



# KOF Bulletin

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# EDITORIAL

Dear readers,

The assumption that companies should protect their innovations from the outside world to avoid competitive copying of new products and services seems obvious. However, recent research has called this focus on secret innovation processes into question. According to the first article of this Bulletin, companies can benefit from greater openness. The second article is dedicated to Swiss consumers – a species that has been spotted mostly just beyond the borders in recent years. As a result, expectations among domestic retailers are somewhat restrained, even though consumer sentiment is positive. The mood in the European construction industry should be particularly buoyant given this year's growth figures in all 19 European member countries of the 'Euroconstruct' network. The outlook for 2018 is also positive.

I hope you enjoy your read,

David Iselin

# ECONOMY AND RESEARCH

## Against Intuition: Transparency in the Innovation Process



**Bringing a product from idea to market is a stony and sometimes expensive process. The classic approach is to keep everything under wraps so that no competitor knows what you are doing. However, this approach is not always the best one, as new research by Georg von Krogh, Torbjørn Netland and Martin Wörter shows.**

Research on open innovation in the development of new products or services has traditionally focused on the use of ideas and knowledge from outside the organisation. But openness can also play an important role within an organisation, as Georg von Krogh, Torbjørn Netland, and Martin Wörter show in their research.

Intuitively, manufacturing companies keep process innovation activities under wraps because they fear that competitors might 'steal' their ideas. And some of them have good reasons for doing this. If you have found a unique production process with which to manufacture a differentiated product, it can be wise to keep that know-how within the

company as, in such cases, there is an obvious risk of loss of intellectual property.

However, the study suggests that for many manufacturers, such defensiveness is not always the best strategy. Walling off process innovations from the outside world can become a disadvantage because, sooner or later, competitors usually catch up anyway. The researchers draw their conclusion from an analysis of nine years of survey responses from 1,000 Swiss manufacturers, as well as 200 interviews with personnel at the Volvo Group (AB Volvo), a manufacturer of trucks, buses, construction equipment, and marine and industrial engines that is based in Gothenburg, Sweden.<sup>1</sup>

<sup>1</sup> Note that AB Volvo, or the Volvo Group, is not the manufacturer of Volvo cars. Volvo Car Group is owned by the Chinese company Zhejiang Geely Holding Group Co. Ltd. One of the authors visited 45 Volvo Group factories around the world.

## From closed to open in six steps

It might feel counterintuitive, but many operations managers can build greater advantage for their company by following a policy of open process innovation rather than secrecy. However, how do you implement such an open culture in an organisation? A six steps plan is suggested:

1. Open up internally.
2. Focus on the pace of process innovation.
3. Exploit connectivity technologies.
4. Improve your organisation's ability to absorb and implement ideas from external sources.
5. Open up to the outside.
6. Utilise unconventional sources of knowledge.

## How to get started

As product life cycles continue to decrease and demand for individualisation increases, companies that master the combination of superior product and process development will be better positioned. Opening process innovation is in line with this new world. However, the success of such an openness program depends on how well a company knows itself, i.e. managers have to ask themselves when external knowledge serves them best, how to combine the search for product and process knowledge, etc.

As with many organisational changes, open innovation is best begun gradually. The authors therefore recommend switching from closed to open process innovation step by

step. Furthermore, the bulk of the research indicates that the businesses that will be most successful in the future are the ones that master both the process and product sides of open innovation.

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## Note

This article is a shortened version of the text that was published on November 14, 2017, in the MIT Sloan Management Review:

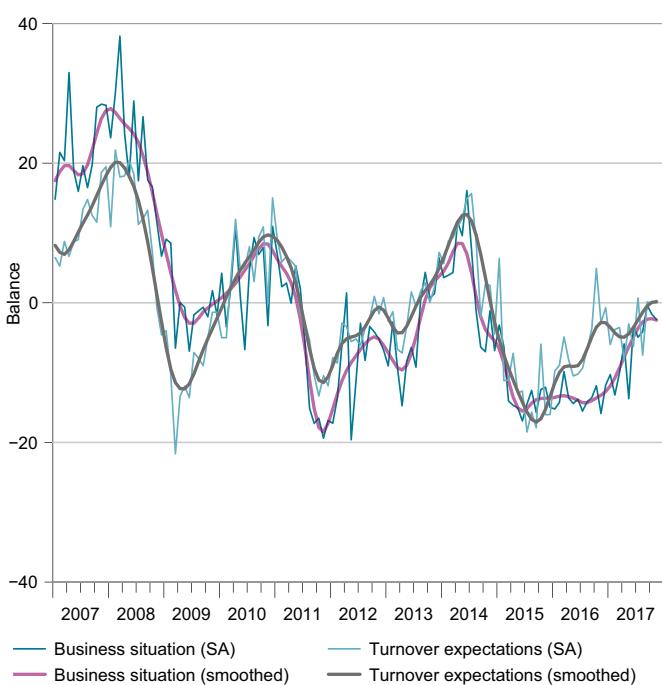
[www.sloanreview.mit.edu/article/winning-with-open-process-innovation/](http://www.sloanreview.mit.edu/article/winning-with-open-process-innovation/) →

# Consumers in Buying Mood – How Much Will Domestic Retailers Benefit?

**With the Christmas business just around the corner, Swiss consumers appear to be quite optimistic – a fact that should be appreciated by domestic retailers. However, this year is likely to have been another dynamic one in terms of cross-border shopping. It remains to be seen how much money will roll in for domestic retailers and how much they will be forced to surrender to their competitors across the border.**

In the first nine months of the year, real retail sales recovered to some degree and returned to the previous year's level. The results of the KOF retail survey indicate a similar trend. Since the beginning of the year, retailers' assessments of their business situation have improved and customer frequency has increased at the same time. Nevertheless, both indicators remain at a rather low level. Turnover expectations for the coming three months show a less significant upward trend this year. However, it should be remembered that in contrast to the other indicators, they had already recovered last year. At present, more retailers expect turnover to increase than decrease in the near future, although all in all, expectations remain muted (see G 1).

**G 1: Retailers' Business Situation and Turnover Expectations**  
(mean adjusted)



## Confident consumers

According to the index published by the State Secretariat for Economic Affairs (SECO), fourth quarter consumer sentiment will have changed very little compared to the previous quarter and will thus remain above the long-term average. In the coming twelve months, consumers mainly anticipate improved economic trends and lower unemployment figures. In contrast, respondents were slightly more subdued when it came to their own future financial situation, and viewed bigger purchases with caution.

The consumer survey conducted by Ernst & Young<sup>1</sup> on the subject of intended purchases confirms current consumer optimism. At close to CHF 300, the average budget for Christmas presents is likely to remain just under the previous year's figure. Nevertheless, since this is the second-highest Christmas gift budget since 2012, retailers expect a healthy Christmas business.

## Will cross-border shopping ruin the Swiss Christmas business?

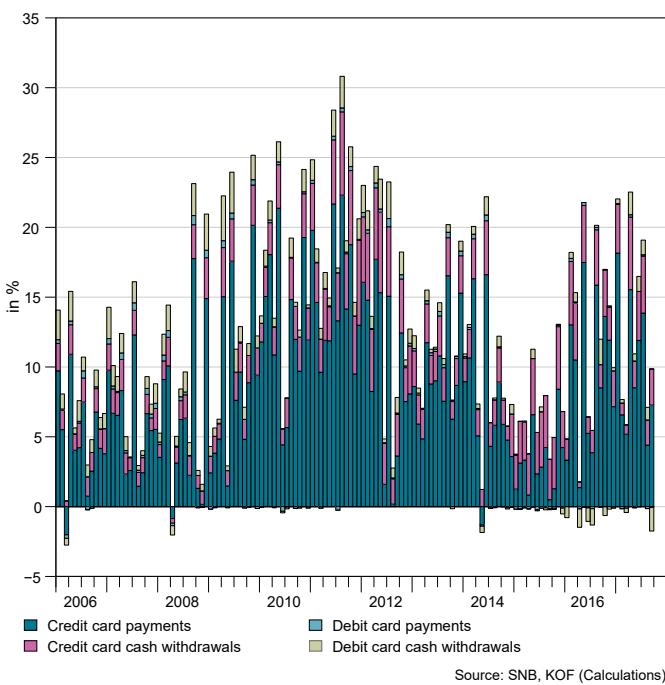
Despite these relatively positive prospects, retailers remain cautious. Among the reasons for this caution is cross-border shopping. It is difficult to measure and put a figure on the extent of Swiss consumers' shopping activities abroad. The data collected by the Swiss National Bank (SNB) on payments and cash withdrawals provide a rich source of information. For instance, the data indicate how much money was paid abroad using Swiss payment cards (issued by domestic financial institutions) and how much cash was withdrawn.

The dynamics involved in cross-border shopping have been analysed via the combined number of transactions made with the two types of card. Graph G 2 presents the four components' contributions to the previous years' growth rates on a monthly basis. Since the cards also include company cards, an exact assessment of the number of

<sup>1</sup> <http://www.ey.com/ch/de/newsroom/news-releases/medienmitteilung-ey-weihnachten-herr-und-frau-schweizer-zieht-es-zum-geschenke-einkauf-in-die-innenstaedte>

## G 2: Payments and Cash Withdrawals Using Swiss Cards

### Abroad Number of Transactions – Growth Contributions to Previous Year's Growth Rates



transactions made by domestic consumers abroad is not possible. However, since they allow us to infer the dynamics in play, it is fair to say that corporate spending does not seem to be the main driver of the trend.

Transactions performed with Swiss cards abroad underwent a significant increase in the years 2010 and 2011 when the value of the Swiss Franc began to go up and the minimum

exchange rate was introduced. Interestingly, the number of transactions abroad seems to have increased relatively slowly in 2015, while rising more significantly again in 2016.

The graph also shows that Swiss consumers have made numerous foreign transactions in the current year, which, in turn, probably slowed down the recovery of the domestic retail sector. Nevertheless, the renewed depreciation of the Swiss Franc appears to have held back cross-border shopping in August and September. On the other hand, close to 30% of the respondents in the Ernst & Young study stated that they planned to buy either all or at least some Christmas presents abroad. This indicates that Swiss consumers will continue to spend money with retailers abroad.

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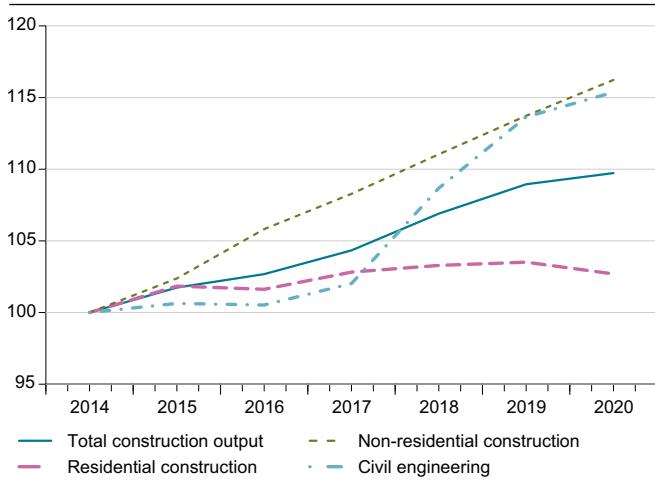
Shopping at home or abroad?

## European Construction Industry Is Booming

**This year, the construction volume in the Euroconstruct area<sup>1</sup> is expected to increase by 3.5%. This is remarkable for two reasons. Firstly, the last significant expansion in construction activities in Europe occurred in 2006, just before the financial crisis. Secondly, in 2017, construction demand has been rising in all 19 countries under review. This supranational growth is unprecedented, and prospects for 2018 are positive.**

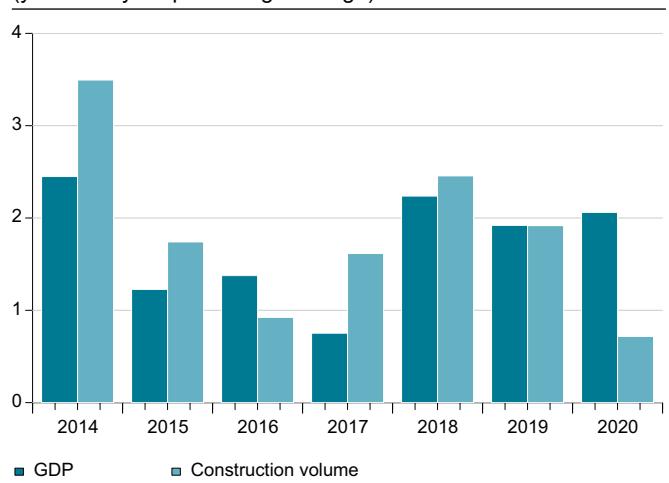
The European construction industry has been growing since 2014. In the four years between 2014 and 2017, building activities expanded by a total of 9%. Until 2020, the 19 countries expect a further increase of 6% (see G 3). Housing construction and the other structural engineering segments will record much lower growth rates in the future, while civil engineering is likely to become the main market driver in the medium-term. The latter is set to grow by more than 4% both in 2018 and 2019, which is another first. At the same time, new construction will lose quite a bit of ground in the coming years. In 2020, conversion and renovation work is likely to grow more significantly than new construction for the first time since 2014.

**G 3: Total Construction Output by Sector in Switzerland, 2014 to 2020**  
(Index 2014 = 100)



Source: EUROCONSTRUCT, November 2017

**G 4: GDP and Construction Volume in Switzerland, 2014 to 2020**  
(year over year percentage change)



Source: EUROCONSTRUCT, November 2017

On the one hand, the positive trend in construction demand is due to robust economic growth and the associated positive impact on household income, corporate profits and public budgets. Other reasons consist of the low interest level, immigration and internal migration and the investment deficit that has arisen since the financial crisis, for instance in the infrastructure field. However, public sector leeway is still visibly restricted – a point that is borne out by restrained fiscal and subsidy policies in many countries. Furthermore, a stronger expansion of building activities is held back by unusually high real estate prices in a few member countries.

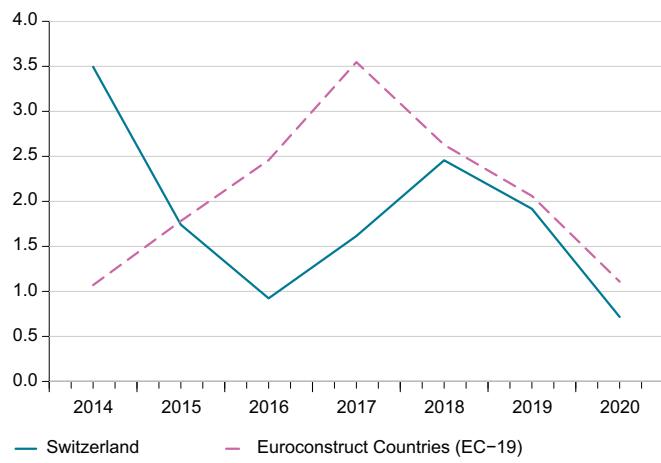
<sup>1</sup> The Euroconstruct area comprises 19 European countries: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Hungary, Ireland, Italy, Netherlands, Norway, Poland, Portugal, Slovakia, Spain, Sweden, Switzerland, UK.

## Swiss construction industry on the way to recovery

After a weak performance in 2016, the Swiss building sector is undergoing a recovery this year and is set to gain further momentum in 2018 and 2019 (see G 4). Growth is driven by infrastructure investments and industrial-commercial construction. The implementation of the railway infrastructure fund and the national road and agglomeration transport fund is giving a boost to the civil engineering sector (see G 5). However, a gradual normalisation of monetary policy as of 2019 and a weaker demand for residential property will put a dampener on housing construction. The growth rate of total construction investment is expected to be 1.6% this year and 2.5% in 2018. At 0.7%, the long-term outlook for 2020 is subdued due to a rise in interest rates.

## G 5: Construction Volume 2014 to 2020 in Europe and Switzerland

(year over year percentage change)



In 2017, at 25%, construction demand will grow most significantly in Hungary – the second-smallest market in the Euroconstruct area. In second place is Ireland (15%), followed by Sweden (10%) and Poland (9%). At 33%, Hungary



Europe under construction

will remain the fastest grower in this field in the coming three years until 2020. Aside from government housing construction subsidies, more consistent use of EU subsidies in the non-residential segment is also playing an important role. Once again, Ireland is in second place (28%), followed by Poland (25%), Czech Republic and Portugal (both 15%, see T 1).

Driven by rising demand for housing, a higher investment propensity among companies and the government's civil engineering campaign, construction growth in Germany, the biggest Euroconstruct country, will be even higher in 2017 than in 2016. Although growth is set to lose substantial momentum in the medium-term, extensive investment is expected both in the residential and the infrastructure sector in the long-term.

**T 1: Construction Volume by Country**

Total Construction Output (% change in real terms)							
Country/Year	Estimate				Forecasts		Outlook
	2014	2015	2016	2017	2018	2019	2020
Austria	-0,1	1,1	1,1	2,8	1,5	1,4	1,4
Belgium	1,5	2,3	3,7	2,5	3,7	2,3	3,5
Denmark	3,2	3,7	4,5	2,0	2,7	2,8	2,5
Finland	-1,9	0,9	8,6	3,5	1,4	-3,3	-1,3
France	-6,0	-2,0	2,6	3,6	2,7	2,3	1,2
Germany	1,8	0,2	2,5	2,6	0,9	-0,3	-0,4
Ireland	10,1	9,0	14,2	14,6	12,7	7,9	5,2
Italy	-2,2	0,9	1,1	1,0	2,0	1,8	1,6
Netherlands	0,5	7,7	5,8	5,4	4,9	3,8	2,6
Norway	2,3	-0,1	5,2	6,8	3,5	2,5	1,8
Portugal	-1,0	3,5	-1,5	6,0	5,0	5,0	4,0
Spain	-1,7	2,9	1,8	4,1	3,8	3,7	3,0
Sweden	7,7	6,1	5,8	9,9	3,6	0,0	-3,2
Switzerland	3,5	1,7	0,9	1,6	2,5	1,9	0,7
United Kingdom	9,3	4,0	3,9	2,7	0,7	1,9	0,2
Western Europe (EC-15)	0,9	1,6	3,0	3,3	2,3	1,7	1,0
Czech Republic	4,1	7,1	-5,8	1,6	5,0	6,7	2,5
Hungary	6,5	3,4	-19,3	25,5	21,4	7,9	1,4
Poland	4,7	4,0	-4,5	8,7	9,0	10,3	4,2
Slovak Republic	-3,5	18,5	-11,4	3,1	1,8	0,4	-0,5
Eastern Europe (EC-4)	4,3	5,4	-7,1	8,6	9,3	8,7	3,2
Euroconstruct Countries (EC-19)	1,1	1,8	2,5	3,5	2,6	2,1	1,1

Source: EUROCONSTRUCT, November 2017

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**Euroconstruct**

Euroconstruct is a network of 19 European research institutions that produce construction sector forecasts. KOF is the Swiss representative on this international network. Local forecast institutions contribute country-specific construction forecasts. Euroconstruct provides information, analysis and forecasts to help companies plan their annual business more effectively.

The current Euroconstruct report can be ordered on the KOF website:

[www.kof.ethz.ch/prognosen-indikatoren/prognosen/euroconstruct →](http://www.kof.ethz.ch/prognosen-indikatoren/prognosen/euroconstruct)

# KOF INDICATORS

## KOF Business Situation: Indicator Dips Slightly

**In November 2017, the KOF Business Situation Indicator for the Swiss private economy dropped slightly for the second time in a row. Although the business situation is still favourable, it does not look quite as magnificent as during the summer months. Nevertheless, all in all, the KOF survey results indicate a consistently robust business situation.**

The Business Situation Indicator dipped slightly in most sectors. For instance, there has been a minor slowdown in the construction, project engineering and retail industries, while the financial and insurance sector suffered a slightly stronger decline (see G 6). Bucking the downward trend, the manufacturing industry reported a small upward movement for the tenth consecutive month. All in all, the business situation in the manufacturing industry is predominantly positive. Wholesale, hotel & catering and the other services were last surveyed in October. At the time, the wholesale and the hotel & catering sectors reported an improvement of their business situation. The indicator for the other service providers dropped slightly.

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



**T 2: KOF Business Situation for Switzerland (seasonally adjusted balances)**

	Nov 16	Dec 16	Jan 17	Feb 17	Mar 17	Apr 17	May 17	Jun 17	Jul 17	Aug 17	Sep 17	Oct 17	Nov 17
<b>Private sector (overall)</b>	10.8	10.3	11.3	12.8	14.9	18.8	19.2	20.3	20.0	21.4	23.7	20.0	19.9
<b>Manufacturing</b>	-9.7	-8.4	-9.2	-7.2	-5.0	-1.6	-1.0	3.9	4.1	6.5	9.7	11.2	14.0
<b>Construction</b>	26.9	24.6	28.3	28.0	31.5	31.6	29.5	33.0	32.7	31.7	31.2	30.7	29.6
<b>Project engineering</b>	42.2	46.5	47.6	47.4	49.2	50.0	47.2	46.7	46.4	46.7	47.3	49.0	48.5
<b>Retail trade</b>	-13.1	-9.0	-7.5	-10.4	-7.2	-3.1	-10.9	-0.6	-2.2	-1.4	2.4	1.1	0.4
<b>Wholesale trade</b>	-	-	0.1	-	-	9.8	-	-	15.5	-	-	19.5	-
<b>Financial services</b>	23.0	18.4	22.8	31.9	33.1	32.3	38.1	37.3	30.2	33.8	36.2	29.9	27.4
<b>Hotel and catering</b>	-	-	-16.2	-	-	-14.4	-	-	-1.9	-	-	-0.1	-
<b>Other services</b>	-	-	27.1	-	-	33.0	-	-	32.6	-	-	24.7	-

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.

At the regional level, the business situation changed very little in the majority of regions. Espace Mittelland, Eastern Switzerland, Central Switzerland and the Zurich Region all reported a similar situation to that of the previous month. The indicator dropped slightly more noticeably in Ticino and in North-West Switzerland. The Lake Geneva region recorded a rise in the Business Situation Indicator. (see T 2).

### Explanation of graphs

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

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

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

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



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

Source: KOF

#### Net balances

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

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

## KOF Economic Barometer: Swiss Economy Gains Pace

**The KOF Economic Barometer continued its upward tendency in November. It rose by 0.5 points to 110.3 points (after revised 109.8 in October) (see G 8). This is the third consecutive increase of the indicator. The Swiss economy continues to gain momentum towards the end of the year.**

As in the previous month, the indicators for manufacturing are responsible for a substantial part of the increase. In addition, the indicators for construction activity have also turned positive again, following a decline in the previous month. In November, export prospects and the outlook for consumption and the accommodation and food service activities remained largely unchanged. The indicators for the banking industry, on the other hand, are slowing down the development.

Within the manufacturing sector, the electrical equipment industry, the wood industry and chemicals are on the up, whereas, the project for the textile industry have deteriorated. The architecture and engineering firms support the positive development of construction activity. The indicators for the construction industry as such are coming to a standstill in November.

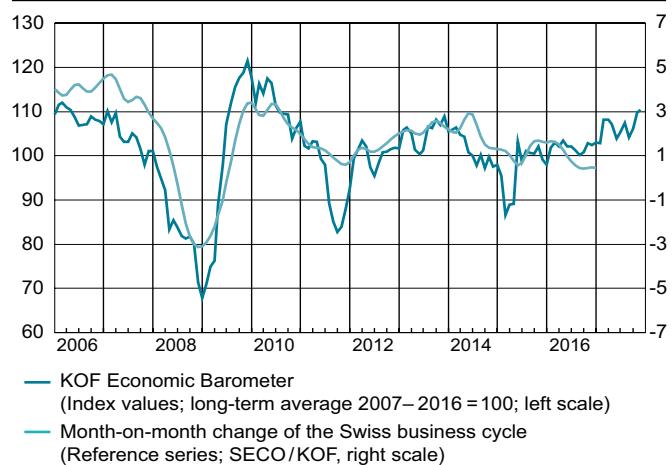
In the goods producing sector (manufacturing and construction), the indicators for demand and production development, as well as for the general situation and export demand, moved upwards. By contrast, the indicators for competitive and capacity development slowed down the upward tendency.

### KOF Economic Barometer and reference time series:

#### annual update

In September 2017, the scheduled annual update of the KOF Economic Barometer took place. The annual update involves the following steps: redefinition of the pool of indicators that enter the selection procedure, update of the reference time series, and renewed execution of the variable selection procedure. The updated reference series is the smoothed continuous growth rate of the Swiss Gross Domestic Product (GDP) according to the new System of National Accounts ESGV 2010, released in early September

**G 8: Economic Barometer and Reference Series**



2017, which takes into account the previous year's annual GDP data published by the Swiss Federal Statistical Office (FSO). As a result of the indicator variable selection procedure, the updated KOF Economic Barometer is now based on 273 indicators (instead of 272 as in the previous vintage), from a pool of almost 500 potential indicator series. They are combined using statistically determined weights.

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

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## KOF Events

### KOF Research Seminar:

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