

KOF Bulletin

No. 85, May 2015

ECONOMY AND RESEARCH

KOF Business Tendency Surveys of April 2015:

KOF Business Situation Indicator with Clear Downward Tendency >>

The Swiss Franc Exchange Rate Shock and Swiss Foreign Trade in the First Quarter 2015 >>

Price Stability in Switzerland since the Nineteenth Century >>

KOF Employment Indicator: Increase in the Value of the Franc is Making Itself Felt on the Labour Market >>

KOF INDICATORS

KOF Economic Barometer: Slight Decline >>

Further KOF Publications >>

AGENDA

KOF Events >>

Conferences/Workshops >>

CUSTOMER SERVICE >>

IMPRINT >>

ECONOMY AND RESEARCH



KOF BUSINESS TENDENCY SURVEYS OF APRIL 2015:

KOF BUSINESS SITUATION INDICATOR WITH CLEAR DOWNWARD TENDENCY

In April, Swiss businesses rated their business situation as being considerably worse than in previous months (see G 1). Compared to the situation at the start of the year when the Swiss franc exchange rate floor was still in place, the situation has become distinctively worse in various sectors of the economy. In addition, for the first time in more than three years, businesses are mainly sceptical regarding future business development. The strong franc takes its toll.

BUSINESS SITUATION ACCORDING TO REGION

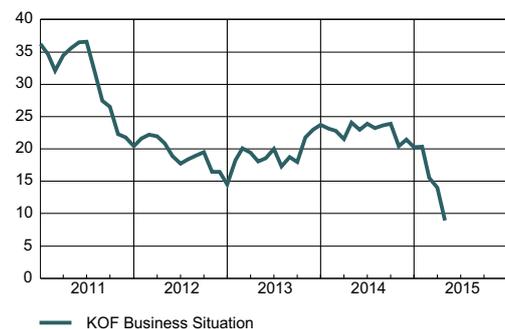
From a regional perspective, the only region in which the business situation did not deteriorate further in April was Espace Mittelland (see G 2). Compared to the situation at the start of the year, before the removal of the exchange rate floor, the business situation has deteriorated in all major regions. The slowdown since then has been particularly marked in Eastern Switzerland, but also in North-West Switzerland and the Zurich region. In most regions, however, the number of businesses reporting a good business situation continued to be higher than those complaining of a negative business situation. The only regions in which positive responses did not prevail were Ticino and the Lake Geneva area.

DEVELOPMENT ACCORDING TO ECONOMIC SECTOR

The fall in the KOF Business Situation Indicator in April was due in particular to the assessment of the quarterly questioning of wholesalers and businesses from the hotel and catering sector. They were reporting their situation in the KOF April surveys for the first time after the exchange rate floor had been scrapped. Compared to the previous month, the business situation for retailers and manufacturers – which are both surveyed monthly by the KOF – was stable and slightly improved, respectively. Compared to the situation at the start of the year, however, the business situation in these sectors is at present much less favourable. The stronger franc has had a negative impact in particular on the manufacturing sector, the hotel and catering sector and retail and wholesale trade. In addition, the position is no longer as good as it previously was also for other service providers. On the other hand, the business situation has improved recently for financial service providers.

G 1: KOF Business Situation Indicator

(balance, seasonally adjusted)



G 2: 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

The business situation in the manufacturing sector was slightly less tense in April than during the previous month, although it continues to be much worse than at the start of this year. Production facilities are much more underused than they were at the end of 2014. The capacity utilisation of 82.1 per cent in the fourth quarter of 2014 fell to 80.9 per cent in the first quarter of 2015. Firms increasingly view the available production capacity as too large. Following the removal of the exchange rate floor, they now perceive their businesses as less competitive. This is the case in particular for the foreign market, but is also apparent on the domestic market. Businesses have reacted to the change in circumstances by reducing their margins. This meant that companies' revenue positions worsened significantly over the first three months of this year. The employment situation continues to be tense, and as before staff planning envisages a reduction in employee numbers.

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

	Apr 14	May 14	Jun 14	Jul 14	Aug 14	Sep 14	Oct 14	Nov 14	Dec 14	Jan 15	Feb 15	Mar 15	Apr 15
Private sector (overall)	24.1	23.0	23.9	23.3	23.7	23.9	20.4	21.4	20.3	20.3	15.5	14.0	9.0
Manufacturing	-0.3	0.4	1.1	0.4	-0.2	0.4	0.7	1.2	0.7	-0.1	-17.4	-20.4	-13.3
Construction	49.2	48.0	46.4	42.5	41.8	41.6	37.3	36.2	36.4	38.3	34.1	33.3	28.2
Project engineering	55.9	54.9	55.4	55.1	52.4	55.7	51.3	51.7	47.9	54.0	49.7	47.7	46.5
Retail trade	15.3	11.6	18.4	9.7	2.0	-3.5	-4.0	2.2	-4.7	-0.4	-3.3	-10.6	-10.9
Wholesale trade	32.6	-	-	31.6	-	-	23.7	-	-	17.1	-	-	-11.5
Financial services	22.0	17.8	18.9	27.4	30.4	33.9	29.5	29.0	26.7	21.2	17.8	18.6	27.2
Hotel and catering sector	-13.0	-	-	-17.6	-	-	-11.2	-	-	-16.3	-	-	-33.2
Other services	37.1	-	-	35.6	-	-	33.3	-	-	38.6	-	-	28.0

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.
Source: KOF Business Tendency Surveys

The business situation continues to be predominantly good in the construction industry and the project engineering sector. However, the business situation was much better in April 2014. Over the coming six months, survey participants in both sectors expect a further gradual cooling of the business situation. Businesses from the construction industry are now using equipment at reduced capacity and no longer regard their machinery levels as being too low. They fear that they will be forced to make additional increased concessions over the coming months in the prices for their services, and expect their revenue position to deteriorate further. Project engineering offices are expecting slightly lower demand for their services in the short term. However, with orders booked up to more than ten months in advance, order books remain as full as they were before.

Retail traders assessed their business situation in April in a similarly cautious manner to March (see Table 1). In many cases, sales volumes have fallen over the last three months and customer footfall in shops is markedly lower than the equivalent period from last year. The effects of the stronger franc have led to a deterioration in the revenue position for retailers. Further price reductions are planned. However, traders hope that it will be possible to keep turnover almost stable

overall. Wholesalers are questioned by the KOF every three months. In April, they reported a significantly worse business situation than in January. Demand has been falling and sales of goods are at present significantly lower than in the corresponding period last year. Most businesses complained of insufficient demand and are facing heavy downward pressure on prices.

The hotel and catering sector has been shaken up by the removal of the exchange rate floor. When assessing the business situation, negative voices were significantly more predominant than in the January survey. The position is tense in particular in mountainous areas. Both restaurateurs and hoteliers report a significantly worse business situation than at the start of the year. Occupancy rates in hotels have dropped significantly and bookings are significantly lower last year's levels. The revenue position in the hotel and restaurant sector has suffered considerably due to the strong franc. With firms fearing further falls in demand, they are looking to cut staffing levels.

The business situation for the financial and insurance services sector improved in April. Above all the banks report a more favourable business situation. The revenue position was almost stable in the first quarter of this year. Whilst survey participants continued to assess staff numbers as being too high, fewer banks are planning to lay off workers in the near future. The insurers questioned adjusted their assessment of the business situation downwards slightly, reporting an overall satisfactory position. Although they are expecting weaker demand over the coming months, they are also looking to hire additional staff.

Other service providers assess their business situation in April as no longer as good as at the start of the year. The effects of the strong franc are also apparent in this sector of the economy. Demand has fallen over the last three months both for economic services as well as for services in the transport, information and communications sectors. Businesses' revenue positions have also suffered over this period. Although service providers are expecting demand to stabilise soon, they will have to make increased price concessions in order to achieve this.

The results of the current KOF Business Tendency Surveys from April 2015 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 54 per cent.

Further information regarding the KOF Business Tendency Surveys is available at:

www.kof.ethz.ch/en/surveys/business-tendency-surveys/ >>

THE SWISS FRANC EXCHANGE RATE SHOCK AND SWISS FOREIGN TRADE IN THE FIRST QUARTER 2015

The scrapping of the euro-franc exchange rate floor has led to a surge in the value of the Swiss franc, especially against the euro. The mean rate in March was 12 per cent below the December rate. The trade-weighted Swiss franc appreciation in the same period amounted to around nine per cent. Nominal goods exports declined in the first quarter. However, this decline is predominantly due to lower prices. The impact of the exchange rate shock on different sectors varies. The downward trend in exports is expected to continue in the second quarter while importers should benefit from the Swiss franc appreciation.

The removal of the minimum exchange rate caught many domestic companies by surprise. It may be assumed that a considerable portion of contractual export and import prices was specified in the foreign currency and was not hedged. Hence, the Swiss franc appreciation had a direct effect on exporters' margins while importers benefited from higher profits. Domestic exporters were not only struggling with a decline in their competitiveness in the important eurozone but also against European competitors in third countries.

DECLINE IN NOMINAL EXPORTS AND IMPORTS

The foreign trade statistics prepared by the Swiss Customs Administration (EZV) for the first three months of the current year provide some initial pointers regarding the impact of the scrapping of the exchange rate floor on Switzerland's foreign trade in goods. According to the foreign trade statistics, the value of exports and imports declined significantly in the first quarter 2015, with nominal goods exports plummeting by a non-annualised rate of 2.8 per cent and imports of goods closing 2.8 per cent below the previous quarter. However, as it turns out, these figures are largely due to lower export and import prices. Based on the

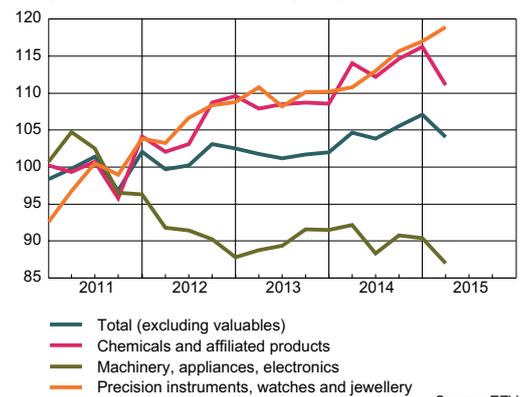
mean values – an incomplete but easily available indicator of price trends – prices of exported goods dropped by 2.7 per cent in the first quarter while the prices of imported goods declined by as much as four per cent from the previous quarter thanks to lower energy prices. Hence, on a price-adjusted basis, little has changed in terms of exports while imports have perked up.

“INELASTIC” PHARMACEUTICALS AND WATCHES

A detailed examination of the export statistics shows the impact of the Swiss franc appreciation on the different goods categories (see G 3). Nominal exports of the goods category with the highest export share, pharmaceuticals, declined by approximately 4.7 per cent. However, this decline is exclusively due to lower Swiss franc prices. Pharmaceutical sales are frequently associated with long-term purchase agreements involving fixed prices, most of them denominated in foreign currencies.

G 3: Exports By Category of Goods

(nominal, 2011=100, seasonally adjusted)



Source: EZV

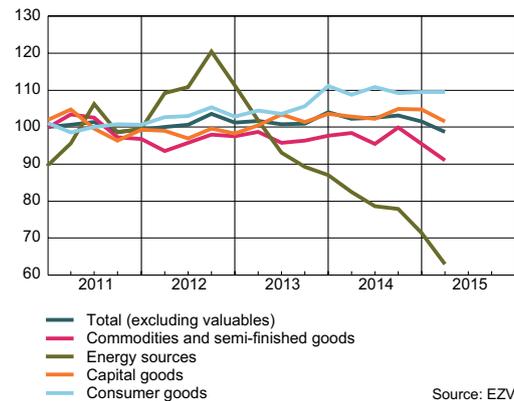
Based on the mean value index, watches, the second most important export category, remained unaffected in the first quarter. Real watch exports even rose by 5.4 per cent compared to the previous quarter. While the impact of the exchange rate shock on pharmaceutical and watch exports was limited thanks to relatively price-inelastic demand and extensive geographical diversification, other categories of goods suffered more severely. Nominal exports of machinery, appliances and electronics declined by 3.7 per cent in the first quarter, with 2.3 per cent resulting from a drop in prices and 1.4 per cent from a drop in volumes. Price-adjusted exports in the remaining goods categories, such as food, textiles, printed matter, metals and automotive all declined.

SLUMP IN PRICE OF ENERGY SOURCES

According to the foreign trade statistics, imports of goods in the first quarter were dominated by lower prices and higher volumes. Aside from the Swiss franc appreciation, lower import prices for energy sources were predominantly due to the drop in oil prices. First quarter prices of energy sources were 18.8 per cent lower than in the previous quarter (see G 4). Real imports of consumer goods rose by one per cent while prices of consumer goods declined by just under one per cent. Despite the slowdown in economic prospects, Switzerland's real imports of commodities, semi-finished goods and capital goods increased.

G 4: Imports By Application

(nominal, 2011=100, seasonally adjusted)



SLIGHT DECLINE IN TREND IN THE CURRENT QUARTER

All in all, it thus appears that the main effect of the exchange rate shock in the first quarter 2015 has been lower prices. A significant number of export-oriented companies in the metal, electronics and mechanical engineering industries, which are associated with relatively low margins, are likely to have slipped into loss-making territory. Since adjustment measures involving potential production outsourcing or cuts in production rarely take effect before the medium-term, KOF is expecting a further decline in the export trend in the second quarter. Due to the slowdown in economic growth, imports of goods are also expected to be lower than in the previous quarter.

PRICE STABILITY IN SWITZERLAND SINCE THE NINETEENTH CENTURY

Price stability is often quoted as a feature of successful monetary regimes. How is price stability actually quantified? Which monetary regimes have been most successful in terms of price stability in the last few decades? A new KOF Working Paper by Daniel Kaufmann provides the answers.

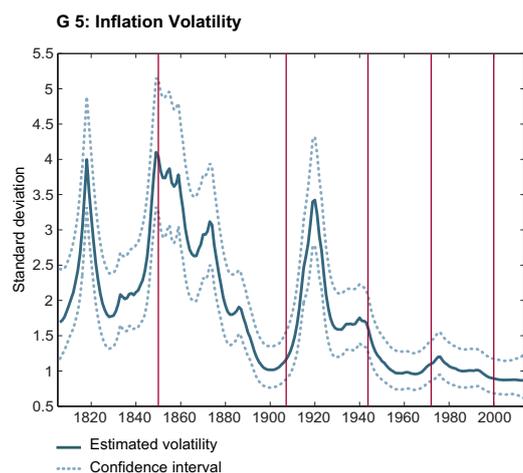
Today, the Swiss National Bank (SNB) equates price stability with a moderate increase in the national consumer price index of less than two per cent. Deflation, a persistent decline in price levels, is considered just as incompatible with price stability as an inflation rate over two per cent. Following this definition of price stability, the analysis at hand assesses different monetary regimes since the early nineteenth century based on historic estimates of consumer price inflation. A statistical model was used to extract the inflation trend and facilitate comparison of data over time. This approach excludes short-term factors, such as measurement errors. Two criteria are employed in the analytical process: First, a successful monetary regime should go hand in hand with low inflation volatility, and second, the inflation trend should remain at low levels, i.e. within the range of the current definition of price stability.

The results of the study indicate that fiat money regimes with an explicit inflation target go hand in hand with a high level of price stability. During the financial and debt crisis, the current monetary regime, in particular, maintained an exceptionally stable price trend despite turbulence at the international level.

REGIMES WITH LOW INFLATION VOLATILITY

Graph G 5 presents changing volatility in the inflation trend, with vertical lines indicating changes occurring in monetary regimes. The regimes are broken down into competing metal currencies (before 1850), bimetallism in a uniform currency (1850–1906), fiat money during and between the two world wars (1907–1944), fixed exchange rates under the Bretton Woods system (1945–1972), monetary targeting (1973–1999) and flexible inflation targeting (since 2000).

It has been shown that the monetary regime based on fiat money resulted in relatively low inflation volatility. When the SNB was established in 1907, inflation volatility was also relatively low. During the First World War, however, it rose significantly once monetary policy made a contribution towards financing the government's defence spending. Following higher volatility during the First and Second World War, the inflation trend increasingly stabilised during the first half of the Bretton Woods System involving fixed exchange rates. After a slight increase in volatility in the last years of the system, before Switzerland's conversion to flexible exchange rates in 1972, the trend further stabilised under the new monetary targeting regime. Subsequent to the introduction of the explicitly flexible inflation target in December 1999, inflation declined to historically low values.



SUCCESS OF DIFFERENT REGIMES MEASURED AGAINST SNB'S CURRENT INFLATION TARGET

The statistical model used in the analysis calculates the probability of the inflation trend in the respective regimes remaining below zero per cent, between zero per cent and two per cent or above two per cent. These ranges are based on the SNB's current definition of price stability. Consequently, we expect successful monetary regimes to be associated with a high probability of inflation remaining within the zero per cent to two per cent range.

According to this criterion, the current regime with its flexible inflation target is more successful than the other fiat or metal currency regimes. It is associated with the highest probability that the inflation trend remains within the stable range. Interestingly, in the current regime, the probability of inflation dropping below zero per cent is higher than the probability of inflation exceeding two per cent. This asymmetry is comparable with that of the metal currency regimes before the First World War and indicates that the flexible inflation target has contributed towards maintaining inflation at a very low level. In contrast, the other fiat currency regimes were dominated by an inflation bias, i.e. the probability of inflation exceeding the two per cent mark was higher than the probability of inflation dropping below zero per cent.

This article is based on the KOF Working Paper No. 379 by Daniel Kaufmann "Nominal Stability and Swiss Monetary Regimes over two Centuries" (2015):

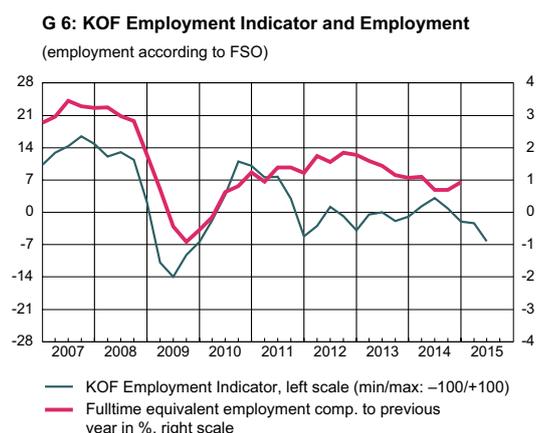
www.kof.ethz.ch/publikationen/p/kof-working-papers/379/ >>

KOF EMPLOYMENT INDICATOR:

INCREASE IN THE VALUE OF THE FRANC IS MAKING ITSELF FELT ON THE LABOUR MARKET

In April, the KOF Employment Indicator fell to its lowest level since the end of the 2009 economic and financial crisis. Swiss businesses are increasingly tending to shed jobs. The strong increase in the value of the Swiss franc following the scrapping of the exchange rate floor is most likely the cause of this.

There is increasing evidence that the franc shock will not pass by without leaving its mark on the Swiss labour market: the KOF Employment Indicator, which enables an early assessment to be made of the labour market situation, fell to -6.2 points (see G 6) in the second quarter of 2015. The last time the indicator reached a level that was this low was at the end of the global crisis in the fourth quarter of 2009. The indicator is determined on the basis of the Business KOF Surveys, which are carried out monthly and quarterly among more than 9,000 businesses in Switzerland. Since the proportion of businesses that plan to shed jobs over the coming three months is larger than the proportion of businesses that intend to create jobs, the indicator has fallen into negative territory. In addition, the overwhelming majority of businesses questioned consider current employment levels to be too high. The position on the labour market is expected to worsen accordingly in the near future.



In the first quarter of 2015 the employment indicator was still at -2 points. However, most companies participating in that survey had answered the questionnaire before the euro-franc exchange rate floor was removed on 15 January. It is thus likely that the current fall in the indicator is largely due to the strong increase in the value of the franc following the removal of the exchange rate floor. The increase in value made most Swiss goods and services significantly more expensive abroad, with the result that the prices of Swiss firms became less competitive, especially compared to European competitors. The negative effects of this situation on employment have not been limited solely to exporters. In fact, the increase in value has also affected businesses operating mainly on the national market, since imports have now also become cheaper than Swiss products. For example, demand with Swiss suppliers has been falling as other firms increasingly source intermediate goods from the eurozone.

RESULTS BROKEN DOWN ACCORDING TO SECTOR

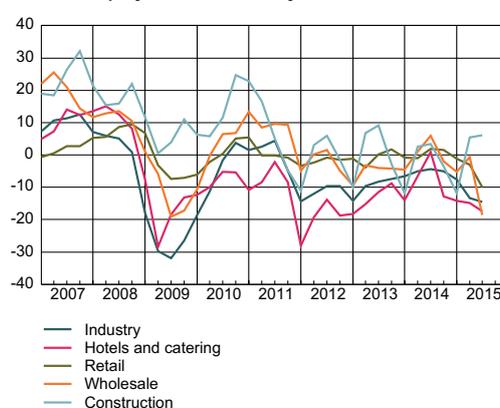
The employment indicators for individual sectors suggest, not unexpectedly, that the employment situation will deteriorate in particular in export-oriented sectors. The branch-specific employment indicators for industry, the hotel and catering sector and the banks are clearly moving into negative territory. However, the franc shock is already having a significant effect on employment indicators from service sectors with a strong domestic focus. The employment indicator for retail trade has fallen to its lowest level in more than ten years (see G7),

which is apparently due to the substantial increase in consumer tourism in border regions. The pressure on retail margins and the increasing competition from abroad have been having knock-on effects also on Swiss suppliers. The employment indicator for the wholesale trade sector has also fallen deep into negative territory. By contrast, the employment indicator for the construction sector has stood up well against the exchange rate turbulence, remaining close to zero. This suggests that employment levels in the construction industry will remain at a high level at least over the next three months.

You will find more information about the KOF Employment Indicator on our website:

<http://www.kof.ethz.ch/en/indicators/employment-indicator/> >>

G 7: Employment Indicator By Sector

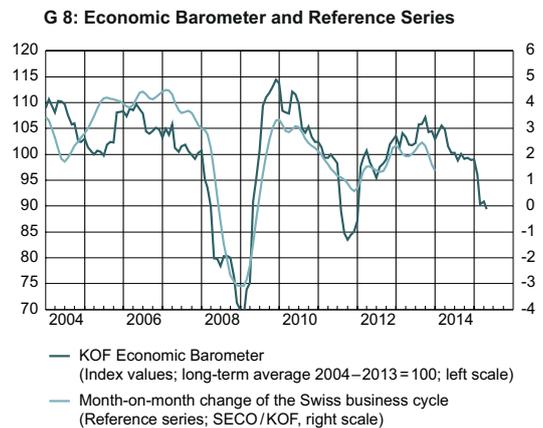


KOF INDICATORS

**KOF ECONOMIC BAROMETER: SLIGHT DECLINE**

The KOF Economic Barometer again fell in April 2015 after it had recovered slightly in the previous month. Currently the Barometer stands at 89.5 points compared to a revised 90.9 points in March. After a clear decline of the indicator in February, in which the scrapping of the exchange rate floor is reflected, the volatility of the Barometer has currently reduced again slightly (see G 8).

Although the business situation of buyer countries of Swiss products has brightened, Swiss producers have only been able to benefit from this to a limited extent. Many indicators for the Swiss industry declined in April. Specifically, the manufacturer of wood products, the electronics industry and the chemical producers feel headwind. Also more clouded are the prospects for the hotel and catering industry. The indicators for the banking industry are slightly negative and the indicators for consumption and the construction industry are currently stable.



With the scrapping of the exchange rate floor the competitiveness of Swiss firms deteriorated. In order not to be forced to reduce their activities too strongly, companies are adjusting their prices downwards. This reduces their profits. On the other hand, the indicators of the development of orders and purchases of intermediate goods slightly improved.

KOF ECONOMIC BAROMETER AND REFERENCE SERIES

The KOF Economic Barometer is a composite leading indicator for the Swiss economy. The latest version comprises 217 indicator variables, which are combined based on statistically determined weights. The indicator variable selection and their weights are updated annually after the release of the previous year's annual Gross Domestic Product (GDP) data by the Swiss Federal Statistical Office. Last year's revision took place in October. Our new 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 September 2014.

More information about the KOF Economic Barometer on our website:

<http://www.kof.ethz.ch/en/indicators/economic-barometer/> >>

FURTHER 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/ >>

KOF ECONOMIC FORECAST

How much GDP growth does the KOF expect for this year? How will the labour market develop? You find the latest KOF Economic Forecasts here:

www.kof.ethz.ch/static_media/bulletin/85/kof_bulletin_forecasts_2015_05_en.pdf >>

AGENDA

KOF EVENTS

KOF Wirtschaftsforum zur KOF Tourismusprognose

Referenten: Prof. Dr. Jan-Egbert Sturm, KOF und Christophe Hans, hotelleriesuisse

ETH Zurich, 28 May 2015

<http://www.kof.ethz.ch/de/veranstaltungen/d/304/> >>

KOF Research Seminar:

Why Does Bank Credit Not Drive Money in Germany (any more)?

Vladimir Kuzin – Deutsche Bundesbank

ETH Zurich, 13 May 2015

Does Public Transit Reduce Car Travel Externalities? Quasi-natural Experiments' Evidence from Transit Strikes.

Jos van Ommeren – VU University Amsterdam

ETH Zurich, 20 May 2015

Global Sourcing of Heterogeneous Firms: Theory and Evidence

Wilhelm Kohler – Universität Tübingen

ETH Zurich, 27 May 2015

The Composition of the Military and Civil Wars

Martin Gassebner – University of Hannover

ETH Zurich, 3 June 2015

Systemic Risk in Australia's Banks

David Tripe – Massey University

ETH Zurich, 9 June 2015

Endogenous Social Interactions: Which Peers Matter?

Eirini Tatsi – University of Frankfurt

ETH Zurich, 10 June 2015

A Theory of Group Goods: Concept, Model, Welfare

Anton Kim – University of Wyoming

ETH Zurich, 17 June 2015

tba

Matz Dahlberg – Uppsala University

ETH Zurich, 18 November 2015

Claus Thustrup Kreiner – University of Copenhagen

ETH Zurich, 25 November 2015

www.kof.ethz.ch/en/events/k/kof-research-seminar/ >>

www.kof.ethz.ch/en/events/k/kof-eth-uzh-seminar-in-international-economic-policy/ >>

KOF Media Agenda: www.kof.ethz.ch/en/medien/agenda/ >>

CONFERENCES/WORKSHOPS

Annual Meeting Swiss Society of Economics and Statistics

The Solvency of Pension Systems

Basel (Switzerland), 2–3 June 2015

sgvs.ch/ >>

Golden Decade: 2015 Global Conference on Asian business

Hong Kong (China), 18–20 June 2015

www.conceptzportal.com/conference >>

Silvaplana Workshop in Political Economy

Silvaplana (Switzerland), 25–29 July 2015

www.journals.elsevier.com/european-journal-of-political-economy/call-for-papers/silvaplana-workshop-in-political-economy/ >>

11th World Congress of the Econometric Society

Montreal (Canada), 17–21 August 2015

eswc2015.com/ >>

9th Annual Conference on the Political Economy of International Organizations

(Call for Papers: 30 September 2015)

Salt Lake City (USA), 7–9 January 2016

peio.me/ >>

Add event: www.kof.ethz.ch/publications/bulletin/event/index_en >>

CUSTOMER SERVICE



The KOF Bulletin is a free service by e-mail which informs you about the latest developments relating to the economy, our research and important events on a monthly basis.

Register: www.kof.ethz.ch/publications/bulletin/registration/en >>

For previous KOF Bulletins, visit our archive:

www.kof.ethz.ch/publications/bulletin/archive/en >>

Visit us at: www.kof.ethz.ch >>

You can also extract time series from our extensive database via the KOF data service (in German):

www.kof.ethz.ch/de/ueber-uns/services/datenservice/ >>

The reproduction of this Bulletin (including excerpts thereof) is permitted only with the written permission of the publisher and with the citation of the original source.

ISSN 1662-4289

IMPRINT

**PUBLISHER**

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

Phone +41 44 632 53 44 | Fax +41 44 632 12 18 | kof@kof.ethz.ch

EDITORIAL TEAM

Anne Stücker | David Iselin

bulletin@kof.ethz.ch

NEXT PUBLICATION DATES

12 June 2015 | 3 July 2015

TABLES – KOF Spring Forecast 2015

SWITZERLAND

Real Gross Domestic Product by Type of Expenditure																
	2005-2013	Percentage change against												previous year		
		previous quarter (annualized, trend cycle component)												2014	2015	2016
		2014				2015				2016						
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Private consumption	1.7	0.5	1.1	1.7	1.9	2.4	2.4	1.9	1.7	1.5	1.4	1.5	1.7	1.0	2.1	1.6
Public consumption	1.1	-0.4	-0.3	1.9	2.7	2.6	1.9	0.9	0.6	1.4	1.3	0.9	1.7	1.1	1.8	1.2
Gross fixed capital formation	2.0	-0.4	1.8	3.2	1.4	-1.3	-1.3	-2.3	0.2	4.3	2.7	-2.6	-3.3	1.5	-0.1	0.8
– Construction	1.4	0.8	-0.6	-2.0	-1.4	-0.3	0.2	-1.3	-0.3	0.2	-0.2	-0.1	0.6	0.9	-0.6	-0.2
– Machinery and equipment	2.3	-1.1	3.5	6.6	3.0	-2.0	-2.2	-2.9	0.5	6.9	4.5	-4.2	-5.6	1.8	0.3	1.4
Exports of goods (1) and services	4.0	0.3	3.9	6.0	3.1	-1.3	-0.3	0.4	2.1	4.0	2.5	2.2	3.9	3.9	1.2	2.4
– Goods	3.6	4.9	6.4	4.5	1.7	-1.1	-1.2	0.2	2.5	3.6	3.1	4.2	5.2	4.1	0.8	2.8
– Services	3.7	1.0	-1.6	0.5	1.4	-0.6	2.8	4.8	2.8	1.7	0.9	0.8	2.0	2.3	0.7	2.2
Imports of goods (1) and services	3.6	0.0	0.6	1.3	1.3	3.3	3.1	0.8	3.0	4.8	3.2	1.3	1.7	1.6	2.4	2.9
– Goods (1)	3.0	2.5	2.5	1.1	1.2	2.7	2.4	0.4	3.3	5.4	3.2	0.9	0.9	1.3	2.5	2.9
– Services	5.2	-0.3	-1.0	-0.1	2.8	3.3	3.5	3.4	2.4	2.7	2.8	3.0	2.9	2.1	2.1	2.8
Change in stocks (2)	0.2	2.0	-0.2	-2.3	-2.1	-0.1	-0.1	-0.2	-0.3	-0.5	0.3	0.5	-0.2	0.1	-0.6	-0.3
Gross Domestic Product (GDP)	2.1	1.7	1.9	2.3	1.6	-0.5	-1.5	-0.7	0.7	1.6	1.8	1.5	1.3	2.0	0.2	1.0

(1) Without valuables (i.e. precious metals including non-monetary gold, precious stones and gems as well as objects of art and antiquities)

(2) Percentage contribution to GDP-growth

Other Macroeconomic Indicators																
	2005-2013	Percentage change against												previous year		
		previous quarter												2014	2015	2016
		2014				2015				2016						
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Real effective exchange rate of Swiss Franc (1)	1.3	2.0	-0.2	-3.6	-1.7	28.5	-7.7	-4.1	-2.2	-4.1	-2.0	-4.6	-1.6	0.6	3.4	-3.5
Short term interest rate ((3-month Libor CHF) (2))	0.9	0.0	0.0	0.0	0.0	-0.7	-0.8	-0.8	-0.8	-0.8	-0.8	-0.8	-0.8	0.0	-0.8	-0.8
Yield of 10 years federal bonds (2)	1.9	1.0	0.8	0.6	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0
Consumer prices (3)	0.5	0.0	0.1	0.0	-0.1	-0.7	-0.8	-1.0	-0.7	-0.2	0.0	0.0	0.0	0.0	-0.8	0.0
Full-time equivalent employment (4)	1.4	0.6	0.6	1.0	1.2	0.5	-0.6	-1.1	-0.9	-0.2	0.5	0.8	0.7	0.9	0.1	-0.2
Unemployment rate (2,5)	3.2	3.2	3.2	3.2	3.1	3.2	3.3	3.5	3.6	3.7	3.8	3.8	3.8	3.2	3.4	3.8

(1) Annualized

(2) Level

(3) Same quarter of previous year

(4) Smooth components annualized

(5) Unemployed as percentage of labour force according to census of 2010

GLOBAL ECONOMY

Percentage change against																
	2005-2013	previous quarter (annualized, seasonal adjusted)												previous year		
		previous quarter												2014	2015	2016
		2014				2015				2016						
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Real Gross Domestic Product (GDP)																
– OECD total	1.4	1.0	1.6	2.5	1.8	2.0	2.1	2.1	2.1	2.1	2.1	2.0	2.0	1.8	2.0	2.1
– European Union (EU-28)	0.9	1.6	0.9	1.2	1.5	1.7	1.9	1.9	1.8	1.9	1.8	1.8	1.8	1.3	1.6	1.8
– USA	1.5	-2.1	4.6	5.0	2.2	2.6	2.7	2.7	2.7	2.7	2.6	2.6	2.5	2.4	3.0	2.6
– Japan	0.7	5.1	-6.4	-2.6	1.5	1.3	1.0	1.2	1.2	1.2	1.2	1.2	1.1	0.0	0.3	1.2
Oil price (\$ per barrel) (1)	84.8	107.9	109.8	102.1	76.0	56.0	62.0	62.3	62.5	62.9	63.2	63.5	63.8	98.9	60.7	63.3

(1) Level

© KOF, ETH Zürich