Annual report

Swiss foreign trade 2019



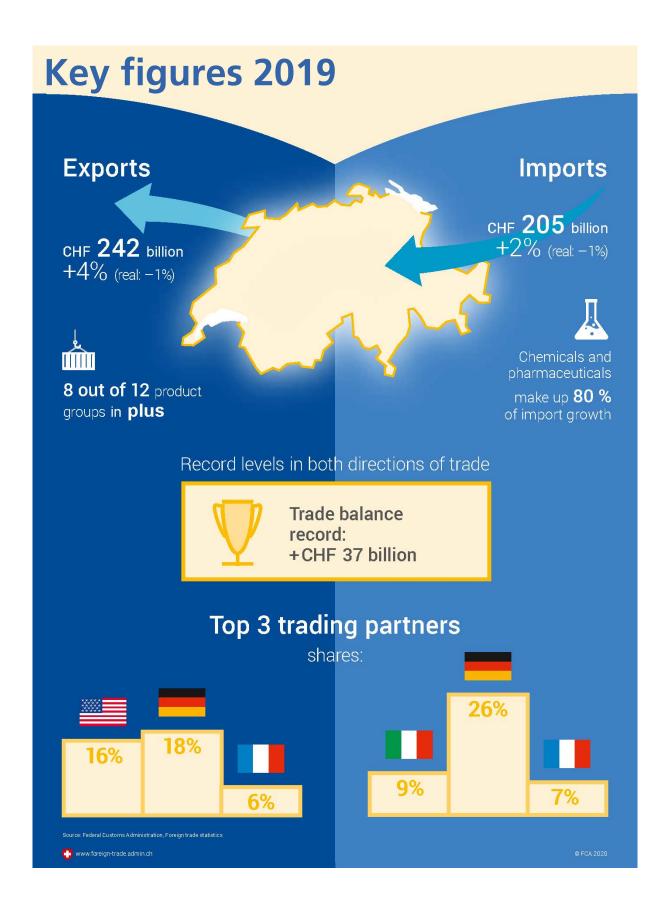
Unless otherwise stated, this report is based on the business cycle total (Total 1), i.e. excluding trade with precious metals, precious stones and gems as well as works of art and antiques – excluded contributions contain a corresponding note.

Imprint

Published by: Federal Customs Administration FCA Foreign Trade Statistics Statistics Section Monbijoustrasse 40 3003 Bern

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July 2020



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Overview

Switzerland in the global trade¹

Stagnation in global goods trade

In 2019, global trading volumes stagnated due to continuing trade tensions. They saw a decline of 0.1% in real terms, after increasing by 2.9% in 2018. Global trade cooled off towards the end of the year in particular, contracting by 1.2% in real terms in the last quarter of 2019 alone (relative to the previous quarter). In terms of value, global exports dropped to USD 18,890 bn over the year, a nominal decline of 3.0%.

Export growth fell in all regions

In all regions of the world, exports grew at a slower rate than in the previous year or even declined. South and Central America (-2.2%) and the category "Other regions" (Africa, Middle East and the Commonwealth of Independent States: -2.9%) recorded the sharpest declines. Exports from North America (+1.0%), Europe (+0.1%) and Asia (+0.9%) also recorded lower year-on-year growth rates. In terms of imports, supplies to South and Central America recorded the largest decline, down 2.1%. Imports to North America and Asia fell by 0.4% and 0.6% respectively year on year, while Europe recorded a slight increase of 0.5%. The other regions (Africa, Middle East and the Commonwealth of Independent States) increased their imports by 1.5%.

Switzerland moved up in the export ranking

In the global country ranking, the top 3 in both directions of trade remain unchanged. In terms of imports, the United States ranked first with a 13% share of the total value, followed by China (share: 11%) and Germany (share: 6%). On the export side, China took the top spot with a share of 13%, the United States came second with 9% and Germany third with 8%. Exports from Japan and South Korea declined annually by 4 respectively 10%, losing one rank each and moving down to fifth and seventh place respectively. Exports from the United Arab Emirates also suffered significant losses (-12%) and fell four ranks to 20th place. Although Switzerland's imports fell by 1%, it remained on place 18 in the international import ranking, which means that it has been among the top 20 for the last 8 years. Swiss imports amounted to USD 277 bn², which corresponds to 1% of total imports. In terms of exports, Switzerland climbed one rank, making it to one of the 20 strongest exporting countries for the fifth consecutive year (2019: 19th place). With an increase of 1%, it was one of the few countries that exported more in 2019 than in the previous year. Swiss exports were worth USD 314 bn, which represented 2% of global exports.

¹ See WTO press release of 8th April 2020: <u>Trade set to plunge as COVID-19 pandemic upends global economy</u>. All data and definitions of world regions in this article are in accordance with WTO usage.

² Due to the inclusion of the general total, i.e. (including gold trade) in respect of Switzerland, the results published by the WTO are higher than those in the other sections (business cycle total) of this annual report.

Overview of the Swiss foreign trade

Weaker growth in both directions of trade

Despite the uncertain global economic environment, Swiss foreign trade in 2019 registered new record values in both directions of trade. Not only were **imports** (CHF 205.2 bn) and **exports** (CHF 242.3 bn) higher than ever before, but the export surplus also reached a new high of CHF 37.2 bn. With nominal growth of 2% and 4% respectively, both imports and exports recorded their fourth consecutive annual increase. However, growth was weaker on both sides compared with previous years and this can be attributed mainly to price increases: in real terms, imports and exports both fell by 1% each.

Slowdown in the final quarter

The increase in exports totalling CHF 9.1 bn was generated exclusively by exports of chemical and pharmaceutical products (+10.2 bn). The seasonally adjusted export development per quarter slowed in the course of the year and closed with a 2% decline in the final quarter of 2019. In terms of imports, deliveries during the year rose by CHF 3.3 bn. Here too, imports fell sharply in the final quarter (-4%), reducing the annual growth attributable to the three previous quarters.

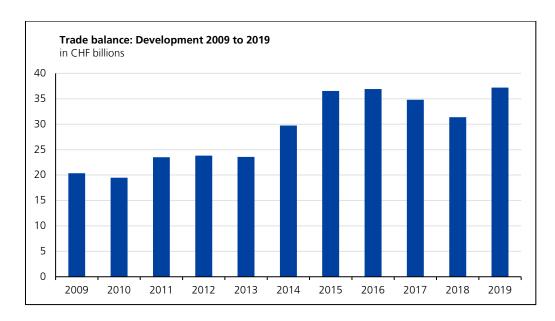
Annual foreign trade results

				Change compared to the previous year (%)			
		bn CHF		Ехроі	rts	Impo	rts
Year	Exports	Imports	Balance	Nominal	Real	Nominal	Real
2009	181	160	20	-12.5	-14.3	-14.3	-9.9
2015	203	166	37	-6.8	-0.1	-2.6	-0.9
2016	210	174	37	4.3	1.4	3.7	-0.9
2017	221	186	35	7.0	4.2	4.8	1.9
2018	233	202	31	8.7	6.2	5.7	1.7
2019	242	205	37	1.6	-0.7	3.9	-0.5

Chemical and pharmaceutical products achieved record levels in the balance of trade

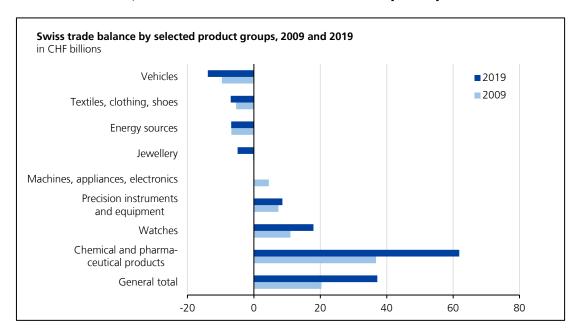
After having fallen in the past two years (-6% and -10% respectively), the positive trade balance resumed its long-term growth

path in 2019 with an increase of 19%. In the last ten years, the export surplus in Swiss foreign trade has almost doubled: since 2009, it has risen from CHF 20.3 bn to CHF 37.2 bn.



The positive Swiss trade balance is mainly due to chemical and pharmaceutical products, which recorded a record high export surplus of CHF 61.9 bn in 2019. Watches (CHF 17.9 bn), precision instruments (CHF 8.6 bn) and machines and electronics (CHF 61 mn) also made a positive contribution to

the trade balance. In all other product groups, more was imported than exported in 2019. The biggest impact on the overall result was caused by the negative results of vehicles (CHF -13.9 bn), textiles, clothing and shoes (CHF -7.0 bn), energy sources (CHF -6.8 bn) and jewellery (CHF -4.9 bn).



Ten years ago, the contributions made by the individual product groups looked slightly different. At that time, **chemical and pharmaceutical products** had also then the largest export surplus, followed by **watches** and **precision instruments**. All three branches have been able to significantly increase their positive results since 2009. By contrast, the

export surplus for machines and electronics has fallen from CHF 4.5 bn to CHF 61 mn. On the other hand, jewellery has seen its import surplus increase by a factor of almost 20 since 2009, but has been subject to strong annual fluctuations. Both vehicles and textiles, clothing and shoes also dragged their results deeper into the red.

General total also sees positive results on both sides

Trading in precious metals, precious stones and gems, works of art and antiques is not included in the business cycle total. When these product groups are included, the general total shows significantly higher results:

exports rose by 3% to CHF 312.0 bn and imports by 1% to CHF 276.1 bn. This was mainly due to trade in precious metals (gold and silver), which accounted more than 20% of the total value in both directions of trade. The trade surplus of the general total amounted to CHF 35.9 bn.

Exports

Development by branch at a glance

Mixed development by branch

The development of exports varied greatly depending on the product group. Although exports rose by 4% (CHF 9.1 bn) overall,

only three of the five strongest export branches showed positive growth. These five product groups accounted for four fifths of all exports in 2019.

Exports by selected product groups, 2019

				nge compared to previous year (%)	
Products	CHF mn	Share (%)	Nominal	unit value	Real
Total	242 344	100.0	3.9	4.5	-0.5
Chemical and pharmaceutical products	114 575	47.3	9.8	7.4	2.2
Machines and electronics	32 064	13.2	-4.3	2.0	-6.2
Watches	21 718	9.0	2.5	6.1	-3.4
Precision instruments	17 010	7.0	1.2	1.0	0.3
Metals	13 585	5.6	-5.7	-0.2	-5.5
Jewellery	11 673	4.8	0.7	10.7	-9.0
Food, beverages and tobacco	9 056	3.7	0.9	-1.5	2.3
Vehicles	5 652	2.3	12.6	-1.7	14.5
Textiles, clothing, shoes	4 984	2.1	2.5	1.2	1.2
Plastics	3 389	1.4	-3.2	-1.4	-1.8
Energy sources	2 497	1.0	-11.4	-18.5	8.7
Paper and graphic products	1 832	0.8	9.7	-0.1	9.8

Chemical and pharmaceutical products even more dominant

Chemical and pharmaceutical products

made the largest contribution to growth, with an increase of CHF 10.2 bn. They reached a record value of CHF 114.6 bn and increased their share of total exports to 47%. Meanwhile, the second most important export sector, machines and electronics, reduced its share to 13% (CHF -1.5 bn). Foreign sales of watches (CHF +538 mn) and precision instruments (CHF +204 mn) increased within a year, albeit less strongly than in previous years. In real terms, however, watch exports fell by 3%, with the number of watches sold reaching a new low

of CHF 20.7 mn. In the meantime, exports of **metals** recorded their first annual decline since 2015 (CHF -817 mn).

Smaller product groups predominantly in positive territory

Exports from the other branches increased in the majority of cases. The highest percentage growth (+13%) was registered for **vehicles** and was attributable to increased exports of rail vehicles (CHF +446 mn) and aircraft and spacecraft (CHF +318 mn). Exports of **food, beverages and tobacco** (CHF +77 mn), **jewellery** (CHF +87 mn) and **textiles, clothing and shoes** (CHF +121 mn) also in-

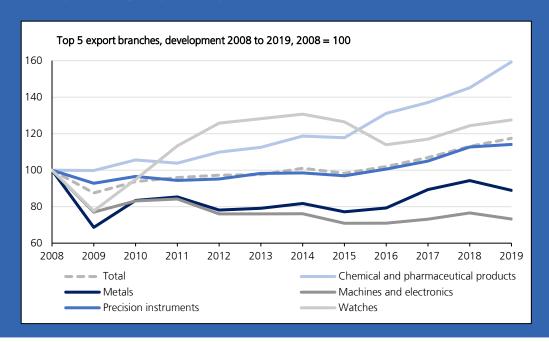
creased, albeit at a slower rate than in previous years. In addition, the rising textile exports can probably still be explained by <u>returns</u>. Meanwhile, exports of **plastics** and

energy sources fell by CHF 112 mn and CHF 321 mn respectively, the latter being mainly due to falling average prices (-9%).

Export development of the top 5 branches since 2008

The five strongest export branches recovered at different speeds from the slump in exports in the wake of the financial and economic crisis. Exports of chemical and pharmaceutical products showed the most dynamic development; since 2008, they have risen by an average of 4.3% per year. Foreign sales of watches grew second fastest – an average of 2.2% per year. Although they fell sharply in

2015 and 2016, they resumed their upward trend in 2019 and came close to their 2014 peak. Exports of precision instruments also developed positively overall: with an average annual growth rate of 1.2%, they have grown at about the same rate as the total exports since 2008 (1.5% per year). Foreign sales of machines and electronics and metals have not yet recovered from the slump in 2009. In 2019, they were 27% respectively 11% below their 2008 level.



Chemical and pharmaceutical products

Record levels for chemical and pharmaceutical products

Exports of chemical and pharmaceutical products continued their long-term growth, even managing to achieve an increase compared to the last two years. Thanks to a rise of 10% (CHF 10.2 bn), the branch registered a new record high of CHF 114.6 bn, making

it once again the main driver of total exports. The chemical and pharmaceutical product sector also gained in importance, increasing its share of total exports by 2 percentage points to 47%. In real terms, exports rose by only 2%. The bulk of the nominal increase is probably due to new and more expensive (intermediate) products.

Exports of chemical and pharmaceutical products 2019

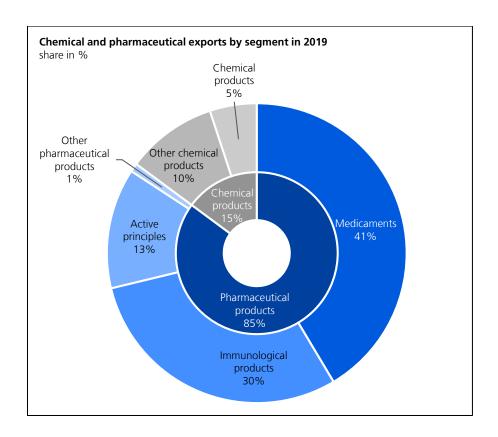
Product category	CHF mn	Share in %	Change compared to 2018 (%)	Contribution to growth (%)
Chemical and pharmaceutical products	114 575	100.0	9.8	100.0
Pharmaceutical products, diagnoses and vitamins	97 550	85.1	10.4	90.3
Medicaments	47 470	41.4	7.1	30.8
Immunological products	34 142	29.8	20.6	57.1
Active principles	14 877	13.0	1.8	2.6
Other pharmaceutical products	1 060	0.9	-2.4	-0.3
Chemical products	17 025	14.9	6.2	9.7
Raw and primary materials	5 798	5.1	19.2	9.2
Unformed plastics	2 075	1.8	-6.2	-1.4
Agrochemical products	2 052	1.8	17.2	2.9
Essential oils, aromatic and flavouring substances	1 826	1.6	1.7	0.3
Cosmetics and perfumery products	1 860	1.6	0.3	0.1
Other chemical products	3 415	3.0	-4.0	-1.4

Immunological products on the rise

Pharmaceutical products, diagnoses and vitamins (CHF +9.2 bn) were largely responsible for the branch's growth, accounting for 85% of exports of chemical and pharmaceutical products. Deliveries of immunological products rose most significantly; they continued their long-term growth trend with an increase of 21% (CHF +5.8 bn). At the same time, they increased their share in the main product group from 27% to 30%. In contrast, the shares of medicaments and active principles dropped by 1 percentage point each to 41% and 13% respectively. Never-

theless, exports of medicaments confirmed their upward trend with an increase of CHF 3.1 bn. Meanwhile, those of active principles rose by CHF 269 mn and are stagnating in a long-term perspective.

Chemical products also recorded additional exports worth CHF 993 mn, thanks mainly to raw and primary materials (CHF +934 mn). Compared to the pharmaceuticals segment, exports in the chemicals segment were losing importance until 2016, but since then they have been able to maintain their share in the branch at a constant 15%.



Spain now among the top 5

In 2019, the Swiss chemical and pharmaceutical industry continued to export primarily to the **United States** (CHF 26.1 bn) and **Germany** (CHF 17.8 bn). Deliveries to the United States rose by CHF 3.4 bn within a year, making the largest contribution to growth in total exports of chemical and pharmaceutical products (33%). Chemical and pharmaceutical products worth CHF 6.7 bn went to Italy,

still the third most important market. Exports to **Spain** grew by 23%, pushing France (-6%) out of the top 5 and took fourth place itself. Fifth place was still held by **China**, which confirmed its long-term growth trend with an increase of 13%. Among other countries, exports to **Slovenia** increased the most, rising from CHF 714 mn to CHF 3.1 bn, climbing from 24th to 8th place.

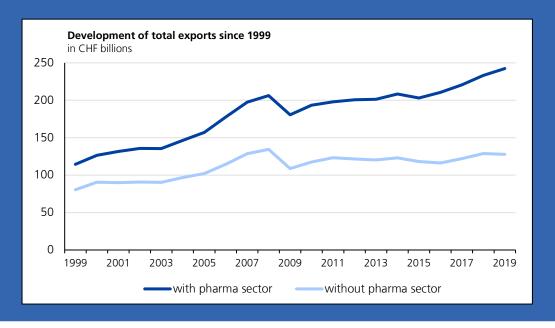
Top 5 sales markets for chemical and pharmaceutical products in 2019

Trading partner	CHF mn	+/- %	Share in %	Contribution to growth (%)
United States	26 079	14.8	22.8	32.9
Germany	17 766	7.0	15.5	11.3
Italy	6 683	7.1	5.8	4.3
Spain	5 769	22.8	5.0	10.5
China	5 604	12.8	4.9	6.2
Total	114 575	9.8	100.0	100.0

Overall export development since 1999

Over the last 20 years, the importance of chemical and pharmaceutical products for the Swiss export sector has increased significantly. In 1999, the branch accounted for 30% of total exports, but by the year under review this share had risen to 47%. During this period, total exports grew by an average of 3.8% per year. A large part of this growth was attributable to the chemical and pharma-

ceutical products branch; without its contribution, total exports alone would only have increased by an average of 2.3% per year. From 2016 in particular, exports of chemical and pharmaceutical products skyrocket above average. In the past four years, total exports have recorded growth of 19%; without chemicals and pharmaceuticals, growth in the four-year period would have been only 8%.

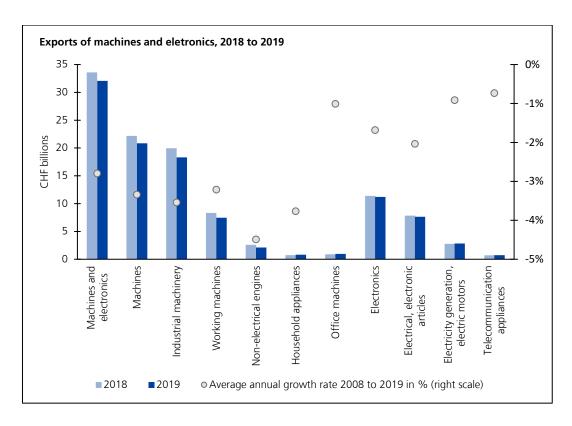


Machines and electronics

Exports of machines and electronics weaken

After three years of growth, exports of machines and electronics fell by 4% to CHF 32.1 bn, confirming the downward trend the branch has been following since the financial crisis of 2008 (average annual change of -2.8% between 2008 and 2019), while total exports rose (average annual

change of +1.5%). **Machines** accounted for 65% of the product group and, with a 6% drop, were a significant factor in the overall decline, while **electronics** fell less sharply (-1%). Both sub-groups have shown a negative trend since 2008 (average annual change of -3.3% and -1.7% respectively).



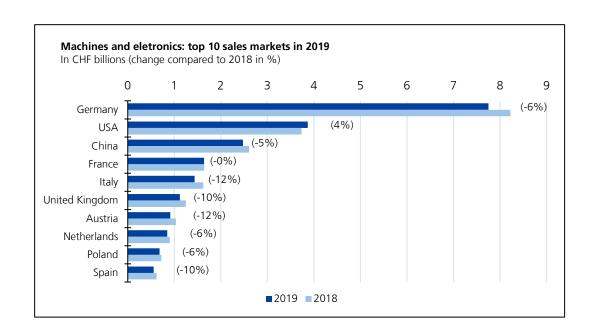
Industrial machinery in decline

Industrial machinery, which accounted for 57% of the machines sub-group, fell from CHF 19.9 bn to CHF 18.3 bn (-8%) within a year. This explains the sharp decline in exports of machines. In particular, exports of non-electric engines (-19%, the sharpest decline for 10 years) and machine tools (-10%) fell. In contrast, exports of other machines developed positively. Within the electronics sub-group, electrical and electronic devices made up 24% of the total exports, and recorded a 3% decline after a 5% increase in the previous year.

Top 10: All countries in decline, except of the United States

Of the ten most important sales markets, only the **United States** showed an upward

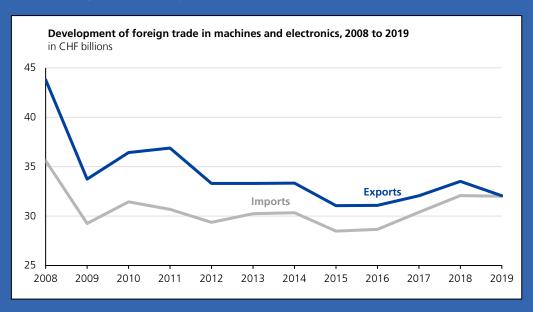
trend; it recorded an increase of 4% and was responsible for 12% of machines and electronics exports. All other countries suffered more or less substantial declines. **Germany**, which as the most important sales market generates 24% of exports, reported a drop of 6%. Exports to **China**, which ranks third, were also down, by 5% within a year. Within the top 10, all European countries recorded a decline, most notably **Austria** (-12%), Italy (-12%) and the **United Kingdom** (-10%). **Japan**, which ranked tenth in 2018, recorded a decline of 20% and as a result fell one place in the ranking.



Export surplus for machines and electronics shrinks since 2008

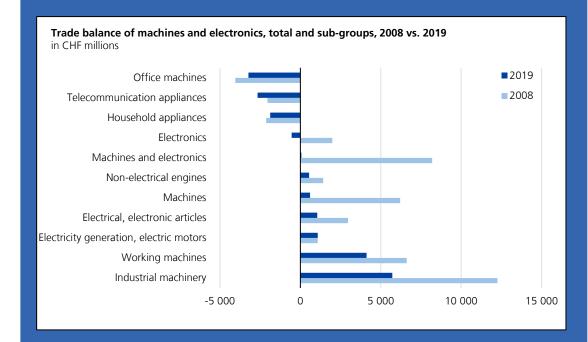
In 2008, the machines and electronics branch still had an export surplus of CHF 8.2 bn. At that time, both exports and imports registered record levels and accounted for around 20% of the value of trade in goods on both sides. Since then, exports have fallen by CHF 11.7 bn, meaning that in 2019 they ac-

counted for only 13% of total exports. Meanwhile, the import side suffered much smaller losses: in 2019, the value of machines and electronics imported by Switzerland was only CHF 3.6 bn less than before the crisis. As a result of this uneven development, the branch's export surplus fell to an all-time low of CHF 61 mn in 2019.



The drop in exports was mainly due to declining foreign sales of machines and industrial machines in particular. Since 2008, these have fallen by an average of 3.3% and 3.5% annually. The trade balance of the machines branch thus dropped from CHF 6.2 bn to CHF 602 mn. At the same time, electronics

exports also suffered losses, primarily due to declining exports of electrical and electronic articles (average annual growth rate: -2.0%). The trade balance of the electronics branch has thus been in negative territory since 2015 (2019: CHF -541 mn).



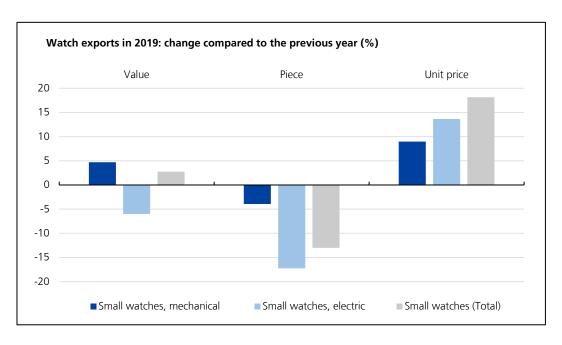
The overall negative trend in exports of machines and electronics is likely to be partly explained by declining foreign orders due to the strong Swiss franc. For example, 64% of the decline since 2008 is due to lower exports to the euro zone (CHF -7.5 bn).

Watches

Fewer watches – but more expensive ones

Exports of clocks and watches increased by 3% (CHF 538 mn) within a year, continuing the growth trend which has been resumed since 2017. However, they did not quite reach their 2014 peak; in 2019, watches and clocks worth CHF 21.7 bn were exported, around CHF 600 mn less than in 2014. In addition, fewer watches have been exported

every year since 2014. In the year under review, the number of watches exported was at an all-time low of 20.7 mn. On the other hand, the unit prices, carriage paid to the Swiss border, continued their long-term upward trend and reached a new record level – in 2019 an exported Swiss watch cost an average of CHF 994.

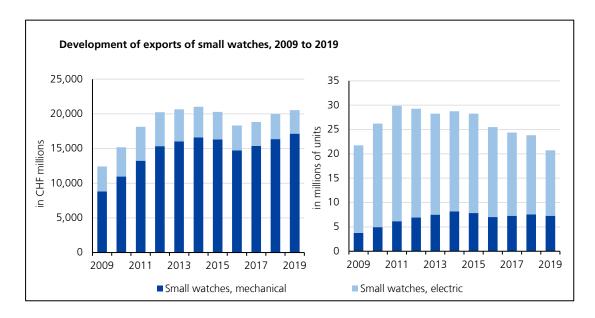


Electric small watches continue to lose importance

The watch branch is largely characterised by small watches (share of total value: 95%). Their exports recorded an increase of CHF 553 mn and were thus the main driver of watch exports. Mechanically operated small watches dominated in terms of value; they accounted for 83% of small watch exports and recorded a gain of CHF 769 mn. Nevertheless, almost 300,000 fewer mechanical small watches were exported than in the previous year (2019: 7.3 mn watches). The nominal increase of 5% was therefore merely due to rising unit prices: in 2019, a small mechanical watch cost an average of CHF 2,356 when crossing the border – around CHF 200 more than in the previous year. The average values of mechanical

watches have been on the rise since 2014 and reached a new record level in the year under review.

Meanwhile, exports of electrically operated watches fell by CHF 216 mn, confirming their decreasing importance compared with mechanical watches. In terms of volume, electric watches still accounted for 65% of all small watches, but their number nevertheless declined by 2.8 mn units within a year (2019: 13.4 mn watches). In addition, they became on average CHF 30 more expensive and cost CHF 253 per watch. Foreign sales of large clocks increased by half to CHF 120 mn within a year, while those of watch components fell by 5% to approximately CHF 1 bn.



Decline in exports to Hong Kong

In 2019, watch deliveries to all three major sales markets increased. North America (+9%) saw the greatest growth, but more timepieces were also exported to Asia (+3%) and Europe (+1%). The top 5 countries for sales remained unchanged compared to the previous two years. Although **Hong Kong** recorded a 10% decline, it remained the

most important purchaser of Swiss watches. The city state was closely followed by **the United States** in second place with a 9% increase. Deliveries to **China** (+16%), **Japan** (+20%) and the **United Kingdom** (+11%) also increased within a year. 46% of all watch exports went to these 5 countries alone.

Top 5 countrie	s for watcl	h sales in	2019
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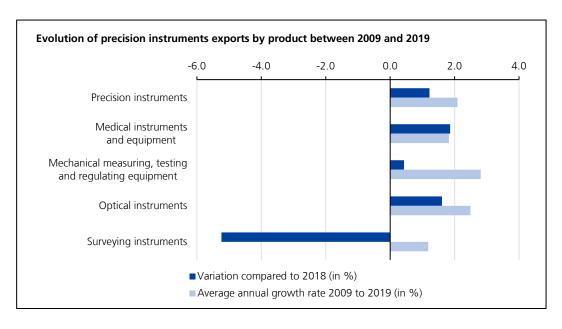
Trading partner	CHF mn	+/- %	Share in %
Hong Kong	2 691	-10.4	12.4
United States	2 409	8.6	11.1
China	1 994	16.1	9.2
Japan	1 609	19.9	7.4
United Kingdom	1 366	10.8	6.3
Total	21 718	2.5	100.0

Precision instruments

Weaker growth in 2019

In 2019, precision instruments made up 7% of total exports and were the fourth most important export branch in terms of value. Since 2015, the branch has shown a strong upward trend, which was, however, somewhat curbed by the more modest growth

(+1%) in the year under review. Nevertheless, exports of precision instruments reached a record level of CHF 17 bn. Between 2009 and 2019, they showed very dynamic growth, recording average annual growth of 2.1%.



Despite slowdown: upward movement in all sub-groups

Between 2009 and 2019 all sub-groups showed a positive trend. In 2019, medical **instruments and equipment** made up 64% of the branch and contributed significantly to the overall growth, with an increase of 2% (CHF +199 mn).

Mechanical measuring, testing and regulating equipment accounted for 26% and, despite only modest growth in 2019 (+0.4%), recorded a strong long-term increase (average annual growth: +2.8%), especially since 2015. In 2019, only exports of surveying instruments suffered losses, with a decline of 5%.

Sharp increase in deliveries to the Netherlands, China and Belgium

The ranking of the top 3 sales markets for precision instruments remained unchanged

compared to the previous year: in the first place were the **United States**, with a slight decline of 1%, followed by Germany – also down (-5%) – and the **Netherlands**, which recorded growth of 24%. This strong increase was mainly due to rising sales of cardiac pacemakers and orthopaedic joint prostheses. China and Belgium continued their long-term upward trend, with growth of more than 10% each; between 2009 and 2019, these two countries recorded an average annual growth of 9.2% and 4.5% respectively. As a result, they have improved their ranking by five and two places in the ranking since 2009. Among the top 10, France suffered another setback. Whereas deliveries to our western neighbour fell by an average of 3% annually between 2009 and 2019, they recorded a decline of almost 9% in 2019. This means that France has lost two places in the ranking since 2009 – one to China and the other to Belgium – and fell back to the sixth place in 2019.

Precision	instruments:	ton	10 sales	markets i	n 2019
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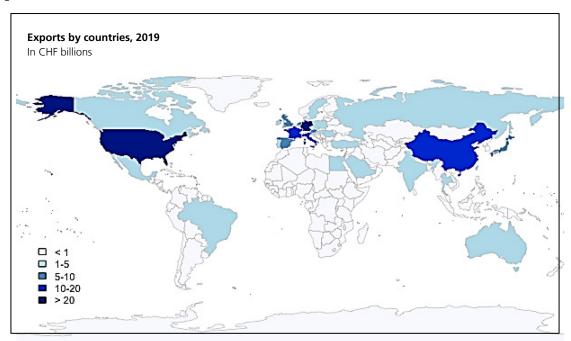
Ranking	Trading partners	Ranking +/- vs. 2009	Change compared to 2018 (%)	Growth per year 2009-2019 (%)
1	United States	▲ +1	-0.7	6.1
2	Germany	▼ -1	-5.0	1.3
3	Netherlands	-	24.2	-1.7
4	China	▲ +5	12.6	9.2
5	Belgium	▲ +2	13.2	4.5
6	France	▼ -2	-8.8	-3.0
7	Japan	▲ +1	-1.4	2.5
8	United Kingdom	▼ -2	-2.9	-0.1
9	Italy	▼ -4	5.4	-2.5
10	Austria	▲ +1	-0.6	0.3

Development by continent and country

Increased deliveries to all major sales markets

The increase in exports of CHF 9.1 bn was mainly due to the three major sales markets of Europe, North America and Asia. Exports to Europe rose by CHF 3.2 bn and, at CHF 130.8 bn, reached their highest level since 2008 – mainly thanks to increased deliveries to the euro zone (+ CHF 2.4 bn). North America showed the highest percentage growth, with an increase of 10% (United

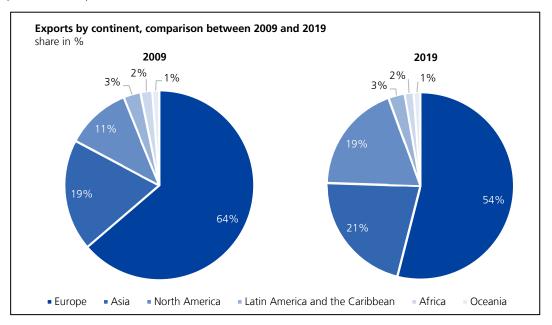
States: CHF +4.0 bn) and exceeded the CHF 45 bn mark for the first time. **Asia** also recorded additional deliveries of CHF 1.9 bn, reaching a new record of CHF 52.2 bn. Goods worth CHF 77 mn (+2%) more were delivered to **Africa** than in the previous year, while **Latin America** and **Oceania** recorded shortfalls of CHF 217 mn (-3%) and CHF 112 mn (-4%) respectively.



Shrinking importance of Europe

In a long-term perspective, exports developed very differently depending on the continent. Exports to Europe stagnated for a long time, but have been showing moderately positive growth rates again since 2016. Nevertheless, they have not regained their peak of 2008 and are steadily losing importance compared to the other two main

sales markets. In 2009, Europe was responsible for 64% of all exports; in the year under review its share was only 54%. In contrast, Asia and North America increased their shares in total exports by 2% and 8% respectively. Exports to North America have more than doubled in the past 10 years, while those to Asia have risen by around 50%.



Top 10: United States lies close behind Germany

In terms of value, Switzerland continued to export the most goods to Germany, but deliveries stagnated in 2019, while exports to the second most important market, the United States, increased by 11%, confirming their long-term upward trend. This moves the USA even closer to the first place: in 2019, there was a difference of only CHF 2.1 bn between exports to the United States and

those to Germany. France and Italy remained in third and fourth place, although deliveries to these two countries fell by 6% and 2% respectively. China, in fifth place, continued its growth trend with a 10% increase in demand. Hong Kong, meanwhile, recorded a decline of 7% and slipped down one place in the ranking. Austria (-6%) also fell back one place to the benefit of the Netherlands, which recorded a 15% increase in deliveries and now ranks on the 9th place.

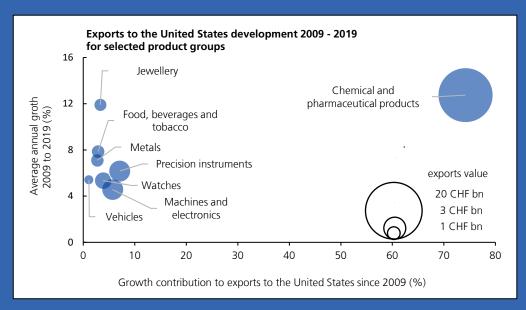
Switzerland's top 15 sales markets in 2019

Ranking	Trading partners	CHF mn	Share (%)	Change relative to 2018		
				+/- %	Ranking +/-	
1	Germany	44 085	18.2	0.4	0	
2	United States	41 989	17.3	10.7	0	
3	France	14 312	5.9	-5.9	0	
4	Italy	14 069	5.8	-2.0	0	
5	China	13 392	5.5	10.0	0	
6	United Kingdom	9 195	3.8	-1.7	0	
7	Japan	8 080	3.3	5.7	0	
8	Spanien	7 815	3.2	14.3	0	
9	Netherlands	5 830	2.4	14.7	▲ +2	
10	Austria	5 799	2.4	-5.6	▼ -1	
11	Hong Kong	5 524	2.3	-7.1	▼ -1	
12	Singapore	4 962	2.0	13.4	0	
13	Belgium	4 366	1.8	5.2	0	
14	Canada	3 953	1.6	7.6	0	
15	Korea (South)	3 432	1.4	7.3	0	
	Total	242 344	100.0	3.9		

Growth in exports to the United States

Over the last 10 years, exports to the United States have grown on average three times as fast as total exports (average annual growth rate: 9.1% vs. 3.0%). In 2009, they accounted for CHF 17.7 bn, i.e. 10% of Swiss exports; since then, they have risen to CHF 41.9 bn and now account for 17%. In 2019, 62% of deliveries to the United States were chemical and pharmaceutical products. Exports from this product group have grown by

12.5% on average per year since 2009 and were responsible for three-quarters of total export growth to the United States. The jewellery sub-group's growth was also above average, with average annual growth of 10.8%. The machines and electronics branch and the precision instruments branch each made up 9% of exports to the United States in 2019. Together, they were responsible for around 13% of export growth since 2009.



Imports

Development by branch at a glance

Mixed development by branch

In 2019, imports recorded their fourth consecutive annual increase, although growth was weaker than in previous years. Overall, imports grew by 2% or CHF 3.3 bn, reaching a new high of CHF 205.2 bn. In real

terms, however, they shrank by 1%. Depending on the product group, developments were mixed; the overall growth was mainly driven by increased imports of chemical and pharmaceutical products and jewellery, while metal imports fell within a year.

Imports by selected product groups, 2019

			Change compared to previous year (%)		
Product groups	CHF mn	Share (%)	Nominal	Mean value	Real
Total	205 150	100.0	1.6	2.3	-0.7
Chemical and pharmaceutical products	52 705	25.7	5.1	7.7	-2.4
Machines and electronics	32 002	15.6	-0.2	0.7	-1.0
Vehicles	19 503	9.5	1.1	3.2	-2.1
Jewellery	16 582	8.1	3.5	2.0	1.5
Metals	14 942	7.3	-6.1	-1.8	-4.3
Textiles, clothing, shoes	11 975	5.8	2.7	4.3	-1.6
Food, beverages and tobacco	10 784	5.3	-0.7	-1.9	1.2
Energy sources	9 312	4.5	-1.7	-8.6	7.5
Precision instruments	8 436	4.1	2.5	2.3	0.2
Plastics	4 473	2.2	-3.5	0.6	-4.1
Paper and graphic products	3 960	1.9	1.7	-0.7	2.4
Watches	3 789	1.8	-5.5	5.8	-10.6

Top 5: 3 out of 5 branches up

Chemical and pharmaceutical products accounted for 77% of total import growth. Their imports rose by CHF 2.5 bn (5%) within a year. In particular, deliveries of medicaments (+10%) and raw and primary materials (+26%) increased. Jewellery (CHF +567 mn) and vehicles (CHF +204 mn) also contributed positively to the overall growth in imports.

Jewellery continued its long-term upward trend, albeit somewhat weakened, with an

increase of 4% and reached a new high of CHF 16.6 bn. In the case of vehicles, their growth (+1%) was exclusively due to increased imports of passenger cars (+5%). Imports of machines and electronics stagnated within a year, while those of metals recorded a decline (-6%) for the first time following three years of growth. This was partly due to declining average prices (-4% in real terms). In 2019, the five most important branches were responsible for two thirds of all imports.

Cheaper imports of food and energy sources

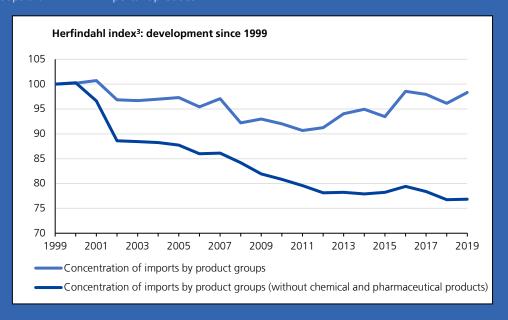
Developments in the other product groups were also mixed. Imports of **textiles**, **clothing and shoes** showed the most dynamic development, with an increase of CHF 313 mn (3%). In real terms, however, they fell by 2%. **Precision instruments** as well as **paper and graphic products** also recorded increases

of 3% and 2% respectively. Meanwhile, deliveries of plastics (-4%) and watches (-6%) declined. Imports of food, beverages and tobacco as well as of energy sources fell by 1% and 2% respectively in nominal terms, but in real terms both sectors recorded increases (+1% and +8% respectively).

Development in import concentration by product groups since 1999

Between 1999 and 2011, the concentration of Swiss imports by product groups declined steadily. Since then, however, it has risen again, so that in 2019 imports were concentrated on certain product groups to roughly the same extent as they were 20 years ago. However, if the import concentration is calculated without chemical and pharmaceutical products, the trend is declining across the board: in 2019, imports were distributed more evenly among the various product groups than in 1999. Important product

groups such as machines and electronics, vehicles and metals have lost some of their import share. For example, imports of machines and electronics accounted for 24% of total imports 20 years ago, compared to 16% in 2019. Other branches such as jewellery were still rather insignificant in 1999 (1%), but have increased their share considerably since then (2019: 8%). Meanwhile, chemical and pharmaceutical products increased their share from 17% to 26%, which means that the figure for import concentration with all product groups is still almost as high as 20 years ago.



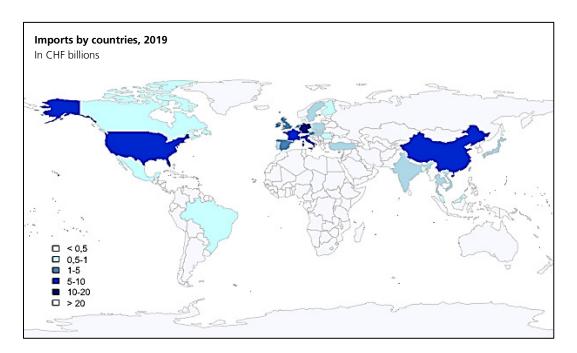
³. Definition: see box in the <u>annual Report 2018</u> (page 31)

Development by continents and countries

Growth in all major procurement markets

In 2019, all three of Switzerland's most important procurement markets recorded increases. However, the overall growth of CHF 3.3 bn was mainly due to **Asia**, whose imports increased by CHF 3.4 bn (9%) and registered a new record of CHF 41.6 bn. Deliv-

eries from Europe (CHF +375 mn) and North America (CHF +170 mn) also increased within a year, but only marginally. Meanwhile, imports from Latin America (-5%), Oceania (-42%) and Africa (-11%) all recorded a decline.

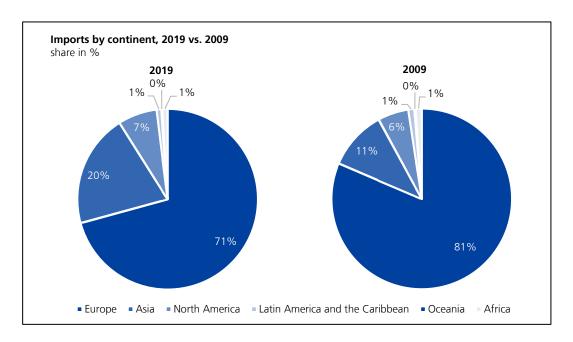


Europe continued to lose share to North America and Asia

In the aftermath of the financial, currency and economic crisis, imports from the European region suffered a sharp decline, but have been showing positive growth rates again since 2016. Nevertheless, they have not regained their 2008 level, thus losing importance compared to the other supply markets. While they accounted for 81% of total imports in 2009, this share had fallen to

71% by 2019⁴. Meanwhile, Asia and North America increased their shares from 11% to 20% and from 6% to 7% respectively. Deliveries from asian countries show strong long-term growth; over the last 10 years their average annual growth rate has been 9.3%. Imports from North America also grew by an average of 5.0% per year. In comparison: total imports grew by an average of 2.5% per year over the same period.

⁴ Since 2012, Swiss foreign trade statistics for imports have been based on the country of origin rather than the country of production.



Imports from Vietnam doubled in a year

In 2019, Germany, Italy and France were once again the three most important suppliers to Switzerland. However, all three countries recorded slight losses within a year, thus confirming their long-term negative trend. Ten years ago, the top 3 were responsible for 54% of total imports; in 2019, this figure was only 43%. In fourth place in the year under review was China, which continued its long-term growth path with an annual increase of 5%. Over the past 10 years, deliveries from China have grown by an average of 11.2% per year. After two years of

decline, imports from the United States increased again by 9% and ended in fifth place, but did not regain their record level of 2016. The United Kingdom, on the other hand, moved up two places in the ranking to sixth place. In the last two years alone, deliveries from the United Kingdom increased by 55% (chemical and pharmaceutical products: +121%). The United Arab Emirates also recorded considerable growth (+20%; jewellery and gold jewellery for smelting) and moved up to 8th place. Meanwhile, imports from Vietnam doubled within a year (gold ornaments) and moved up to the 14th place.

Imports: Switzerland's 15 most important trading partners in 2019

Ranking	Trading partners	CHF mn	Share (%)	Change compared to 2018	
3	31			+/- %	Ranking +/-
1	Germany	53 821	26.2	-1.6	0
2	Italy	18 748	9.1	-0.1	0
3	France	15 114	7.4	-6.8	0
4	China	14 894	7.3	4.6	0
5	United States	13 737	6.7	9.3	0
6	United Kingdom	9 427	4.6	21.8	▲ +2
7	Austria	8 305	4.0	0.8	0
8	United Arab Emirates	7 728	3.8	19.9	▲ +1
9	Ireland	7 543	3.7	-12.3	▼ -3
10	Spain	6 063	3.0	16.2	▲ +1
11	Netherlands	5 444	2.7	1.2	-1
12	Belgium	3 574	1.7	8.5	▲ +1
13	Japan	3 356	1.6	-1.1	▼ -1
14	Vietnam	2 848	1.4	94.1	▲ +5
15	Czech Republic	2 749	1.3	6.8	▼ -1
	Total	205 150	100.0	1.6	

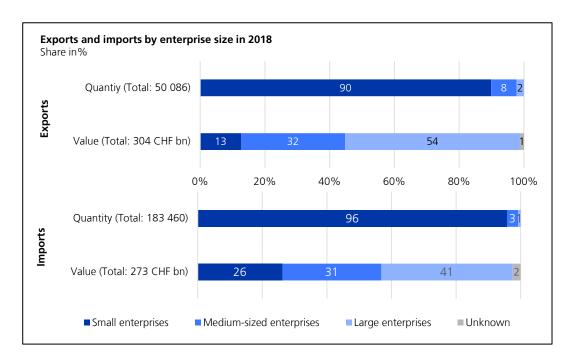
Foreign trade in 2018 by enterprise characteristics

Results 2018

Export business dominated by large enterprises...

In 2018, 8% (50,086) of the 590,253^{5, 6} enterprises registered in Switzerland were active in the export business. In total, they exported goods to the value of CHF 304 bn⁷. **Large enterprises** (250 or more employees) accounted for 54% (164 bn) of exports,

although in terms of numbers they represented only 2% of the enterprises active in foreign trade. With a share of 98% of all exporting enterprises, **small and medium-sized enterprises** (SMEs; 0 to 249 employees) were the largest players in the export business. In terms of value, they sold goods worth CHF 136 bn (share: 45%) abroad.



... and the import business by SMEs

On the import side, 183,460 enterprises were involved, which is three and a half times as many as on the export side. This represents 31% of all registered enterprises. In contrast to exports, **SMEs** set the tone in

the import business: they accounted for 57% of the total imports of CHF 273 bn. 99% of the import enterprises were SMEs and 1% were large enterprises. The latter nevertheless imported goods worth CHF 111 bn.

⁵ Source: STATENT corporate structure statistics, FSO (as of 22 August 2019)

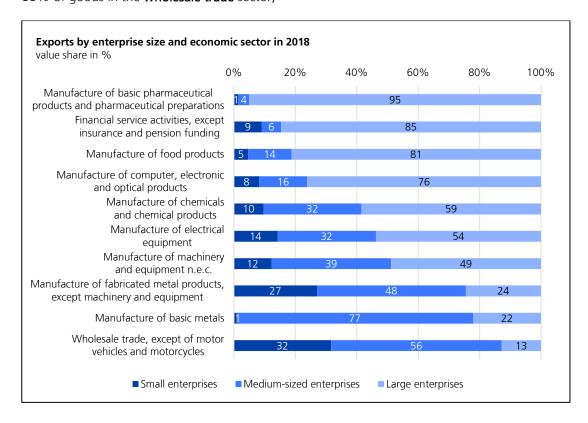
⁶ 2017 data due to unavailability of 2018 data

⁷ General total (Total 2)

Large enterprises in 6 out of 10 export branches with a share of more than 50%

In terms of exports, the importance of large enterprises varies according to the sector of the economy. For example, they exported over 50% of goods in 6 of the 10 strongest export sectors; these ranged from 54% (manufacture of electrical equipment) to 95% (manufacture of basic pharmaceutical products and pharmaceutical preparations). SMEs, on the other hand, exported over 88% of goods in the wholesale trade sector,

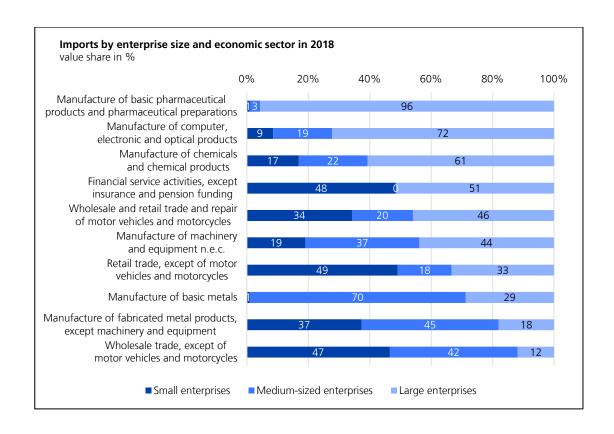
followed by the manufacture of basic metals (78%) and fabricated metal products (75%). In the manufacture of machinery and equipment n.e.c. sector, SMEs accounted for 51%. The large enterprises tend to be found in capital-intensive sectors where a high level of know-how and top specialists are required. However, SMEs are very active in sectors where they act as intermediaries or suppliers of accessories for other sectors of the economy.



SMEs have a strong presence in wholesale trade on the import side

In terms of imports, SMEs were the leading players in 6 out of 10 sectors of the economy: they were most dominant in **wholesale trade** and **manufacture of basic metals**, accounting for 89% and 71% of the value respectively. Large enterprises were also active

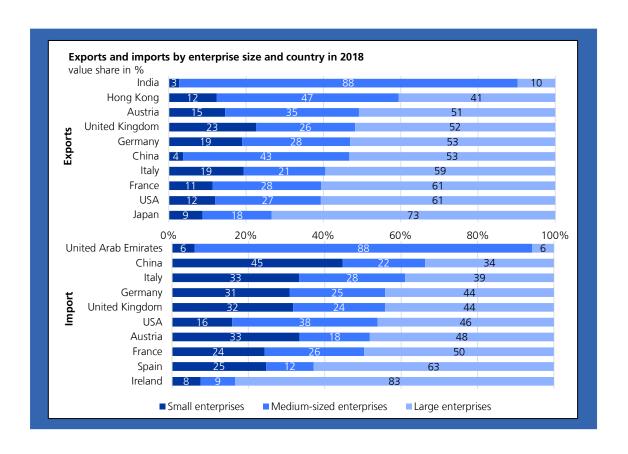
on the import side, with a 96% share in the manufacture of basic pharmaceutical products and pharmaceutical preparations. The high level of activity of large enterprises in the manufacture of computer, electronic and optical products and the manufacture of chemicals and chemical products should also be noted.



Japan is mainly supplied by large enterprises, India by SMEs

Large enterprises accounted for more than 50% of exports to 8 of the top 10 exporting countries. Their shares were similar, ranging from 51% (Austria) to 61% (United States and France), with the exception of Japan (73%, mainly pharmaceutical products). SMEs supplied all the top countries, but exports to India (91%) and Hong Kong (59%) stood out, mainly due to precious metals.

In terms of imports, SMEs dominated 8 of the top 10 countries, with more than 50% of goods purchases. They imported above-average amounts of goods from the **United Arab Emirates** (jewellery) and **Chin**a (94% and 67% respectively). Large enterprises, on the other hand, imported more than half of the goods from only two countries: **Ireland** with 83% and **Spain** with 63% (for both countries: pharmaceutical products).



Focus

Foreign trade by canton: analysis of data from 2016 to 2019 using the new method⁸

Cantonal statistics: an important economic indicator

The foreign trade statistics by canton are of particular importance to the Swiss economy. At the regional level, it is an important economic indicator that helps to monitor the development of cantonal exports and imports, either overall or by sector. In order to ensure the quality of the data in the cantonal foreign trade statistics, the Federal Customs Administration, in collaboration with the Swiss Conference of Regional Statistical Offices (CORSTAT), has developed a new method. This method is based on link-

ing data from the Business and Enterprise Register (BER), which is managed by the Federal Statistical Office, with customs data (see box).

The new method allows a more detailed analysis of the data from 2016 to 2019. On the one hand, the importance of the major regions and cantons for international trade can be highlighted and, on the other hand, the cantonal distribution of the most important export and import branches can be examined.

New allocation method for the cantons

The Unique Business Identification Number (UID) is used to link customs data with data from the Business and Enterprise Register (BER), i.e. the address and number of employees of an enterprise. The variables "address" and "employees" are used to calculate a weighting coefficient per enterprise and per canton, which is then applied to the enterprise's imports and exports (see methodological note).

The main difference between the new and the old method is the criterion for allocating imports and exports to the cantons. Under the old method, the address of the sender or the first recipient of the goods was decisive. The new method uses the address of the enterprise that exports or imports the goods, i.e. the owner of the goods. The annual results from 2016 onwards are available retroactively using the new method.

Northwestern Switzerland as a driving force for exports

In 2019, Northwestern Switzerland set the pace for Swiss foreign trade, accounting for 35% of exports (CHF 85.3 bn) and 27% of imports (CHF 54.9 bn). In the period between 2016 and 2019, this region developed extremely dynamically (average annual growth rates: +6.2% and +7.9%), due mainly to chemical and pharmaceutical products.

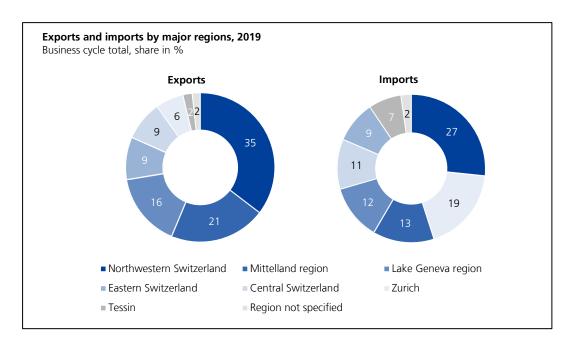
The Espace Mittelland and Lake Geneva regions together covered almost 40% of Swiss exports, putting them in second and third place on the podium. Moreover, the Espace Mittelland recorded an above-average growth trend between 2016 and 2019 (average annual growth rate: +6.6%). The top 3 regions thus accounted for three quarters of Switzerland's total exports.

⁸ This analysis refers to the business cycle total (excluding gold bars and other precious metals, coins, precious stones and gems, as well as works of art and antiques), unless otherwise stated.

In terms of imports, Zurich took second place as a major region (19%, 38.0 bn). Nevertheless, its upward trend of the last three years remained below average (average annual growth rate: +3.1% vs. +5.7%). The remaining 54% was distributed among the

Espace Mittelland (13%), the Lake Geneva region (12%), Central Switzerland (11%), Eastern Switzerland (9%), Ticino (7%) and to others (2%).

Definition of major regions These major regions each comprise one or more cantons and enable comparative statis-The Federal Statistical Office defined seven tical analysis at regional and international major regions in Switzerland which correspond to NUTS 29 according to the statistical office of the European Union (Eurostat). Major region Cantons Lake Geneva region GE/VD/VS Mittelland region BE / FR / JU / NE / SO Northwestern Switzerland AG/BL/BS Zurich ZΗ Eastern Switzerland AI / AR / GL / GR / SG / SH / TG Central Switzerland LU / NW / OW / SZ / UR / ZG Ticino Region not specified FL / OS*



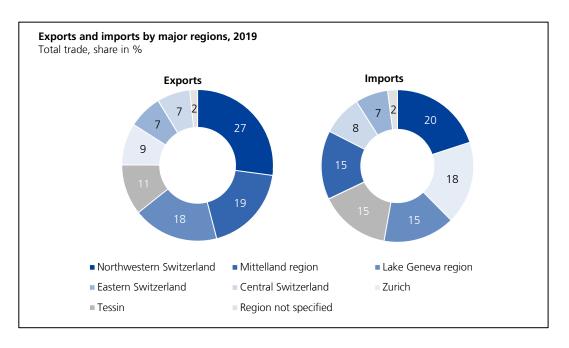
If the general total is considered, which includes gold bars amongst other things, the regional distribution of exports is much different. The top 3 regions are the same as for

the business cycle total: Northwestern Switzerland, the Espace Mittelland and the Lake Geneva region (cumulative share: 64%). Ticino, however, moved up to fourth place;

⁹ Nomenclature of territorial units for statistics

compared to its business cycle total of CHF 6.1 bn, it reported a general total of CHF 33.6 bn. The inclusion of gold also influences the regional distribution of imports. In 2019, Northwestern Switzerland remained in first place with a share of 20% of the general total, closely followed by Zurich (18%).

The Lake Geneva region, the Espace Mittelland and Ticino all shared third place on the podium with a share of 15% each. For Ticino, the difference between the business cycle total and the general total was CHF 27 bn.

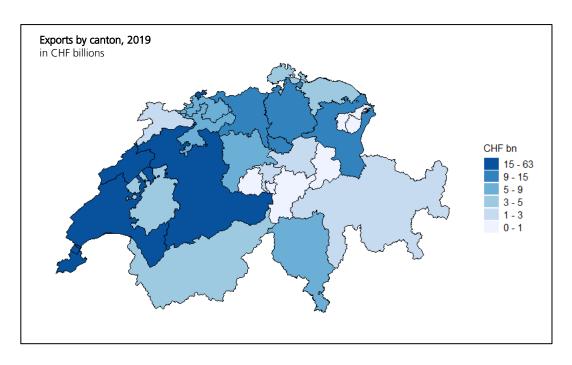


Exports: Basel-Stadt eclipses the other cantons

In 2019, the canton of Basel-Stadt alone was responsible for more than a quarter of Switzerland's foreign sales (CHF 63.5 bn). Compared to the previous year, it recorded a substantial increase of 12%. The top 5 also included the cantons of Neuchâtel (CHF 22.2 bn), Geneva (CHF 20.1 bn), Bern (CHF 16.2 bn) and Vaud (CHF 15.2 bn). With the exception of the canton of Vaud, the average annual growth rates of the top 5 between 2016 and 2019 exceeded the Swiss average, reflecting their dynamic development, particularly in terms of chemical and pharmaceuti-

cal products and watches. At the bottom of the ranking are a small number of cantons that exported goods worth less than CHF 1 bn in 2019, such as the two Appenzell halfcantons, Glarus, Obwalden and Uri. Exports from the Canton of Ticino are also worth mentioning, having dropped by 9% within a year (chemical products).

If gold and precious metals are included, the figures for the cantons of Ticino (CHF +27 bn), Geneva (CHF +18 bn), Zurich (CHF +13 bn) and Neuchâtel (CHF +7 bn) increase considerably.

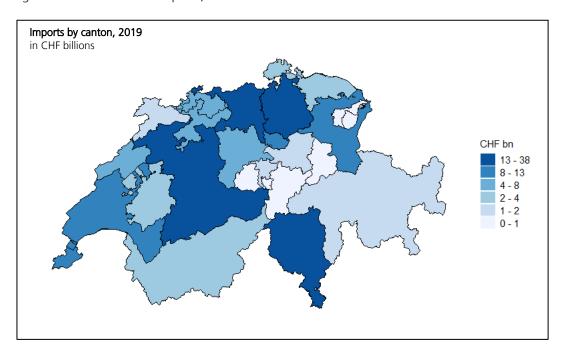


Imports: Zurich in first place

In the 2019 import ranking, Zurich took first place (CHF 38.0 bn), closely followed by Basel-Stadt (CHF 34.1 bn). Ticino also made it to the podium thanks to its rapid increase in imports, which rose from CHF 7.1 bn to CHF 14.8 bn between 2016 and 2019, and could thus more than double (mainly due to jewellery imports). The Canton of Aargau performed similarly well, with imports totalling CHF 14.7 bn. As with exports, the two

Appenzell half-cantons, Glarus, Obwalden and Uri were also in the lower ranks; their imports in 2019 amounted to less than CHF 1 bn each.

As with exports, the inclusion of gold bars and other precious metals also influences the result on the import side, especially for the cantons of Ticino (CHF +27 bn), Geneva (CHF +17 bn), Neuchâtel (CHF +11 bn) and Zurich (CHF +11 bn).



Top 6 branches according to CPA broken down by canton

According to the Classification of Products by Activity (CPA) (see box), Switzerland's top 6 export branches are: basic pharmaceutical products and pharmaceutical preparations, metals (including gold), computer, electronic and optical products (in particular watches and measuring devices), other products (in particular jewellery, gold and silversmith work n.e.c. and medical instruments), machines and chemicals and chemical products.

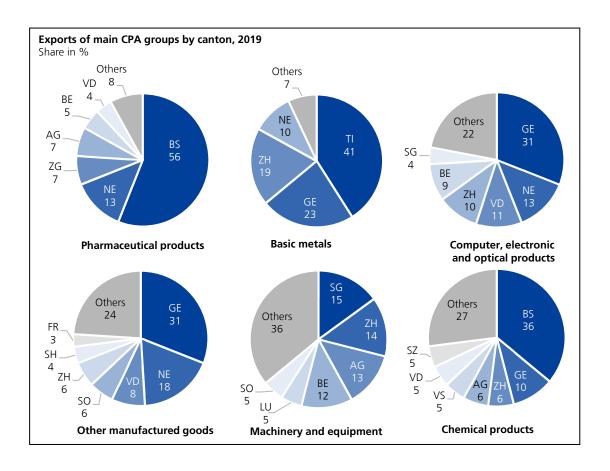
The breakdown by canton makes it possible to analyse the regional distribution of the individual product groups. In 2019, the canton of Basel-Stadt generated more than half of the exports of pharmaceutical products, with

the other half coming from the cantons of Neuchâtel, Zug, Aargau, Bern and Vaud. Northwestern Switzerland thus acted as a cradle for pharmaceutical exports.

In 2019, exports of metals were concentrated exclusively in four cantons, namely Ticino, Geneva, Zurich and Neuchâtel. Computer, electronic and optical products as well as other goods came mainly from the cantons of Geneva, Neuchâtel and Vaud (cumulative share: 55% and 57% respectively). In the case of machines, the geographical distribution of exports was somewhat more diversified, while exports of chemical products were clearly concentrated in Northwestern Switzerland, with a share of more than 45%.

Classification by CPA product group

The statistical Classification of Products by Activity (CPA) is the product classification (goods and services) used by the European Union. The CPA has six levels, of which the most highly aggregated level is identified by an alphabetical code and consists of 21 sections. The cantonal foreign trade results are published at the two-digit CPA level, which allows a more detailed breakdown into 88 product classes. However, the CPA classification does not allow a distinction to be made between the business cycle total and the general total.



Dependence on individual cantons for the most important product groups

The Herfindahl index, (HHI: see box) allows the measurement of the export concentration by canton per product class and also allows the analysis of its development between 2016 and 2019. In this case, the index varies between 0.04 (1/28 cantons) and 1 (dependence on a single canton). Although exports of pharmaceutical products and metals were relatively highly dependent

(HHI: 0.35 and 0.26 respectively), their index has fallen by 9% and 17% respectively since 2016. In 2019, the index for the other product classes ranged between 0.09 and 0.16, indicating a more even distribution between the cantons. Nevertheless, the index for computer, electronic and optical products and chemicals as well as chemical products has increased significantly since 2016 (+9% and +36% respectively).

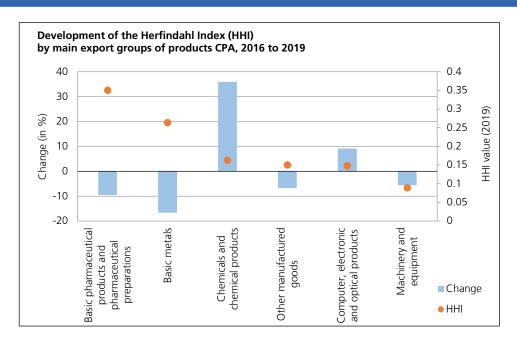
Herfindahl index in foreign trade

The Herfindal index measures the concentration of foreign trade according to various variables, particularly geographical dimensions. The concentration measurement by geographical dimension represents the degree of dependence on a region or a canton.

The Herfindahl index is calculated by summing the squared shares, i.e. $\sum_{i}^{n} s_{i}^{2}$, where \mathbf{s}_{i} = share of region/canton \mathbf{i} in foreign trade,

and $\mathbf{n} =$ number of regions /cantons. The index values lie between 1/n (not concentrated) and 1 (highly concentrated).

The properties of the index allow a comparison over time only as long as n is identical for all indices calculated. The index increases with the dependence on individual regions/cantons. The higher the index value, the more foreign trade is concentrated in individual regions/cantons.

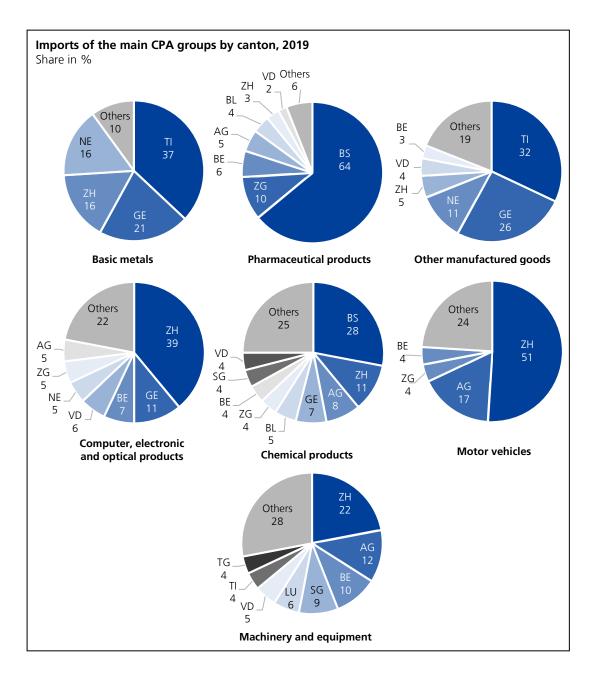


Two thirds of pharmaceutical imports went to the canton of Basel-Stadt

According to the CPA classification, Swiss imports are concentrated in seven product classes: metals (including gold), pharmaceutical products, other products (in particular jewellery and medical instruments), chemical products, motor vehicles, computer, electronic and optical products and machines.

As on the export side, imports of metals were also concentrated in the cantons of Ticino, Geneva, Zurich and Neuchâtel. Meanwhile, the canton of Basel-Stadt was responsible for two thirds of Swiss imports of

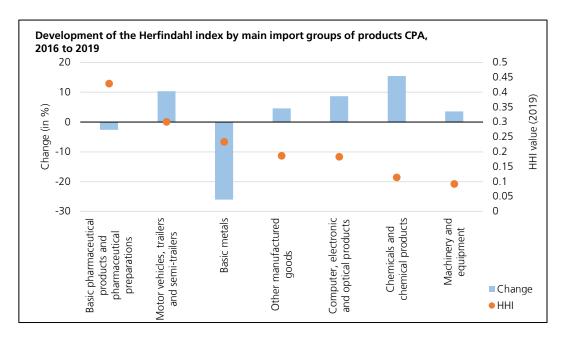
pharmaceutical products. Demand for other products (in particular jewellery and bijouterie) came mainly from the cantons of Ticino, Geneva, Zurich and Neuchâtel (cumulative share: 69%). Meanwhile, imports of vehicles were strongly concentrated in four cantons (Zurich, Aargau, Zug, Bern), which accounted for almost 80% of the total. In this case, the large automobile groups imported the vehicles and then distributed them to their branches in the rest of Switzerland. Chemical products, computers, electronic and optical products as well as machines were distributed more evenly among the cantons.



Concentration increased in 5 out of 7 product classes

Despite a decline of 26% and 3% respectively since 2016, the Herfindahl index for metals and pharmaceutical products was relatively high in 2019, indicating a strong concentration of imports in individual cantons. The indices of the other main product

groups have each shown a rising trend since 2016; their dependence on individual cantons has increased since then. Nevertheless, the values of these product groups remained relatively low in 2019 and ranged between 0.09 and 0.19, with the exception of vehicles, which had an index of 0.30.



Conclusion

The foreign trade statistics by canton play an important role in the analysis of Swiss economic activity. Thanks to this new method, cantonal statistics are now more coherent and precise. The Unique Business Identification Number (UID) makes it possible to link data from different public sector databases. In this way, customs data are supplemented with data collected by the BER.

The analysis of the most important sectors highlighted the importance of individual cantons (or regions) as importers and exporters. For example, imports and exports of pharmaceutical products were mainly concentrated in Northwestern Switzerland, in particular in the canton of Basel-Stadt. This region is an attractive location for multinational pharmaceutical enterprises because it

encourages innovation in this sector and thus drives its growth. The cantons of Neuchâtel, Geneva and Vaud are known for their expertise in the watch and jewellery sectors. The geographical export distribution of these product categories highlights the importance and dynamism of these cantons. Foreign trade in metals (and gold in particular) is strongly anchored in the cantons of Geneva, Zurich, Ticino and Neuchâtel.

Measuring the competitiveness of the various sectors enables each canton to plan and adapt its strategy in the best possible way, thereby promoting innovation, employment and growth in the canton. Thanks to the new statistics, each canton can identify and analyse its main export and import sectors and support their development with appropriate measures.