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EDITORIAL

Dear readers,

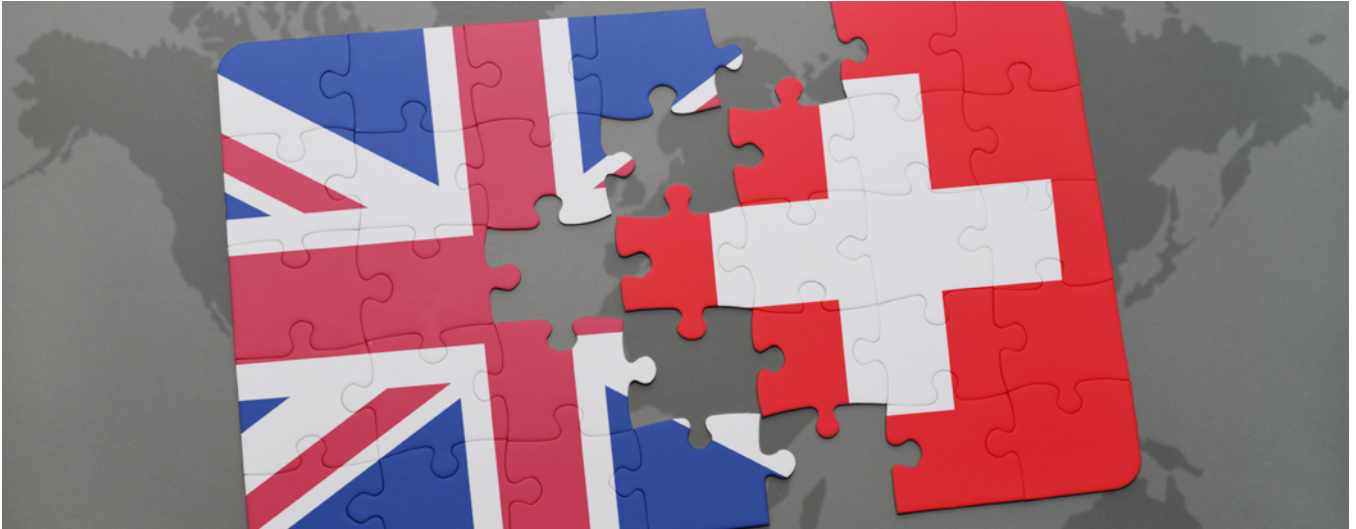
In the United Kingdom, anything is possible again. The next few weeks will show whether the Brexit will take place on 29 March as originally planned, whether it will be postponed or whether there will even be a new vote. What is clear is that to date the UK has only been able to roll over a small fraction of the trade deals from which it has benefited as an EU Member State. You will find an overview in the first article. The second article focuses on Swiss foreign trade as a whole. It explains which goods enabled exports to reach a new record high in 2018. And also why the second half of the year should give us pause for thought. The third article deals with questions which economists have been pondering for hundreds of years: What role does culture play for entrepreneurship? Are there any differences between entrepreneurs originating from different regions? A KOF researcher has attempted to answer these questions by taking advantage of a Swiss peculiarity: the 'place of origin'. And she actually found some differences. The fourth article focuses on an issue that is highly topical for Switzerland at the moment: free movement of persons. Critics claim that it places local workers under pressure. Supporters assert that it is a key element of the success of Swiss businesses. Where does the truth lie? A research program in which three KOF researchers were involved provides some indications.

We hope you enjoy this issue!

Franziska Kohler and Anne Stücker

ECONOMY AND RESEARCH

Brexit and Trade Relations – The Main Issues



Important decisions on Brexit are due in mid-March. It is still unclear whether the United Kingdom will withdraw from the European Union in a regulated or unregulated manner – or whether the Brexit vote will be taken again. In the present state of things, Switzerland and the United Kingdom signed a bilateral trade agreement on 11th February which would regulate post-Brexit relations. This article shows the importance of the countries for each other and how they are linked to the rest of the EU.

Importance of the trading partners to each other

The share of Swiss exports of goods and services to the UK amounts to 5.7% and 7.7% respectively, based on total Swiss exports of goods and services (see T 1). The UK is Switzerland's sixth largest export market for goods. Vice versa, the share of UK exports of goods and services to Switzerland amounts to 2.2% and 4.5% respectively, based on total UK exports of goods and services.

Categories of goods traded between the UK and Switzerland

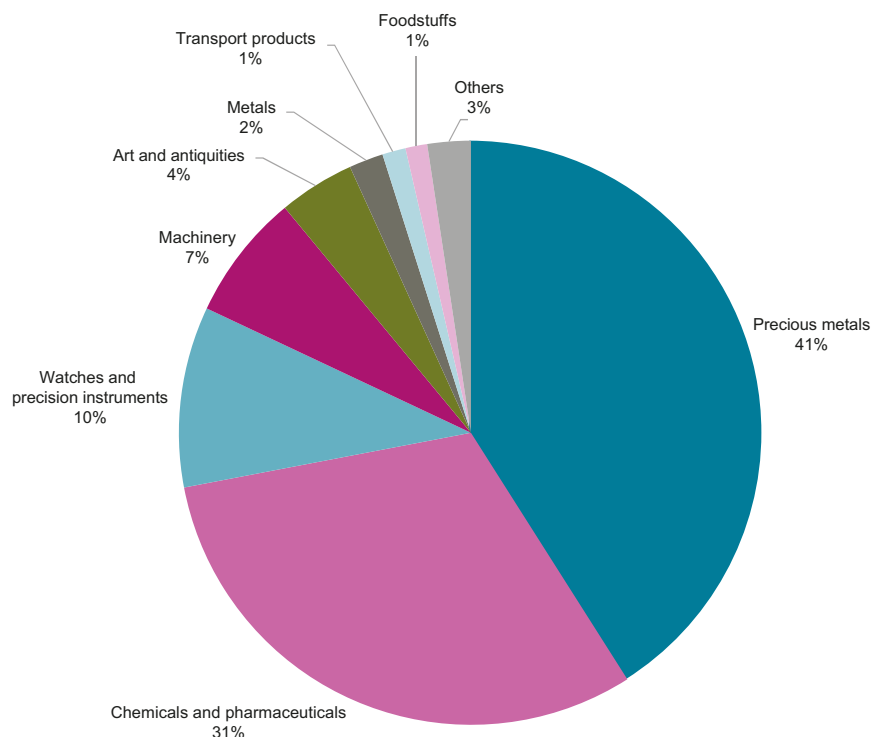
The trade in precious metals (gold, silver, etc.) between Switzerland and the UK is very brisk. Accordingly, 41% of Switzerland's total exports to the UK are in the precious metal category (see G 1). At 31%, chemical and pharmaceutical products are the second largest export category, followed by watches and precision instruments (10%)

T 1: Swiss Exports to the United Kingdom and British Exports to Switzerland in 2017

	Swiss exports to the United Kingdom		British exports to Switzerland	
	Goods	Services	Goods	Services
in millions of CHF	16,734	8,047	9,514	15,868
as a percentage of total exports	5.7%	7.7%	2.2%	4.5%

Sources for Swiss export data: Federal Customs Administration, Swiss National Bank (SNB). Source for British exports: Office for National Statistics (currency conversion according to SNB statistics). The fact that the sources are different limits the comparability of the data.

G 1: Swiss Exports of Goods to the United Kingdom According to Type in 2017



Source: MIT Observatory of Economic Complexity

and machines (7%). In contrast to the long-running trade surplus in goods with the entire world, Switzerland has mostly recorded a trade deficit in goods with the UK in the past few years. However, adjusted by the precious metal trade, Switzerland actually runs a trade surplus in goods with the UK.

Importance of the new trade agreement to the UK and to Switzerland

According to official sources, the recent trade agreement between Switzerland and the UK comprises approximately three quarters of the volume of goods traded between Switzerland and the UK that was previously covered by Swiss agreements with the EU. The new agreement also

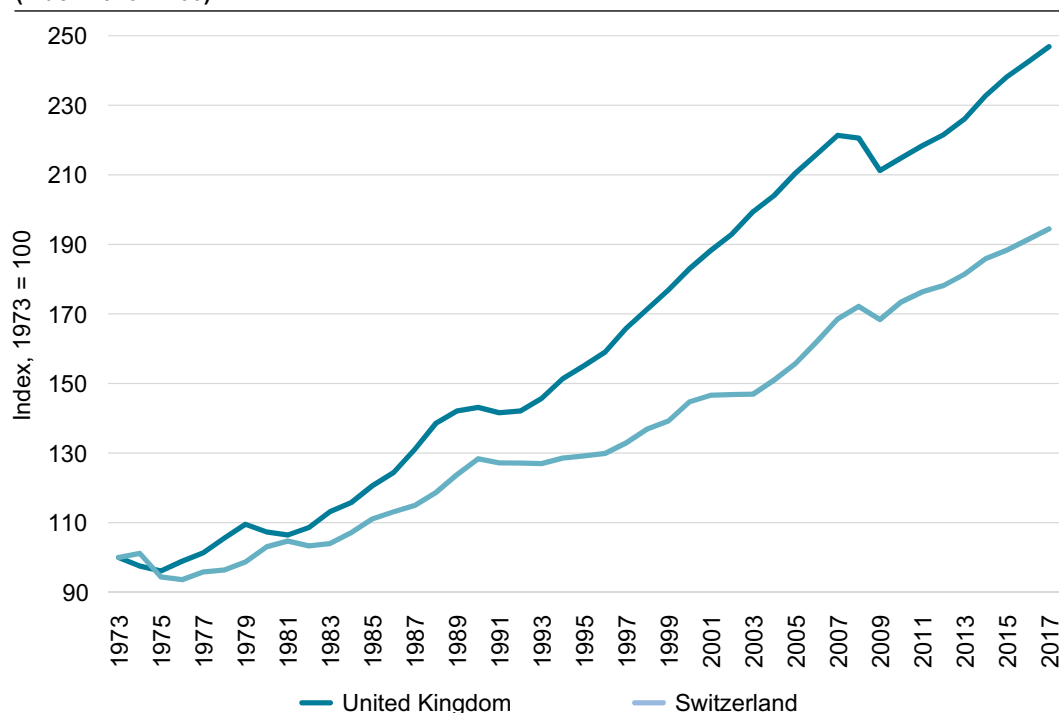
includes pharmaceutical products, which are a key export category for Switzerland. By contrast, the UK benefits to a lesser degree from the trade agreement with Switzerland since the trade in services, the majority of which is not included in the agreement, is relatively important for the UK in international comparison. Only 56% of all exports relate to goods, 44% to services. In the case of Switzerland, however, the trade in goods including non-monetary gold accounts for 72% of all exports. Excluding non-monetary gold, the share is 67%, while services account for 33%. Once the volatile components, such as other valuables and merchanting, are also excluded, the trade in goods accounts for a mere 63% in Switzerland, while services make up 37%.

T 2: Importance of Trade in Goods and Services

	Share of goods (in %)	Share of services (in %)
Total exports United Kingdom	55.6	44.4
Total exports Switzerland (including non-monetary gold)	71.7	28.3
Total exports Switzerland (excluding non-monetary gold)	66.9	33.1
Total exports Switzerland (excluding non-monetary gold, valuables and transit trade)	63.2	36.8

Sources: National statistics offices

G 2: Real Growth in Gross Domestic Product per Head at Purchasing Power Parity (Index 1973 = 100)



Sources: Organisation for Economic Co-operation and Development (OECD)

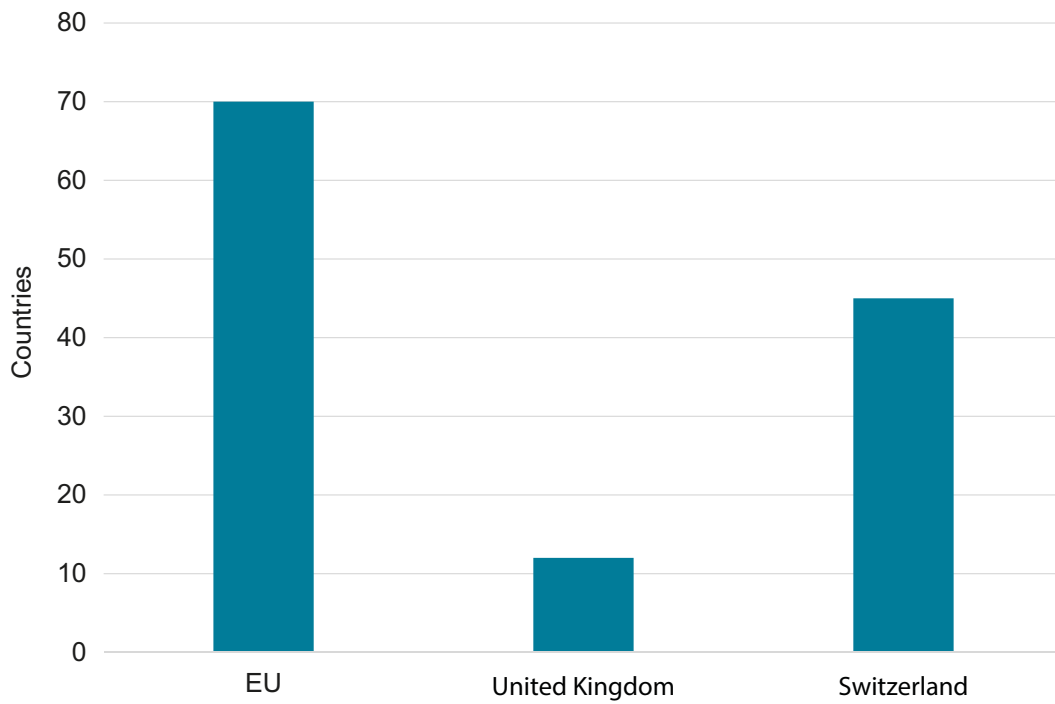
Importance of the EU-27 to the UK and vice versa

The EU-27 (EU excluding the UK) is by far the most important market for British goods. All in all, the UK exported goods worth CHF 189 billion to other EU countries in 2017. This corresponds to around 48% of its total goods exports. Further key trading partners are the United States at 11% and China at 5.6% of all goods exports, giving China roughly the same importance to the UK as Ireland. In absolute figures, the UK is more important for the EU than vice versa. In 2017, the other EU countries exported goods worth CHF 330 billion to the UK. However, this figure only corresponds to just under 7% of all goods exports by the other 27 EU countries.

Importance of the EU-27 to Switzerland and vice versa

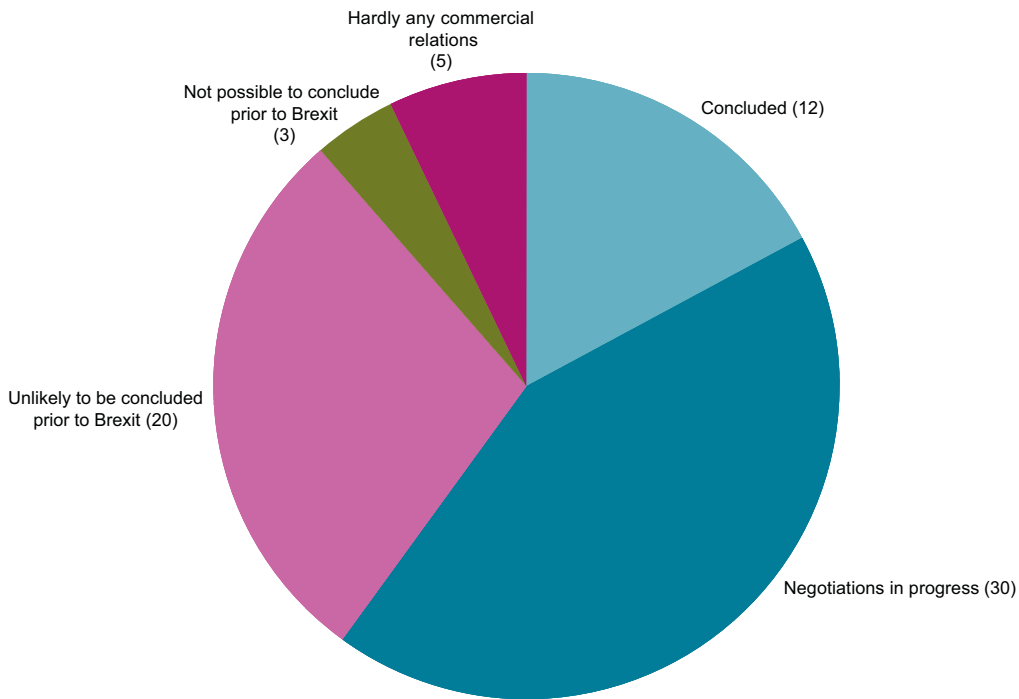
The EU is also the most important trading partner for Switzerland. In 2018, goods worth CHF 112 billion were exported to the 27 EU countries, which corresponds to approximately 48% of total goods exports. In the past year, Switzerland's other important trading partners consisted of the United States at 16.2% and China at 5.2% of all goods exports. Switzerland's importance to the EU-27 is much lower. At CHF 135 billion, a mere 3% of all EU-27 goods exports went to Switzerland.

G 3: Trade Agreements with Non-EU Countries



Sources: State Secretariat for Economic Affairs, SECO

G 4: Status of British Negotiations for New Trade Deals (Number of Countries)



Source: House of Commons Library

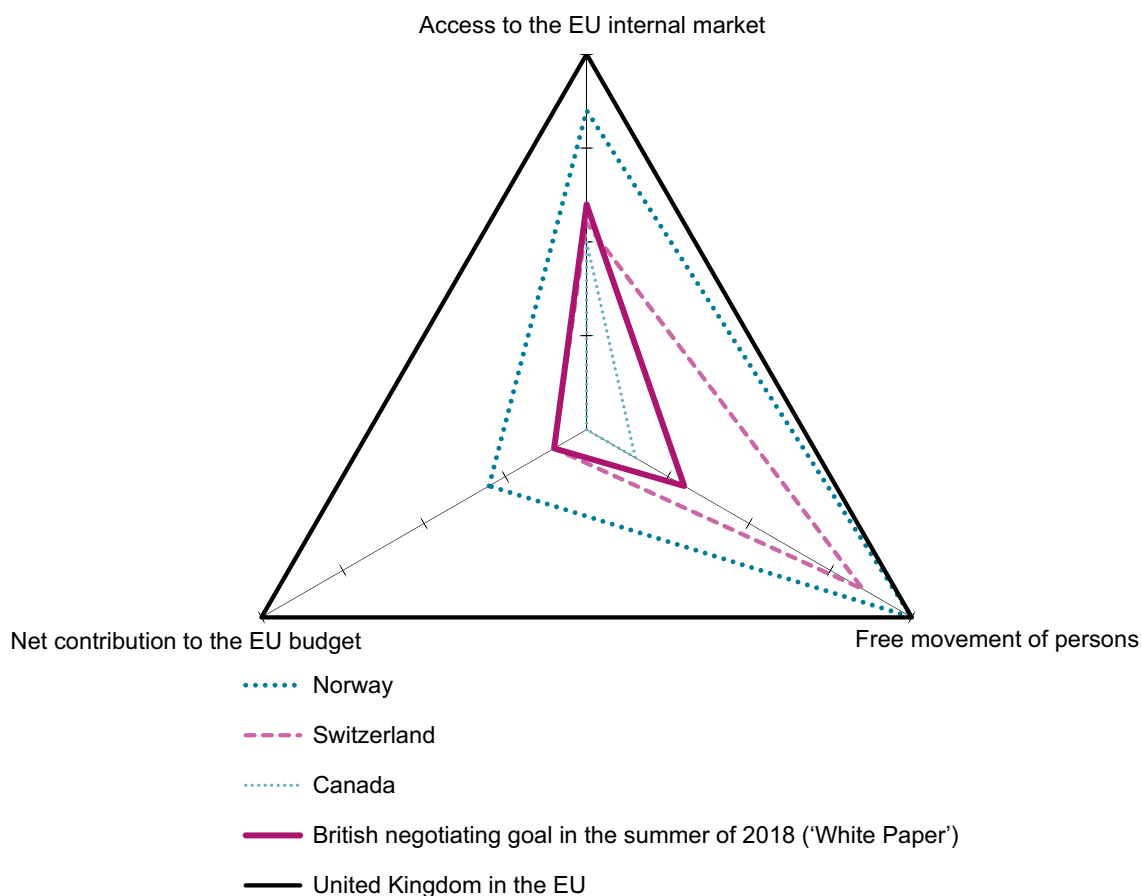
UK economic development since joining the EU in 1973 and Switzerland's economic development in the same period

In the UK, per capita GDP adjusted for purchasing power has increased much faster since 1973 than per capita GDP in Switzerland (see G 2). Swiss economic development was much less dynamic, especially in the 1990s. However, since the middle of the 2000s, Switzerland has once again been growing faster than the UK. Moreover, absolute per capita GDP adjusted for purchasing power is still close to one and a half times higher in Switzerland than in the UK.

Countries with which the UK has concluded trade agreements since the Brexit vote and number of countries with which Switzerland has concluded trade agreements

As a EU member, the UK benefits from the trade agreements between the EU and 70 countries worldwide (see G 3). To retain access to these markets, the UK must replicate these agreements before its departure from the EU. To date, the UK has managed to conclude agreements with no more than twelve countries. Switzerland is in a position to conclude its own trade agreements on a global basis and currently maintains trade relations with 45 countries.

G 5: The Brexit Triangle



Source: National Institute for Economic and Social Research (NIESR)

UK's ability to conclude the remaining trade agreements

It is unlikely that the UK will be able to replicate all outstanding agreements by the time it might leave the EU on 29 March. Negotiations are ongoing with around 30 countries, among them important trading partners such as South Africa, South Korea and Norway (see G 4). In the case of 20 countries, conclusions before the departure date are very unlikely. These countries include Mexico, Egypt and Ukraine. Agreements with key trading partners, such as Japan and Turkey, which make up just under 2% of all sales of goods each, are not feasible until the departure date. All in all, the UK's global market access is likely to decline significantly after its exit from the EU.

Potential future relations between the UK and the EU

The current negotiations between the EU and the UK focus on the modalities of the departure and on future relations. The National Institute of Economic and Social Research (NIESR), a UK-based partner institute of KOF, has summarised the UK's options in terms of its future relationship

with the EU in a so-called Brexit triangle and has compared these options with the solutions Switzerland and other countries have chosen (see G 5). In its White Paper published in summer 2018, the UK government aims for relatively extensive access to the EU Internal Market for Goods and Services accompanied by a relatively low degree of integration into the labour market (free movement of persons) and low net contributions to the EU budget. The desired degree of integration in the goods and services market is higher than Switzerland's current integration, while the desired integration in the labour market is significantly lower. The EU, however, insists on the inseparability of its four basic freedoms (free movement of people, goods, services and capital) and uses access to the Internal Market as a bargaining chip to achieve greater freedom of movement for people.

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A Behind-the-Scenes Look at the Balance of Swiss Foreign Trade

Swiss exports reached a high water mark in 2018. Exports rose significantly for the most important categories of goods. However, the position becomes slightly more nuanced when considered more closely: during the second half of the year the dynamism fell back, above all in the machinery, electronics and metal industry.

Exports and imports scale new heights

Last year, Switzerland exported goods worth CHF 233.1 billion, representing a rise of 5.7% or CHF 12.5 billion on the previous year, thus reaching an all-time high.¹ All three of the most important categories of goods posted strong gains. Exports in the chemical and pharmaceutical industry grew by 5.9%, those of precision instruments, watches and jewellery were up by as much as 6.1%, whilst exports by the machinery and electronics industry posted a gain of 4.6%, the strongest growth since 2011 (see G 6). The dynamic for imports was even more marked last year than

it was for exports. 2018 saw imports of goods worth CHF 201.8 billion, representing growth of 8.6% compared to the previous year. Alongside the three major export categories, imports of clothing, metal goods and vehicles increased last year.

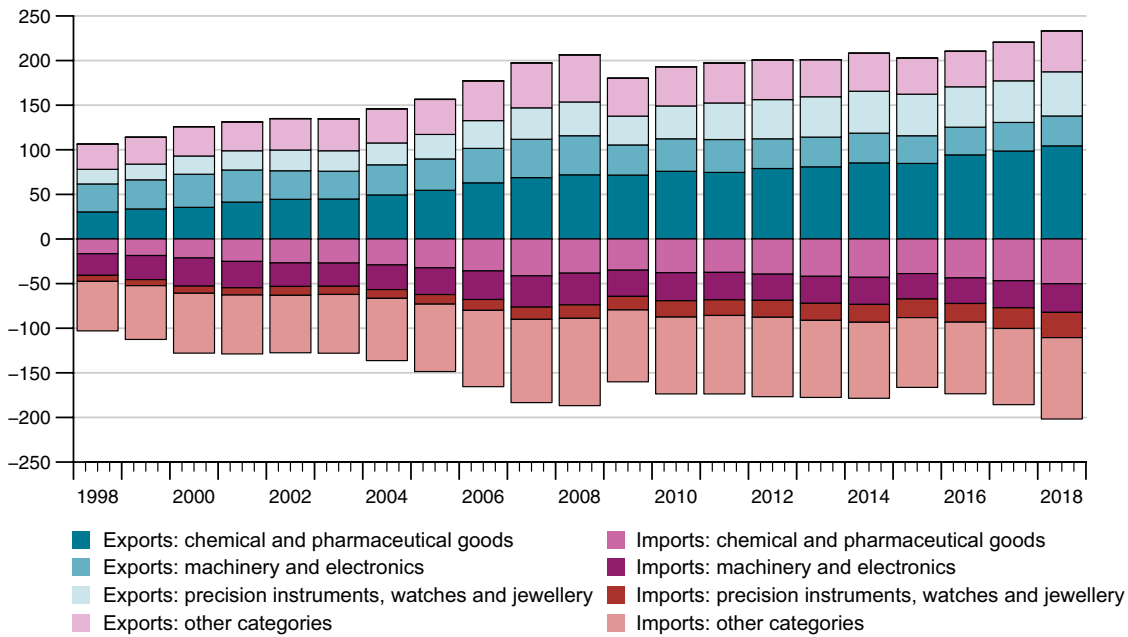
Without pharmaceutical goods there would be a deficit

The strong rise in imports reduced the positive balance of trade last year (see G 7). However, the surplus, at CHF 31.3 billion or 4.5% of the nominal gross domestic product (GDP), remains high compared to other countries. The most

¹ The following text concerns the share of trade in goods that is relevant for the economy (total 1) and disregards transit trade and valuable items, including non-monetary gold.

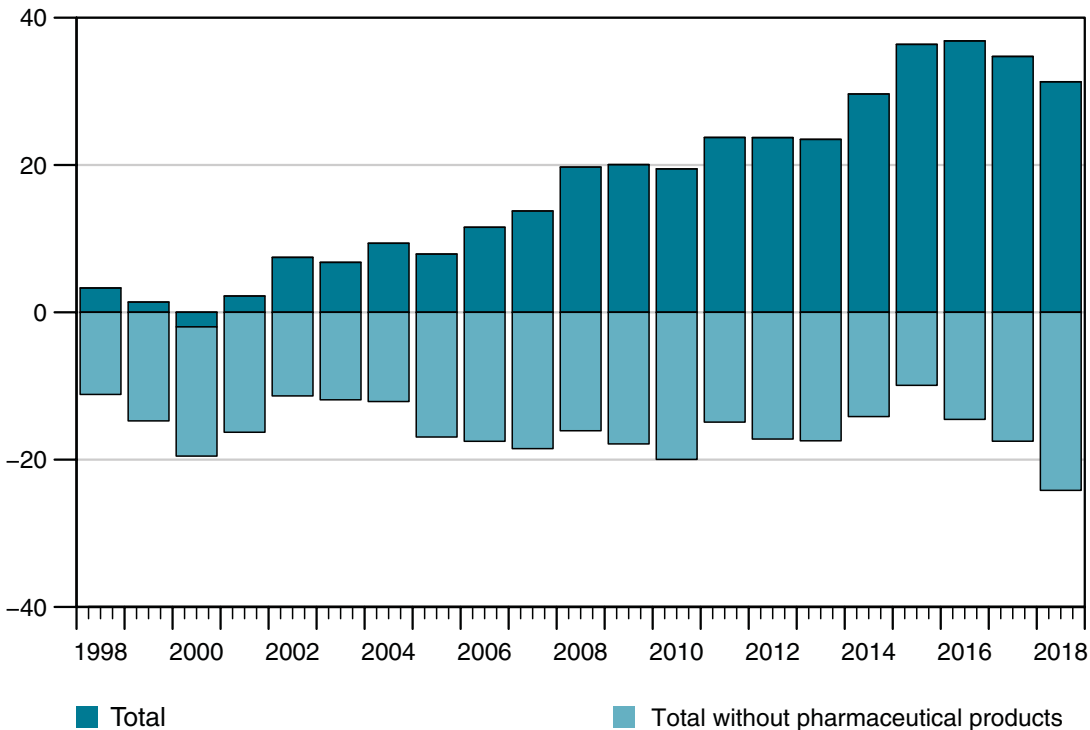
G 6: Foreign Trade According to Category of Goods

(In billions of CHF; source FCA)



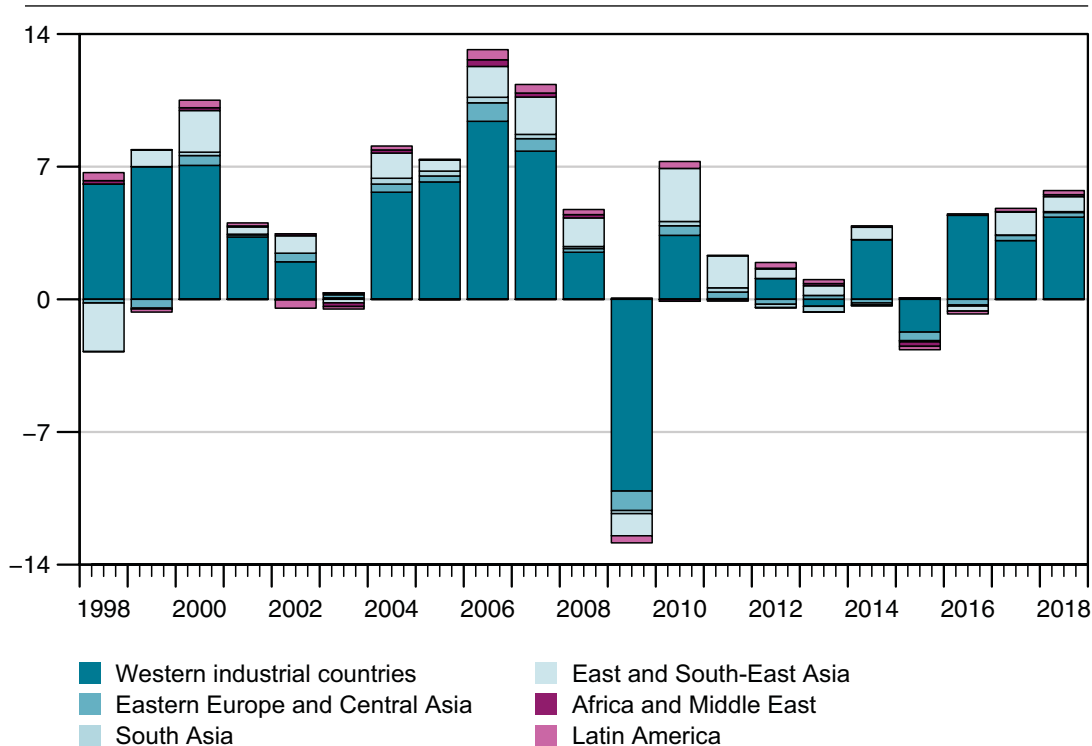
G 7: Balance of Trade

(In billions of CHF; source FCA)



G 8: Exports of Goods: Regional Contributions to Growth

(Nominal, in %; source FCA)



important category of goods, pharmaceutical products, is mainly responsible for the surplus.² Without this category of goods, which accounts for 42% of total exports and 21% of total imports, the trade balance would be in deficit by CHF 24.2 billion. This deficit has increased steadily – in particular since the increase in the value of the Swiss franc in 2015 due to a strong rise in imports – whilst exports have remained stable.

Strong demand for Swiss goods in the USA and Europe

Although the developing economies represent strong growth markets for Swiss exporters of goods, the western industrial countries continue to provide the greatest contributions to growth due to their high share of exports. Out of the export growth of 5.7% last year, 4.3 percentage points related to trade with western industrial countries (see G 8). Demand for Swiss goods last year was high in particular in the USA and Eurozone countries. Exports to east and south-east Asia, the second most important group of countries, contributed 0.8 percentage points to the result. Export volumes were higher also for other regions, with the exception of the Gulf states. Trade in pharmaceutical

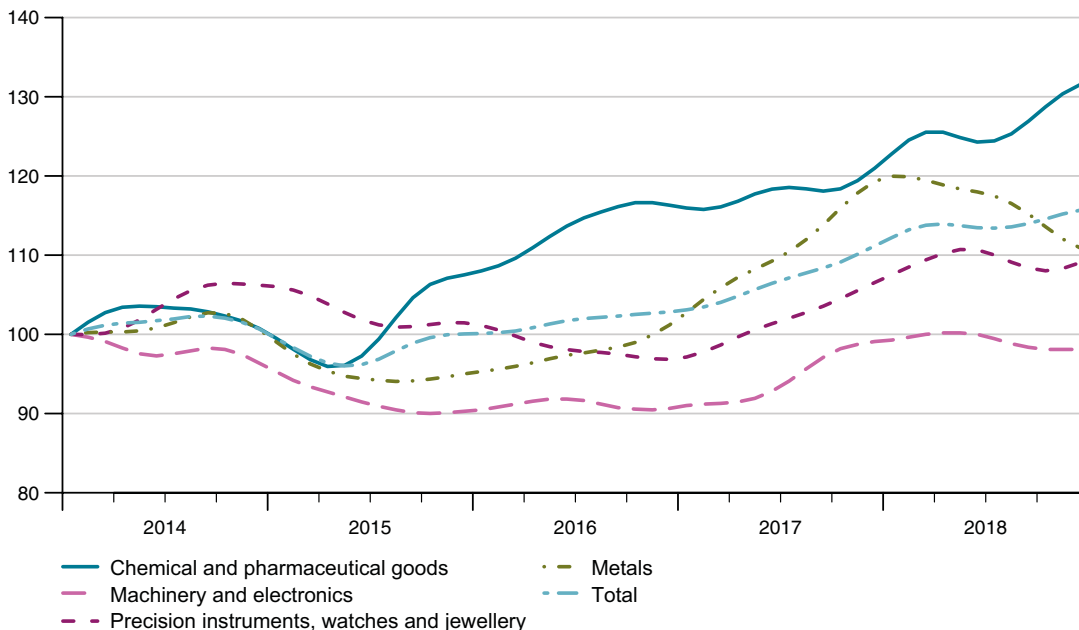
products saw a rerouting of a large share of exports of goods from the United Kingdom to the Netherlands, which could be related to an adjustment within the distribution networks of major pharmaceutical companies in the run-up to Brexit.



² These calculations count goods from category 06.2 in foreign trade statistics as pharmaceutical products.

G 9: Exports of Goods According to Type

(Nominal, index, 2014=100, seasonally adjusted and smoothed data; source FCA)

**Exports became significantly less dynamic during the second half of 2018**

The sound performance by exports last year reached its high point around the middle of the year. Taking into account the individual categories of goods, it is clear that exports became much less dynamic in the second half of 2018, in particular in the machinery, electronics and metal industry (see G 9). This was predominantly due to the darkening of the mood for the most important trade partners, coupled with uncertainty concerning the future development of the world economy. This came in parallel with the cutting back of production in the German automobile industry in the 3rd quarter, with the corresponding knock-on effects for Swiss supply chains. Exports of watches also

flatlined during the second half of the year, in the wake of the strong growth trend ongoing since 2017. The trade war appears to have dampened consumer sentiment in China, which depressed exports of watches and other jewellery. The only engine of growth during the second half of the year was the pharmaceutical sector, which is less sensitive to cyclical developments.

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Entrepreneurialism in the Genes?

What role does culture play in the founding of businesses? A new study has investigated this question with reference to Swiss linguistic regions. It shows that entrepreneurialism is in fact characterised by cultural differences. Specifically, Swiss nationals hailing from German-speaking areas are more likely to start a business than their French-speaking compatriots.

New businesses not only create jobs, but are also a driving force behind innovation and economic growth. According to calculations from the United States, business startups account for 25% of productivity growth. Researchers and politicians thus have a fundamental interest in understanding what exactly drives entrepreneurial activity within individual countries and regions. Alongside factors such as tax policy and competition law, discussions repeatedly return to the influence of an entrepreneurial culture.

Switzerland's special circumstances provide opportunities for research

This notion is by no means new: at least since Max Weber, culture has been cited as an important reason for economic differences. However, in empirical terms the concept of an entrepreneurial culture causes difficulties. Ideally, the question should be answered experimentally by extracting people from their cultural space of origin and implanting them at random within a new environment. This would then make it possible to actually ascribe differences between business startups to the various cultures and to measure the role of culture. This is naturally a pure thought experiment. However, two special circumstances found in Switzerland could be of assistance here.

First, Switzerland as is known embraces German, French, Italian and Romansh linguistic and cultural areas. There are very clear boundaries between these different cultural regions: within the space of a few kilometres the dominant language can change completely. This means that any

given place can be unequivocally ascribed to a particular cultural area. In fact, the German-French linguistic boundary runs for the most part right down the middle of three cantons, without any geographical barriers. On an institutional level, nothing changes when crossing the language boundary in these bilingual cantons, other than the dominant language. Our analysis therefore focuses on municipalities along the French-German language boundary situated within bilingual cantons.

The cultural background plays a role down through the generations

In order to consider culture independently from other framework conditions, the study draws on a second characteristic feature of Switzerland: the so-called 'place of origin'. This is the place from which the male ancestors of any Swiss citizen originate. The registration of the place of origin makes it possible to consider people living in the same place who have a different cultural origin. In its analysis the study compares the number of businesses founded by Swiss nationals with a place of origin to the west of the linguistic boundary with startup figures for their compatriots with a place of origin to the east of it.

By comparing business startups by individuals with different places of origin within their current municipality of residence, the researchers were able to examine specifically the environment of the business and attribute all differences observed to the cultural background. The result discovered is that Swiss nationals with a place of

origin within the German-speaking cultural space are more likely to become entrepreneurs. Specifically, they found on average 20% more firms than their counterparts with a place of origin within the French-speaking cultural space, irrespective of where they currently live. The study observed the same effect for people resident in Geneva and also in Zurich. And also finds the effect if the individual bilingual cantons are considered separately.

The German-speaking Swiss prefer to be their own boss

This can be accounted for by a variety of alternative explanations, as the language boundaries for the three cantons analysed – Bern, Valais and Fribourg – are not directly contiguous and are in some cases separated by a journey of up to two hours on the motorway. This strongly suggests that language and hence culture plays the decisive role. The effect also remains if one considers exclusively assimilated entrepreneurs. These are defined by the fact that their first name is typical for their place of residence. The researchers can conclude from this that cultural background also plays a role down through the generations.

But what is it that changes between the two cultural groups? If one considers the analysis more closely, one sees not only that people with a German-speaking cultural background are more likely to set up businesses, but

also that the businesses founded are equivalent*. This supports the claims made by Frank H. Knight (1921), who argues that risk aversion differs between cultural groups. It is also conceivable that Swiss nationals with a German-speaking background have a stronger preference for independence. Surveys have found evidence for both explanations. The French-speaking Swiss in actual fact appear to be more risk-averse than the German-speaking Swiss. The latter appear to have a stronger preference for jobs with greater responsibilities and are comfortable taking the initiative within their work.

*i.e. identical in terms of structure, legal status, survival rate and size

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Literature

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The Consequences of the Free Movement of Persons for the Labour Market

Has the free movement of persons resulted in new jobs or has it simply shifted jobs from local residents to immigrants? Has it raised salaries among local residents or reduced them? These are the questions that were investigated in the context of an extensive research programme in which three KOF researchers played a leading role.

The adoption of the anti-mass immigration initiative seems to indicate anxiety about the consequences of immigration among the Swiss population. A possible consequence of immigration is 'displacement' from the labour market. This fear is understandable since the abolition of immigration restrictions leads to an expansion of the labour force available to companies. In theory, such an expansion of the labour supply has the potential to reduce wages and job opportunities for the local population. However, many entrepreneurs state that unrestricted access to qualified personnel is a central factor ensuring their success (Eichler et al., 2013).

Which of the two sides is right? This is the question investigated by an extensive research programme in which three KOF researchers played a leading role (cf. Beerli et al. 2018). The researchers took advantage of the fact that the gradual opening of the Swiss labour market happened earlier and to a more significant degree in border regions than in other Swiss regions, since the free movement of persons opened the Swiss labour market not only to immigrants but also to cross-border commuters. Today, there are 150,000 more border crossers working for Swiss companies than in early 2002 – which is close to twice the original number. It comes with the territory that this increase happened almost exclusively in border regions.

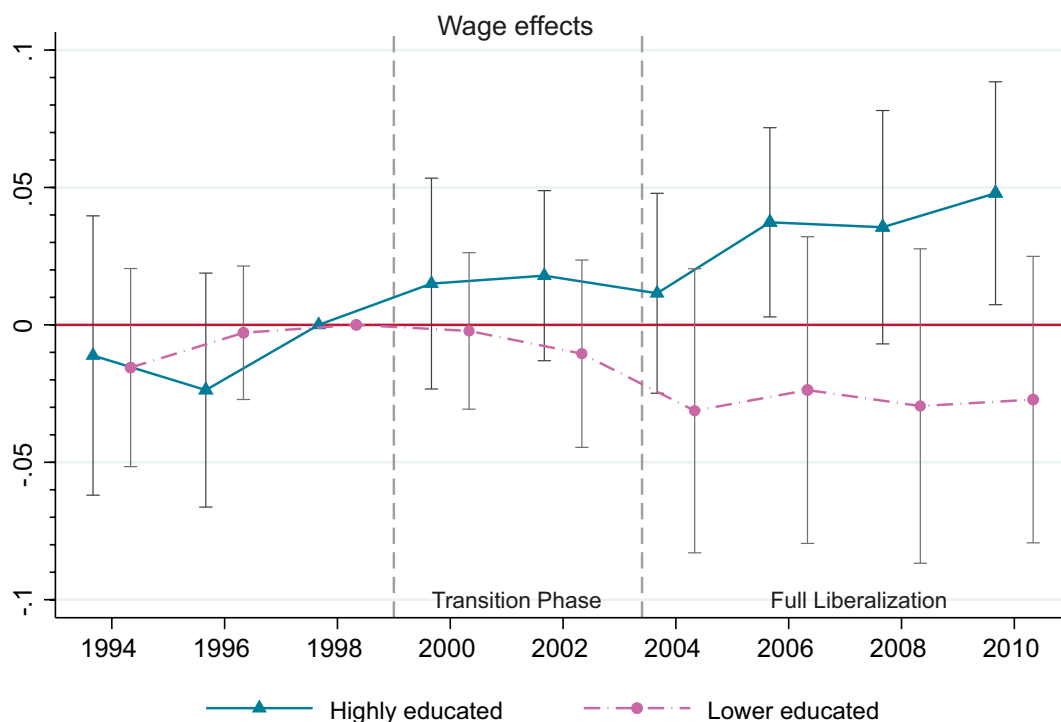
The study conducted by Beerli et al. (2018) shows that, after 2002, employment of both cross-border commuters and foreign workers in general – i.e. border crossers plus immigrants – increased substantially faster in border areas than in more distant regions. These results seem to indicate that the most immediate impact of the free

movement of persons, namely an increase in employment of foreigners in Switzerland, was more pronounced in border regions. In their study of the effects of the free movement of persons, the researchers therefore concentrated on comparing border and non-border regions in Switzerland. This comparison allows for statistical control of other trends that affect both regions to a similar extent.

Few indications of wage pressure

As a first step, the researchers compared the wage and employment trends among local populations in border and non-border regions. They found that both wages and employment of Swiss employees had grown at virtually the same rate in both regions. Hence, despite the substantially larger rise in foreign employment, the high wage level in Switzerland and the job opportunities of the Swiss population in the border regions did not come under increased pressure.

On the contrary: The researchers found signs that the wages earned by well-qualified Swiss employees in border regions increased faster than in non-border regions despite greater immigration pressure (see G 10). This result is all the more remarkable since the majority of foreign employees who found work in border regions in the course of the free movement agreement were also well qualified. It can be explained by the fact that demand, and hence the number of jobs available to well-qualified personnel, also recorded exceptional growth in border regions (see G 11). In fact, one-third of the rise in wages of well-qualified Swiss employees in border regions is due to increased opportunities to find managerial positions.

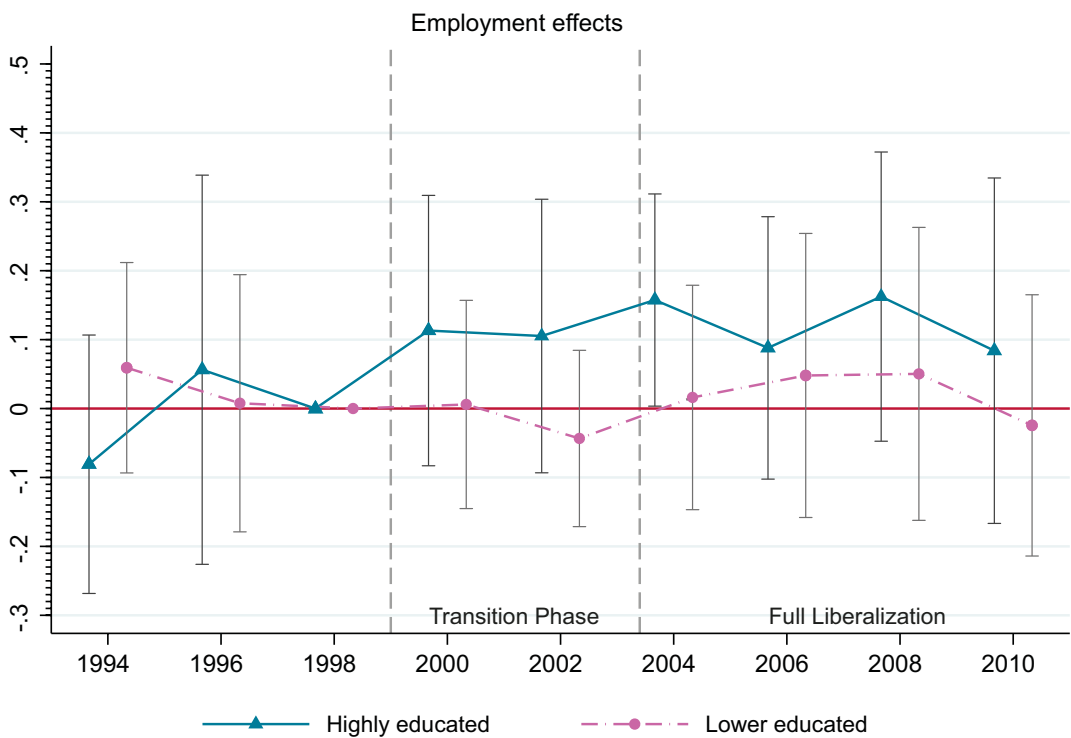
G 10: Effect of Free Movement of Persons on Wages of Swiss Residents, by Skill Level

Wage effects: The graph shows the trend in gross wages earned by Swiss employees in municipalities that are a 15-minute commute from the closest border crossing in relation to the trend in wages in non-border municipalities (over 30-minute commute to the border). The figures are shown separately for highly educated personnel (tertiary education) and employees with medium and low education (primary and secondary education). The graph indicates that, until late 2010, wage growth among highly educated Swiss personnel was around 5% higher in border regions than among highly educated Swiss personnel in non-border regions. By contrast, the wages of medium and lower educated Swiss workers are showing a relative decline. However, as shown by the vertical bars (confidence intervals), this decline is not statistically secure. The researchers refer to the years 1999 to 2004 as the transitional phase of the freedom of movement of persons, during which restrictions of the labour market in border regions were partially lifted. The freedom of movement applied to cross-border commuters as of 2004. It appears that the relative rise in wages for highly educated Swiss personnel in border regions was particularly pronounced in the period after the opening of the labour market.

To understand why more jobs were created for highly educated personnel, the researchers then looked at the companies involved. They found strong evidence that better access to foreign personnel had a positive impact on companies in border areas. In the years 2002 to 2007 in particular, companies in border regions recorded stronger growth than those in non-border regions, both in terms of employment and turnover. Unsurprisingly, this growth effect is

particularly evident in the case of companies that are active in sectors with a high demand for well-qualified personnel. According to the researchers, these sectors comprise the high-tech industry, including among others the chemical, pharmaceutical and engineering industry, as well as knowledge-intensive service industries, such as insurance, IT and healthcare (see G 12).

G 11: Effect of Free Movement of Persons on Employment of Swiss Residents, by Skill Level



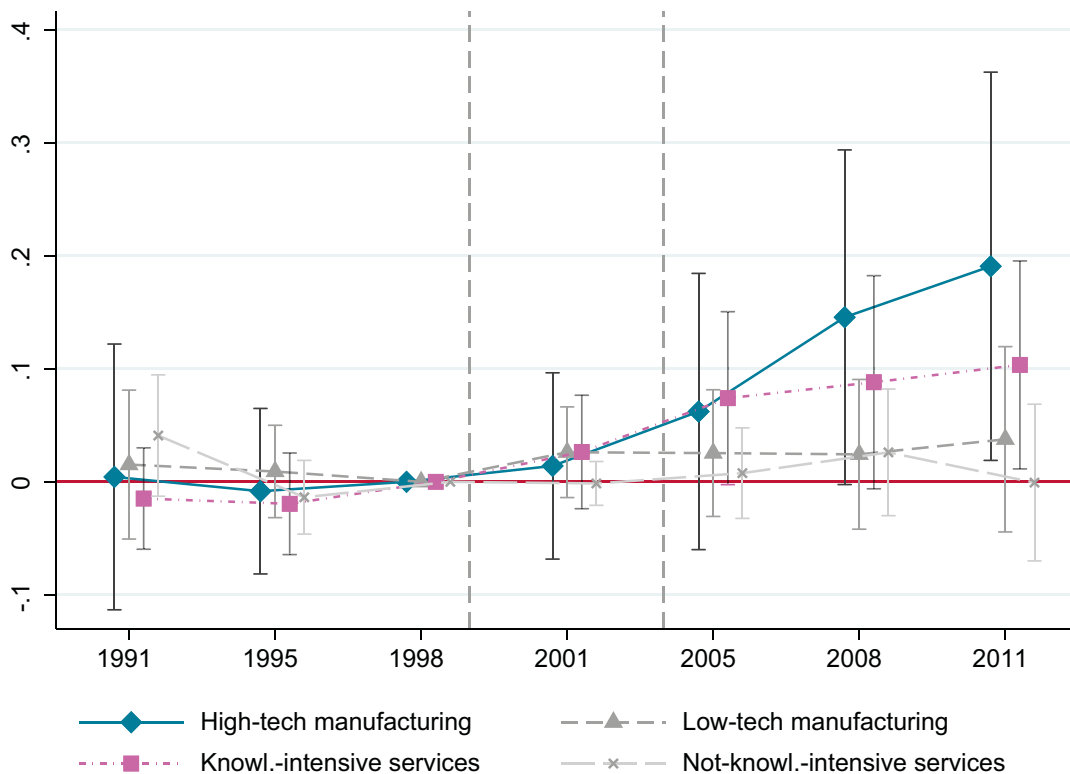
Employment effects: The graph shows the differences between the employment trend of Swiss personnel in border municipalities in relation to the Swiss employment trend in non-border municipalities (cf. graph 10 as a reading aid).

Foreign personnel acted as a growth driver

All in all, Swiss companies in the border regions have benefited significantly from better access to EU labour. Without recourse to foreign personnel, companies would have expanded less substantially and would be less numerous. This supports the assumption that EU labour was indeed an important factor for the success of Swiss companies in the period after the introduction of free movement. In addition, the effects on companies were responsible for pushing up demand for labour at the same time as the

labour supply increased: Companies created jobs in Switzerland that would not exist without the free movement of persons. Consequently, immigration resulted neither in displacement nor in widespread wage pressure.

At the same time, the research results show that the companies were in part responsible for the substantial influx of foreigners in the years following the opening of the labour market. The results suggest that immigration to Switzerland cannot be curtailed without affecting companies'

G 12: Effect of Free Movement of Persons on Establishment Size, by Sector of Economic Activity

Company size: The graph shows the differences between the trend in company sizes in border municipalities in relation to the trend in company sizes in non-border municipalities (cf. graph 10 as a reading aid). The effects are shown separately for each industry.

employment growth and slowing down economic development – immigration and employment growth are, after all, reverse sides of the same coin.

An extended version of this article was written in the context of a hearing of economists organised by Avenir Suisse and Economiesuisse.

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KOF INDICATORS

KOF Business Situation: Indicator Falls for the Third Time in a Row

The KOF Business Situation Indicator for the Swiss Private Economy is still on the decline in February (see G 13). The indicator has fallen for the third month in a row and is thus being propelled along a downward trajectory. It is becoming harder for Swiss businesses to navigate through increasingly treacherous economic waters.

The various sectors performed differently in February. The business situation became more problematic in the retail and manufacturing sectors (see T 3). On the other hand, the situation remained unchanged for financial and insurance service providers. The downward trend was countered above all by the construction and project engineering sectors, both of which reported improvements in the business situation. Wholesalers, the hotel and catering companies and the other service providers were last surveyed in October. At the time, all three sectors reported a worsening of their business situation.

Performance trends are also different when considered in regional terms (see G 14). On the one hand, the situation worsened in the Lake Geneva region, Ticino, the Zurich region and – albeit marginally – Eastern Switzerland. On the other hand, North-West Switzerland, Central Switzerland and Espace Mittelland recorded a strongly improved business situation.

G 13: KOF Business Situation Indicator

(Balance, seasonally adjusted)



T 3: KOF Business Situation for Switzerland (seasonally adjusted balances)

	Feb 18	Mar 18	Apr 18	May 18	Jun 18	Jul 18	Aug 18	Sep 18	Oct 18	Nov 18	Dec 18	Jan 19	Feb 19
Private sector (overall)	26.7	26.8	26.3	28.3	27.2	29.1	28.8	28.4	27.9	29.0	28.2	25.9	25.1
Manufacturing	22.5	23.0	21.4	27.3	24.7	27.3	28.5	25.9	22.1	26.5	25.7	22.9	19.9
Construction	29.9	27.7	30.2	29.7	28.7	29.2	27.6	27.7	29.5	28.5	28.5	27.0	29.3
Project engineering	48.7	50.1	48.0	46.9	46.8	45.4	46.5	45.7	46.1	44.7	45.5	46.3	49.4
Retail trade	8.3	5.9	0.0	8.2	7.4	10.1	8.0	9.4	6.4	8.1	6.3	6.3	1.2
Wholesale trade	-	-	27.0	-	-	32.8	-	-	33.5	-	-	27.4	-
Financial services	39.6	41.2	41.7	42.8	39.9	41.3	38.9	40.3	40.9	41.2	37.4	35.5	35.5
Hotel and catering	-	-	5.2	-	-	8.3	-	-	9.4	-	-	6.8	-
Other services	-	-	27.3	-	-	27.3	-	-	28.1	-	-	26.9	-

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 13 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.

G 14: 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	

Graph G 14 presents the business situation in the main regions pursuant to the Federal Statistical 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.

Contact

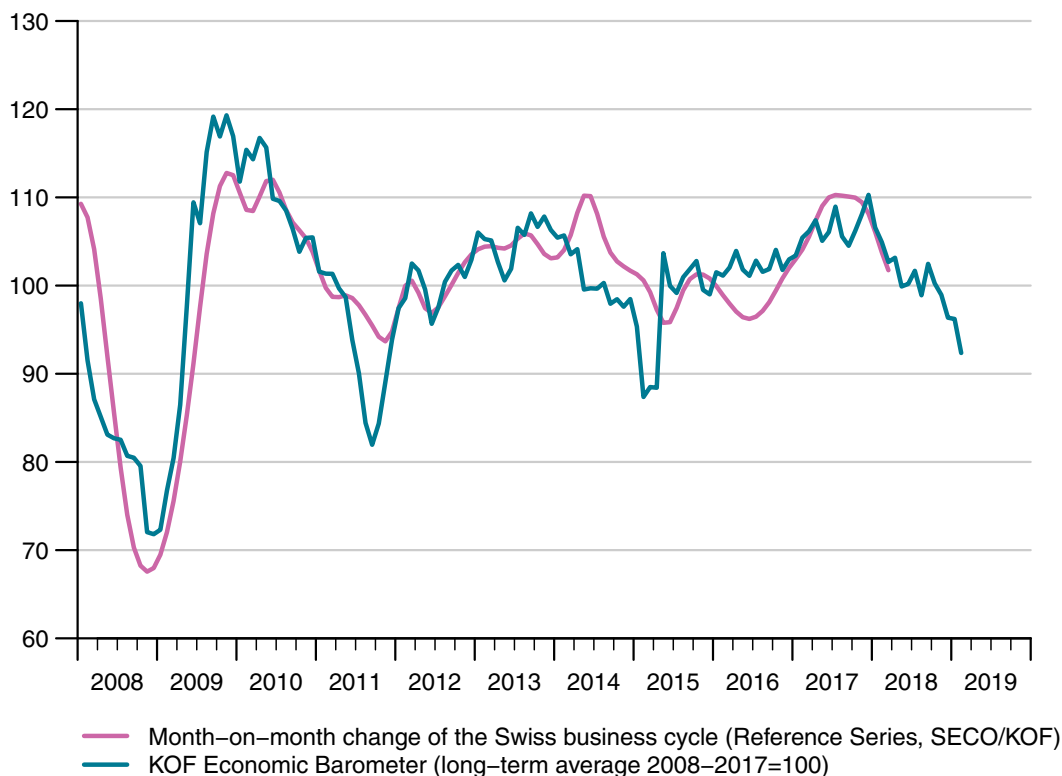
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You can find more information about the KOF Business Tendency Surveys on our website:
www.kof.ethz.ch →

KOF Economic Barometer Continues to Fall

In February 2019, the KOF Economic Barometer dropped to a reading of 92.4 (see G 15). The recent downward tendency thus continued unabated. Accordingly, the Swiss economy can expect to experience a weak phase in the coming months.

G 15: KOF Economic Barometer and Reference Series



The KOF Economic Barometer fell from 96.2 in January (revised from 95.0) by 3.8 points to 92.4 by the end of February. The marked decline is predominantly due to negative impulses from the manufacturing industry; but the deteriorating sentiment has meanwhile also extended to the other components of this barometer.

The negative tendency within the manufacturing industry is mostly driven by the mechanical engineering and the electrical industry; but the signals are now below average in all

industry branches. Within the construction sector, in particular the architects have become more cautious.

In the goods producing sector (manufacturing and construction), the negative trend is above all attributable to the assessments of the order books and the overall business situation; but the assessments have also become more sceptical with respect to intermediate products and inventories.

KOF Economic Barometer and reference time series: annual update

The annual 2018 revision took place in September. These updates always comprise the following steps: a redefinition of the pool of indicators that enter the selection procedure, an update of the reference time series and a renewed execution of the automated variable selection procedure.

The updated pool of indicators now consists of more than 500 economic time series. The updated reference series is the smoothed continuous growth rate of Swiss GDP distributed across the three months of a quarter, based on the official quarterly real GDP statistics, adjusted for the effects of major international sporting events, as released by the Swiss State Secretariat for Economic Affairs (SECO) in early September 2018. SECO, in turn takes the release of the previous year's annual GDP data published by the SFSO into account. The 2017 vintage of the KOF Barometer (published until August 2018) comprised 273 indicator variables.

The current 2018 vintage, which is now replacing the 2017 vintage, consists of 345 indicator variables, selected from a pool of more than 500 candidate variables. Compared to the previous vintage, 104 indicators are new and 32 dropped out of the set of selected indicators. The Barometer is the rescaled weighted average of the selected indicators, where the weights correspond to the loadings of the first principal component.

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For detailed information on the KOF Economic Barometer, visit our website:

www.kof.ethz.ch →

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