

# KOF Bulletin

No. 80, December 2014

## ECONOMY AND RESEARCH

Swiss Public Sector Growth Is Demand-Driven >>

The Economic Consequences of the Russia Crisis >>

Exchange Between Swiss Parent Companies and Their Foreign Subsidiaries >>

The European Construction Market: 2014, Year of Recovery >>

## KOF INDICATORS

KOF Business Situation Indicator: Economic Outlook Has Recovered Slightly >>

KOF Economic Barometer: Economic Perspectives Slightly Dimmed >>

Further KOF Publications >>

## AGENDA

KOF Events >>

Conferences/Workshops >>

## CUSTOMER SERVICE >>

IMPRINT >>

## ECONOMY AND RESEARCH

**SWISS PUBLIC SECTOR GROWTH IS DEMAND-DRIVEN**

In the last few years, employment in the public and semi-public sectors has grown substantially, raising concerns about excessive bureaucracy and declining productivity. However, a close look reveals that public and semi-public sector growth is largely a result of Switzerland's economic success and the ensuing demand for public services.

Between 2003 and 2013, the number of employees in the semi-public sector rose by an impressive 235,000 jobs. Thus, the number of people working in the public and semi-public sectors went up by just under twenty-five per cent, with the two sectors also acting as important drivers of employment growth in Switzerland. In the last few years, approximately every third employee in Switzerland took up employment in the public or semi-public sector. The fact that this figure has increased significantly also raised concerns that the Swiss employment miracle of the last few years may have to be considered as an increase in bureaucracy rather than sustainable employment.

A glance at the relevant employment statistics shows that this view is too indiscriminate. The company surveys conducted by the Federal Statistical Office, which supply detailed figures on public sector employment with the Federal government, the cantons and the municipalities, provide a good basis for analysis. The survey was, however, last conducted in 2008 and does not reflect the trends of the last few years. The company survey has in the meantime been replaced by the corporate development statistics which provide detailed employment figures for the years 2011 and 2012. Although the two statistics employ different definitions of the term "employee" as well as a different data collection basis, they nevertheless allow conclusions regarding the business areas of the public and semi-public sectors that have grown more than others.

**MAIN JOB CREATION AREAS**

Table 1 shows the top 12 business areas in the public and semi-public sectors that have created the most full-time equivalent jobs since the year 2001. Business area denotes the lowest (most disaggregated) level of the classification of economic activities, the sixth digit in the so-called NOGA classification 2008 (NOGA – Nomenclature Générale des Activités économiques or General Classification of Economic Activities). The business areas within the public sector are listed on a scale from one to 12 for two different periods according to the number of new full-time equivalent jobs (FTE). The number of new jobs is represented both for the period between the company survey 2001 and the corporate development statistics 2012 and, to ensure that the results are not skewed by differences in methodology and definitions, also for the period between the company surveys 2001 and 2008.

The 12 business areas represented in the table have made up as much as approx. 70 per cent of total employment growth in the public and semi-public sectors since 2001. Which of the areas has seen the most significant growth in employment since the start of the new millennium? The main growth drivers in the public and semi-public sectors consisted of residential care homes and hospitals. The following places are taken by children's daycare, universities and universities of applied science, other welfare, consultants' surgeries, institutions for the disabled and home care. Next on the list are the classic public administration areas, such as business development, order and supervision as well as general public administration.

**Table 1: Employment Trend According to Sector**

Rank	Sector	Increase in Employment 2001-2008	Sector	Increase in Employment 2001-2012
1	Residential care homes	16795	General hospitals	22407
2	General hospitals	14948	Residential care homes	21552
3	Children's day-care	7136	Consultants' surgeries	14169
4	Other welfare	5628	Children's day-care	12984
5	Universities	5315	Other welfare	9191
6	Public order and safety	4904	Universities	8722
7	Institutions for the disabled	4570	Universities of applied science	8522
8	Nurses' activities, home care	3967	Institutions for the disabled	7806
9	Universities of applied science	3874	General public administration	7516
10	Business development, order and supervision	3526	Other activities, medical professions excluding doctors	7061
11	General public administration	3414	Nurses' activities, home care	6964
12	District, secondary and secondary modern schools, sixth form primary schools	2904	Public order and safety	6905

In conclusion, the results show that a large part of public and semi-public sector employment growth in Switzerland simply reflects greater demand for such services and can thus be convincingly explained by structural factors. The fact that the Swiss population is getting older and wealthier may go a long way to explain the above-average growth in the health sector. One likely reason for the continuous rise in the numbers of public employees working in eldercare, care of the disabled or childcare is the increasing percentage of women in work.

Furthermore, the fact that universities and universities of applied science account for a significant part of public and semi-public sector employment growth is most likely due to the Swiss economy's trend towards a knowledge economy that requires highly qualified employees. On top of this, it seems reasonable that public and semi-public sector employment increases when the population grows at the rate it has grown in Switzerland over the last few years. Even highly-qualified immigrants require the services of civil servants in the registration office, bus drivers who get them to work, comprehensive healthcare when they are sick and a high-quality local education for their children.

Hence, in many respects, the employment boom in the public and semi-public sector is a consequence of Switzerland's economic success reflected in income, immigration and a thirst for knowledge.

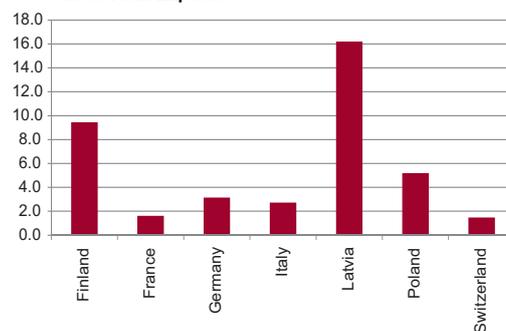
## THE ECONOMIC CONSEQUENCES OF THE RUSSIA CRISIS

The conflict between Russia and the USA/EU surrounding the approach to the Ukraine crisis has been one of the leading political issues over the last twelve months. There is a question as to whether the political conflict has had any implications for the economy, in particular in Switzerland. According to an analysis by the KOF, there are not yet any indications that this has occurred.

### THE CHANNELS THROUGH WHICH A CRISIS GENERATES ECONOMIC EFFECTS

A geopolitical conflict may generate knock-on effects for the economy through various channels. There are obviously adverse effects for cross-border trade. These have negative effects on gross domestic product (GDP) due to the reduced demand for exported goods, at least in the short term. Graph G 1 shows exports to Russia from selected European countries as a proportion of total exports. Trade links with Russia are only of major significance for Finland and a few Eastern European countries.

**G 1: Proportion of Exports to Russia Out of Total Exports**



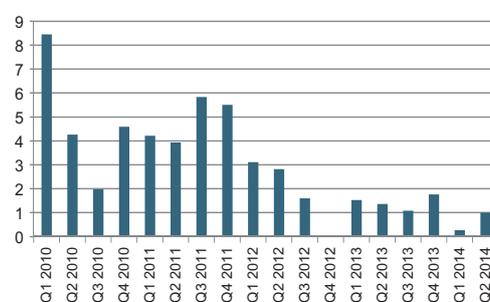
■ Proportion of exports to Russia out of total exports (% in 2013)

Source: IMF

In addition, simple calculations based on historical elasticities between GDP growth and exports show that it would require a massive recession in Russia (comparable to the downturn during the 1998 rouble crisis) in order to cause a significant trade-driven negative effect on GDP in the Western European economies. As Graph G 2 shows, however, Russia is not yet in recession.

Alongside trade, uncertainty provides a further potential channel for transferring shocks. For example, a transnational conflict may lead to uncertainty regarding future profits from current investment. Investors may delay their investments until the uncertainty has been dispelled. With regard to the Russia conflict, Europe's relatively high energy dependence on Russia could be a cause for increased uncertainty amongst European investors. Around one third of oil imported into the EU comes from Russia, around 40 per cent of the gas and around one quarter of solid fuels (coal etc.). The important point is that political conflicts are not necessarily causally responsible for increased uncertainty. However, investors may take the conflict as an opportunity to reassess their risks as a whole—including those that are not related to the conflict at all.

**G 2: Russia GDP Growth**



■ Russia GDP growth (annualised % compared to previous quarter)

Source: OECD

### KOF SPECIAL SURVEY CONCERNING THE RUSSIA CONFLICT

The KOF has carried out a special survey alongside the monthly KOF survey of industrial companies in order to establish whether the Russia conflict has resulted in increased uncertainty or has had any other adverse effects on Swiss businesses. Companies were asked what proportion of their total turnover related to the Russian economy, taking account also of indirect business such as

supplies to other businesses that are attractive in Russia. The assumption was that businesses with at least some level of (direct or indirect) business links with Russia would consider it more likely for their assessments and expectations to be rendered uncertain or negatively affected by the Russia conflict than businesses that have no or only negligible business links with Russia.

As expected, the proportion of turnover resulting from Russia business was very low for participants in the survey: 61 per cent out of 676 firms reported a figure of zero per cent, 29 per cent reported one to two per cent, eight per cent declared three to five per cent and only two per cent of firms indicated a figure higher than five per cent. Thus, Swiss industrial companies can classify their direct or indirect dependence on Russian business as minor.

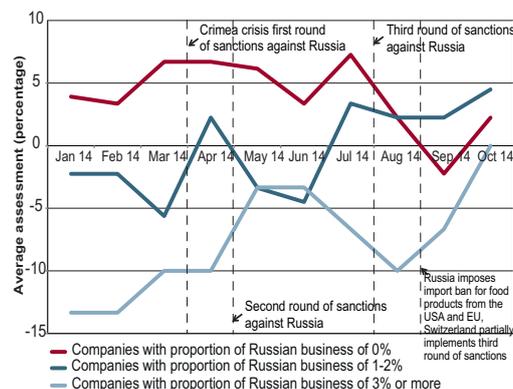
In a next step the survey analysed whether the assessments by and expectations of companies with a relatively high level of business with Russia relating to orders, production, economic outlook etc. had developed any differently over the last few months compared to other companies.

### COUNTER-INTUITIVE DEVELOPMENT

Graph G 3 shows the average assessment of the economic outlook by businesses with a percentage turnover from Russian business of zero per cent, one to two per cent and three per cent or more, respectively. The higher this share, the more negative the assessment of the economic outlook was in the first half of the year. However, the gradual escalation of the Russia conflict over the year was accompanied by a tendency on the part of businesses trading with Russia to assess the economic outlook more positively, and not –as one might have expected– by a worsening of the outlook. Accordingly, this method does not provide any indication that the Russia conflict is relevant from the perspective of businesses. An analysis of the assessments by and expectations of businesses concerning orders and production supports this view.

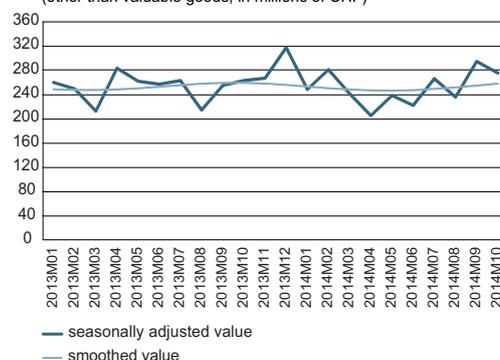
In a further step, the analysis examined whether, on the basis of difference in differences regressions, businesses earning a higher proportion of turnover from Russian business were negatively affected by the Russia conflict as regards their assessments and expectations. The regression approach enables this to be monitored for the share of exports as a whole within businesses and thus to avoid the distortions resulting from any correlation between the share of turnover from Russia business and exports in general. During the course of 2014, the Russia conflict became increasingly more serious. Accordingly the

**G 3: Assessment of the Economic Outlook**  
(good = +1, satisfactory = 0, bad = -1)



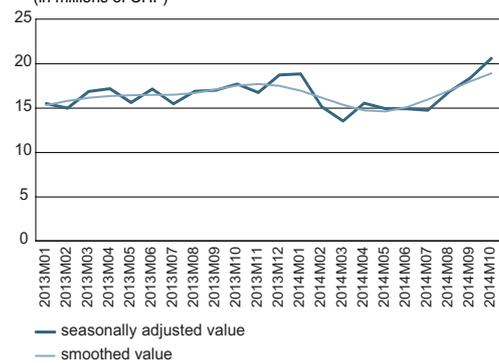
**G 4: Export of Goods to Russia**

(other than valuable goods, in millions of CHF)



above question was examined with the aim of identifying alternative points at which a break may have occurred between the pre-conflict period and the conflict period. Overall, the regression analysis provides no indication that the Russia conflict has caused any significant adverse effects for Swiss businesses. This contrasts with the results obtained by the Munich-based ifo Institute, which concluded on the basis of similar investigations that German businesses had been negatively affected by the Russia conflict (see Grimme, Seiler and Wohlrabe in ifo Schnelldienst 18/2014).

**G 5: Exports of Food, Beverages and Tobacco**  
(in millions of CHF)



According to export trade figures from the Swiss Customs Administration, the Russia conflict has not had any lasting negative effect on exports of Swiss goods to Russia. As Graph G 4 shows, following a weak performance in the first half of the year, exports picked up again in the second half. It is interesting to note the exports of food, beverages and tobacco, a class of goods which could potentially benefit from high demand from Russia due to the Russian embargo on European and American food products. As Graph G 5 shows, exports grew strongly in the first few months after the embargo was announced at the start of August. However, it will only be possible to establish whether this is the result of additional demand generated by the embargo or whether food exports have returned to the growth trend from previous years on the basis of foreign trade figures for the coming months.

#### EXCHANGE BETWEEN SWISS PARENT COMPANIES AND THEIR FOREIGN SUBSIDIARIES

In a new study, KOF investigates the activities that Swiss multinational companies abroad internalise or process internally, the factors that determine the companies' degree of internationalisation abroad and the impact these decisions have on head offices in Switzerland.

International business activities, also known as offshoring, can be broken down into international outsourcing and international insourcing. In contrast to international outsourcing, which involves contracting out work to external companies abroad, insourcing, i.e. the international internalisation of activities by companies, involves contracting out work within the group structure in the form of direct foreign investment.

While a variety of studies have been conducted on the subject of international outsourcing, very few studies have been carried out on the intensification of internalisation. No research has so far been conducted into the situation in Switzerland. In a new KOF study on the determinants and impact of the internalisation of service flows, Spyros Arvanitis, Thomas Bolli und Tobias Stucki fill this gap. The study is based on data collected in the context of a KOF survey of Swiss multinational companies. To measure the degree of internalisation of the service flows, the authors use the share of intra-company service flows in total service flows from abroad.

## CHARACTERISATION OF INTERNAL SERVICE FLOWS

Among Swiss multinational companies, internalisation from the inside to the outside appears to be more common than vice versa: The internalisation of service purchases from abroad is more relevant than the internalisation of service deliveries. Companies predominantly purchase intermediate and finished products from their foreign subsidiaries. Purchases of IT services and know-how are much less common (see Graph G 6). In turn, the parent companies deliver finished products to their foreign subsidiaries as well as know-how and IT services. The knowledge intensity of the purchases is thus noticeably lower than that of the deliveries. This pattern reflects Switzerland's relative location advantages which are primarily based on human capital and technological knowledge (patents, product concepts, engineering know-how).

In addition, there are significant differences between the industrial sector and the service sector. While the degree of internalisation of purchases in the industrial sector is similar to that of the service sector, the knowledge-intensive areas in both sectors, i.e. high-tech industrial companies and knowledge-intensive service companies, show a higher degree of internalisation intensity than the traditional, less knowledge-intensive areas. In contrast, internalisation of deliveries among industrialised companies is substantially higher than that among service companies, with little difference discernible between knowledge-intensive and less knowledge-intensive sectors.

## DETERMINANTS OF INTERNALISATION

According to the study, companies are more likely to internalise services if their activities entail high coordination costs for the harmonisation and control of processes that are based on the division of labour. This can be explained by the fact that internalisation increases the efficiency of communication and thus reduces coordination costs. As a further result, lack of ownership protection and legal security promotes the internalisation of service purchases since internalisation entails better protection of valuable company-specific knowledge.

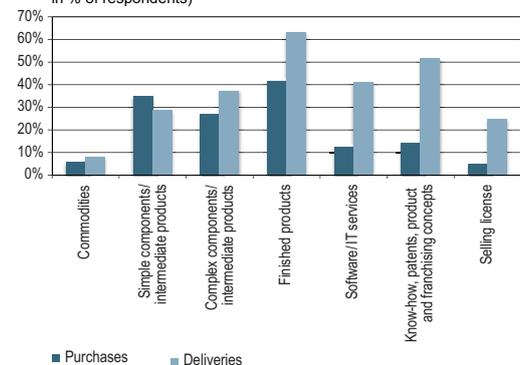
## IMPACT ON THE PARENT COMPANY

The study furthermore shows that the internalisation of purchases raises labour productivity. At the same time, internalisation of service purchases reduces investment and employment. However, these short-term effects may be compensated by the realisation of medium-term productivity gains. The impact of the internalisation of purchased services is also reflected in the qualification-related employment structure which shifts in favour of highly qualified staff (employees with university-level education).

According to the authors, the internalisation of deliveries has little impact on the activities of Swiss companies. This may be due to the fact that foreign subsidiaries which purchase services from Switzerland primarily act as distributors and are rarely involved in production.

**G 6: Service Flows According to Type of Goods/Services**

(Percentage of companies that purchase/deliver the respective category of goods or services within the company, in % of respondents)



Source: Arvanitis, Boffi, Stucki (2014) / Die Volkswirtschaft

A detailed version of this article is appearing simultaneously in “Die Volkswirtschaft”, the economic policy magazine:

[www.dievolkswirtschaft.ch/](http://www.dievolkswirtschaft.ch/) >>

The study entitled “Die Determinanten und Auswirkungen von intra-betrieblichen Leistungsverflechtungen von Schweizer multinationalen Unternehmen” (Determinants and impact of intra-company service flows in Swiss multinational companies) by Spyridon Arvanitis, Thomas Bolli, Tobias Stucki is available for download from the KOF website:

[www.kof.ethz.ch/de/publikationen/p/kof-studien/3440/](http://www.kof.ethz.ch/de/publikationen/p/kof-studien/3440/) >>

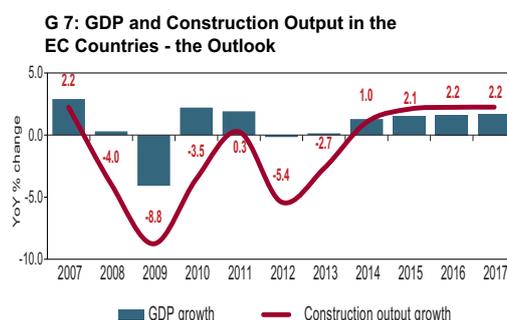
### THE EUROPEAN CONSTRUCTION MARKET: 2014, YEAR OF RECOVERY

According to the forecast group Euroconstruct, of which KOF is a member, the European construction market entered a new phase of growth in 2014. After seven years of deep crisis, during which the market declined by 21 per cent, and after a negative 2013 (-2.7%), 2014 is confirmed to be the first year of recovery in construction output. Growth has been moderate this year (+1%) but will consolidate in the near future: +2.1 per cent in 2015, +2.2 per cent in both 2016 and 2017.

Even though there are strong disparities within the 19 countries, the European economy is recovering, however more slowly than expected six months ago. In the United Kingdom the recovery has been gaining momentum and growth has been accelerating also in Northern European countries outside the euro area. In the euro area the recession has ended (except in Italy) but the economy has now stagnated. Output, wages and prices are stagnating and levels of unemployment are at record highs.

The European Central Bank (ECB) is starting to deploy non-conventional measures in an attempt to stimulate the economy. Eastern European economies, on the other hand, have returned to robust growth after a sharp slowdown in 2012-2013. All in all, economic growth will be weak since the labour market is still fragile in many countries, the credit market is still tight and public accounts correction is still underway. But above all, deflationary fears have increased further in the euro area.

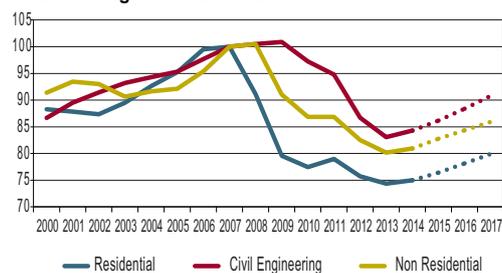
In this weak but slowly improving economic scenario, the new outlook for construction activity in Europe indicates that construction investments bottomed out in 2013 and stabilized at a very modest level in 2014 (see G 7). This new phase can be described as one of modest recovery, and of low investments levels even if sector-specific growth rates, after some years, will once again overtake the pace of the economy.



Source: Euroconstruct November 2014

According to new estimates, all three main segments within the construction market are expected to grow in the short-to-medium term, albeit to varying degrees (see G 8). The residential sector is still suffering. Particularly new production which, after further severe reduction last year (-4%), has stagnated (0.1%) in 2014. In the short-to-medium term it will however be a very important engine for the European sector (growth rates of 2.6 per cent in 2015 and 4.7 per cent and 3.7 per cent in 2016 and 2017, respectively). An upward trend can also be observed for new non-residential investment, in which the decline in 2013 was even steeper.

**G 8: Development of the Construction Output by Market Segments - Index 2007=100**



Source: Euroconstruct November 2014

However, the forecasted growth is more moderate than that for residential construction (little more than two per cent for each year in the period 2015-2017).

For civil engineering works the recovery in 2014 is stronger if compared to the building segments (+1.4%) even if it has been the market segment with the most marked downward revision with respect to six months ago (mainly due to the downward revision for the UK). However, the sector will continue to grow at an accelerated speed in the next three years (2.2%, 2.6%, 2.7%). Finally, renovation building activity continues to have an important cushioning effect for the entire construction sector. It indeed has been able to absorb part of the decline in the past period, and will stabilize the trend in the next future.

Not surprisingly, the scenario for the different territorial areas is more heterogeneous. At a macro level, Eastern Europe is once again a driving force in the market, showing a growth rate of +4.8 per cent in 2014 that will continue to surpass three per cent in the next two years. Thus the construction market in the Eastern European countries is expected to enter into a new phase not far from the previous period of growth, mainly thanks to an improved capability to contribute the required own financial means in order to be eligible for using EU project funds, which will mainly boost the segment of infrastructure.

This stands in contrast to the outlook for the Western European countries: in 2014 their growth rate will remain below one per cent (0.8%) and in the next three years will not exceed two per cent. Growth in France, Italy and Spain is still negative in 2014 (see Table 2). Germany's economy is set to slow down in the near future and could even enter a stagnation phase in two years' time.

Table 2: Development of the Construction Output in the Euroconstruct Countries

	2014 CONSTRUCTION OUTPUT		% CHANGE IN REAL TERM			
	Billion euro	2013	2014	2015	2016	2017
Germany	285	-0.3	2.4	1.8	0.2	-0.4
France	200	-3.2	-2.8	-0.4	1.8	1.6
United Kingdom	177	1.8	5.2	5.1	3.5	2.4
Italy	163	-3.5	-2.2	1.1	2.5	2.8
Spain	63	-18.8	-2.4	1.8	3.6	5.0
The Netherlands	60	-3.9	0.3	3.4	3.5	4.7
Switzerland	53	1.2	0.8	-0.7	1.4	1.5
Norway	46	0.3	2.1	3.9	2.5	2.9
Poland	44	-8.8	4.9	7.1	6.2	6.7
Belgium	39	-0.9	0.7	0.0	1.5	2.4
Sweden	34	1.4	5.3	1.3	1.1	1.6
Austria	32	1.2	1.7	1.0	1.3	1.5
Finland	29	-2.5	-0.2	1.5	1.7	3.2
Denmark	27	-1.2	2.5	2.9	3.5	3.7
Czech Republic	16	-7.0	1.0	2.5	3.3	4.0
Portugal	15	-14.5	-1.0	2.5	3.6	5.0
Ireland	9	-2.0	10.1	9.0	10.6	9.2
Hungary	9	6.2	14.3	5.1	3.8	2.9
Slovak Republic	4	-5.3	-0.4	1.8	2.7	3.0
<b>Western Europe</b>	<b>1.232</b>	<b>-2.5</b>	<b>0.8</b>	<b>1.9</b>	<b>2.0</b>	<b>2.0</b>
<b>Eastern Europe</b>	<b>73</b>	<b>-6.7</b>	<b>4.8</b>	<b>5.5</b>	<b>5.1</b>	<b>5.5</b>
<b>Euroconstruct Countries</b>	<b>1.305</b>	<b>-2.7</b>	<b>1.0</b>	<b>2.1</b>	<b>2.2</b>	<b>2.2</b>

Source: Euroconstruct November 2014

Growth is expected for the UK. Although it is expected to slow down in the next three years, the residential market is currently booming again (+16% new investment in 2014). Non-residential construction will be boosted by a strong demand for commercial, industrial and educational building and finally, after a halt in 2014, new civil engineering works should also return to growth.

The latest Euroconstruct Report can be ordered through our website:

[www.kof.ethz.ch/en/publications/euroconstruct/](http://www.kof.ethz.ch/en/publications/euroconstruct/) >>

KOF INDICATORS



**KOF BUSINESS SITUATION INDICATOR: ECONOMIC OUTLOOK HAS RECOVERED SLIGHTLY**

The KOF Economic Outlook Indicator for the Swiss private sector recovered slightly in November, following a significant fall in October. However, it was unable to make up entirely the ground lost during the previous month. This means that the economic outlook continues to be less favourable than in the first three quarters of this year (see G 9). The Swiss business cycle is navigating through stormy waters.

The improvement was driven in particular by retail trade (see G 10), which was able to improve its economic outlook significantly. The outlook for the manufacturing, financial services and project engineering sectors is practically unchanged. On the other hand, the construction sector has reported an increasingly subdued economic outlook. Wholesalers, the hotel and restaurant sector and other service providers were most recently questioned in October. Wholesalers and other service providers stated that the economic outlook was no longer as good. By contrast, the situation in the hotel and catering sector is somewhat more relaxed.

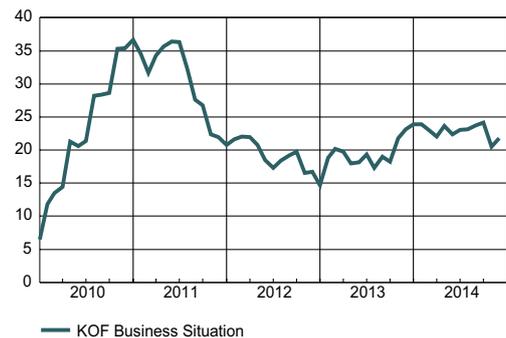
From a regional perspective (see G11), businesses in Central Switzerland lost a bit more of their edge in November. Nevertheless, the situation is viewed most positively in this area. However, the situation is also positive in Eastern Switzerland, Zurich and North-west Switzerland. In particular, North-west Switzerland made up ground in November. In the Geneva region, the marginally satisfactory economic outlook improved slightly in November, whilst Ticino –where the economic outlook has been the most unfavourable until now– reported a further slow-down.

**EXPLANATION OF GRAPHS**

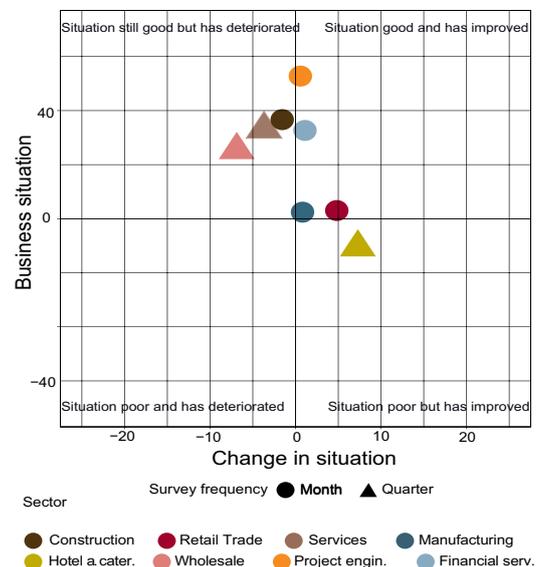
Graph G 9 shows the original data from the KOF Business Situation for all the sectors that were included in the survey. The business situation of sectors that are only surveyed every three months is kept constant in the intervening months. Graph G 10 shows the business situation and the actual change 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 quarter.

**G 9: KOF Business Situation Indicator**

(balance, seasonally adjusted)

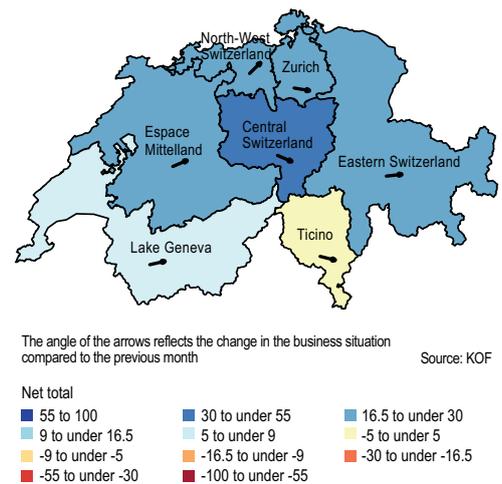


**G 10: KOF Business Situation: Change in Different Sectors**



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.

G 11: KOF Business Situation in the Private Sector



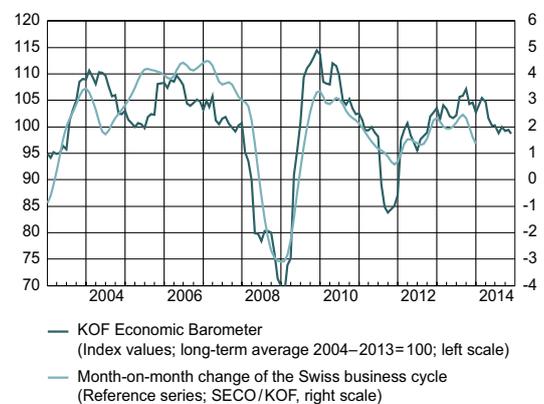
### KOF ECONOMIC BAROMETER: ECONOMIC PERSPECTIVES SLIGHTLY DIMMED

The KOF Economic Barometer fell 0.8 points in November 2014. It now shows a reading of 98.7, following revised 99.5 points in October (see G 12). Whereas the barometer had moved very closely around the long-term average in the last three months, the gap now has widened somewhat. Nevertheless, the indicator is retaining close contact to its average. Accordingly, economic development in Switzerland is likely to be marginally bumpier in winter.

Within the banking sector and in industry, the economic climate has cooled somewhat. The partial indicator for consumption also fell significantly. Consumers are assessing their economic situation more cautiously. The retailers have hardly received any positive impulses. In the construction sector, however, prospects have slightly brightened in comparison to the previous month. Furthermore, the global environment for Switzerland presents itself slightly more favourable than before, even if the various international indicators show a rather heterogeneous picture.

In general, the order situation has come under pressure. The indicators for purchasing primary goods indicate a cautious purchasing policy, which goes hand in hand with rather subdued production plans. The wood and textile industries are showing rather negative signals. On the other hand, the chemical industry and food manufacturers indicators have a stabilising impact on the overall barometer.

G 12: Economic Barometer and Reference Series



**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. This 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.

<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/80/kof\\_bulletin\\_forecasts\\_2014\\_12\\_en.pdf](http://www.kof.ethz.ch/static_media/bulletin/80/kof_bulletin_forecasts_2014_12_en.pdf) >>

## AGENDA

KOF EVENTS**KOF Research Seminar:**

Environmental Standards and Trade: Evidence from a Natural Experiment

Pavel Chakraborty, University of Oxford

**ETH Zurich, 10 December 2014**

tba

Hartmut Egger, University of Bayreuth

**ETH Zurich, 16 December 2014**

Do Higher Corporate Taxes Reduce Wages? Micro Evidence from Germany

Andreas Peichl, University of Mannheim, ZER

**ETH Zurich, 17 December 2014**

[www.kof.ethz.ch/de/veranstaltungen/k/kof-research-seminar/](http://www.kof.ethz.ch/de/veranstaltungen/k/kof-research-seminar/) >>

**KOF-ETH-UZH International Economic Policy Seminar:**

tba

Alejandro Cunat, University of Vienna

**ETH Zurich, 11 December 2014**

Non-Tariff Barriers, Integration, and the Trans-Atlantic Economy

Doug Nelson – Tulane University

**ETH Zurich, 18 December 2014**

[www.kof.ethz.ch/de/veranstaltungen/k/kof-eth-uzh-seminar-in-international-economic-policy/](http://www.kof.ethz.ch/de/veranstaltungen/k/kof-eth-uzh-seminar-in-international-economic-policy/) >>

**KOF Media Agenda:** [www.kof.ethz.ch/en/medien/agenda/](http://www.kof.ethz.ch/en/medien/agenda/) >>

CONFERENCES/WORKSHOPS

8th Annual Conference on the Political Economy of International Organizations

**Berlin (Germany), 12 – 14 February 2015**

[www.peio.me/](http://www.peio.me/) >>

Young Swiss Economists Meeting – YSEM 2015

**Zurich (Switzerland), 12 – 13 February 2015**

[www.kof.ethz.ch/de/veranstaltungen/d/251/](http://www.kof.ethz.ch/de/veranstaltungen/d/251/) >>

Annual Meeting Swiss Society of Economics and Statistics

The Solvency of Pension Systems

**Basel (Switzerland), 2 – 3 June 2015**

[sgvs.ch/](http://sgvs.ch/) >>

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/](http://www.journals.elsevier.com/european-journal-of-political-economy/call-for-papers/silvaplana-workshop-in-political-economy/) >>

**Add event:** [www.kof.ethz.ch/publications/bulletin/event/index\\_en](http://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](http://www.kof.ethz.ch/publications/bulletin/registration/en) >>

For previous KOF Bulletins, visit our archive:

[www.kof.ethz.ch/publications/bulletin/archive/en](http://www.kof.ethz.ch/publications/bulletin/archive/en) >>

Visit us at: [www.kof.ethz.ch](http://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/](http://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](mailto:kof@kof.ethz.ch)

**EDITORIAL TEAM**

Anne Stücker | David Iselin

[bulletin@kof.ethz.ch](mailto:bulletin@kof.ethz.ch)

**NEXT PUBLICATION DATES**

29 December 2014 | 6 February 2015

## TABLES – KOF Autumn Forecast 2014

## SWITZERLAND

Real Gross Domestic Product by Type of Expenditure																
Percentage change against																
	2005-2013	previous quarter (annualized, trend cycle component)												previous year		
		2014				2015				2016				2014	2015	2016
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Private consumption	1.7	0.5	0.6	1.2	1.6	2.3	2.4	2.0	1.7	1.4	1.3	1.2	1.3	0.8	1.9	1.6
Public consumption	1.1	0.2	0.8	2.5	2.5	2.2	1.5	0.7	0.9	1.7	1.4	1.1	1.8	1.4	1.8	1.3
Gross fixed capital formation	2.0	-0.4	0.0	0.6	1.9	3.0	4.6	4.1	3.5	3.9	4.1	3.6	3.2	0.5	2.8	3.9
– Construction	1.4	0.0	-2.1	-2.7	-1.7	-1.1	-0.2	0.2	1.0	1.7	1.4	1.0	1.3	0.2	-1.0	1.1
– Machinery and equipment	2.3	-0.7	1.5	2.8	3.9	5.6	7.6	6.5	5.0	5.2	5.8	5.1	4.4	0.8	5.2	5.5
Exports of goods (1) and services	4.0	-0.5	2.2	3.1	4.8	5.4	4.0	3.9	5.6	5.9	5.0	4.8	5.4	2.6	4.4	5.1
– Goods	3.6	4.2	4.5	4.0	6.1	5.8	4.4	5.5	6.6	6.2	5.0	5.2	5.6	3.8	5.2	5.7
– Services	3.7	2.3	0.6	0.7	2.8	4.0	4.7	4.6	4.1	4.9	5.4	5.4	4.9	2.8	3.3	4.9
Imports of goods (1) and services	3.6	0.1	0.8	2.6	3.7	5.2	5.3	4.8	5.3	5.6	4.9	4.3	4.5	1.4	4.3	5.1
– Goods (1)	3.0	2.9	1.7	2.6	4.3	5.6	5.6	5.6	5.9	5.6	4.9	4.6	4.6	1.9	5.1	5.4
– Services	5.2	-2.2	-2.4	-0.1	3.4	3.3	3.8	4.7	4.2	4.8	4.6	4.6	4.2	0.4	2.7	4.5
Change in stocks (2)	0.2	2.2	0.5	-0.2	-0.9	-1.2	-0.5	-0.2	-0.7	-0.6	0.0	0.1	-0.4	0.8	-0.6	-0.4
Gross Domestic Product (GDP)	2.1	1.6	1.3	1.5	1.7	1.6	1.7	1.8	2.0	2.2	2.2	2.1	2.1	1.7	1.7	2.1

(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

Other Macroeconomic Indicators																
Percentage change against																
	2005-2013	previous quarter												previous year		
		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	1.7	-0.2	-3.7	-4.6	-2.9	-0.9	-3.7	-0.6	-2.9	-0.4	-2.7	1.0	0.3	-2.8	-1.7
Short term interest rate ((3-month Libor CHF) (2))	0.9	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	0.1
Yield of 10 years federal bonds (2)	1.9	1.0	0.8	0.6	0.6	0.7	0.8	0.9	0.9	1.0	1.1	1.1	1.2	0.7	0.8	1.1
Consumer prices (3)	0.5	0.0	0.1	0.0	0.0	0.1	0.2	0.2	0.5	0.5	0.5	0.6	0.7	0.0	0.3	0.6
Full-time equivalent employment (4)	1.4	0.8	0.5	0.6	1.0	1.3	1.4	1.4	1.2	1.1	1.2	1.3	1.3	0.8	1.1	1.2
Unemployment rate (2,5)	3.0	3.2	3.2	3.2	3.2	3.2	3.2	3.1	3.1	3.1	3.1	3.1	3.1	3.2	3.2	3.1

(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																
Percentage change against																
	2005-2013	previous quarter (annualized, seasonal adjusted)												previous year		
		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	1.1	2.3	1.7	1.8	2.1	2.4	2.1	2.2	2.1	2.0	2.0	1.7	2.0	2.1
– European Union (EU-28)	0.9	1.3	0.6	0.7	0.9	1.2	1.5	1.7	1.8	1.9	1.9	1.7	1.7	1.2	1.2	1.8
– USA	1.5	-2.1	4.6	3.1	3.2	3.1	3.0	2.9	2.9	2.8	2.7	2.6	2.5	2.2	3.1	2.8
– Japan	0.6	6.0	-7.1	5.5	0.5	-0.1	1.6	3.1	0.3	1.2	1.2	1.2	1.3	1.1	1.0	1.3
Oil price (\$ per barrel) (1)	84.8	107.9	109.8	102.6	95.0	95.5	96.0	96.5	97.0	97.5	98.0	98.5	99.0	103.8	96.2	98.3

(1) Level

© KOF, ETH Zürich