

KOF Bulletin

No. 76, July/August 2014

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ECONOMY AND RESEARCH

**LABOUR DETERMINES ECONOMIC GROWTH**

In the last few years, economic growth in Switzerland was primarily based on an increased employment of labour while labour productivity remained largely unchanged. Among the main reasons for this development are structural shifts in the local economic structure.

For some time now, the employment of labour rather than labour productivity has been dominating economic growth in Switzerland. Last year, labour productivity (in relation to full-time equivalent employment) increased by as little as 0.5 per cent compared to 2010 and 0.6 per cent compared to 2007. Before this period, productivity had had significant growth rates of 16.9 per cent between 1990 and 2000 and a further 7.8 per cent between 2000 and 2007. During those periods, average annual growth amounted to 1.6 per cent and 1.1 per cent, respectively. How can we explain the fact that current growth rates are nowhere near the historical rates?

There are a number of reasons why the increase in labour intensity goes hand in hand with slow growth in labour productivity. In the 1990s, the structure of the Swiss economy underwent significant changes. Labour productivity went up at the same time as total employment declined. This made the Swiss economy more competitive at international level, which turned out to be a highly beneficial development. Between 2003 and 2007, the Swiss franc declined against the currencies of Switzerland's main trading partners. As a consequence, margins in the export economy rose without requiring an increase in production per labour unit. In such a situation, the market provides little pressure to increase productivity unless margins are reduced by wage rises.

THE FINANCIAL CRISIS – THE DAWN OF A NEW ERA?

In the same period, due to increased demand, both production and employment in the industrial sector expanded disproportionately. Industry's share in value-added creation and employment went up and a reversal of the "normal" development in highly developed economies, namely increasing tertialisation, occurred. Switzerland's export-oriented industry is very capital intensive and the added value per workplace is accordingly high. Within the service sector, the financial industry has the highest productivity. It recorded above-average growth until the onset of the financial crisis. This period is also dominated by substantial growth in the transit trade, primarily due to the commodity trade. Thanks to high added value and low unemployment, this segment of the wholesale industry recorded higher labour productivity. Hence, the rise in labour productivity since 2000 primarily represents a structural shift towards high value-added sectors.

Since the financial crisis, some of these industries have contracted slightly. Even the transit trade has recorded no more than average growth since 2010 and thus no longer contributes to an increase in average labour productivity. Production has mainly expanded in industries with below-average productivity. As a result, the macroeconomic productivity trend as triggered by structural changes has taken a different direction than before the financial crisis.

EXPANSION OF EMPLOYMENT

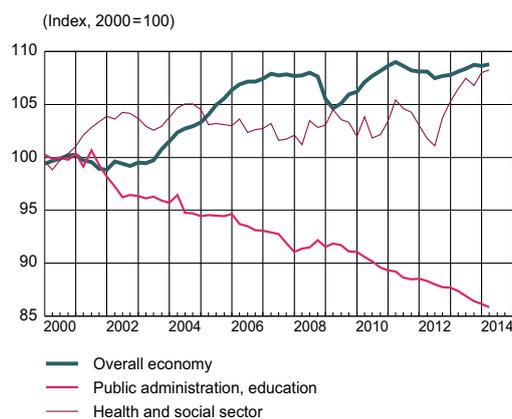
In-depth analysis shows that the shift towards less productive industries ultimately resulted in a relative increase in less sophisticated jobs. The trend seems to have gone towards jobs that require higher employment of human capital at the expense of jobs that require high employment of physical capital. This is consistent with the simplified, increased immigration of qualified employees following the agreement on free movement of labour between the EU and Switzerland. The marginal product of labour which, in theory, should be reflected in the wages has thus not declined in contrast to the payment for physical capital via depreciation and interest.

STATISTICAL SURVEY PROBLEMS

A further reason for the slow productivity trend is the fact that individual sectors with above-average growth rates calculate added value on the basis of factor input instead of market prices. This applies, for instance, to tuition in public education institutions. Due to the lack of appropriate measurement, higher productivity in this sector is insufficiently recorded. Another sector that has seen a substantial increase in employment in the last few years is the health sector. Again, it is difficult to determine any improvements in quality. On top of this, the part of medical services in hospitals that is paid by the public sector counts as a subsidy instead of production and is thus not included in the value added statement.

If the share of these payments is changed, as in the new hospital financing system, the calculation of growth rates in added value and productivity in this sector is distorted. If the health sector grows significantly, the reported below-average productivity in the sector will also lead to a distortion of the macroeconomic productivity figures. According to official data, labour productivity in the health and social sector remained almost unchanged in the period 2001 to 2012 while, in the same period, labour productivity in public administration and education declined by close to 15 per cent since 2000 (see G 1).

G 1: Productivity Trend – Overall Economy and Selected Sectors



IRAQ TENSIONS BOOST CRUDE PRICES

Tensions in Iraq during the last few weeks led to a sharp increase in the oil price. Is this a cause for concern? What are the likely consequences for the global economic recovery? There is no consensus in the empirical literature, but the price of oil is an additional challenge for policy makers.

Territorial gains by Islamic militants in Iraq sent oil prices soaring in the last few weeks. This increase was likely bolstered by continued fears of supply disruptions from Iraq. The price of Brent Crude oil increased to levels not seen since September 2013, reaching as much as US dollar 115 a barrel after the ISIS militants seized control of the country's borders with neighbouring Syria and Jordan and continued their march towards Baghdad.

As the second-largest producer in the Organization of the Petroleum Exporting Countries (OPEC), Iraq supplies around 3.3 million barrels a day, which accounts for about 11 per cent of OPEC's quota. As long as the crisis does not spread to the south where the main oil reserves are located, the spike in the oil price may be contained in the 110–115 US dollar range. However, if the violence threatens Baghdad or the southern oil reserves, the oil price could spike by a further 50 per cent as the largest OPEC producer Saudi Arabia is unlikely to be able to compensate for the lost capacity.

NO PANIC ON FINANCIAL MARKETS

So far the global financial markets have not overreacted to the tensions in Iraq as oil analysts regard 120 US dollar a barrel as the crucial benchmark.

Oil price increases lead to higher inflation directly through transportation and heating costs and also indirectly through the prices of goods and services as production costs are passed on to consumers. Normally, the group composed of energy prices does not exceed ten per cent of the consumer price index, which is mostly driven by oil prices, implying that a ten per cent increase in energy prices will increase inflation by an additional one per cent.

Core US consumer prices have risen by two per cent over the last year. If inflation increases further because of higher oil prices, the Fed may be pressured to raise the federal funds rates sooner than planned despite the negative first quarter GDP.

Rising energy costs may ease the European Central Bank's (ECB) concerns about deflation, but could also lead to a contraction in business activity in countries such as France and become a major impediment for the already fragile growth, particularly if the probability of further monetary easing by the ECB is reduced.

A further surge in oil prices could dampen the global economic recovery in the second half of the year. Emerging markets such as China, which is the world's biggest importer of oil, and India are highly sensitive to rising oil prices.

In Switzerland, inflation is currently very close to zero (0.2 per cent) and the increase in the oil price since the beginning of the year (6.8 per cent in US dollar) has only been slightly offset by the appreciation of the Swiss Franc vis-à-vis the US dollar (5.8 per cent in francs). All things being equal, it is nevertheless quite unlikely for Swiss inflation to increase to more than 0.8 per cent given the current level of oil price increases.

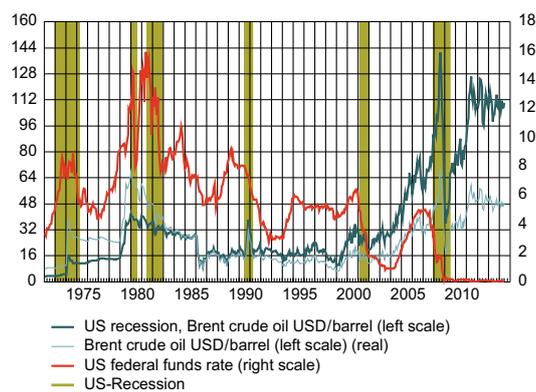
NO CONSENSUS ON THE IMPORTANCE OF OIL PRICES

As far as the impact of oil price increases on the economy is concerned, there is not much consensus in the empirical literature. Hamilton (2009) argues that the rise in the oil price between August 2007 and June 2008 was a major contributor to the global recession. He argues that booming demand pressures from increased economic activity and stagnant production and the subsequent increase in the oil price contributed to a worsening consumer sentiment, and aggravated the impact of the housing downturn.

On the other hand, Kilian (2009) downplays the importance of oil price increases on the economy and argues that, even in the case of physical supply disruptions, it is usually the increased precautionary demand for oil, triggered by uncertainty about future oil supply shortfalls, that drive the oil price, and that the connection between oil prices and economic growth has become weaker since 2003.

Despite the lack of consensus with regard to the role of oil prices in the Great Recession, there is no denying that rising inflation eventually leads to increasing interest rates which is detrimental to economic growth. Indeed, the higher US rates in 2007 (see G 2) led to an increase in mortgage defaults aggravating the US sub-prime crisis. While the hypothesis that the effects of oil price shocks on the economy have become less important over time requires further empirical evidence, it remains to be seen if oil price increases will influence policy makers in their timing of future interest rate hikes.

G 2: Trend in Oil Prices, US Federal Funds Rate and US Recession



(Source: Datastream, internal calculations)

References:

- J.D. Hamilton (2009) "Causes and the Consequences of the Oil Shock of 2007–08", *Brookings Papers on Economic Activity*, Spring, 215-261 (283).
- L. Kilian (2009) Not all Oil Shocks are alike: Disentangling Demand and Supply Shocks in the Crude Oil Market, *American Economic Review*, 99:3, June, 1053–1069

**MORE INFORMATION FOR MORE INFORMATION:
RESPONSE BEHAVIOUR AMONG SURVEY PARTICIPANTS**

As is the case of other surveys, a number of companies invited to take part in the KOF Business Tendency Surveys decline to answer. In a new study, KOF has investigated the systematics of non-participation in order to gain an overview of the companies most likely to decline participation. In contrast to conventional studies which describe response behaviour in terms of standard company features, such as size, sector and origin, the new KOF research shows that meta-information gained in a feedback survey is better suited to describe the response behaviour of companies than the commonly used information.

KOF conducted a non-recurrent feedback survey in summer 2013. A total of over 1,700 service providers and restaurateurs took part. In advance of the special survey, a pre-test in the form of personal interviews was conducted among selected business owners and managing directors in order to ascertain the effectiveness and relevance of the questions listed in the business tendency survey questionnaire and take account of the heterogeneous nature of the service sector.

The additional information thus gained was utilised for a more in-depth analysis of the response behaviour of the participants in the service sector.

MORE THOROUGH INFORMATION INCREASES PLAUSIBILITY

The meta-information consists of additional information about the respondents and their company, such as language, gender, average number of surveys the respondent participates in per year and number of minutes spent completing the KOF service sector questionnaire. The model calculation includes additional variables aside from the usual company characteristics (number of staff, sector and region) containing information regarding the benefit of the business tendency surveys perceived by the respondents, company rules regarding participation in surveys and the company's degree of capacity utilisation. Furthermore, both the response history and the type of participation (online or on paper) were investigated.

Since the resulting meta-information is time-related, analysis of the participants' response behaviour is limited to the year 2013. This is based on the assumption that the results of the feedback survey are the same two quarters before and after the survey.¹

The dependent variable is the number of questionnaires that were not completed. Since the service sector poll is a quarterly survey and analysis is limited to the year 2013, the dependent variable ranges between the values of zero and four. Zero signifies that a company has returned all questionnaires while four means that the company has not participated in any of the surveys in the year 2013.

¹ The expansion of the time horizon to +/- four quarters has an insignificant or no effect on the results.

META-INFORMATION HAS GREATER STATISTICAL WEIGHT

According to the results of the study, the inclusion of the additional variables reduces the significance of the common variables. Taking into account the additional information, neither the sector nor the number of staff provide a significant additional explanation. The origin of the company appears to play a certain role as companies in the greater Zurich region, for instance, respond less frequently than companies in other regions. However, the regional effects are rather insignificant.

Aside from the response history and the nature of participation, a company's survey policy and the number of minutes spent completing the questionnaire also have substantial explanatory power. Companies that participated regularly in the past also showed a greater probability of responding regularly in 2013. Participants completing the questionnaires online respond less frequently than those who respond on paper. It was also found that companies with internal survey processing rules participate more often than other companies. In addition, respondents who take longer to answer the questions are less willing to return the completed questionnaire.

Further results show that the likelihood of a participant returning the KOF service sector survey rises with increasing numbers of surveys completed per year². In addition, companies with higher capacity utilisation are more willing to participate in the service sector survey. The study also found that the position held by the person completing the questionnaire affects the rate of participation. The higher the position, the higher the likelihood of participation. In contrast, the perceived benefit of the business tendency surveys does not have an impact on the response behaviour.

Thanks to the inclusion of meta-information, a model for the explanation of response behaviour among survey participants was developed that has a greater explanatory power than conventional models. It was found that meta-information has a much greater impact on the likelihood of participation than conventional variables such as size, sector or origin of the company.

A comprehensive summary (in German) of the results of the feedback survey is available in: Abberger, K., M. Bannert und A. Dibiasi (2014): Metaumfrage im Dienstleistungssektor, KOF Analysen, 8(2), 51–62.

<http://www.kof.ethz.ch/de/publikationen/kof-analysen/> >>

² Here, all surveys are considered, not only KOF surveys.

EUROPEAN CONSTRUCTION MARKET: SIGNS OF A TENTATIVE RECOVERY

The European construction market is reaching firmer ground. The Euroconstruct network, of which KOF is part of, forecasts an annual average growth of 1.8 per cent, in real terms, from 2014 to 2016. The tentative recovery is noticeable in all subsectors, with new residential buildings being the main contributors to the upturn. The growth rate may be weak given the low starting level, but after some hard and turbulent years any signs of stability and recovery are welcome.

The Euroconstruct (EC-19) countries' collective GDP (measured at chained values and constant exchange rates) grew by 0.2 per cent in 2013. From 2014 to 2016 growth is expected to pick up further and average about two per cent a year (see G 3). The outlook for France and Italy is the weakest, whereas the economies of Poland and Slovakia could grow by as much as 3.5 per cent in 2015 and 2016. Inflation is low and recovery is most likely to be protracted as high unemployment and debt, low investment, tight credit, and financial fragmentation in the euro area continue to dampen domestic demand.

Aggregated construction output for the EC countries fell by 2.7 per cent in real terms last year, prolonging the negative trend started in 2008. The forecast suggests that the decline bottomed out last year after reaching the lowest point in 20 years. Euroconstruct expects construction output to grow an average of 1.8 per cent per year from 2014 to 2016, in real terms. This is an upward revision of 0.2 percentage points from the previous Euroconstruct forecast in November 2013. Even if the volume of construction work should grow as projected in the forecasting period, output and capacity utilisation in the European construction sector as a whole will remain at near-depression levels.

NEW RESIDENTIAL CONSTRUCTION IS BOOSTING RECOVERY

New residential construction in total is expected to grow by an average of 3.2 per cent from 2014 to 2016, whereas residential renovation and maintenance (R&M) is expected to grow by only 1.2 per cent per year, pulling down average growth in total residential construction to two per cent per year in real terms (see G 4). Although there are no signs of recession in most EC countries, sluggish domestic demand growth and weak public sector finances

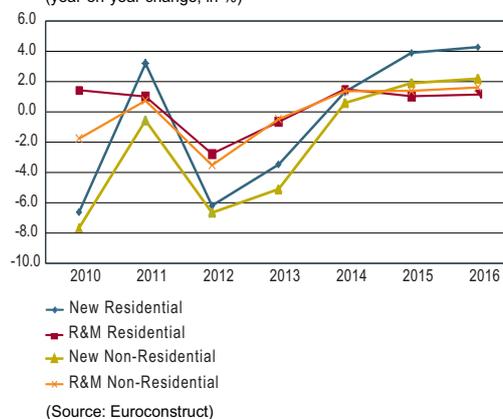
G 3: GDP and Total Construction Output from 2010 to 2016

(year-on-year change, in %)



G 4: Total Building Construction Output from 2010 to 2016

(year-on-year change, in %)



will most likely continue to dampen non-residential building demand for some time. Euroconstruct expects total non-residential construction to increase by an average of 1.5 per cent per year from 2014 to 2016, in real terms, which is an upward revision of 0.3 percentage points from the previous forecast. The total number of civil engineering works is currently expected to grow by an average of 1.9 per cent per year from 2014 to 2016, in real terms, compared to 1.5 per cent in the previous forecast. The adjustment is mainly a result of a brighter outlook for new civil engineering.

There are big differences across the EC-19 countries. Ireland and Poland saw an average growth rate of nine per cent and six per cent respectively from 2014 to 2016, measured at constant prices. The UK, Denmark and Hungary are also among the fast growing construction markets, with average growth rates of three to four per cent per year. At the other end of the scale are the Czech Republic and Spain where construction output looks set to remain below 2013 levels.

KOF INDICATORS



KOF BUSINESS SITUATION INDICATOR: BUSINESS IS PICKING UP

The KOF Business Situation Indicator for the Swiss private economy rose substantially in June and thus more than compensated for the previous month's decline. At the end of spring, the Indicator was at its highest level since February of this year (see G 5). The Swiss economy is trending upward again.

The sectors subject to monthly surveys, i.e. the processing industry, construction industry, project engineering industry, retail trade and financial services sector, all reported an improvement of their business situation in June (see G 6). The current improvement is thus solid across the different industries. The wholesale trade, the hotel and catering industry and the other service providers were last surveyed in April. The wholesale trade's excellent business situation deteriorated slightly. The hotel and catering industry also reported a slight setback. The business situation among the other service providers is largely unchanged.

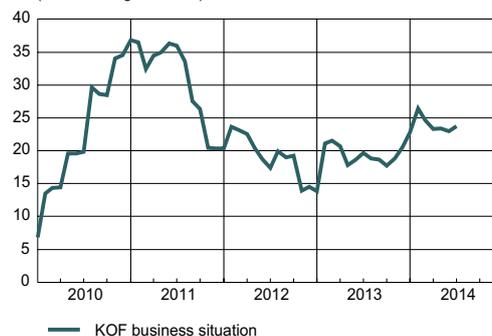
EXPLANATION:

The KOF Business Situation is based on more than 6,000 responses from companies in Switzerland. Companies in the industrial, retail, construction and project engineering sectors as well as financial and insurance services are surveyed on a monthly basis. Companies in hotel and catering, wholesale and other services are surveyed every three months during the first month of a quarter in each case. Companies are asked to assess their current business situation, amongst other things. They can rate their situation as "good", "satisfactory" or "bad". The final result for the current business situation is obtained from the difference in the percentages of "good" and "bad" responses.

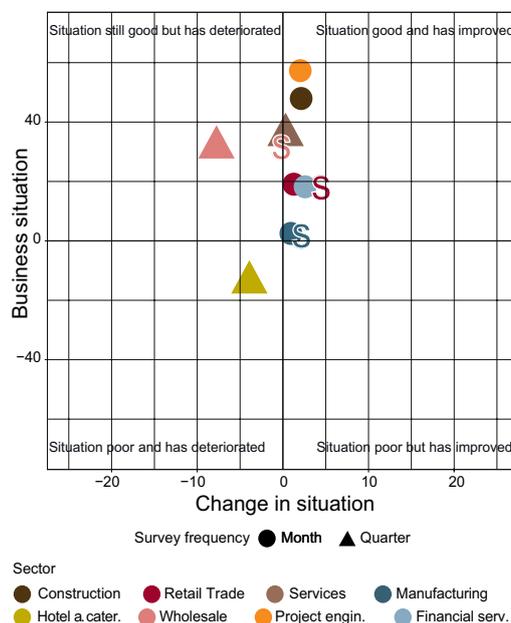
Graph G 5 shows the original data from the KOF Business Situation for all the sectors that were included in the survey. The business situation of sectors that are only surveyed every three months is kept constant in the intervening months. Graph G 6 shows the business situation and the actual change in the situation. The change over the previous month is invariably subtracted from the monthly surveys. The quarterly surveys plot the change in the most recent quarterly data over the previous quarter. The quarterly data are not changed in the intervening months and are only updated in the first month of the respective

G 5: KOF Business Situation Indicator

(balance, original value)



G 6: KOF Business Situation: Change in Different Sectors



quarter. An “S” is also entered against the results for industry and retail that are produced when the survey results that are used are adjusted for seasonal factors. A seasonal adjustment cannot be made for the other monthly surveys due to the short monthly time series.

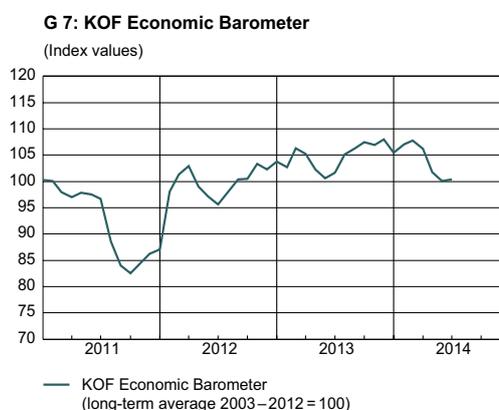
You will find more information about the KOF Business Situation Indicator on our website:

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

KOF ECONOMIC BAROMETER: STABILISATION CLOSE TO LONG-TERM AVERAGE

In June 2014, the KOF Economic Barometer rose slightly. After it had fallen three times in a row, it now climbed from 100.1 (revised from 99.8) to 100.4. The barometer thus continues to linger very close to its long-term average reading (see G7). Accordingly, during the next few months the Swiss economy can be expected to run unspectacularly.

The rise of the Barometer was mainly driven by indicator variables from the Swiss manufacturing and banking sectors. Other areas like the international environment, the construction industry, the hotel and catering industry and the retail sector overall hardly contributed. A closer look at the information from Swiss manufacturing reflected by the Barometer, which together accounts for about more than 50 per cent of this month’s rise, shows that indicators related to intermediate products gave positive impulses. At the same time, information related to inventories rather contributed negatively. The overall only marginal change of the Barometer corresponds to the finding that most of its numerous indicator variables emitted only negligible signals.



BAROMETER AND REFERENCE SERIES

The KOF Economic Barometer is a composite leading indicator for the Swiss economy. The latest version comprises 219 indicator variables, which are combined based on statistically determined weights. The indicator variable selection and their weights are updated annually. These updates are performed after the release of the previous year’s annual Gross Domestic Product (GDP) data by the Swiss Federal Statistical Office. In 2014, this will be in October. The reference series is a smoothed continuous growth rate of Swiss GDP.

FURTHER KOF PUBLICATIONS

You will find a complete list of all KOF publications (KOF Analyses, KOF Working Papers and KOF Studies) on our website.

<http://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:

http://www.kof.ethz.ch/static_media/bulletin/76/kof_bulletin_forecasts_2014_07_en.pdf >>

AGENDA

KOF EVENTS**KOF Research Seminar:**

Superstar Central Bankers

Peter Tillmann, University of Giessen

ETH Zurich, 16 July 2014

tba

Alfonso Sousa-Poza, University of Hohenheim

ETH Zurich, 1 October 2014

Bernd Fitzenberger, University of Freiburg

ETH Zurich, 8 October 2014

Thomas Gresik, University of Notre Dame

ETH Zurich, 22 October 2014

Dirk Czarnitzki, KU Leuven

ETH Zurich, 5 November 2014<http://www.kof.ethz.ch/de/veranstaltungen/k/kof-research-seminar/> >>**KOF Media Agenda:** www.kof.ethz.ch/en/medien/agenda/ >>OTHER EVENTS

Silvaplane Workshop in Political Economy

Pontresina (Switzerland), 26–30 July 2014ees.elsevier.com/ejpe/img/Silvaplane_2014_submission.pdf >>

Jahrestagung 2014 Verein für Socialpolitik

Evidenzbasierte Wirtschaftspolitik

Hamburg (Germany), 7–10 September 2014<http://socialpolitik.de/De/vfs-jahrestagung> >>

Schweizer Tage der öffentlichen Statistik

Die Statistik: Kommunikationsmittel und Entscheidungshilfe

Yverdon-les-Bains (Switzerland), 8–10 October 2014www.statoo.ch/jss14/ >>

Annual CIRET Conference

Hangzhou (China), 9 – 11 October 2014www.ciret.org/conferences >>

8th Annual Conference on the Political Economy of International Organizations

(Call for Papers: 30 September 2014)

Berlin (Germany), 12 – 14 February 2015www.peio.me/ >>**Add event:** www.kof.ethz.ch/publications/bulletin/event/index_en >>

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**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

5 September 2014 | 3 October 2014

TABLES – KOF Summer Forecast 2014

SWITZERLAND

Real Gross Domestic Product by Type of Expenditure																
	2004-2012	Percentage change against												previous year		
		previous quarter (annualized, trend cycle component)												2013	2014	2015
		2013				2014				2015						
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Private consumption	1.7	2.8	2.0	1.6	1.2	1.5	2.1	2.5	2.0	1.8	1.9	1.6	1.6	2.3	1.7	1.9
Public consumption	0.7	3.3	3.1	2.2	0.8	-0.6	-0.4	0.5	1.3	2.0	1.5	0.8	0.6	3.0	0.3	1.3
Gross fixed capital formation	2.5	-0.6	1.8	2.7	2.6	2.6	2.7	3.7	4.0	3.4	3.3	2.9	3.3	0.3	3.0	3.4
– Construction	1.7	-3.7	-2.4	2.5	5.6	4.6	1.0	-1.5	-0.7	0.3	0.5	0.9	2.3	0.2	2.6	0.0
– Machinery and equipment	3.0	0.4	6.0	5.1	0.5	1.3	4.8	8.0	7.5	6.5	5.4	4.3	4.6	0.3	3.3	6.4
Exports of goods (1) and services	4.8	-1.3	1.9	3.8	3.7	4.4	4.8	3.2	3.9	5.1	4.9	5.3	5.2	1.1	4.0	4.6
– Goods	4.5	-4.0	-0.4	1.8	3.5	6.0	6.2	3.8	4.2	5.6	5.4	5.9	5.9	-0.5	3.9	5.1
– Services	5.7	4.0	3.5	5.5	6.7	4.6	2.3	2.6	2.6	3.3	4.9	4.3	3.3	4.4	4.2	3.5
Imports of goods (1) and services	4.2	-0.4	2.2	4.1	2.3	1.4	1.5	3.1	3.8	4.5	5.2	5.2	5.4	1.3	2.2	4.3
– Goods (1)	3.4	-1.2	1.9	3.2	0.9	0.7	2.0	4.6	4.8	5.3	5.3	5.0	5.3	0.1	2.1	4.9
– Services	7.7	4.1	3.8	8.5	8.6	2.1	-2.1	-1.9	-0.3	2.3	6.0	5.4	5.1	5.7	2.8	2.3
Change in stocks (2)	0.0	1.4	1.3	0.4	-0.7	-1.1	-1.0	-0.8	-0.3	-0.2	0.0	0.0	-0.2	0.9	-0.7	-0.2
Gross Domestic Product (GDP)	2.1	2.1	2.4	1.8	1.3	1.6	2.1	2.1	2.0	2.0	2.0	2.1	2.1	2.0	1.8	2.0

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

(2) Percentage contribution to GDP-growth

Other Macroeconomic Indicators

Other Macroeconomic Indicators																
	2004-2012	Percentage change against												previous year		
		previous quarter												2013	2014	2015
		2013				2014				2015						
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Real effective exchange rate of Swiss Franc (1)	1.4	-3.0	-0.7	-0.7	4.4	2.3	1.5	-3.8	0.1	-2.9	-2.3	-4.4	-1.1	-1.6	1.0	-2.1
Short term interest rate ((3-month Libor CHF) (2))	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0
Yield of 10 years federal bonds (2)	2.1	0.8	0.8	1.1	1.1	1.0	0.8	0.9	1.1	1.2	1.3	1.4	1.5	0.9	1.0	1.4
Consumer prices (3)	0.7	-0.4	-0.4	0.0	0.0	0.0	0.1	0.0	0.3	0.4	0.6	0.6	0.6	-0.2	0.1	0.6
Full-time equivalent employment (4)	1.3	1.2	1.1	1.0	1.1	1.3	1.4	1.4	1.3	1.2	1.2	1.3	1.3	1.3	1.2	1.3
Unemployment rate (2,5)	3.1	3.1	3.2	3.2	3.2	3.2	3.1	3.1	3.0	2.9	2.8	2.8	2.7	3.2	3.1	2.8

(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

GLOBAL ECONOMY																
	2004-2012	Percentage change against												previous year		
		previous quarter (annualized, seasonal adjusted)												2013	2014	2015
		2013				2014				2015						
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Real Gross Domestic Product (GDP)																
– OECD total	1.7	1.2	2.3	2.6	1.8	1.0	1.6	2.0	2.3	2.3	2.4	2.6	2.2	1.3	1.8	2.3
– European Union (EU-28)	1.1	-0.2	1.6	1.2	1.6	1.2	1.2	1.7	1.8	1.8	1.9	1.8	1.9	0.1	1.4	1.8
– USA	1.7	1.1	2.5	4.1	2.6	-1.0	3.3	3.2	3.2	3.2	3.2	3.1	3.1	1.9	2.1	3.2
– Japan	0.7	4.9	3.5	1.3	0.3	5.9	-2.1	-0.1	1.0	1.6	1.9	3.4	0.7	1.6	1.5	1.3
Oil price (\$ per barrel) (1)	77.0	112.9	103.0	110.1	109.4	107.9	109.2	109.7	110.2	110.8	111.3	111.9	112.5	108.8	109.2	111.6

(1) Level

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