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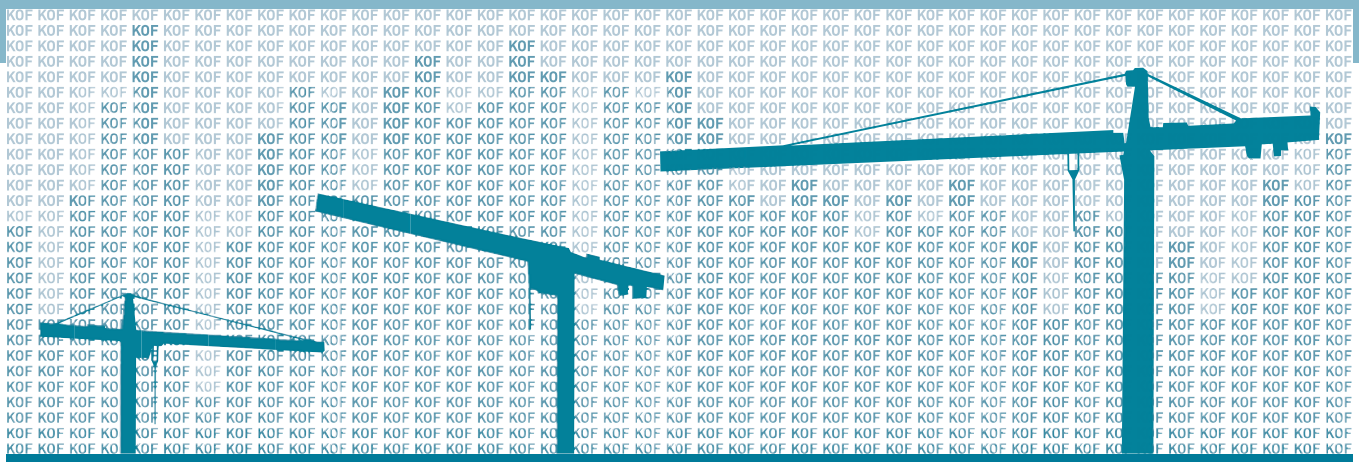


KOF Bulletin

No. 107, May 2017

ECONOMY AND RESEARCH

KOF INDICATORS

KOF Swiss Economic Institute

EDITORIAL

Dear readers,

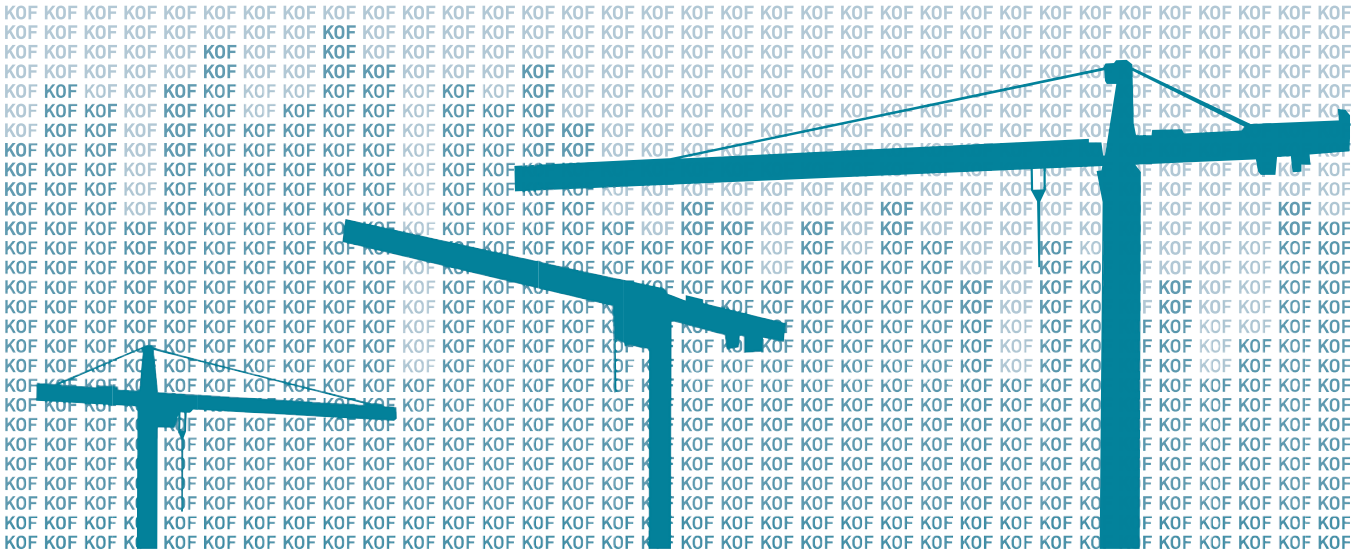
According to the latest KOF Business Tendency Surveys conducted in April, the mood among Swiss companies has improved since the previous month. All sectors included in the KOF surveys reported that their business situation in April was better than, or at least the same as, in March. Companies are also more confident in respect of the expected business trend. It is noteworthy that this confidence has spread across all sectors. The second article in this month's bulletin explains that energy policies can stimulate the adoption of green energy technologies without reducing the companies' competitiveness. The two final articles are dedicated to international issues: the third article introduces a new Eurozone inflation model developed by KOF researchers. They show that the inflation trend in the last few years was primarily determined by the decline in oil prices. The fourth article discusses US President Trump's tax reform.

We hope you enjoy your read,

David Iselin, Anne Stücker and Solenn Le Goff

ECONOMY AND RESEARCH

KOF Business Tendency Surveys: Business Situation Improves Further



In April 2017, the business situation of businesses in the private sector was significantly more favourable than during the previous month (see G 1). This means that businesses have been able to improve their situation continuously since the start of 2017. In addition, firms' expectations concerning the course of business over the coming six months are more confident than previously. The Swiss economy has started the spring with a swing in its step.

Significant recovery trend in the manufacturing sector...
The business situation improved further in April in the manufacturing sector. Following the rise in the indicator for the fourth time in a row, the situation of businesses is now classified as virtually satisfactory. Order books expanded slightly, and the level is now higher than in April of last year. Slightly less survey participants reported no order backlog. They have been able to step up production activity over the recent period, with the result that capacity utilisation of machinery and equipment over the last three months has been higher than previously. The level of capacity utilisation of 81 per cent is at a similar level to the equivalent period from last year, although it is still below the long-term average. This is in part also due to the fact that businesses have invested further in capacity expansion. Since firms have been forced to cut prices less frequently than previously, earnings performance is no longer as bleak as it was before. Firms hope that they will be forced to cut prices less often in the immediate future. However, they also fear higher prices when purchasing intermediate products. The expectations of businesses in relation to incoming orders and production over the next three months may not be as positive as they were over the last three months, but are clearly on an upward trend. All in all, the survey results for the manufacturing sector point to a clear recovery trend over the winter and into spring.

...further improvement in construction
In the two building-related sectors of construction and project engineering, the already good business situation improved further. In the construction sector, the recovery in the business situation, which has been ongoing since the start of the year, therefore continued. Demand increased at an accelerated rate. Compared to the previous quarter, capacity utilisation grew somewhat, whilst earnings performance was not as negative as previously. However,

G 1: KOF Business Situation Indicator
(balance, seasonally adjusted)

businesses are quite sceptical regarding the future development of earnings. In addition, demand projections are also muted. Businesses are expecting demand to fall in both building construction and civil engineering. On the other hand, the demand expectations of the finishing trade are stable. Project engineering firms are expecting the demand dynamic to remain virtually unchanged. They have already expanded their services over the last three months and also plan a small increase in the near future. In the view of these firms, the earnings position will remain unchanged into the near future.

Situation in the retail and wholesale sectors no longer as tense as previously

The unfavourable business situation in the retail sector eased in April for the second time in a row (see T 1). Customer footfall reached approximately the previous year's level and sales volumes did not fall for the first time in more than two years. Earnings performance was not as unfavourable as it previously was. Although retailers are somewhat sceptical regarding the further development of sales and thus remain reticent about ordering new goods, they plan to cut prices less frequently than previously. Overall, the situation in the retail sector has therefore relaxed somewhat, although a clear reversal in the trend is not yet apparent. The business situation also improved significantly in the wholesale sector following a marked cooling in the previous quarter. Demand increased for wholesalers over the last three months, with the result that sales of goods were higher than the comparable period from last year. Businesses are expecting demand to increase further over the coming period, although, as before, they are concerned that purchase prices may rise faster than selling prices. Nevertheless, their business expectations for the coming six months have improved significantly.

In the hotel and catering sector, dissatisfaction with the business situation decreased slightly once again. The situation is now considered to be slightly less negative than in the same period last year. However, businesses in mountain areas complained much less of a poor business situation than one year ago. In the big cities on the other hand, the situation one year ago was almost exactly as satisfactory as it is now. In the restaurant sector, the business situation is now less tense compared to last summer, although it remains unsatisfactory overall. According to the answers provided by survey participants, the problems associated with insufficient demand have abated. Restaurateurs are hoping that demand will pick up slightly over the next three months and, in addition, that prices will remain stable.

T 1: KOF Business Situation for Switzerland (seasonally adjusted balances)

	Apr 16	May 16	Jun 16	Jul 16	Aug 16	Sep 16	Oct 16	Nov 16	Dec 16	Jan 17	Feb 17	Mar 17	Apr 17
Private sector (overall)	7.5	9.8	8.1	9.8	10.7	11.1	11.5	9.7	9.2	9.7	11.3	13.5	20.5
Manufacturing	-7.6	-6.2	-3.6	-8.6	-7.8	-7.7	-6.0	-9.8	-8.9	-9.8	-7.6	-5.2	-1.7
Construction	24.9	22.3	22.9	23.9	27.6	23.3	25.0	26.4	24.3	28.3	28.1	32.3	33.6
Project engineering	45.2	46.7	43.9	45.5	46.2	46.1	45.7	42.1	46.3	47.5	47.7	49.8	51.7
Retail trade	-9.4	-10.6	-8.6	-11.8	-10.7	-8.5	-7.5	-11.7	-9.3	-7.0	-9.6	-6.4	-3.8
Wholesale trade	-6.8	-	-	3.7	-	-	3.5	-	-	-7.5	-	-	15.1
Financial services	18.1	26.3	14.5	18.2	22.8	22.9	24.1	21.5	17.6	21.4	31.1	32.5	32.5
Hotel and catering	-16.8	-	-	-21.9	-	-	-17.1	-	-	-17.1	-	-	-16.4
Other services	20.0	-	-	23.7	-	-	21.9	-	-	26.5	-	-	36.1

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.

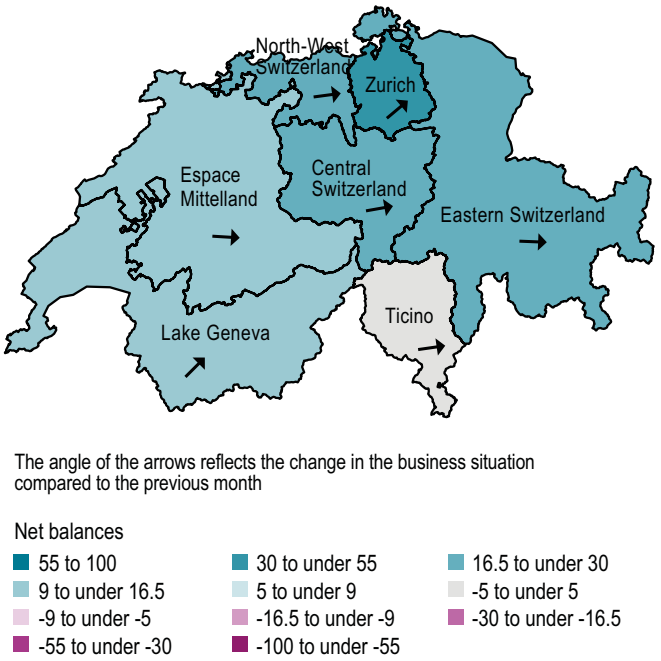
Occupancy rates for hoteliers grew slightly and the business situation is no longer considered to be as negative as it was during the previous quarter. Bookings are falling at a slower rate compared to the previous year. Businesses are expecting practically stable numbers of overnight stays and hope that they will be under less pressure to cut prices over the coming three months.

Situation stable in the financial and insurance sector…
In the financial and insurance sector the business situation overall is just as good as it was in March, and thus significantly more favourable than at the start of 2017. Whilst demand growth for these services was not as dynamic as it was last month, survey participants are nonetheless confident that demand will remain robust. Although the number of employees in this sector is considered to be more or less appropriate, there will be some pressure to reduce the workforce in the near future. Businesses hope that operating expenses will increase at a lower rate than revenues in the coming months, thereby resulting in a significantly improved earnings position. Banks are more satisfied than they were last month in terms of their situation with both national and foreign clients, although, as previously, foreign client business is lagging behind business with domestic clients. Firms are more confident than they were previously concerning the development of business over the coming year. They are expecting a major boost, in particular from domestic private client business. Banks are expecting their profits to grow from trade-related business, commission business and, albeit very slightly, also from interest-related business.

…and significantly improved for other service providers
The business situation of other service providers improved significantly in April. Demand has risen over the last three months, whilst the earnings situation has also improved. This positive trend is apparent both in the sub-sector of transport, information and communications as well as the business services sector. Overall, service providers project demand to continue to follow an upward path over the next three months. They therefore plan to take on more staff. However, businesses are more widely forecasting a need to lower the prices of their services: whilst business expectations for the coming six months are more positive than previously, overall confidence is more contained.

Business situation according to region
In regional terms, the business situation improved in most of the major regions as defined by the Federal Statistics Office (FSO). The improvement was particularly evident in the Zurich and Lake Geneva regions. However, businesses in Central Switzerland, North-West Switzerland and Ticino also reported a more favourable situation compared to the previous month. On the other hand, the figures for Espace Mittelland and Eastern Switzerland fell slightly.

G 2: KOF Business Situation in the Private Sector



The results of the current KOF business tendency surveys from April 2017 incorporate the answers provided by more than 4,500 businesses from industry, construction and the major service sectors. This corresponds to a response rate of around 56 per cent.

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You can find more information about the KOF Business Tendency Surveys on our website:
www.kof.ethz.ch/en/surveys/business-tendency-surveys →

The Impact of Energy Policy Measures from a Corporate Point of View

New research conducted by KOF in conjunction with the WIFO Institute in Austria and the ZEW Institute in Germany shows that energy policies can stimulate the adoption of green energy technologies without reducing companies' national or international competitiveness.

The classic arguments against energy policy measures are anticipated higher production costs (purchase of expensive machinery/vehicles, higher maintenance costs, complex licensing procedures, etc.) and the associated potential loss of competitiveness of the domestic industry. However, higher costs are also juxtaposed with potential cost savings since market failure can lead to companies making suboptimal decisions. In their frequently quoted research article, Porter and Van der Linde (1995) argue that market interventions may even lead to better decision results. Based on their article, the respective economic literature has broken down the impact of environmental policy into two stages (Jaffe and Palmer 1997). In the first stage, policies impact on the adoption of green technologies (weak Porter hypothesis). In the second stage, the adoption of green technologies, triggered by the policies, impacts on the performance of the companies (strong Porter hypothesis). In their article, Porter and Van der Linde argue that both impacts can be positive (see G 3). It is therefore unclear whether economic policy intervention has a negative effect on the competitiveness of the economy in this case.

In conjunction with WIFO in Austria and ZEW in Germany, KOF Zürich has analysed the impact of energy policies on companies in the context of NRP 71 (National Research Programme entitled 'Controlling energy consumption'). As a first step, the researchers investigated the effects of policy measures on the adoption of energy-efficient technologies and technologies generating energy from renewable sources (in short: green energy technologies). As a second step, they researched the impact of policies on labour productivity and the companies' international competitiveness.

The study was based on a dedicated survey among companies in Germany, Austria and Switzerland. To ensure comparability of the data, the surveys were conducted at the same time in all three countries, and a uniform questionnaire was used. On top of this, the data are representative of the respective industry structures in the three countries.[1]

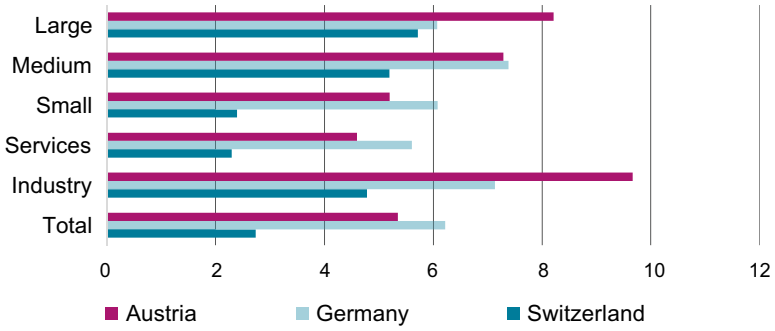
Prevalence of green energy technologies in international comparison

According to the survey results, 40 per cent of the companies in Germany, 32 per cent of the companies in Austria and 25 per cent of the companies and Switzerland had

G 3: Anticipated Political Effects

[1] In total, the survey was sent to 6,374 German companies, 7,091 Austrian companies and 5,789 Swiss companies. Analysable data were received from 2,321 German companies (response rate: 36%), 539 Austrian companies (response rate: 8%) and 1815 Swiss companies (response rate: 31%) (see Arvanitis et al. 2016a).

G 4: Share of Investments in Green Energy Technology Adoption
(average 2012–2014; in % of gross investments)



adopted at least one new green energy technology in the period 2012–2014 (see Arvanitis et al. 2016a). Among the average of all companies, the share of green energy technology investments in total investments amounted to 6.2 per cent in Germany, 5.3 per cent in Austria and 2.7 per cent in Switzerland (see G 4). All in all, the results show that adoption of green energy technologies in Switzerland is relatively low, not least in comparison with companies in the neighbouring countries.

Impact of energy policy measures on adoption activities

According to the weak Porter hypothesis, policies can contribute towards an increase in benefits and hence the adoption of energy technologies. A first study was conducted to verify this hypothesis (see Woerter et al. 2016). The study concludes that policy instruments do increase adoption of green energy technologies. Fiscal measures, voluntary agreements and standards as well as subsidies all have a positive impact on the probability of companies introducing respective technologies. 'Regulation' is the only factor that was not associated with a significant effect. On the one hand, this may be due to the fact that companies were already meeting the regulations before the survey period, or that the regulations reflect the technological status quo and do not offer any additional incentives. On the other hand, the results of the study show that the policy measures primarily impact on the propensity or adoption likelihood of green technologies. 'Subsidies' are the only measure that also increases adoption intensity, i.e. they result in companies investing more in energy technologies than comparable, unaffected companies.

Impact of energy policies on productivity and international competitiveness

Policies can therefore effectively serve as an instrument for raising the adoption of energy-saving technologies. The question arises how this affects the economic performance of the companies. The impact of energy policies on the economic performance of the companies was researched in two further studies. In conjunction with the strong Porter Hypothesis, the studies investigated whether or not the policy-driven adoption of green energy technologies has a positive impact on the companies' performance. Arvanitis et al. (2016b) studied the correlation between investments in energy technologies and labour productivity. All in all, the indirect effect of policy measures on productivity appears to be of minor importance. While regulation, voluntary measures and subsidies fail to make any additional positive contributions, investments induced by fiscal measures deliver positive effects.

The issue of the correlation between energy policy measures and the international competitiveness of companies is the focus of numerous discussions and was investigated in Rammer et al. (2016). Policy measures can raise companies' costs and may have a negative impact on their competitiveness. In the reference period 2012–2014, econometric analysis shows no significant correlation. On the one hand, this may be due to the fact that, for the

average of all companies, the additional accosts are negligible, or that the additional costs could not be passed on through higher prices.

Hence the data did not confirm the strong Porter Hypothesis. Contrary to the classic arguments used by opponents of energy policy measures, neither did the studies identify any negative impact.

Conclusion
All in all, the results show that energy policies may stimulate the adoption of green energy technologies without reducing the companies' national or international competitiveness. In general, it is likely that such stimuli are necessary to ensure that green energy technologies are adopted at a broad level. The data show that the share of energy costs in turnover is very low: 1.3 per cent in Germany, 2.7 per cent in Austria and 1.4 per cent in Switzerland. Accordingly, managers have few incentives to invest in green energy technologies on their own account. However, it should be noted that, although the potential savings may be low in each individual case, the contribution towards an environmentally compatible, sustainable economy at the aggregated level across all companies is significant.

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Determinants of Inflation in the Eurozone

Recently, inflation rates in the eurozone have picked up again. Nevertheless, the core inflation rate remains low. To get a better understanding of the inflation dynamics, KOF has developed an inflation model, which shows that the inflation trend in the past few years was predominantly affected by the decline in oil prices. In the course of the eurozone's economic recovery and the lapse of the second-round effects of the drop in energy prices, the core inflation rate is likely to rise again.

In the past few months, consumer prices increased substantially in the eurozone. The average inflation rate in the first quarter 2017 was 1.8 per cent, back in the vicinity of the European Central Bank's (ECB) medium-term inflation target of just under two per cent. As recently as the fourth quarter 2016, the inflation rate still amounted to 0.8 per cent. To a large degree, the rise is due to fluctuations in the crude oil price in the last 12 months. Although, at an average 55 US dollars per barrel (Brent) in the first quarter the oil price was half as expensive as before the big slump around two-and-a-half years ago, it was still 55 per cent higher than in the first quarter 2016. This development is currently affecting consumer price inflation worldwide. If, however, the oil price should undergo another substantial rise in the near future, its impact on the global inflation trend will decline in the course of the year.

All the same, the recent inflationary dynamics are not driven by the oil price effect alone, but also by the recovery of the global economy. Rising demand is probably a key cause of the increase in the prices of crude oil and other commodities. Price pressure on other goods is also likely to increase due to cyclical reasons. Core inflation – the measure of inflation excluding energy inflation and unprocessed food inflation – has hardly risen so far. The core inflation rate was 0.8 per cent both in the fourth quarter 2016 and the first quarter 2017.[1] Given the rise in production capacity utilisation and medium-term inflation expectations in the eurozone – the two key determinants of inflation according to the new Keynesian Phillips Curve – low core inflation dynamics actually come as a surprise.[2]

Inflation rate in the first quarter 2017 was below 2 per cent.

The KOF inflation model

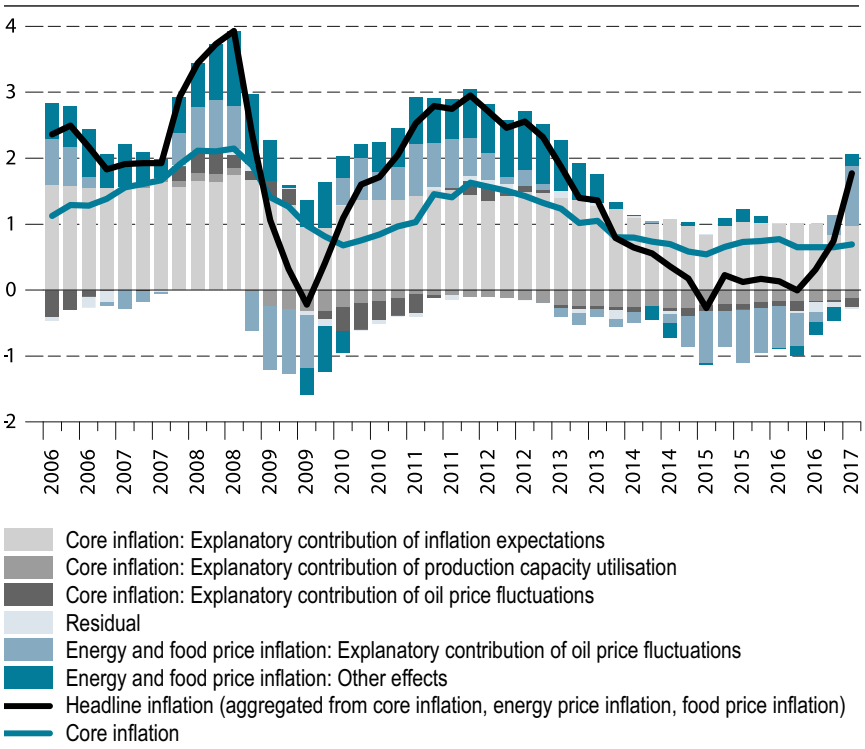
To arrive at a better understanding of the inflation dynamics in the eurozone, KOF uses an inflation model based on the new Keynesian Phillips Curve, which allows for the variation of estimated parameters over time.[3] This model is based on estimates calculated from the data of the years 1999–2017 (first quarter). The core inflation rate is explained by current expectations of future core inflation, the current macroeconomic rate of capacity utilisation and the rate of the year-on-year change in the exchange rate-adjusted oil price. In the version presented below, core inflation expectations are based on the forecasts for eurozone inflation in two years, taken from the Survey of Professional Forecasters at the ECB, in which the indirect effects of past energy and food price fluctuations presumably no longer play a role. The rate of capacity utilisation in the eurozone is based on the potential estimations of the European Commission. The volatile energy price component is estimated separately using a regression model with time-varying parameters. In conjunction with food prices, this allows for a presentation of the price change of the entire basket of commodities. This separate estimate is advantageous since the trend in energy prices follows different laws than the core inflation trend. While the direct impact of oil price fluctuations on core inflation is relatively low, it may come with a delay due to so-called second-round effects; in contrast, the impact of oil price fluctuations on the energy component, and hence headline inflation, is relatively substantial in the short term.

Inflation decline primarily due to oil price

Between the end of 2011 and the middle of 2015, the inflation rate dropped from 2.8 per cent to just below zero per cent. According to the model results, this development was primarily due to the oil price trend (see G 5). The latter had both a direct impact via the energy price component and an indirect effect via core inflation. In addition, low capacity utilisation, which started in 2013, increasingly had a restraining effect on prices. Since 2015, the production gap in the eurozone has been closing slowly, which has led to a gradual decline of the restraining effect on prices. At the current margin, however, the restraining effect is still present. Nevertheless, a much more important factor explaining the low dynamics of the core rate are inflation expectations. On the one hand, two-year inflation expectations were regressing, on the other hand, the correlation between realised inflation and expectations was weakening. In the period between the end of 2012 and the middle of 2015, this factor alone accounted for as much as 0.6 percentage points. Recently, the decoupling of inflation expectations from realised inflation has stabilised once again.

[1] The latest decline in March 2017 from 0.9 per cent to 0.7 per cent is due to a calendar effect. While Easter last year was in March, this year the holiday was in April. As a consequence, package holiday prices were substantially lower than in the previous year. In April, this is likely to result in a significant rise in package holiday prices in year-on-year comparison.
[2] Cf. e.g. Galí, J. (2015): Monetary Policy, Inflation, and the Business Cycle: An Introduction to the New Keynesian Framework and Its Applications, Princeton University Press, 2. Edition.
[3] Cf. KOF Analyses, Autumn 2014.

G 5: Explanatory Contribution to Eurozone Inflation
(in %)



Source: Eurostat

However, headline inflation is primarily driven by the trend in energy prices. In 2015 and the first three quarters of 2016, energy prices exerted significant downward pressure. The effect petered out towards the end of last year, which explains the sudden jump in inflation rates in the last few months. While the oil price already had a positive direct impact on headline inflation in the fourth quarter 2016 and the first quarter 2017, this was not yet true for the indirect impact via core inflation.

Analysis of the recent inflation trend suggests that the low inflation rates of the past few years were primarily a consequence of the decline in oil prices. The core inflation rate is currently being restrained by the remaining production gap and the spillover effects of the energy prices. Once the expected rise in capacity utilisation occurs and there are no further spillover effects, core inflation is likely to pick up again.

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Tax Reform in the USA

One of the most important concerns of the new US Government is tax reform. High marginal effective tax rates, a laboriously defined tax base, complicated regulations and a large number of loopholes have led to high administrative costs. Discussions are focusing on destination-based cashflow taxation. This would ultimately place pressure on foreign companies to relocate production to the USA.

Paying taxes is turning into an increasingly cumbersome process for natural and legal persons in the USA. The independent Tax Foundation estimates that, since the last reform in 1986, the federal tax code has doubled to around 2.4 million words (Hodge, 2016). According to estimates made by this institution, the average American dedicates around eight hours per year to declaring income, whilst this process for businesses takes more than a day on average. The Internal Revenue Code contains hundreds of politically motivated deductions and tax breaks, which results in complexity and market distortions. High rates of corporate tax, which can only to some extent be brought back to an internationally comparable level through deductions, have been encouraging businesses to relocate production abroad. In addition, the taxation of profits earned abroad upon repatriation to the USA has also been criticised, as it has resulted in a situation in which American enterprises have accumulated more than two trillion US dollars abroad, rather than reinvesting this capital in their home country. Finally, due to inadequate customer services and chronic inefficiency, the Internal Revenue Service has an extremely poor reputation.

Tax reform proposals

Accordingly, tax law reform is a major concern, in particular in Republican circles. Alongside investment in infrastructure and foreign policy, President Donald Trump's electoral programme strongly focused on tax reform. Tax reform is also a central pillar of the agenda 'A Better Way' of the conservative majority in the House of Representatives, which is serving as a guide for the current 2017–2018 legislature. Since both the executive and the two houses of the legislature are dominated by the Republican Party, the prospects for tax reform are good. The two proposals are similar, above all in relation to income tax. They envisage three marginal tax rates of 12 per cent, 25 per cent and 33 per cent, instead of the current seven rates of between 10 per cent and 39.6 per cent. Although the lowest rate of tax would be higher than it currently is, tax allowances would however be twice as high. In addition, the 'Alternative Minimum Tax' for high earners would be abolished, inheritance and gift tax rates reduced and capital gains taxed at a lower rate.

However, the proposals of the Trump Administration in the area of corporate taxation are different from those of Republicans in Congress. Whilst the most recently presented presidential plan proposes to reduce federal corporate tax to 15 per cent and to impose import duties on selected goods, Republicans in Congress have gone further and propose a fundamental review of corporate taxation. They are considering cashflow-based taxation according to the country of destination, as has been discussed within academic circles for a number of years.

A completely new approach to corporate taxation…

The 'Destination-based Cash Flow Taxation with Border Adjustment' has for example been proposed by American economist Alan J. Auerbach and has attracted increasing attention over the last few years as part of discussions concerning tax evasion. 'Cash Flow Taxation' means that the actual cash flow into a company is taxed, rather than the profit. This is defined as income from sales less expenditure on intermediate products, investment and wages. Cashflow differs from profit amongst other things due to the fact that non-cash items such as amortisation, depreciation and capital reserves are not taken into account. It is more difficult to distort it through accounting techniques, and businesses no longer have any incentive to transfer their profits to tax havens or to conceal them through opaque transfers between subsidiaries. Amortisation and depreciation no longer has to be applied over several years in an arbitrary manner as investment costs are eligible for deduction immediately. This results in significant incentives to invest. In addition, borrowed capital would no longer have any tax advantage over equity capital as interest payments would no longer be tax deductible.

'Destination-based' means that tax is only levied on domestic income. In this respect the proposed tax is similar to value added tax, although it would be levied directly by businesses rather than indirectly, as here the taxpayer would be the business and not the consumer. Income on exported goods and services would be tax free. This means that there would be no more incentive for businesses to accumulate abroad the profits earned there. In contrast, expenditure on imported intermediate products and foreign investments and salaries would no longer be tax-deductible. Hence the term 'Border Tax Adjustment'. A business that produces domestically is able to deduct its production costs from the amount liable to tax. However, if it sources goods from abroad, it will pay tax on the full amount of the selling price, as no national costs can be deducted. A tax rate of 20 per cent is being considered. The benefits and drawbacks of this principle of taxation are discussed in detail in Auerbach et al. (2017). However, it is envisaged that its unilateral introduction by the United States would meet with resistance from various quarters.

...the implementation of which is doubtful

According to its supporters, the new form of corporate taxation would increase government revenue and ensure stronger economic growth. Exporters would benefit directly from this tax reform, as they would not pay any tax on income earned abroad and would thus become more competitive. This would also be consistent with the trade policy goals of the new administration. Importers would bear a burden as they would no longer be able to deduct foreign intermediate products from the amount liable to tax. Who ultimately ends up bearing the cost of the tax reform will be dependent upon elasticity of supply and demand for the relevant goods. If import demand is highly inelastic and there are no competitive national sellers, due to foreign producers' technology or labour cost advantages, it is likely that most of the cost increases would be passed on to end consumers. On the other hand, if import demand is elastic, foreign sellers would have to cut their prices as there would be tax benefits in sourcing intermediate products nationally rather than from abroad, or in producing them internally. It is however projected that the increased competitiveness of the US economy would be lost again over the medium term, in part due to an adjustment of the exchange rate or of the relative prices of goods. Since the new tax principle would make exports cheaper and imports more expensive, this would increase the value of the US dollar and thus once again boost the competitiveness of importers and foreign sellers.

An American dedicates around 8 hours to declaring income, for businesses, this takes on average more than one day.

It is also expected that this form of taxation would attract opposition from the trade partners of the USA, which still operate source-based tax systems. In contrast to conventional value added tax, a distortion results from the discrimination against foreign labour costs, as foreign companies continue to pay income taxes in their countries of origin. This could result in companies relocating production to the USA. The rest of the world –potentially also Switzerland – would thus lose some of its tax base. Such a tax would also violate current World Trade Organization rules. Although tax systems with a border adjustment are permitted and also commonplace for conventional value added taxes, this is only the case for consumer taxes that are levied indirectly by businesses, which is something different from this proposal. Were the USA to introduce the tax proposed, the rest of the world would have to adapt accordingly in order to avoid a relocation of real value added to the USA. It is expected that this would give rise to a sharp reduction in transnational production chains, and that its effect would be similar to the introduction or increase of import duties on a global scale.

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KOF INDICATORS

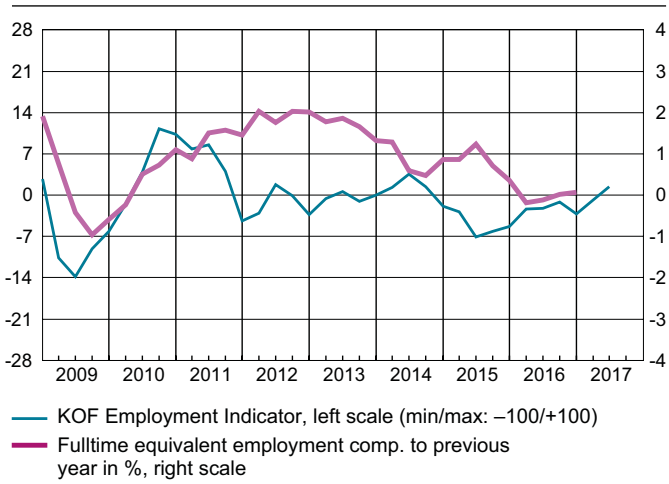
KOF Employment Indicator: Labour Market Is Picking Up

According to the KOF Employment Indicator, the percentage of companies planning to expand their staff numbers is on the rise (see G 6). The indicator passed the zero mark for the first time in three years. Among other factors, this is due to the industrial sector, which has not been this optimistic since before the Swiss franc shock at the beginning of 2015.

The KOF Employment Indicator has passed the zero mark for the first time since the third quarter 2014. Climbing to 1.4 points in the second quarter 2017, it consolidated its recent rise. In the preceding quarter, the Indicator still hovered just below the zero mark (–0.9, revised up from –2.1). This increase gives rise to hopes for a positive trend on the Swiss labour market in the coming summer months.

The KOF Employment Indicator is based on the responses of around 4,500 Swiss companies which were interviewed about their employment situation and employment plans in the context of the quarterly Business Tendency Surveys. Among other factors, the slightly positive indicator value is due to the fact that the number of companies planning to expand their workforce is currently a little higher than the number of companies planning to reduce their staff numbers. In the past, the survey results often proved to be a reliable predictor of the Swiss labour market development in the coming months.

G 6: KOF Employment Indicator and Employment
(Employment according to FSO)



Higher employment expectations in the industrial sector

The rise in the KOF Employment Indicator has a broad base. Employment plans are slightly more positive in many service industries, among them insurance as well as hotel and catering. The employment indicators in the secondary sector are also following a favourable trend: in the construction industry, the indicator rose to a value last recorded in mid-2014. The same development can be observed in the industrial sector, although the industry indicator is still below zero and euphoria is as yet premature. Nevertheless, the new industry indicator value is substantially higher than in any preceding quarter since the Swiss franc shock at the beginning of 2015. This suggests that the improved business situation in the Swiss manufacturing industry is increasingly translating into a greater propensity to employ additional staff or, at least, avoid further dismissals. The wholesale trade is the only sector to record a decline in its sector-specific employment indicator.

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More detailed information regarding the KOF Employment Indicator can be found on our website:
www.kof.ethz.ch/en/forecasts-and-indicators/indicators/kof-employment-indicator →

KOF Economic Barometer Is Easing

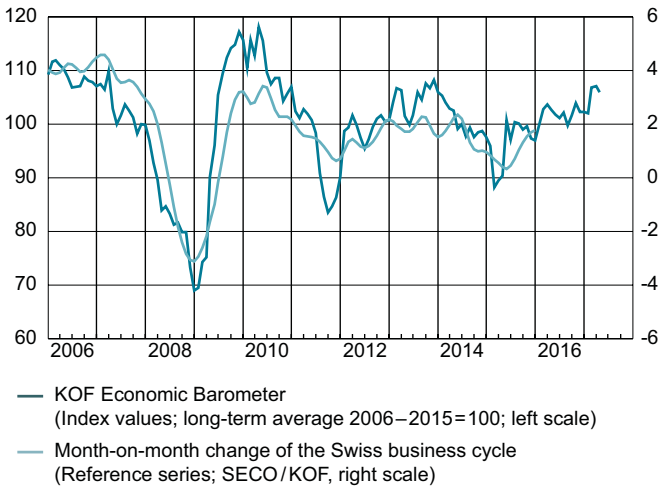
In April, the KOF Economic Barometer did not continue its upward tendency, which started at the beginning of 2017, but instead declined slightly (see G 7). However, despite the decline, the indicator is still well above its long-term average. It still indicates a more dynamic economic development than at the beginning of 2017. The recovery of the Swiss economy is likely to continue, albeit with a little less momentum than indicated in the past two months.

In April 2017, the KOF Economic Barometer declined compared to the previous month (revised to 107.2 from 107.6) by 1.2 points to a value of 106.0. Declines in the hotel and catering industry and in the manufacturing and construction sectors are responsible for this weakening. The indicators for private consumption and export development are also easing slightly in April. The banking sector is stepping up against this, with upwards pointing indicators.

Within manufacturing, prospects are developing unevenly. The outlook for the electrical and electronic, chemical, wood and food industries has deteriorated. On the other hand, the prospects have improved particularly in the metal, other processing and machinery industries.

In the producing sectors (manufacturing and construction), the indicators for the assessment of the business situation, the purchase of intermediate products, the inventories and the export opportunities particularly dampened the development. However, the order situation and the earnings situation have turned more favourable.

G 7: KOF Economic Barometer and Reference Series



KOF Economic Barometer and reference time series: annual update

In September 2016, the scheduled annual update of the KOF Economic Barometer took place. The annual update of the Barometer included the following stages: redefinition of the pool of indicators that enter the selection procedure, update of the reference time series, a new execution of the variable selection procedure and a procedure to estimate missing monthly values of quarterly variables. The updated reference series is the smoothed continuous growth rate of Swiss GDP according to the new System of National Accounts ESVG 2010, released at the end of August 2015, which takes into account the release of the previous year's annual Gross Domestic Product (GDP) data by the Swiss Federal Statistical Office. As a result of the indicator variable selection procedure, the updated KOF Economic Barometer is now based on 272 indicators (instead of 238 as in the previous vintage) from a pool of more than 400 potential indicator series. They are combined using statistically determined weights.

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For detailed information on the KOF Economic Barometer, visit our website:
www.kof.ethz.ch/en/forecasts-and-indicators/indicators/kof-economic-barometer →

AGENDA

KOF Events

Save the Date:
KOF Prognosetagung 2017
ETH Zürich, Donnerstag 5. Oktober 2017

KOF Research Seminar:
www.kof.ethz.ch/en/news-and-events/event-calendar-page/kof-research-seminar →

KOF-ETH-UZH International Economic Policy Seminar:
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Here you can find our media events:
www.kof.ethz.ch/en/news-and-events/media/media-agenda →

KOF Publications

You will find a complete list of all KOF publications (KOF Analyses, KOF Working Papers and KOF Studies) on our website.
www.kof.ethz.ch/en/publications →

Tables KOF Spring Forecast 2017

SWITZERLAND

Real Gross Domestic Product by Type of Expenditure

		Percentage change against														
		previous quarter (annualised, trend cycle component)												previous year		
	2008-	2016				2017				2018				2016	2017	2018
	2015	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Private consumption	1.5	1.0	0.7	1.1	1.7	1.2	0.6	0.7	0.8	1.0	1.2	1.0	1.0	1.2	1.0	1.0
Public consumption	1.5	2.6	2.6	1.5	1.0	1.5	1.7	1.3	1.3	1.1	1.1	1.0	1.0	1.9	1.5	1.2
Gross fixed capital formation	1.4	3.4	2.6	0.5	-0.6	-0.2	-0.2	-1.6	0.8	3.5	2.1	1.6	2.2	2.4	-0.1	1.6
– Construction	2.3	-0.7	-0.5	-0.1	0.2	0.9	1.9	2.3	2.8	2.8	2.1	1.8	1.6	0.0	1.1	2.3
– Machinery and equipment	0.9	5.9	4.7	0.8	-1.1	-0.9	-1.8	-3.9	-0.4	4.0	2.1	1.4	2.5	4.1	-0.9	1.0
Exports of goods (1) and services	2.3	8.1	4.2	-0.9	-1.6	1.0	4.6	5.5	4.1	2.7	3.0	4.5	4.0	4.9	2.0	3.7
– Goods (1), (2)	1.9	9.4	3.2	-0.2	-1.3	1.4	4.2	3.3	4.0	4.5	3.9	4.1	4.5	5.8	2.0	4.0
– Services	1.6	3.1	1.1	-1.5	-2.8	2.7	6.1	4.8	4.5	3.2	2.4	2.5	3.4	2.3	2.2	3.5
Imports of goods (1) and services	2.5	3.0	0.4	-1.3	-0.6	4.1	5.0	2.0	3.5	5.6	3.9	3.6	4.0	2.1	2.4	4.0
– Goods (1)	1.4	5.4	1.1	1.5	1.9	5.6	4.5	0.1	1.8	5.0	3.5	2.2	2.9	3.9	3.1	3.0
– Services	5.2	-2.4	-8.6	-8.1	-7.1	2.8	9.9	4.4	6.5	6.9	5.9	5.9	5.7	-1.3	1.1	6.1
Change in stocks (3)	-0.2	-2.6	-2.5	-0.8	1.7	3.2	1.8	-0.2	-0.1	0.7	1.0	0.5	0.1	-2.5	1.4	0.5
Gross Domestic Product (GDP)	1.3	1.9	1.5	0.6	0.5	1.7	2.2	1.9	2.0	2.0	2.0	2.1	2.2	1.3	1.5	1.9

(1) Without valuables (i.e. precious metals including non-monetary gold, precious stones and gems as well as objects of art and antiquities)
(2) Without merchanting
(3) Percentage contribution to GDP-growth

Other Macroeconomic Indicators

		Percentage change against														
		previous quarter												previous year		
	2008-	2016				2017				2018				2016	2017	2018
	2015	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Real effective exchange rate of CHF (1)	2.7	-1.3	-1.3	3.2	2.0	1.4	-2.5	-2.8	-0.8	-0.2	-0.9	-2.3	-0.3	-2.3	0.2	-1.2
Short term interest rate (3-month Libor CHF) (2)	0.2	-0.8	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7
Yield of 10 years federal bonds (2)	1.1	-0.4	-0.4	-0.5	-0.2	-0.1	-0.1	-0.1	-0.1	0.0	0.1	0.1	0.2	-0.4	-0.1	0.1
Consumer prices (3)	0.0	-1.0	-0.4	-0.2	-0.2	0.5	0.2	0.2	0.3	0.1	0.3	0.3	0.4	-0.4	0.3	0.3
Full-time equivalent employment (4)	1.0	-0.2	0.2	0.3	0.4	0.6	0.7	0.6	0.6	0.5	0.5	0.6	0.7	-0.1	0.5	0.6
Unemployment rate (2,5)	3.0	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3

(1) Annualised
(2) Level
(3) Same quarter of previous year
(4) Annualised trend-cycle component
(5) Unemployed as percentage of labour force according to survey 2012-2014

GLOBAL ECONOMY

		Percentage change against														
		previous quarter (annualised, seasonal adjusted)												previous year		
	2008-	2016				2017				2018				2016	2017	2018
	2015	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Real Gross Domestic Product (GDP)																
– OECD total	1.2	1.5	1.7	2.0	2.0	1.9	1.9	1.9	1.9	2.0	2.0	2.1	2.1	1.7	1.9	2.0
– European Union (EU-28)	0.6	1.8	1.7	1.8	2.1	1.8	1.6	1.6	1.6	1.7	1.5	1.5	1.5	1.8	1.8	1.6
– USA	1.3	0.8	1.4	3.5	1.9	2.0	2.1	2.1	2.2	2.4	2.5	2.6	2.6	1.6	2.2	2.4
– Japan	0.4	2.3	1.8	1.4	1.0	1.2	1.1	0.8	0.7	0.5	0.5	0.8	0.8	1.0	1.1	0.7
Oil price ($ per barrel) (1)	85.4	35.2	47.0	47.0	51.1	56.2	52.0	52.3	52.5	52.8	53.0	53.3	53.6	45.1	53.2	53.2

(1) Level

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