.

Consequently, KOF has lowered its GDP growth forecast for 2019 from 1.6% to 1% (see T 1). Excluding the effect of licensing income from big international sport events, the respective growth rate for this year declines from 1.8% to 1.3%. At 2.1% (or 1.8% excluding international sport events), projected growth for 2020 remains virtually unchanged from the December forecast.

The weaker international economy also affects export-oriented industrial companies in Switzerland. Industry's contribution to growth will be significantly lower this year and next year than during the boom year 2018. In the course of 2019, GDP growth will be predominantly lower than the potential growth rate; hence, the annual average output gap will be slightly negative.

### **Swiss economy at close to full capacity in 2018**

The output gap measures the deviation of the realised GDP from the estimated macroeconomic production potential. A positive output gap indicates above-average macroeconomic production capacities, while a negative output gap signals a weak phase of the economy.

Several theoretical approaches are used to calculate the output gap. A popular method is the output approach

<b>T 1: Contributions to Real GDP Growth in Switzerland, 2006–2020 (1)</b>						
(In/decrease as a percentage of the previous year's GDP, respectively mean in/decrease as a percentage of the respective previous year's GDP)						
	06-15	2016	2017	2018	2019	2020
Private consumption (nationals concept)	0.9	0.8	0.6	0.6	0.4	0.6
Public consumption	0.2	0.1	0.1	0.1	0.2	0.1
Construction investment	0.1	0.0	0.1	0.1	0.0	0.1
Investment in plant and machinery	0.4	0.8	0.7	0.4	0.0	0.5
Domestic final demand	1.6	1.8	1.5	1.1	0.6	1.3
Inventory change	-	-2.4	0.7	0.2	0.8	0.3
Domestic demand	1.4	-0.1	1.4	1.1	0.9	1.6
Total exports	1.8	3.6	1.9	1.8	0.8	2.9
Total demand	3.2	3.5	3.3	3.0	1.7	4.5
less total imports	1.3	1.9	1.7	0.4	0.8	2.3
<b>GDP</b>	<b>1.9</b>	<b>1.6</b>	<b>1.6</b>	<b>2.5</b>	<b>1.0</b>	<b>2.1</b>
thereof: net exports	0.5	1.7	0.2	1.4	0.1	0.5
Statistical differences from linkage and inventory valuation	-	0.5	-0.8	-0.2	-0.5	0.0
(1) In contrast to the national accounts, this table does not include the non-cyclical exports and imports of valuables, i.e. precious metals (including non-monetary gold), precious stones and gems as well as art objects and antiques.						

employed by the EU Commission (EU method, see box) that is binding for all eurozone member countries. To ensure comparability with the surrounding EU countries, KOF calculates the output gap in accordance with the EU method. The underlying GDP is adjusted for international sport events.

The average annual output gaps recorded by Germany, France, Italy and Switzerland show distinct parallel movements over time (see G 1). For instance, following high production capacity utilisation rates in all four countries in 2008, the financial crisis resulted in a negative output gap in 2009.

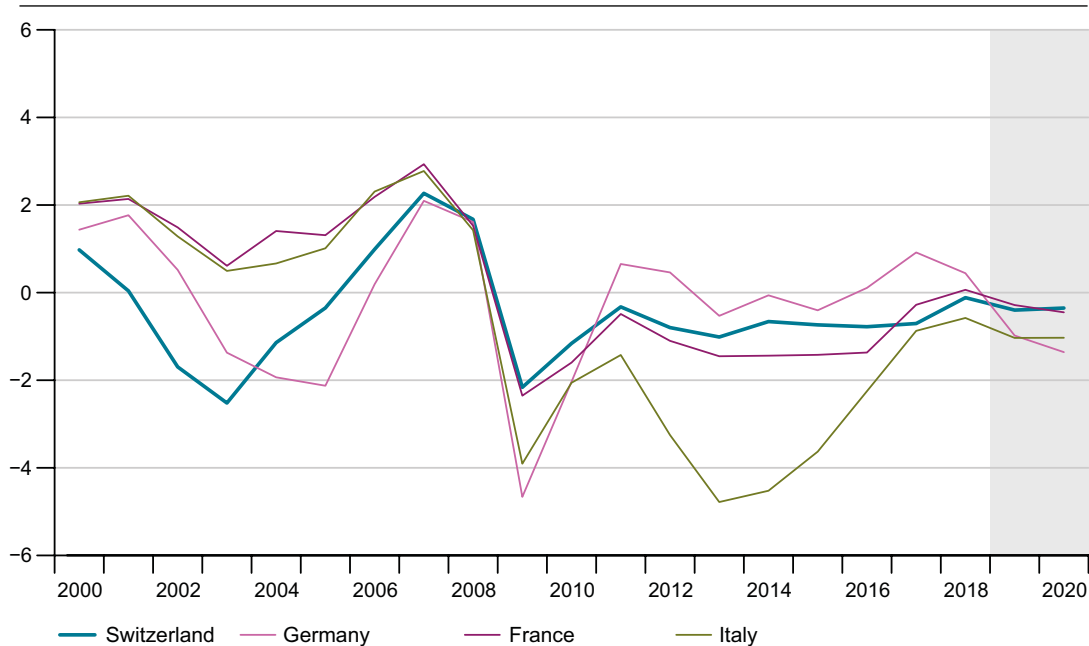
In Switzerland, the output gap, which had been consistently negative since 2009, virtually closed in the past year. Hence, with the macroeconomic output rising faster than the

production potential, the Swiss economy was operating at close to full capacity in 2018. Given that the expansion rate is lower than the potential growth rate, KOF expects the economy to operate slightly below capacity in 2019, owing to the subdued economic outlook. In 2020, the output gap will narrow to some degree.

In international comparison, the Swiss economy will thus operate at a similar capacity utilisation rate as France in 2019 and 2020, while Germany and Italy are in for slightly higher under-utilisation rates. However, any interpretation of these figures must take into account that potential growth rates may differ substantially from country to country. In 2018 for instance, they varied from just under 2% in Germany to 0.5% in Italy. Switzerland's 2018 potential growth rate was 1.6%.

**G 1: Output Gap: EU Method**

(as a percentage of the production potential)

**The EU Method**

According to the EU method, the production potential is broken down into three components: the potential labour volume, the non-financial capital stock and the trend in total factor productivity (TFP). The TFP is calculated as a residual using a Cobb-Douglas production function. It determines the portion of the GDP that cannot be explained by the quantitative use of the labour and capital production factors. With the help of a structural time series model, a cyclical and a trend component can be determined. To this end, an indicator produced from survey data is used which reflects the cyclical capacity utilisation of the production factors. The calculation of the labour volume is based on the number of individuals of working age, the net employment rate, the average annual working hours per employed individual and the unemployment rate.

**Contacts**

Yngve Abrahamsen | abrahamsen@kof.ethz.ch

Sina Streicher | streicher@kof.ethz.ch

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## Five Insights About Wages in Switzerland

**Although the Swiss economy went through a difficult phase in 2015 and 2016, real wages grew relatively substantially during this period, only to drop again in the subsequent two years. This development provides five key insights into wage setting in Switzerland.**

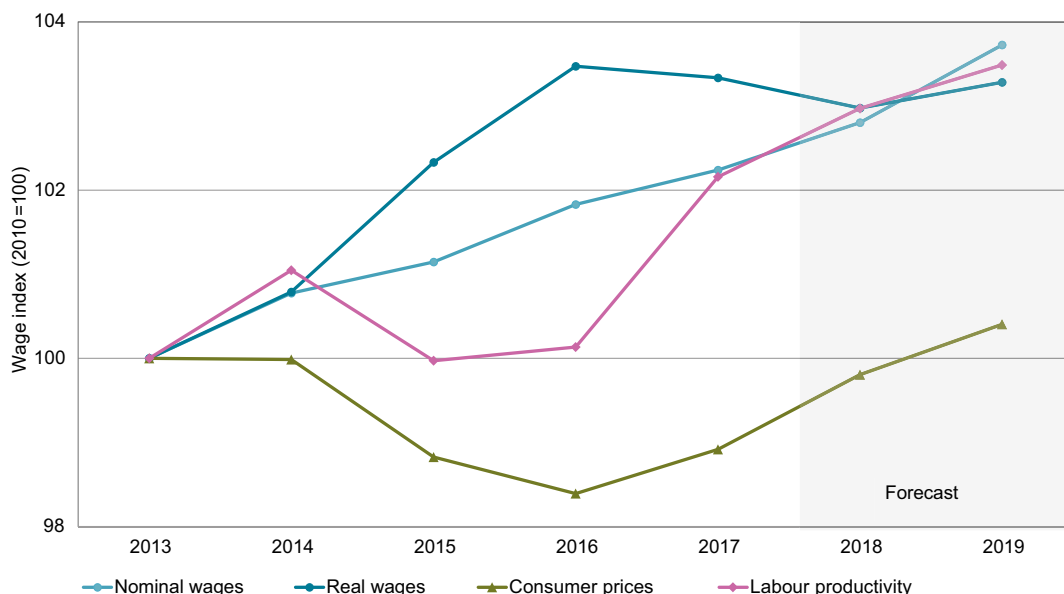
Although wages have declined in the last two years after deduction of inflation, they had been growing rather substantially in the preceding three years. The following graph 2 illustrates this to and fro, showing the development of real and nominal wages, consumer prices according to the National Consumer Price Index (CPI) and labour productivity. All in all, real wages according to the Swiss Wage Index rose by around 3% between 2013 and 2018. Labour productivity recorded a similar gain. This is no coincidence since labour productivity is by far the most important long-term driver of wage growth.

The graph also shows that nominal wages rose rather evenly throughout the four-year period under review, while the trend in real wages was anything but constant. In the years 2015 and 2016, real wages recorded a relatively significant increase, followed by a decline in the two subsequent years. At first glance, this may seem surprising given that neither 2015 nor 2016 were easy years for the Swiss economy due to the Swiss franc shock.

The main reason for the substantial rise in real wages in these years was the unexpected drop in prices in 2015 and 2016. In 2015, for instance, prices of consumer goods in Switzerland came down by more than 1%. The leading cause for the falling prices was the suspension of the minimum exchange rate between the Swiss franc and the euro, which resulted in the Swiss franc shock. Thanks to this revaluation, consumer goods from abroad became much cheaper in Swiss francs. As a result of lower prices, even those wage earners whose contractual wages did not change were able to afford more goods and services.

The tables turned in 2017 when consumer prices started to rise again. Although the business situation of Swiss companies improved gradually, many enterprises had little leeway for wage increases. In order to retain their customers, many exporters did not change their prices in Euro after the Swiss franc shock, although their prices slumped in francs. As a result, costs rose in relation to revenues. Due to lower margins, there was no money for investments

**G 2: Wage, Price and Productivity Trend**



in machinery and R&D. With numerous companies catching up on investments before granting higher wages, few employees received any wage rises in 2017 and 2018. By then, rising prices were once again putting pressure on consumer finances. As a consequence, real wages declined two years in a row. Prospects for wage earners are likely to remain gloomy in the coming year: According to the spring 2019 economic forecast, wages after deduction of inflation are unlikely to rise substantially in 2019.

These observations show that the wage trend in Switzerland was largely dominated by the trend in consumer prices in the last few years. The following graph 3 illustrates that the decline in prices was, in turn, driven by the exchange rate trend.

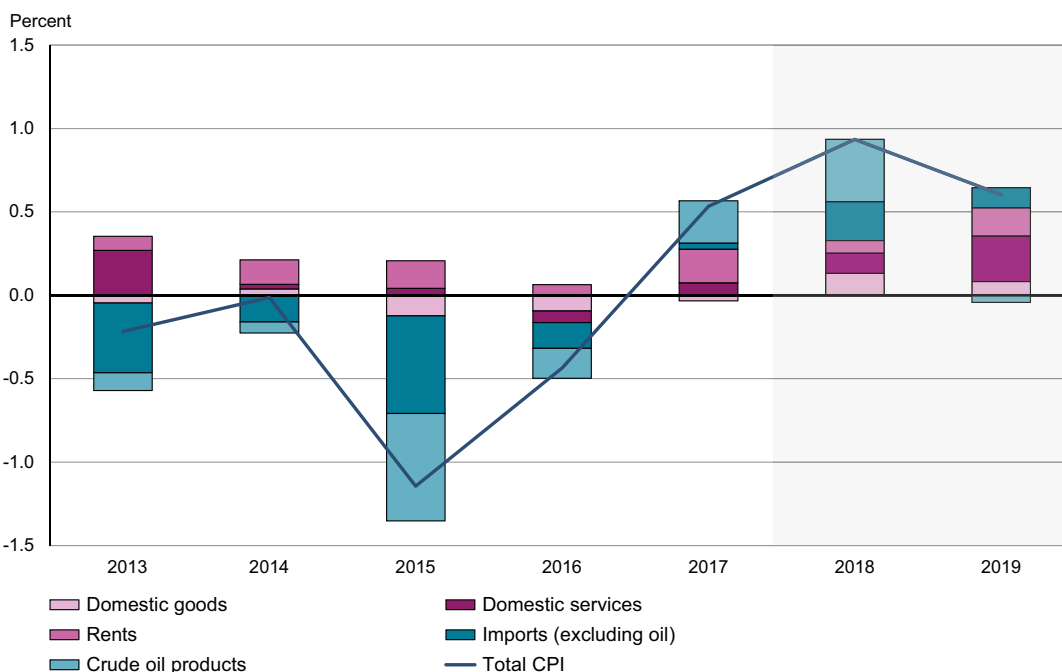
In 2014, the average price level was similar to the year before. However, due to the unexpected suspension of the minimum exchange rate, prices came under pressure in early 2015. Prices of both imported and domestic products declined substantially in 2015. This trend was reinforced by the international commodity price development. Compared to the preceding year, the price of crude oil on the global markets almost dropped by half in 2015. At  $-1.4\%$ , annual inflation dropped to the lowest value of the century in

August 2015. The price level of domestic goods also fell significantly within the space of a year ( $-0.5\%$ ), driven down by rising competition from abroad. Both domestic private and public services and domestic goods became cheaper.

2016 was also dominated by the Swiss economy's adjustment to the Swiss franc revaluation. Although the effects of the revaluation on imported goods started to peter out, increased competition from abroad pushed the entire average domestic inflation rate below zero. This was a new phenomenon in Switzerland. All in all, prices remained  $0.4\%$  below the previous year's level. In early 2017, inflation climbed back above zero. Among other reasons, this was due to a stronger global economic trend and a prolonged stable exchange rate that lost considerable ground in the second half of the year. On top of this, prices of imported goods slowly began to recover and the rising global economic dynamics pushed up the price of crude oil. Hence, the dynamics of the last few years had finally reversed. For the first time since 2010, annual average inflation had climbed above zero again. This trend continued in 2018.

Analysis of the last few years shows that inflation was mostly dominated by two rather unpredictable factors: the price of crude oil and the development of the Swiss franc.

### G 3: Price Trend by Components



Hence, for some wage earners, the 2015 Swiss franc shock practically came as a belated Christmas present as the purchasing power of their wages went up significantly without any effort on their part.

All in all, a lot can be learned from the trend in Swiss wage setting in the last few years. Here are five insights.

### **1. Unexpected changes in consumer prices determine the trend in the wages' purchasing power**

As in other countries, wage negotiations in Switzerland focus on nominal wages, not real wages. It is true that inflation is included in the wage negotiations since unions or employers ask for inflation adjustments. However, if there are surprise changes in prices, as with the Swiss franc shock in 2015, the trend in real wages may deviate substantially from the trend in nominal wages. Hence, the risk of changes in consumer prices is borne by the wage earners.

### **2. Wages are adjusted to past inflation instead of future inflation**

During wage negotiations in Switzerland, wages are predominantly adjusted to past inflation although it would make more sense to link wages primarily with expected rises in consumer prices.

### **3. The reaction of wages to cyclical fluctuations is weak and delayed**

The economic trend affects wage growth in Switzerland, albeit to a moderate degree. The GDP fluctuates much more than nominal wages, which have gone up rather consistently in the last few years despite cyclical fluctuations. One reason for this delay is the fact that wage negotiations in Switzerland usually take place only once a year, in autumn. If an unexpected economic slump occurs thereafter, as in the case of the Swiss franc shock in January 2015, this will not be reflected until the wage agreements of the following autumn. One key exception to this rule are the wages of new employees, which react sooner and more substantially to cyclical fluctuations.

### **4. Nominal wage cuts in Switzerland are minor even in difficult phases**

Companies in Switzerland are very restrained when it comes to lowering the contractual wages of their employees. This was even true after the Swiss franc shock, despite the fact that the latter significantly affected the competitiveness of many companies. This raises the question what actually holds companies back from cutting their employees' wages. One key reason is probably the negative effect of wage cuts on staff morale and the potential departure of top employees.

### **5. In the long run, real wages grow in line with labour productivity**

On a long term basis, wages in Switzerland rise precisely in line with labour productivity. If wages rose faster than labour productivity over a longer period of time, wage earners could secure an ever growing slice of the macroeconomic pie. Nevertheless, in Switzerland, this slice has been surprisingly constant. In the short term, however, the macroeconomic productivity and wage trends may well deviate from each other as during the Swiss franc crisis, when wage earners practically lived above their means – especially in 2015 and 2016.

### **Contacts**

Alexander Rathke | rathke@kof.ethz.ch

Michael Siegenthaler | siegenthaler@kof.ethz.ch

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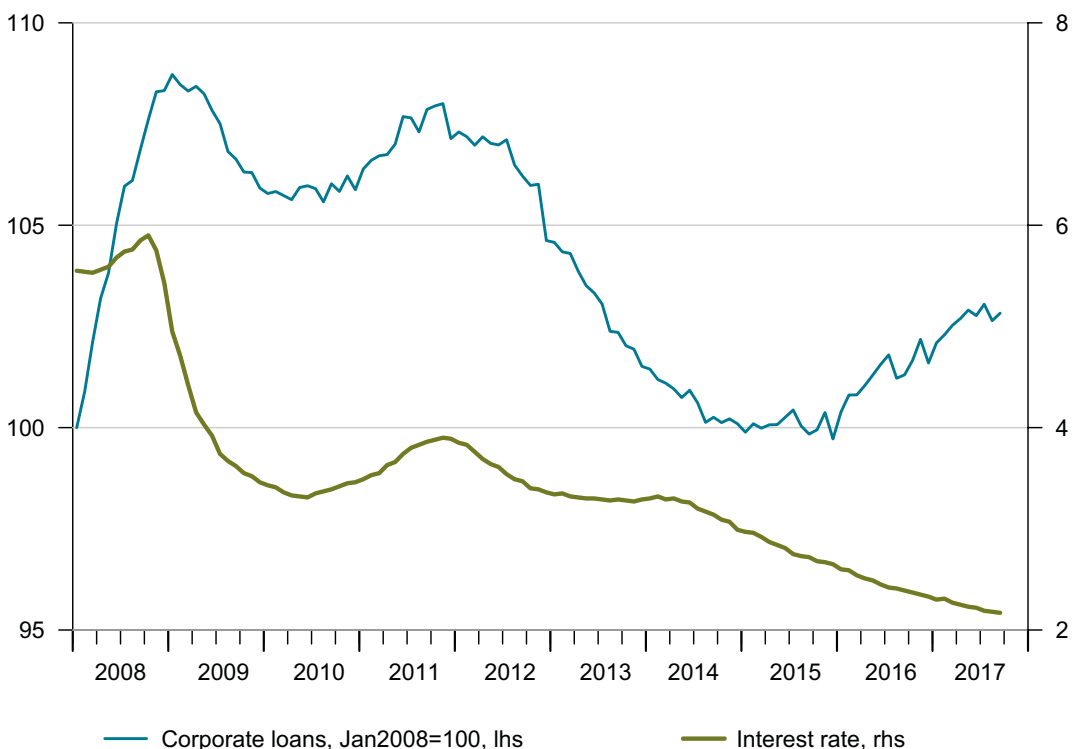
## Quantitative Easing in the Eurozone: Who Benefits?

**After the global financial crisis, lending to companies slowed down considerably in the eurozone. The European Central Bank chose unconventional measures to alleviate the situation. According to a current KOF study, small and medium-sized enterprises have benefited from the ECB's quantitative easing – albeit to different degrees in different countries.**

A few years ago, the deterioration of the European sovereign debt crisis and slow debt reduction by the banks brought the European economy close to a credit crunch. Between 2011 and 2015, the volume of corporate loans slumped despite a massive decline in the key interest rate and hence the interest companies pay on their loans (see G 4). The European Central Bank (ECB) took unprecedented measures in order to preserve the credit channel within its monetary policy, which included, for instance, Targeted Long Term Repurchase Operations (TLTRO).

However, a sustained improvement in the lending situation did not occur before quantitative easing began in the form of the Public Sector Purchase Programme (PSPP) in March 2015 (announced in January 2015). The ECB's Bank Lending Survey (BLS) and Survey on the Access to Finance of Enterprises (SAFE) show that a fundamental improvement of lending conditions did not set in until after 2015. It is not clear whether the ECB's unconventional monetary policy measures, such as the PSPP, also contributed towards the facilitation of financing conditions for small and medium-sized enterprises (SMEs).

**G 4: Corporate Loans in the Eurozone**



The graph shows the volume of corporate loans in the eurozone. The data are taken from the MFI Balance Sheet Statistics. The interest rate represents the interest charged by credit and other institutions for corporate loans (outstanding amounts). The interest is calculated as the annualised agreed interest rate with the original maturity (MFI Interest Rate Statistics, ECB).

- **Targeted Long Term Repurchase Operations (TLTRO):** These are long-term financing options for banks which are offered at attractive terms and are intended to stimulate lending to the real economy.
- **Public Sector Purchase Programme (PSPP):** This is the ECB's large-scale government bond buying programme.

### Difficult access to financing for SMEs

Especially in comparison to the USA, companies in the eurozone are highly dependent on bank loans (see for example Praet, 2016, or Kraemer-Eis et al., 2017). Between 2002 and 2008, non-financial corporations obtained an average of 70% of their financing from banks. In general, SMEs are heavily reliant on bank loans as a source of finance. Most companies in the eurozone are SMEs. They employ more than two-thirds of the labour force and generate around 60% of the value added (Kraemer-Eis et al.,

2017). Their financing conditions therefore play an important role for the economy and monetary policy. However, it is more difficult for SMEs to access financing and they incur higher financing costs than large companies.

Based on SAFE corporate data, a current study conducted by KOF analyses the effects of the ECB bond buying programme on SMEs' access to financial resources. Compared to the existing literature on bank lending, analysis based on these data allows for a focus on SMEs without

### T 2: Effects of PSPP on SMEs' Financing Conditions

	Availability					Restrictions			Interest rate
	Credit line	Bank loan	Commercial loan	Equity	Bond	Credit line	Bank loan	Commercial loan	Credit line
PSPP	0.29***	0.31**	0.39***	0.17	0.23	-0.13**	-0.13*	-0.11**	-0.10***
GDP	0.90**	1.00	1.76***	0.69**	0.91**	-0.66***	-0.31*	-0.31***	0.04
Inflation	-2.73**	-2.91***	-2.22*	-0.93	-4.36*	-0.25	-0.02	0.16	0.06
Rising demand for credit lines	0.03**					0.07***			-0.00
Rising demand for bank loans		0.08***					0.05***		
Rising demand for commercial loans			0.13***					0.05***	
Rising demand for equity				0.24***					
Rising demand for bonds					0.26**				
N	67348	69997	54580	11369	1912	64976	75778	55212	6257

\* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01.

Linear probability model with fixed effects for companies. Standard error clustered at country level. PSPP is determined as the share in the size of the government bond market. GDP and inflation in rates of change. Demand equals one when the company has reported rising demand in the last six months.

### T 3: Effects of PSPP on SMEs' Financing Conditions by Country Group

	Availability					Restrictions			Interest rate
	Credit line	Bank loan	Commercial loan	Equity	Bond	Credit line	Bank loan	Commercial loan	Credit line
PSPP	0.20***	0.19**	0.25***	0.25*	0.31	-0.03	-0.02	-0.03	-0.07***
GDP	0.89**	0.96	1.75***	0.65**	0.91**	-0.65***	-0.281*	-0.30***	0.01
Inflation	-2.75**	-2.95***	-2.25*	-0.92*	-4.39*	-0.23	0.02	0.18	0.18
Rising demand for credit lines		0.08***					0.05***		
Rising demand for bank loans			0.13***					0.05***	
Rising demand for commercial loans	0.03**					0.07***			-0.00
Rising demand for equity				0.24***					
Rising demand for bonds					0.26**				
PSPP periphery	0.25**	0.30*	0.24*	-0.52	-0.16	-0.28***	-0.27***	-0.14	-0.07***
N	67348	69997	54580	11369	1912	64976	75778	55212	6257

\* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01.

Linear probability model with fixed effects for companies. Standard error clustered at country level. PSPP is determined as the share in the size of the government bond market. The reference group is the eurozone core, which comprises Germany, Austria, Belgium, Finland, France and the Netherlands. The periphery comprises Italy, Spain, Ireland, Portugal and Slovakia. The countries are allocated according to their government bond yield level before the introduction of the PSPP. GDP and inflation in rates of change. Demand equals one when the company has reported rising demand in the last six months.



approximating the companies with small-scale loans or small banks. Secondly, it allows for direct comparison between eurozone countries. Thirdly, company characteristics and macroeconomic parameters can be controlled in the credit demand context.

According to the analysis, the ECB's quantitative easing programme has indeed improved SMEs' access to financial resources by raising credit availability, easing financial restrictions and lowering interest rates on credit lines and overdrafts (see T 2). However, the PSPP has had very different effects in the individual countries. SMEs in the eurozone periphery, for instance Italy, Spain or Ireland, have benefited most from the programme (see T 3). The differences are due to bank capitalisation. The PSPP has a bigger impact on financing conditions where banks have low equity ratios since it improves the health of their balance sheets and hence stimulates lending (see for example Acharya et al., 2017, or Gambacorta and Marques-Ibanez, 2011).

These results have important implications for economic policy. Aside from big corporations, SMEs also benefit from the ECB's PSPP. Although the ECB's mandate is to achieve price stability in the eurozone, its policies may have very different effects in the different countries and depending on the economic agent involved. SMEs in the countries that require the most support have so far benefited most from the PSPP.

#### Contact

Anne Kathrin Funk | [funk@kof.ethz.ch](mailto:funk@kof.ethz.ch)

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## Globalisation Shifts Tax Burden onto Middle Class

**Effectively taxing high-income businesses and workers is more difficult because of their global increase in mobility. According to a new study, governments have consequently increased the income tax burden on the middle class. While, at the same time, the tax burden on top earners and businesses decreased.**

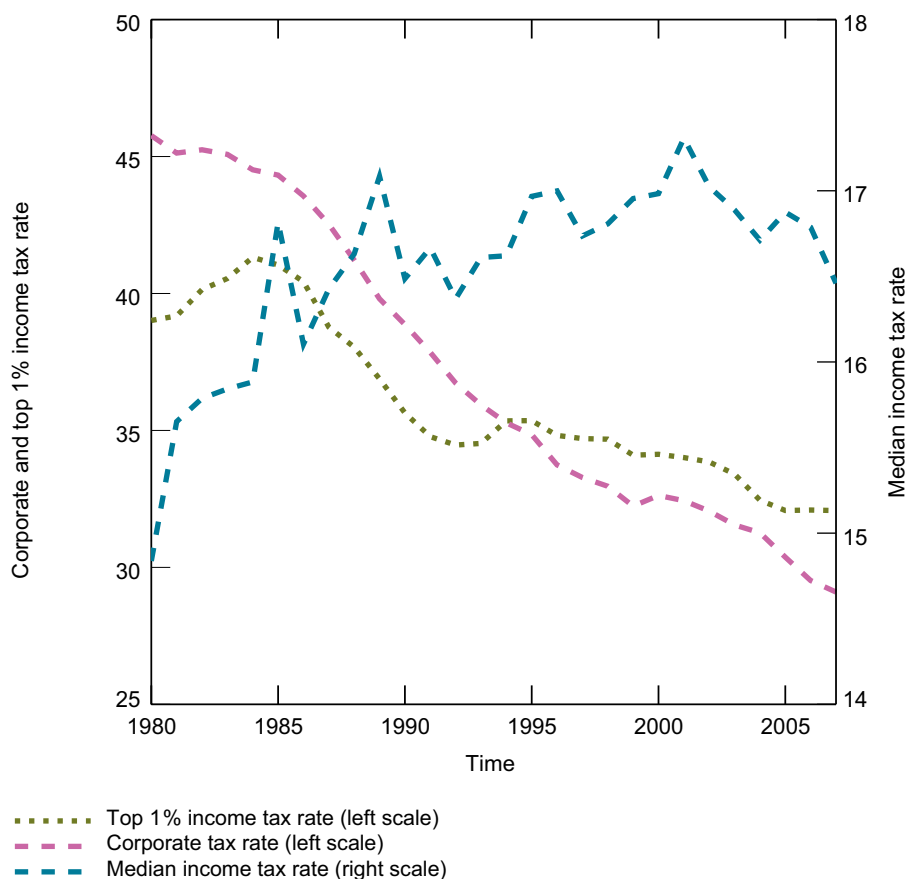
Economists have long known that increasing globalisation would lead to considerable, but unequally distributed profits. This is due to heterogeneous effects on employment, wages and prices. For example, the disappearance of trade barriers in certain industries and labour markets can have negative effects on employment.

Globalisation-induced inequality could theoretically be alleviated by domestic policy. However, this would require a mechanism for redistributing profits to compensate those

disadvantaged by globalisation. The defensive reactions to increasing globalisation in many places suggest that redistribution mechanisms of this kind are non-existent or ineffective in many cases.

The most obvious and frequently used instrument for such redistribution is income tax. Higher income tax could therefore be expected to go hand in hand with increasing globalisation, in order to impose relatively higher taxation on people with higher incomes. However, a new study by

**G 5: Average Corporate and Income Taxes for Employees in the Median and Upper Percentile**



Source: American Economic Review

Peter Egger, Sergey Nigai and Nora Strecker shows that, since the mid-1990s, the effect has been the opposite. The top 5% of earners experienced a reduction in their relative tax burden, which increasingly shifted to employees in the middle and upper middle income brackets.

### **Mobility reduces effectiveness of taxes**

Graph 5 shows how tax rates for businesses and incomes have changed in the 65 largest national economies between 1980 and 2007. Average corporation tax rates (red line) have fallen steadily during the period examined. This result illustrates what is known as the ‘race to the bottom’: It shows how tax competition between different locations results in falling corporation tax rates in all locations. Interestingly, graph 5 also shows that the richest wage earners experienced similar tax competition – their average rate of income tax has also fallen steadily since the 1980s. By contrast, the average tax rate for employees in the median increased steadily during the same period.

Why was the tax impact on people in the middle of wage distribution so different to firms and high earners? The answer could lie in globalisation itself. Lower trade and migration barriers enable businesses and highly paid employees to be very mobile. This mobility influences the extent to which governments can collect tax revenues from these actors, before they move away for tax reasons. This mobility therefore severely restricts the effectiveness of taxation in a globalised world.

Similarly, lower effective tax rates are a significant factor in attracting foreign firms and a highly qualified workforce. Employees in the middle of income distribution, on the other hand, are much less mobile. This can be because their qualifications do not easily transfer across borders, or because they do not have the means to move for tax reasons. This limited mobility could be the reason why governments across the world have started to rely more on middle class workers to stabilise their tax base.

### **Coordination of taxation as a possible solution**

Peter Egger, Sergey Nigai and Nora Strecker estimate that the top 1% of earners in OECD (Organisation for Economic Cooperation and Development) countries experienced, on average, a reduction in their relative income tax burden of 0.59 to 1.45 percentage points between 1994 and 2007, because of growing globalisation. The relative tax burden on the middle classes, on the other hand, rose by 0.03 to 0.05 percentage points. This indicates that the globalisation-induced change in tax progressivity has increased, and not reduced, net inequality. With the growing mobility of large enterprises and highly qualified employees, this process will probably continue.

A survey by Pew Research Center, conducted in 2014, revealed that around 60% of respondents saw inequality as a major challenge, and progressive taxation as a way of tackling this growing problem. However, in a globalised world, the solution cannot lie in unilaterally increasing marginal rates of tax, because, as long as tax competition for highly productive employees and companies exists, it is extremely difficult for countries to unilaterally tackle inequality with progressive taxes. One possible solution could be harmonisation and coordination on international income taxation. Although this is already a topic for taxes on capital, there is little discussion about international coordination of income tax. Examination of the costs and benefits of this kind of multi-lateral coordination might be worthwhile.

### **Contact**

Nora Strecker | strecker@kof.ethz.ch

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# KOF INDICATORS

## KOF Business Situation: Uncomfortable Situation for Companies

**In March, the KOF Business Situation Indicator for the Swiss private sector fell for the fourth time in succession (see G 6). After only a slight decline of the indicator in the previous month, the negative trend has now intensified again. As a result, the business situation of companies is currently less favourable than at the same time last year. The Swiss economy is cooling down.**

The business situation indicator is declining almost unanimously across all industries. In the manufacturing sector it is falling for the fourth time in succession (see T 4). For the second month in a row, the retail trade has recorded a clear minus. The situation is also deteriorating for financial and insurance service providers. In the construction industry, the indicator is falling as well, although it had risen even more sharply in the previous month. The project engineering sector is the only branche of the economy that is bucking the negative trend; the business situation is improving here. Wholesale, hospitality and other service providers

were last surveyed in January. At the time, the business situation cooled in all three economic sectors.

From a regional perspective, the development of the indicator in March was mostly unfavourable (see G 7). The business situation deteriorated in the Zurich, Central Switzerland, Eastern Switzerland and Espace Mittelland regions. It is almost unchanged in Ticino, with a slight improvement in northwestern Switzerland and the Lake Geneva region.

**G 6: KOF Business Situation Indicator**  
(Balance, seasonally adjusted)



**T 4: KOF Business Situation for Switzerland (seasonally adjusted balances)**

	Mar 18	Apr 18	May 18	Jun 18	Jul 18	Aug 18	Sep 18	Oct 18	Nov 18	Dec 18	Jan 19	Feb 19	Mar 19
<b>Private sector (overall)</b>	26.8	26.3	28.3	27.2	29.1	28.8	28.5	27.9	29.0	28.2	25.9	25.6	24.5
<b>Manufacturing</b>	22.8	21.3	27.3	24.6	27.3	28.6	26.0	22.2	26.6	25.9	23.2	21.8	21.2
<b>Construction</b>	27.5	30.2	29.8	28.8	29.2	27.6	27.7	29.5	28.5	28.5	27.0	29.1	28.5
<b>Project engineering</b>	49.4	47.8	46.7	46.8	45.3	46.6	45.8	46.3	45.1	46.0	46.9	49.6	51.7
<b>Retail trade</b>	6.3	0.1	7.9	7.7	10.2	7.9	9.3	6.2	7.8	6.0	5.9	2.4	-3.0
<b>Wholesale trade</b>	-	27.0	-	-	32.8	-	-	33.5	-	-	27.4	-	-
<b>Financial services</b>	41.6	41.8	42.8	39.9	41.4	38.9	40.4	40.9	41.1	37.3	35.2	35.1	30.8
<b>Hotel and catering</b>	-	5.2	-	-	8.3	-	-	9.4	-	-	6.8	-	-
<b>Other services</b>	-	27.3	-	-	27.3	-	-	28.1	-	-	26.9	-	-

Answers to the question: We assess our business situation as good/satisfactory/bad. The balance is the percentage of 'good' answers minus the percentage of 'bad' answers.

### Explanation of graphs:

Graph G 6 presents the KOF business situation across all sectors covered by the survey. The business situation in sectors which are surveyed on a quarterly basis is kept constant during the intervening months.

### G 7: KOF Business Situation in the Private Sector



The angle of the arrows reflects the change in the business situation compared to the previous month

Source: KOF

#### Net balances

■ 55 to 100	■ 30 to under 55	■ 16.5 to under 30
■ 9 to under 16.5	■ 5 to under 9	■ -5 to under 5
■ -9 to under -5	■ -16.5 to under -9	■ -30 to under -16.5
■ -55 to under -30	■ -100 to under -55	

Graph G 7 presents the business situation in the main regions pursuant to the Federal Statistical Office (FSO). The regions are coloured according to business situation. The arrows in the regions indicate the change in the business situation compared to the previous month. An upward-pointing arrow, for instance, indicates that the situation has improved over the previous month.

The KOF business situation is based on over 4,500 reports by Swiss companies. Every month, businesses are surveyed in the following sectors: industry, retail trade, construction and project engineering as well as financial and insurance services. Businesses in the hotel and catering sector, wholesalers and the other service providers are surveyed in the first month of every quarter. Among other questions, the businesses are asked to assess their current business situation. They may rate their situation as 'good', 'satisfactory' or 'bad'. The balance of the current business situation is the percentage difference between the 'good' and 'bad' responses.

### Contact

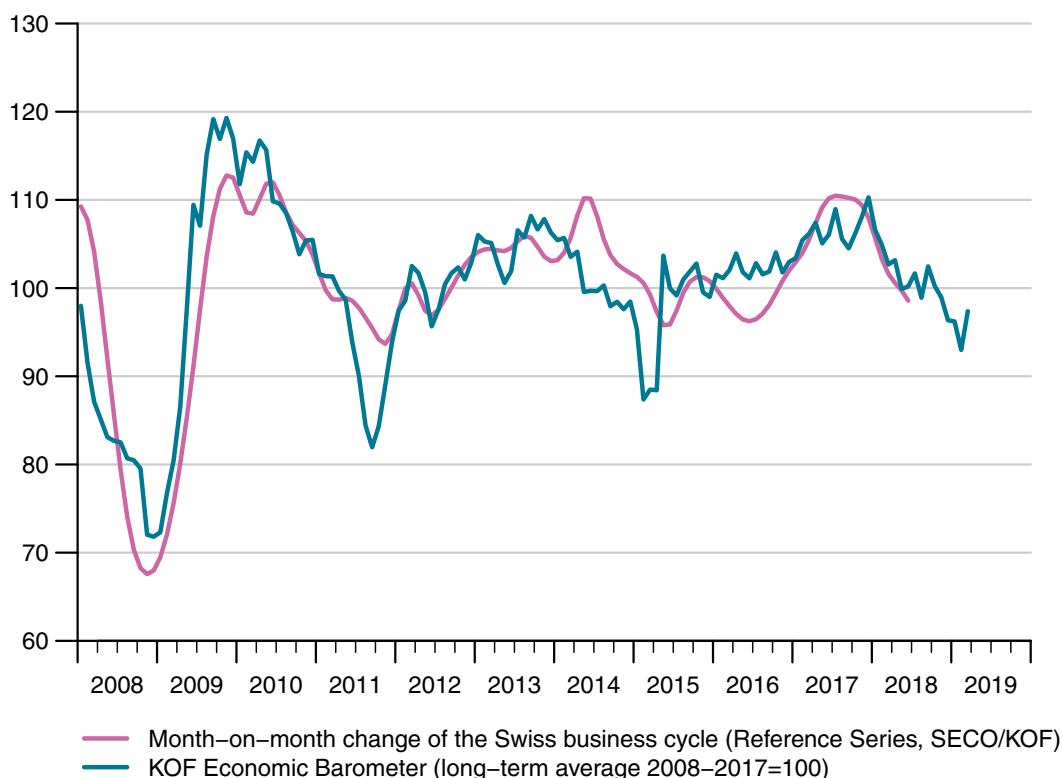
Klaus Abberger | abberger@kof.ethz.ch

You can find more information about the KOF Business Tendency Surveys on our website:  
[www.kof.ethz.ch](http://www.kof.ethz.ch) →

## KOF Economic Barometer : Economic Barometer Halts its Drop

In March 2019, the KOF Economic Barometer rose and reached a reading of 97.4 (see G 8). The recent downward tendency has at least for the time being ended. However, as the current barometer reading is still markedly below its average, in the coming months the Swiss economy can expect to experience rather weak growth rates.

G 8: KOF Economic Barometer and Reference Series



By the end of March, the KOF Economic Barometer rose from 93.0 (revised from 92.4) by 4.4 points to 97.4. This is predominantly due to positive impulses from the manufacturing industry. However, the recovery also extended to the other components of the barometer.

The positive tendency within the manufacturing industry is mostly driven by the electrical industry, followed by the metal industry, mechanical engineering and the textile industry.

In the goods producing sector (manufacturing and construction), the positive trend is above all attributable to the

assessments of the intermediate products, order backlogs and the overall business situation. The assessment of production has also improved somewhat.

### Contact

Michael Graff | [graff@kof.ethz.ch](mailto:graff@kof.ethz.ch)

For detailed information on the KOF Economic Barometer, visit our website:  
[www.kof.ethz.ch](http://www.kof.ethz.ch) →



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Address	LEE G 116, Leonhardstrasse 21, 8092 Zurich		
Phone	+41 44 632 42 39	E-Mail	bulletin@kof.ethz.ch
Fax	+41 44 632 12 18	Website	www.kof.ethz.ch/en

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# KOF

ETH Zurich  
KOF Swiss Economic Institute  
LEE G 116  
Leonhardstrasse 21  
8092 Zurich

Phone +41 44 632 42 39  
Fax +41 44 632 12 18  
[www.kof.ethz.ch](http://www.kof.ethz.ch)  
#KOFETH

