



KOF Bulletin

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EDITORIAL

The Financial Crisis – 10 Years On: KOF Forecast Conference

The upcoming KOF Forecast Conference on 3 October 2018 will be all about the anniversary of the financial crisis. Aymo Brunetti, Oswald Grübel and KOF Director Jan-Egbert Sturm will discuss the impact of the Great Recession and the lessons learned from it. Read more about this subject in our first short article. Discussing the issue of rational conduct, the second article is somewhat longer. If people can earn more by postponing their work or delaying the declaration of their income, they will do so – goes the generally accepted economic theory. But does empirical research support this thesis? A study conducted by Michael Siegenthaler in conjunction with Isabel Martínez of the University of St Gallen and Emmanuel Saez of the University of California, Berkeley, shows that this is not necessarily the case. In addition to this, the current Bulletin contains articles on the Swiss construction industry and its specific features as well as a review of this year's summer school at CEMETS, the Center on the Economics and Management of Education and Training Systems, which is located at the KOF Institute.

David Iselin

ECONOMY AND RESEARCH

The Great Recession – 10 Years On: KOF Forecast Conference 2018



The financial crisis is approaching its tenth anniversary. While Switzerland got off rather lightly, economic distortions at the global level were pronounced. At the KOF Forecast Conference on 3 October, Aymo Brunetti, Oswald Grübel and KOF Director Jan-Egbert Sturm will take stock of the past and cast an eye on the future of the Swiss economy.

Ten years have passed since the world went through the most serious financial and economic crisis in the post-war era. The impact of the global economic crisis was severe, involving pronounced turbulence on the stock markets, the cave-in of global trade and numerous countries sliding into recession. Switzerland got through the crisis with a relatively strong but temporary 'dip'. Having declined for a period of four quarters, the country's GDP recovered quickly, following a virtual V curve.

Numerous European countries, where the financial crisis also turned into the harbinger of the Euro crisis, went through a rather different experience. Following the collapse of their real estate markets, countries such as Spain or Ireland were confronted with lengthy recessions. With many banks faltering, especially at the beginning of the crisis, the debate about the stability of our financial system is still ongoing.

On 3 October 2018, Aymo Brunetti, Oswald Grübel and KOF Director Jan-Egbert Sturm will discuss the structural and cyclical consequences of the Great Recession as well as the potential future challenges facing the Swiss and the global economy. During the Apéro, which will follow the presentations and the panel discussion, there will be an opportunity to talk to the speakers and further KOF experts.

Register for the 2018 KOF Forecast Conference on our website:

www.kof-prognosetagung.ethz.ch →

Program:

www.kof.ethz.ch/prognosetagung →

Attendance of the conference is subject to a fee.

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Despite Income Tax Holidays, the Swiss Hardly Worked More

Do we work more when it pays off? Not necessarily, as a new study by Isabel Martínez, Michael Siegenthaler and Emmanuel Saez shows. On the basis of Swiss data, the authors demonstrate that a temporary total exemption from income tax has not really resulted in increased labor input.

Do people work more when their wage is temporarily higher? Macroeconomists believe that they do and that this is a key driver of employment fluctuations. While working more when your wage is higher makes sense theoretically, can you do it in practice? Many people have jobs with fixed hours and may not be able to switch jobs easily. People have careers where harder work does not immediately translate into higher earnings. Those out of the labor force might not be able to find jobs quickly. So how do temporary tax changes affect the macroeconomic labor supply?



The Swiss income tax holiday

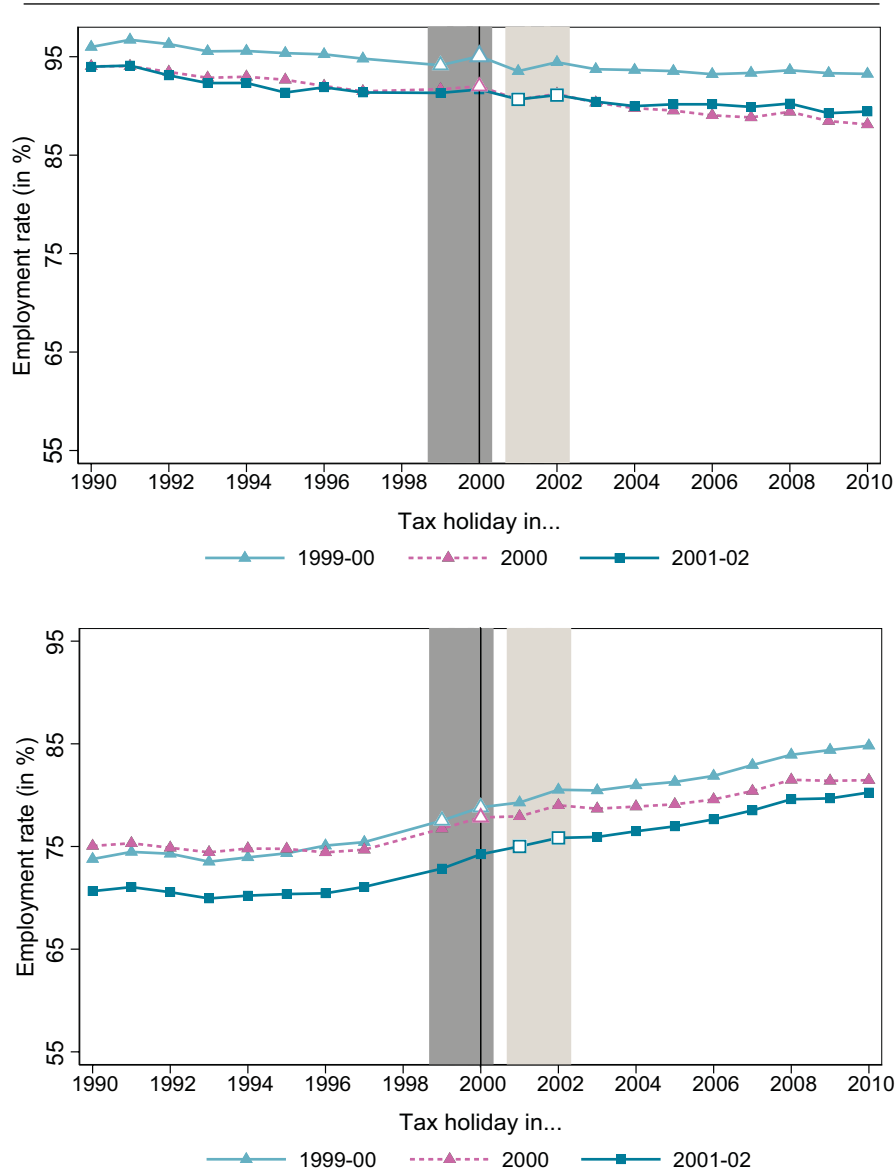
In a recent study (Martínez et al, 2018), Isabel Martínez, Michael Siegenthaler and Emmanuel Saez break new ground on this important question by documenting the labor supply decisions of the entire Swiss population during an exceptional tax experiment: a massive, temporary increase in workers' after-tax wages caused by one- to two-year long income tax holidays. During the tax holidays, earnings were fully exempted from income taxation –the average tax rate fell from around 11% to zero. The marginal tax rate fell from more than 20% to zero. The holidays thus created large incentives to work more in the tax-free years.

The tax holidays were a peculiar side effect of Switzerland's change from a past-oriented tax system to a modern pay-as-you-earn tax system. To avoid double taxation, income earned during the transition had to be exempt from taxation so that people would not pay taxes both on past incomes (as in the old system) and on current income (in the new system). Interestingly, not all Swiss cantons transitioned at the same point in time. Two cantons had a tax holiday for years 1997 and 1998; 16 cantons had a tax holiday for years 1999-2000; four cantons had a tax holiday in 2000 only; and three cantons had a tax holiday for years 2001-2002.

Surprisingly small labor supply effects despite large incentives

Did the zero tax burden during the holidays affect workers' decisions whether or not to work? This question is studied in Graph 1 using population-wide social security earnings records matched to 2010 Census data. The figure displays the share of employed men (top panel) and women (bottom panel) in the total population aged 20–60 from 1990 to 2010. For the purpose of this column, these employment rates are only shown for three groups of cantons: 16 cantons with a tax holiday in 1999 and 2000 (in light blue); four cantons with a tax holiday for 2000 (red); and three cantons with tax holiday in 2001–02 (in in darker blue). The employment rate is the fraction of individuals in the sample with positive labor earnings during the year.

G 1: Effects of Tax Holiday on Employment Rates for Males (top) and Females (bottom)



Source: KOF/calculations based on AHV data

Notes: This figure displays the employment rate by year and groups of cantons from 1990 to 2010. The top panel is for men and the bottom panel for women. The sample in a given year is all individuals aged 20–60. The employment rate is computed as the fraction of individuals in the sample with positive earnings (either from wages or self-employment) during the year. The three groups of cantons are: 16 cantons with a tax holiday in 1999 and 2000 (in light blue), 4 cantons with a tax holiday for 2000 (red), 3 cantons with tax holiday in 2001 and 2002 (in darker blue). For each of the three groups, we represent the corresponding tax holiday periods using the vertical shading. In the series, the dots corresponding to tax holidays are bigger and are blanked out. The figure shows no evidence of employment effects due to the tax holiday.

Two findings are worth noting. First, all three groups of cantons follow remarkably parallel trends for employment over the full period. This implies that for each group of cantons, the two other groups constitute good control groups. Second, there is no evidence of any relative increase in employment rates during the tax holidays represented by the shaded areas. This implies that a temporary tax holiday does not affect labor supply along the extensive margin, in sharp contrast from the prediction of modern macro business cycle models. The study also shows that the tax holiday had very small effects on average earnings in the overall population: the authors found limited evidence that workers increased their hours of work in response to the tax holiday.

Overall, there is surprisingly little evidence that the large drop in taxes affected the labor supply of the average worker in the population although workers had one or even two years to adjust. The authors find no evidence of a response along the employment, not even for subgroups usually considered to react more strongly along this margin, such as married women. The evidence suggests that people cannot easily adjust their labor supply to take advantage of the tax holidays. Therefore, the intertemporal labor supply responses appear to be very small on average at the macro-economic level. Some groups however, such as high earners or the self-employed, can take advantage of the tax holidays by artificially shifting their income into the tax holiday. This evidence of small real labor supply responses overall with large tax avoidance responses for specific groups who can avoid taxes is very consistent with the large literature on behavioral responses to income taxation.

Implications for Macroeconomics

Although this may not seem obvious at first, these results have important implications for macro models used to understand employment fluctuations during the business

cycle. The reason is that the results identify a key parameter in these models: the so-called Frisch elasticity, which measures workers' willingness to work more if the wage increases temporarily. The parameter is important in business cycle models because it governs the extent to which the models can match an important fact about business cycles: that recessions lead to large falls in employment but to only limited reductions in wages. If the Frisch elasticity is large, workers labor supply decisions can explain this fact: even a relatively small wage decrease in a recession induces workers to leave the labor force voluntarily. Comparing the prevailing wage with the gains from enjoying leisure time, they decide to abstain from participating in the labor market. The results suggest that voluntary withdrawals do not play an important role in explaining employment reductions during recessions. Indeed, the Frisch elasticities that the authors estimate are orders of magnitude smaller than the Frisch elasticities that many macro business cycle models require to match the employment reductions during recessions.

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Literature

Martinez, Isabel, Michael Siegenthaler, und Emmanuel Saez (2018): Intertemporal labor supply substitution? Evidence from the Swiss Income Tax Holiday, NBER Working Paper No. 24634.

Note

On *Ökonomenstimme* or on *Vox* you can read a detailed version of this article.

www.oekonomenstimme.org →

Real Estate Investments by Swiss Institutional Investors Pose a Downside Risk

Most Swiss people rent their home rather than buy an apartment or house during their lifetime. Only 38% of Swiss households are homeowners – the lowest homeownership ratio in Europe. Furthermore, only a fifth of the housing stock are single family dwellings – with a declining trend. The reasons behind these low figures are both structural and cyclical. This blog post highlights the main drivers, sheds light on the recent development towards multi-family house construction and provides an outlook of Swiss residential construction in the next years.

Structural factors

It is not straightforward to explain the low homeownership rate in Switzerland structurally. However, there are some factors which may influence the households' decision to rent rather than to buy a home. First of all, there are very few tax policies incentivising homeownership – especially compared to other European countries – and the national rental value is part of the income tax base. Furthermore, the high quality of rented apartments and houses across all sizes and locations make renting attractive. Additionally, the high price level of real estate make house or apartment purchases unaffordable for a large circle of households – despite the current attractive financing conditions. This list of structural factors is certainly not exhaustive. Delbaggio & Wanzenried (2010) provide further explanations for regional differences in homeownership.

Cyclical developments

On the cyclical front, recently there have been a couple of policies and economic conditions which accentuate the trend to multi-family house construction.

Since 2012, a couple of macroprudential policies have been introduced to reduce mortgage lending and to increase the resilience of the Swiss banking sector towards a housing bubble or a real estate crisis. For instance, the self-regulatory measures by Swiss banks comprise new minimum requirements for mortgage financing such as the amortisation of a third of the mortgage in 20 years (since 2012),

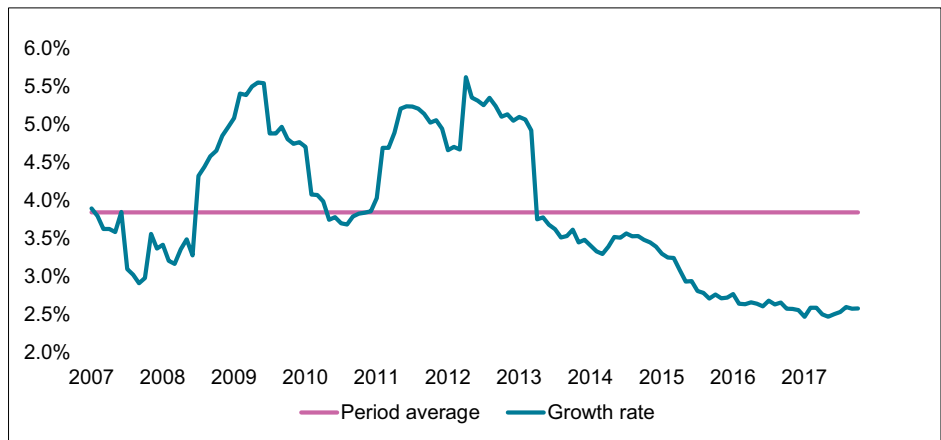
respectively in 15 years (since 2014), equity requirements of 10% as well as the valuation at the lower of cost or market. Furthermore, the Swiss National Bank activated the countercyclical capital buffer of 1% in 2013 and increased it to 2% in 2014.

These measures seem to have had a dampening effect on mortgage lending. As illustrated in chart 2, mortgage lending to households expanded on a high rate of 5–6% from 2009–2013, year-on-year. Since 2014, mortgage lending calmed down significantly, reaching growth rates of 3%, which is well below the average growth rate of the past ten years – despite the extremely attractive mortgage rates. It is of course difficult to evaluate to what extent supply, demand or even macroprudential policies are responsible for the slow-down in mortgage lending. Nevertheless, macroprudential policies certainly contributed to some extent.

The low interest rate environment in Switzerland since the financial crisis does not only make mortgages affordable, but also attracts investments by institutional investors in the real estate market. With low or negative government bond yields, the institutional investors are on a search for yield to invest the ample liquidity available. The return differential between real estate investments and the government bond yield has fallen, but is still remarkable with 3.6% last year. In 2017, Swiss pension funds invested 23% of their portfolio in real estate (Credit Suisse Pension Fund

G 2: Mortgage Lending to Private Households

(Year-on-year growth rate)



Source: Swiss National Bank

Index). In 2003, when the Pension Fund Index was introduced, the share was only 8%. Recently, the investors have become more cautious with regards to object choice. Real estate prices in the periphery may start to correct and a supply surplus may build up.

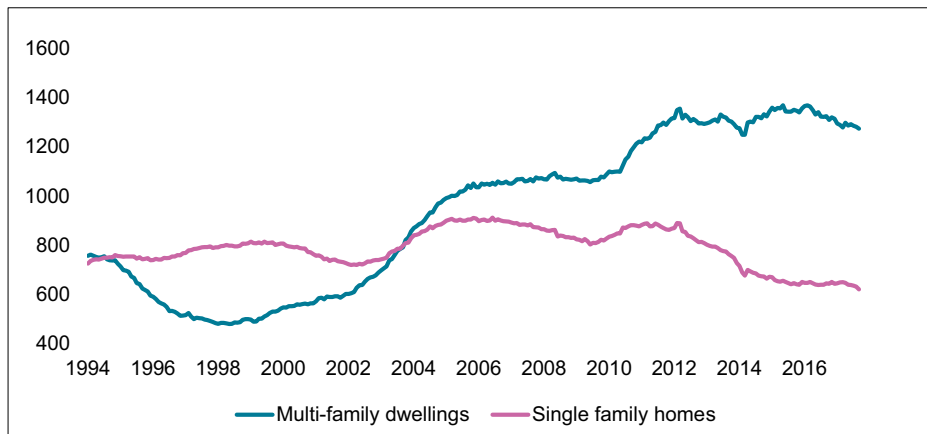


Therefore, the Swiss National Bank sees a heightened risk for residential investment property lending. “[It] monitors the development on the mortgage and real estate markets closely, and regularly reassess the need for an adjustment of the countercyclical capital buffer.” (SNB, 2018). With rising interest rates and a sharp correction of real estate prices, the high investments of institutional investors into multi-family housing pose a risk to both residential construction and the Swiss banking sector.

The trend to multi-family house construction can also be seen in the volume of construction permits. Graph 3 illustrates the 24-month moving average value of new multi-family house and single-family house permits since 1994. Since 2010, the construction costs associated to new multi-family house permits rose to about CHF 1,300 million per month on average. However, it shows a declining trend since 2013 – shortly after the introduction of macroprudential policies.

G 3: Building permission volumes

(Monthly building permission volume in CHF million, 24-month moving average)



Source: Baublatt, KOF Swiss Economic Institute

Residential construction outlook

The Swiss residential sector is currently developing robustly, but is not able to achieve the high growth rates of the boom years 2008–2014. A normalisation of monetary policy with rising interest rates will slow down the housing market from 2019 onwards. We expect a decline by -0.7% in 2019 and -0.2% in 2020. The market is slowly saturated and a supply surplus may start to build up.

The trend to multi-family house construction will certainly continue, as can be seen by the volume of construction permits. However, a stronger than expected fall in investments of institutional investors poses a downside risk for the Swiss residential sector.

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Delbiaggio, K.&G. Wanzenried (2010). Wohneigentum in der Schweiz. Die Volkswirtschaft, 7–8.

Raiffeisen Schweiz, Economic Research (2015). 20 Jahre Wohneigentumsboom: Wie weiter? Zürich.

Swiss National Bank (2018). Introductory remarks by Fritz Zurbrugg, 21 June 2018.

CEMETS Summer Institute 2018

The 2018 Summer Institute organized by the Center on the Economics and Management of Education and Training Systems (CEMETS) brought teams from Benin, Chile, Costa Rica, Nepal, Serbia, South Africa, and the United States (Colorado and California) to Zurich to participate in a 10-day intensive course on vocational education and training (VET) as part of the CEMETS reform lab.

As always, the 2018 program was intense, combining elements of theory, practice, and collaborative work on the different countries' own reform plans. Researchers at the forefront of VET scholarship, including Dr. Ursula Renold from ETH Zurich, Prof. Dr. Uschi Backes-Gellner from the University of Zurich, and Prof. Dr. Stefan Wolter from the University of Bern, shared their knowledge and findings about apprenticeship. Other researchers from ETH Zurich's KOF Swiss Economic Institute also contributed.



Experienced experts spoke to the group about leading innovative reforms (Noel Ginsburg, Career-Wise Colorado), facilitating Swiss apprenticeship (Christoph Buser, Basel-land Chamber of Commerce), leading and representing industry (Valentin Vogt, Confederation of Swiss Employers' Associations), representing a specific industry (Arthur

Glaettli, SwissMEM), providing a platform through which Swiss apprentices find positions (Urs Casty, Yousty), and guiding Swiss youth through their educational transitions (Anskar Roth, Career Guidance and Counseling BIZ Horgen).

In what is always a highlight of the institute, we visited apprentices in action at Swisscom (telecommunications), Migros (retail), Libs (advanced manufacturing) and CYP (banking). The opportunity to hear from apprentices, trainers, and educators is a crucial part of our work and we are very grateful to our generous hosts.

Each team has an ongoing relationship with CEMETS through research, previous projects, or other collaboration. Each one had been asked to work on their own reform plans and as a result came well-prepared and aware of clear and pressing problems at home that need solving.

Although the summer institute is over, the reform lab program is not. Participants have returned to their own countries where they will implement their reform plans and submit final reports on their progress, challenges, and experiences at the end of October 2018.

CEMETS also continues to follow up and work with alumni for research purposes in order to better understand VET reform implementation. Four cases – Benin, Chile, Costa Rica, and Nepal – are part of the ongoing Research for Development project financed by a Swiss National Science Foundation grant. These cases will be a continuous part of the work of the reform lab for years, enabling implementation research in parallel to the main project's investigations. The Nepal case includes a number of additional research projects in support of the country's federalization process.

Other cases, like the path-breaking CareerWise Colorado initiative in the United States, have been part of CEMETS as independent projects for years. CareerWise started after the 2015 summer institute and is now into its second pilot year with more than 200 apprentices statewide.

Serbia's new national dual VET law and the law's implementation are partly CEMETS research projects thanks to the cooperation with the Swiss Development Cooperation (SDC), which also facilitates a large part of the research in Nepal. In-depth implementation research in Serbia starting this summer will help us understand when VET reforms succeed or fail, thereby improving the usefulness of the reform lab overall.



South Africa and California are growing research partners, and it is exciting to see how existing, upcoming, and new reform lab projects can both support and learn from their initiatives. The reform lab's emphasis on evidence-based policy means all of our participants know what kind of research they may need in order to drive, refine and create enthusiasm for their goals.

Although every team comes from a different developmental, geographical, cultural, and historic background, they all share a passion for improving young people's access to the best possible lives. CEMETS is proud to support all the reforms of their partners and looks forward to the final reports, upcoming research projects, and the next summer institute from June 26 to July 5, 2019.

Quotes:

"The sessions related to real reform projects have had an outstanding impact on our reform planning, They significantly influenced our perception of the challenges we are facing and encouraged us to examine different solutions for how they can be tackled and addressed." - Jasmina, Serbia

"CEMETS provides convincing and research-based evidence in the modern VET sector which is an eye opener for the leaders and change makers of any country." - Usha, Nepal

"The methodology forced us to leave our comfort zones and gave us the opportunity to discuss with people of different backgrounds and cultures." - Gonzalo, Chile

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KOF INDICATORS

KOF Business Situation: Swiss Economy Still on the Ascent

In August, the KOF Business Situation Indicator for the Swiss private economy climbed very slightly again, falling into line with the previous month's positive trend. Despite uncertainty in the international environment, the Swiss upswing remains robust.

The business situation in the various sectors followed different trends. Project engineering offices and financial and insurance service providers reported very little change in their favourable business situation. The rising trend reported by the manufacturing industry in the preceding months continued in August. By contrast, momentum slowed down slightly in the construction industry where the business situation clouded over to some degree. Retail also failed to emulate the previous month's business situation, with the indicator pointing slightly downward again. Wholesalers, the hotel and catering companies and the other service providers were last surveyed in July. At the time, the business situation of the wholesalers and the hotel and catering companies continued to improve, while the other service providers reported a very slight slowdown.

Broken down according to FSO regions, the business situation changed relatively little in the different regions. Espace Mittelland reported a slight further recovery and has been on the ascent since spring. In August, the business situation also improved to some extent in Central Switzerland.

G 4: KOF Business Situation Indicator
(Balance, seasonally adjusted)



Little change was reported in the Zurich region, Ticino, the Lake Geneva region and Eastern Switzerland. In North-West Switzerland, the situation slowed down very slightly.

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

	Aug 17	Sep 17	Oct 17	Nov 17	Dec 17	Jan 18	Feb 18	Mar 18	Apr 18	May 18	Jun 18	Jul 18	Aug 18
Private sector (overall)	22.6	24.5	21.4	22.4	23.1	25.2	25.9	25.8	25.7	27.6	26.7	28.4	28.7
Manufacturing	11.7	16.9	15.4	18.4	17.7	17.9	19.9	19.7	18.6	24.1	22.3	24.3	26.5
Construction	30.0	29.8	30.1	29.6	28.4	30.3	30.4	28.0	30.3	29.7	28.7	29.2	27.9
Project engineering	47.3	47.6	48.7	49.5	49.8	45.9	48.8	50.4	48.2	47.0	47.0	45.4	46.0
Retail trade	-1.5	2.7	1.4	0.8	4.1	1.7	7.7	5.5	0.1	7.8	7.4	10.1	8.3
Wholesale trade	-	-	18.1	-	-	27.5	-	-	27.1	-	-	33.2	-
Financial services	35.0	37.4	32.2	34.7	39.8	41.3	39.5	40.9	41.4	42.9	39.8	41.7	41.7
Hotel and catering	-	-	-2.6	-	-	2.9	-	-	6.2	-	-	9.0	-
Other services	-	-	24.5	-	-	26.4	-	-	27.3	-	-	27.0	-

Answers to the question: We assess our business situation as good/satisfactory/bad. The balance is the percentage of 'good' answers minus the percentage of 'bad' answers.

Explanation of graphs:

Graph G 4 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 5 presents the business situation in the main regions according to the Federal Statistics Office (FSO). 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.

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

You can find more information about the KOF Business Tendency Surveys on our website:
www.kof.ethz.ch →

KOF Economic Barometer Is Falling

In August 2018, the KOF Economic Barometer fell slightly by 1.4 points to a new reading of 100.3 (see G 6). It now pints to a level that is only marginally above its long-term average. Accordingly, in the near future, Swiss growth should hover around its average over the last ten years.

In August 2018, the KOF Economic Barometer fell from 101.7 in the previous month (revised up from 101.1) by 1.4 points to a level of 100.3. This confirms the impression that the height phase of 2017, in which the barometer was continuously significantly above average, is not returning for the time being.

The strongest contributions to this negative result come from manufacturing, followed by the indicators from the exporting sector. On the other hand, the indicators related to private consumption give a positive signal. The indicators from the financial and the construction sectors have remained practically unchanged.

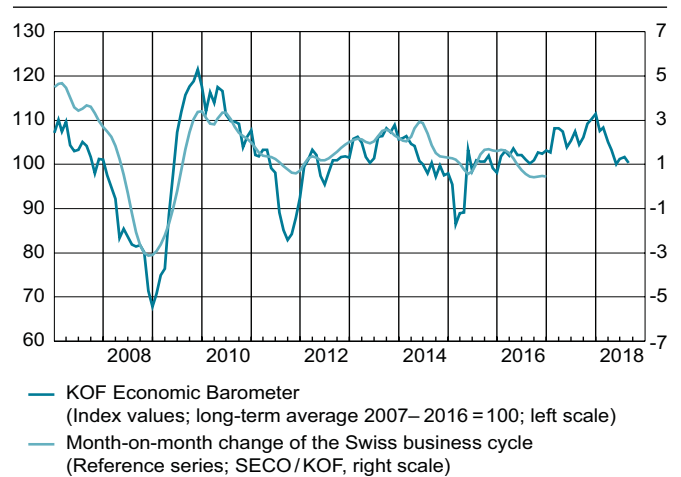
Within the manufacturing sector, the negative development can be attributed to rather different branches. Noticeably negative signals came from firms in the 'other industries' classification, followed by the metal and the food processing industries. Slightly improving sentiments, on the other hand, are visible in mechanical engineering, the chemical and the paper industries. The remaining industry branches recorded hardly any change.

The overall slight deterioration of sentiment in the manufacturing sector is mainly driven by deteriorating assessments of production. On the other hand, the assessment of firm's orders slightly improved.

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

G 6: Economic Barometer and Reference Series



the smoothed continuous growth rate of the Swiss Gross Domestic Product (GDP) according to the new System of National Accounts ESVG 2010, released in early September 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 →

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