

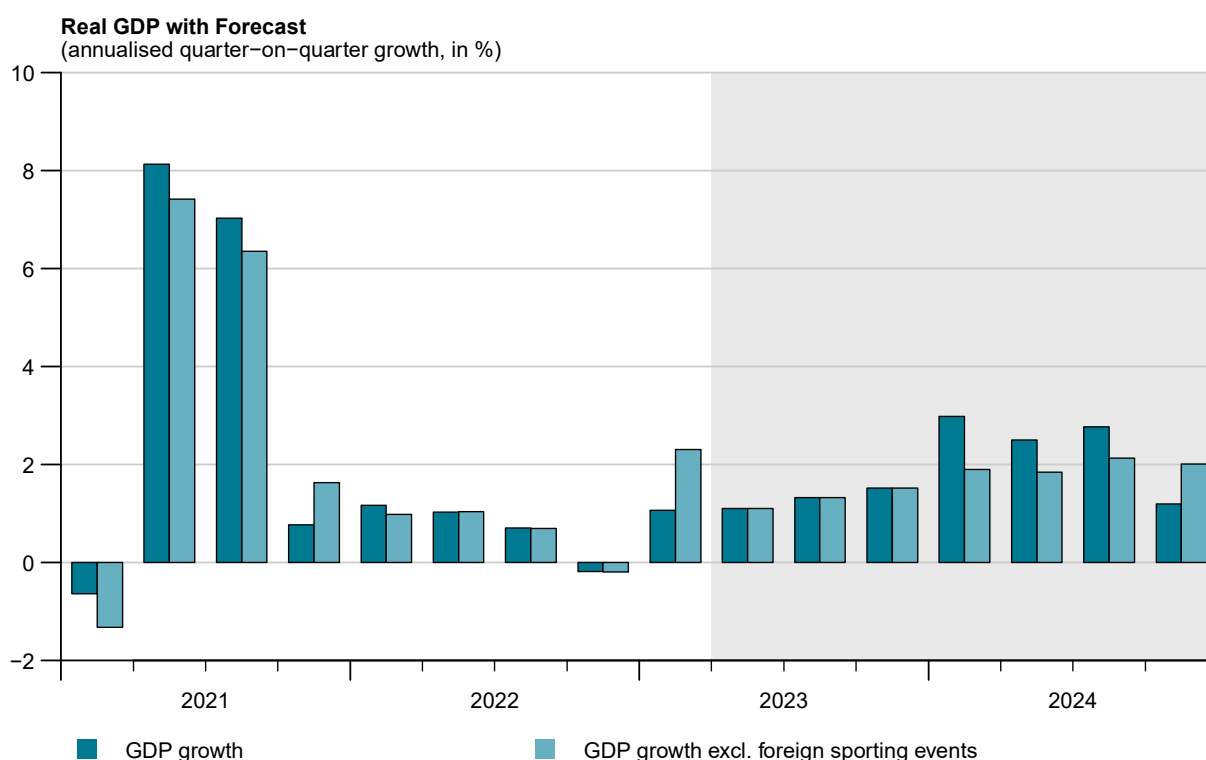
Executive summary of KOF's economic forecast (summer 2023)

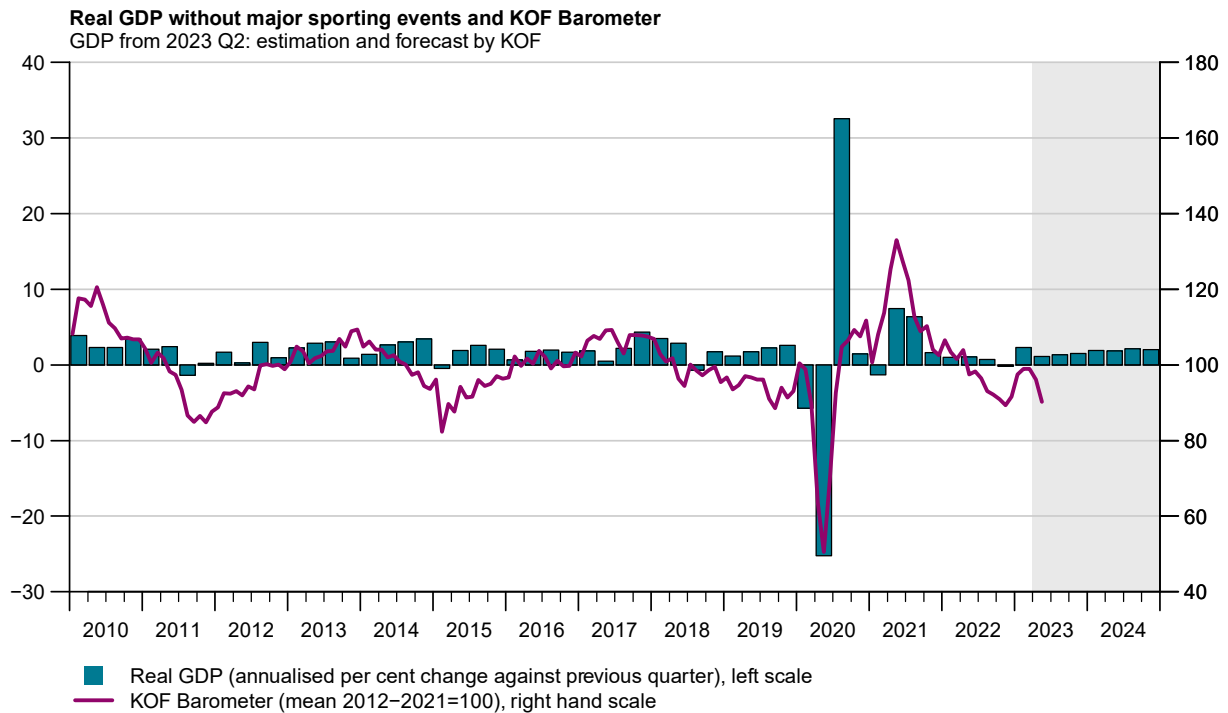
15 June 2023

This is the 2023 summer forecast of the KOF Swiss Economic Institute at ETH Zurich, released on 15 June 2023, with a forecast horizon up to the end of 2024.

Very little change in the economic outlook for Switzerland

Faced with a number of global challenges, the Swiss economy is proving to be robust and stable. Although value added will rise at below its potential growth rate over the coming quarters owing to the subdued nature of the global economy, there are signs of a positive trend in the labour market. Employment growth in Switzerland and the resultant immigration are boosting domestic demand, making consumer spending a key driver of economic growth despite the high but declining level of inflation. KOF is forecasting that Switzerland's real gross domestic product (GDP) will rise by 0.9 per cent in 2023 (by 1.2 per cent excluding major international sporting events) and by 2.1 per cent in 2024 (by 1.7 per cent excluding major international sporting events). Back in the spring, KOF had predicted growth of 0.8 per cent for 2023 (1.1 per cent excluding major international sporting events) and 2.1 per cent for 2024 (1.7 per cent excluding major international sporting events). KOF has therefore only modestly modified its economic outlook for Switzerland compared with its spring forecast and has revised its GDP forecast very slightly upwards to reflect the latest data. Per-capita GDP is expected to flatline or even edge down in 2023, whereas it is forecast to achieve modest growth in 2024.





Global economy: gradual recovery hampered by inflation and restrictive monetary policy

Worldwide output in 2022 achieved only below-average growth owing to supply chain disruption, spiking energy prices and uncertainty caused by the war in Ukraine. Global output then surged at the beginning of this year, driven by the discontinuation of China's zero-COVID policies and by the decline in energy prices. In recent weeks, however, global leading economic indicators have become much less optimistic. Worldwide economic growth is therefore likely to weaken in the second half of the year in the face of high inflation and tougher financial conditions. Countervailing positive stimulus will come from pent-up demand in China this year. Taken together, KOF is forecasting that central banks in the developed economies will manage to engineer a 'soft landing'. In other words, the monetary policy response that central banks were forced to adopt to contain sharply rising consumer prices is not expected to tip the global economy into a deep recession. KOF predicts that Swiss-export-weighted global output will continue to grow at a virtually unchanged rate of 1.4 per cent this year and 2.0 per cent in 2024.

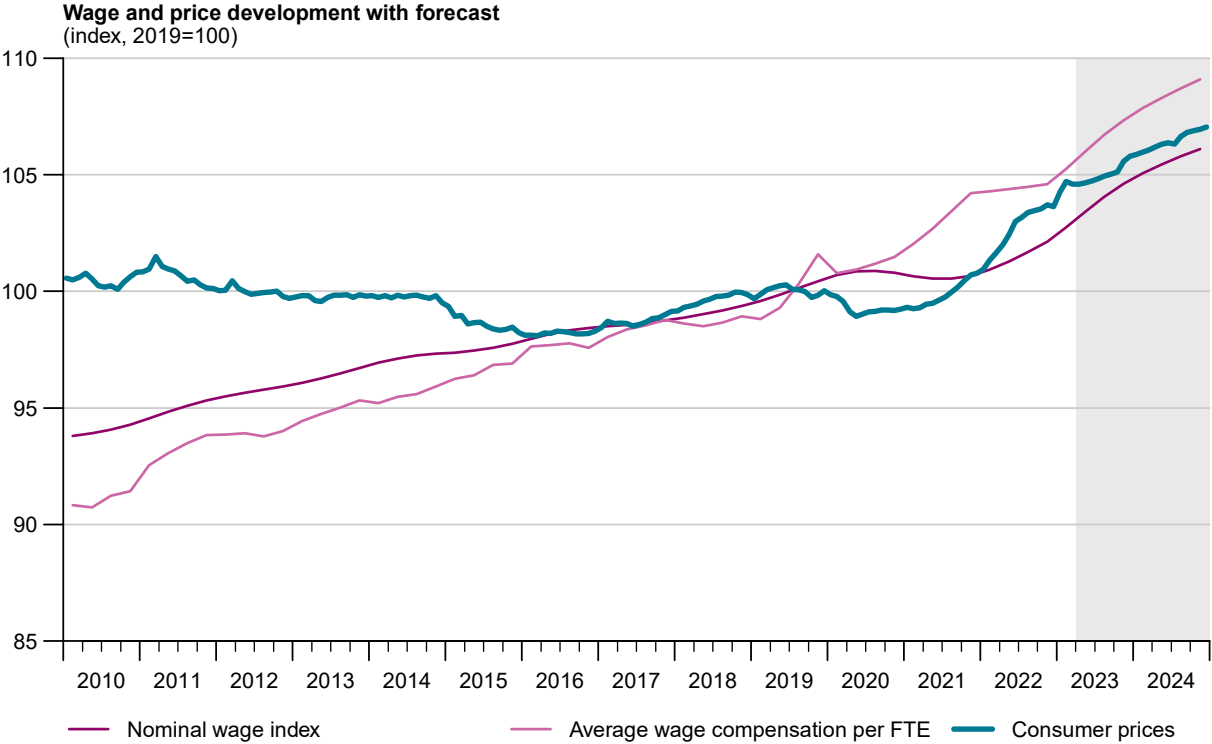
Exports recovering

Swiss exports of goods staged a strong recovery at the beginning of 2023, driven largely by the pharmaceutical industry. Although exports of services have been performing slightly erratically for some time now, especially in the case of licensing and patenting services, they are likely to perform well in general in 2023. Growth in 2024 should be even stronger. Overall, exports of goods and services will increase by almost 4 per cent annually over the forecasting period. As the growth rate in imports is likely to be similar, the balance-of-trade surplus that Switzerland has reported for many years will continue over the forecasting period.¹

¹ For an assessment of this trend, see the article by Abrahamsen and Graff in *KOF Analysen* (2023/2, in German).

Low unemployment and stagnating real wages

Employment has grown more than expected in recent quarters. The strongest seasonally adjusted employment growth in the first quarter of 2023 was in hospitality, retail and in the information and communication sector. This increase in employment, only a small proportion of which was supplied by the domestic work force, caused net immigration to rise sharply. Although some leading indicators for the labour market suggest that this job growth could slow, it is not expected to end immediately. Full-time-equivalent employment growth is unlikely to approach its longer-term average until 2024. Immigration and employment trends will ensure that joblessness remains low but will not fall any further. Currently available data indicate that real wages will grow only modestly over the forecasting period. The figures on productivity trends also suggest that real wage growth will remain low, as value added per hour worked has not increased since 2020.



Residential construction recovering

After several years of continuous contraction there are signs that the construction sector is slowly starting to recover. This trend is largely being driven by residential construction. Having fallen sharply for years, residential construction investment now appears to be returning to normal levels and is being driven by strong demand for accommodation while vacancy rates are declining. Higher population growth will put further pressure on output during the forecasting period. KOF expects total construction investment to recover gradually over the forecasting period.

Inflation curbing consumer spending

After private consumption had grown significantly in 2022, primarily owing to pent-up demand in the wake of the COVID-19 pandemic, KOF expects consumer spending to return to its usual growth rate of around 1.5 per cent in 2023. This is because households' consumption behaviour has largely returned to normal. Private consumption during the forecasting period is being boosted by strong population

growth and by the savings that many Swiss households accumulated during the COVID-19 pandemic. Persistent inflation will, however, erode real disposable incomes, which means that these incomes will not quite be able to keep pace with the level of consumer spending. Consequently, the savings ratio this year should continue to fall slightly from the elevated levels seen since the pandemic. KOF expects real disposable incomes to rise in 2024, however, which means that the overall savings ratio will be close to its usual level.

Output varies widely from sector to sector

Given the weakness of the global economy, manufacturing industry reported fairly moderate output levels on the whole in 2022. By contrast, value added in hospitality staged a significant recovery, which was reflected in strong employment growth. The construction industry suffered a sharp decline in its value added in 2022, as did the value added by financial and insurance service providers. The process of normalisation in the retail sector following the COVID-19 pandemic should be complete. Value added here is expected to rise over the coming quarters. Manufacturing output is likely to grow largely thanks to the chemical and pharmaceutical sectors, while the rest of manufacturing industry will tend to stagnate. Gross value added in construction will flatline in 2023 before achieving positive growth in 2024. The normalisation of value added in financial services that began at the end of 2021 has continued, and this value added has now almost returned to its pre-pandemic trend level. The hospitality sector will achieve above-average growth in 2023 – especially in the first half of the year – owing to pent-up demand in the wake of the pandemic, after which conditions are likely to return to normal. Tourism will benefit from the return of overseas guests this year.

Buoyant momentum in equipment investment

Swiss firms' investment activity surged at the beginning of this year despite rising interest rates, high energy costs and geopolitical uncertainty. Leading indicators suggest that this encouraging trend will continue in the near future. The mostly above-average level of capacity utilisation, for example, suggests that the buoyant investment momentum will continue throughout the rest of the forecasting period. KOF therefore expects to see solid growth in equipment investment this year, and this growth is likely to continue – albeit at a slightly slower pace – in 2024.

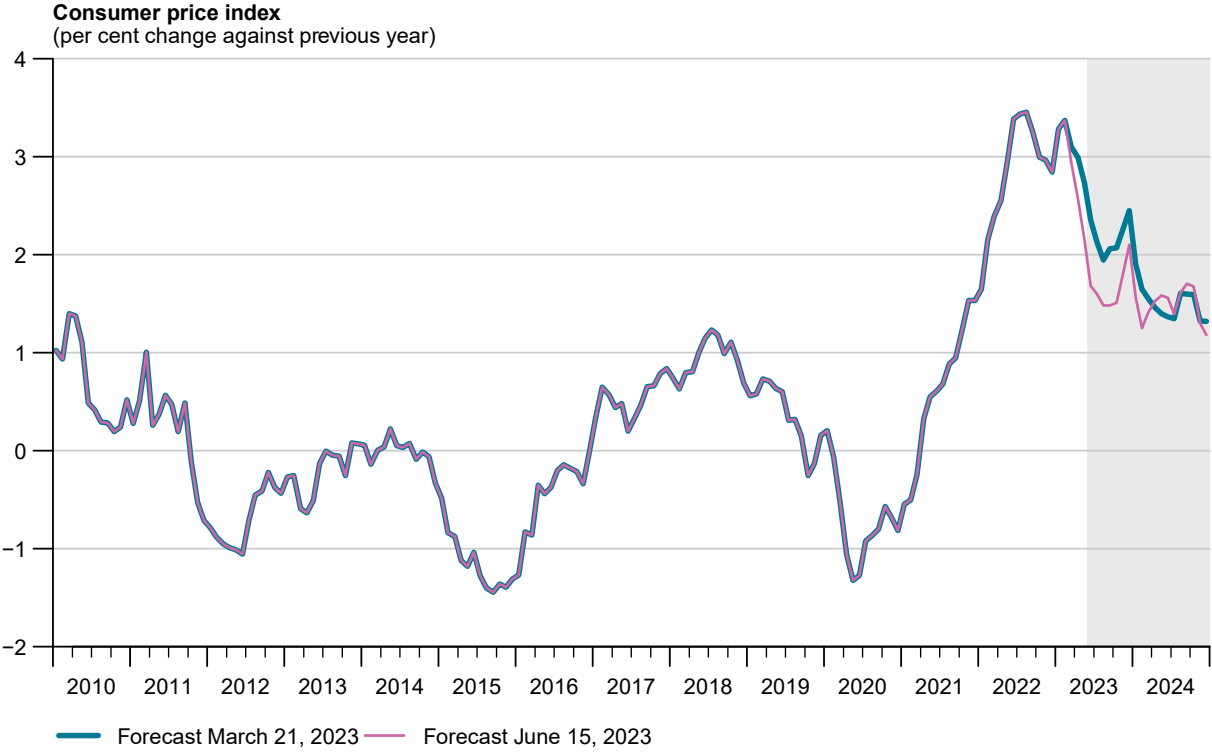
Government consumption as a share of GDP shrinking

The pandemic situation returned to normal in 2022, which is reflected in the level of government consumption. COVID-related government spending has come to an end, and government consumption is returning to pre-pandemic levels. Given the current austerity plans, government consumption growth is expected to continue to weaken slightly, so we are forecasting that government consumption as a share of GDP will shrink in both 2023 and 2024.

Inflationary pressures easing surprisingly quickly

The Swiss National Consumer Price Index (CPI) rose by 2.2 per cent in May 2023 compared with the corresponding month of last year. Annual inflation is therefore currently at its lowest level since March 2022. The main reason for the fall in annual inflation has been the normalisation of energy and fuel prices. In addition, inflation in domestic services has been less dramatic than expected despite rising electricity prices at the beginning of the year. Moreover, KOF's latest Business Tendency Surveys reveal that the proportion of firms planning to raise their prices in the next three months is now declining after having hit historic highs around the beginning of the year. KOF is thus forecasting that, over the next few months, annual inflation will return to the level that the Swiss National Bank (SNB) defines as price stability (below 2 per cent). Taken together, KOF now expects average annual inflation to be only 2.2 per cent this year (compared with 2.6 per cent in its spring forecast) and to remain unchanged at 1.5 per cent next year. The recent rise in the mortgage reference interest rate will mean that many rents for

existing properties will be raised substantially in the coming autumn (by between 3 per cent and 5 per cent depending on the length of the lease). As housing rents currently account for a weighting of over 19 per cent in the CPI, this increase will significantly contribute to inflation up to the end of the forecasting period, especially as the SNB's tightening of monetary policy is likely to push up the reference interest rate further. KOF's forecast assumes that roughly half of the inflation seen in 2024 will be caused by rent increases.



The output gap (difference between realised GDP and estimated potential output), which is important for longer-term equilibrium considerations, is positive and is likely to close in 2023 before turning marginally positive again in 2024. In other words, the forecast assumes that the Swiss economy will grow slightly above its potential next year after achieving below-average growth this year. There are no signs of any inflationary pressures arising from overutilisation of domestic factors of production during the forecasting period.

Monetary policy being tightened more slowly

Given inflation trends abroad, KOF does not expect the US Federal Reserve (Fed) to raise interest rates any further, although it does anticipate a moderate increase in the European Central Bank's (ECB) key rate. Similarly, KOF is forecasting that the SNB will gradually raise its key rate from 1.5 per cent to 2 per cent over the coming months. This interest rate will probably be maintained throughout the forecasting period so that inflation continues to be contained and stabilised. At the same time, the SNB should still ensure that the Swiss franc does not depreciate too much in order to curb any inflation in imported goods.

Current forecasting risks

This forecast is based on the assumptions that energy prices will rise only slightly during the forecasting period and that the recent turmoil in the banking sector does not cause any further disruption. If KOF is wrong on these points, its forecast will probably turn out to be overoptimistic in retrospect. A further downside risk emanates from the real-estate market, where consistently falling prices – especially those for investment properties – pose a downside risk to the Swiss construction sector. The clearest upside risk is that the ongoing geopolitical conflicts unexpectedly de-escalate, which would improve sentiment among consumers and businesses. Private consumption in Switzerland could also perform better than forecast if larger-than-expected amounts of personal savings are spent. And, finally, if worldwide inflation rates converge more quickly than expected towards central bank targets, monetary policy might turn out to be less restrictive than assumed in this forecast. This could provide a stronger stimulus to the global economy if investment is increased.

Further information on KOF's economic forecast is available here:

<https://www.kof.ethz.ch/en/forecasts-and-indicators/forecasts/kof-economic-forecast.html>

APPENDIX

Tables

Table A-1											
Detailed historical data and forecasts for Switzerland 2010–2024											
a) Real Gross Domestic Product (GDP): Expenditures											
(Million Swiss franc; chained volumes (reference year 2019); per cent change against previous year at previous' year's prices and mean per cent change, respectively)											
	10-19	2020	2021	2022	2023	2024					
		(1)	(1)	(2)	(3)	(3)					
1. Consumption	1.5	444'386	-2.8	-	2.0	-	3.2	-	1.4	-	1.0
thereof: private households and NPISHs	1.6	360'118	-4.1	366'056	1.6	380'542	4.0	388'007	2.0	393'400	1.4
general government	1.0	84'268	3.5	87'191	3.5	87'293	0.1	86'512	-0.9	86'067	-0.5
2. Gross fixed capital formation	2.5	184'837	-3.1	-	4.2	-	-0.3	-	2.2	-	2.5
thereof: construction	1.7	65'619	-1.0	63'663	-3.0	60'878	-4.4	60'196	-1.1	60'821	1.0
machinery and equipment	2.9	119'218	-4.3	128'918	8.1	131'210	1.8	136'299	3.9	140'633	3.2
Domestic final demand	1.8	629'223	-2.9	-	2.6	-	2.2	-	1.7	-	1.5
3. Inventory changes and statistical deviations (4)	-	-	-0.1	-	-1.9	-	-0.1	-	-0.3	-	0.1
Domestic demand (*)	1.9	629'991	-3.0	-	0.6	-	2.0	-	1.3	-	1.6
4. Exports of goods and services (*)	3.8	393'186	-4.6	-	11.1	-	5.4	-	3.8	-	3.7
thereof: goods excl. merchanting	4.3	223'448	-2.9	252'376	12.9	263'754	4.5	275'148	4.3	285'362	3.7
merchanting (net)	5.0	47'775	12.0	48'250	1.0	48'433	0.4	50'029	3.3	49'088	-1.9
services	2.9	121'963	-12.5	135'994	11.5	149'031	9.6	153'640	3.1	163'153	6.2
Total demand (*)	2.6	1'023'177	-3.6	-	4.5	-	3.4	-	2.4	-	2.5
5. Imports of goods and services (*)	4.1	323'328	-6.2	-	5.1	-	6.3	-	5.4	-	3.1
thereof: goods (*)	3.6	191'807	-6.2	200'361	4.5	216'589	8.1	227'227	4.9	234'526	3.2
services	5.0	131'521	-6.1	139'285	5.9	144'517	3.8	153'540	6.2	158'000	2.9
Gross Domestic Product	1.9	699'849	-2.4	729'394	4.2	744'333	2.0	750'666	0.9	766'806	2.1
without large international sports events	1.9	699'849	-2.4	727'027	3.9	741'869	2.0	750'433	1.2	763'419	1.7
Gross Domestic Income	1.8	696'596	-2.8	728'273	4.5	747'804	2.7	755'381	1.0	769'381	1.9
without large international sports events	1.8	696'596	-2.8	726'050	4.2	745'529	2.7	755'146	1.3	765'983	1.4
(1) Preliminary calculation from the Federal Statistical Office (FSO)											
(2) KOF estimation 15 June 2023											
(3) KOF forecast 15 June 2023											
(4) Growth contribution											
(*) Adjusted by the non-cyclical exports and imports of valuables, i.e. precious metals incl. non-monetary gold and stones, gems as well as objects of art and antiquities. This adjustment has no influence on the GDP.											
(+*) FSO publish the national account data without those adjustments. For comparison reasons we list the non-adjusted figures in the lines below.											
In the forecast period the growth rates of the trade in valuables are the same as the predicted ones for the goods without valuables, causing fluctuations in the net acquisitions of valuables.											
Domestic demand (+)	1.3	641'409	-0.8	-	-0.9	-	1.1	-	2.2	-	1.7
4. Exports of goods and services (+)	3.7	455'220	-5.2	-	12.4	-	6.9	-	4.6	-	3.5
thereof: goods (+)	4.1	333'257	-2.2	375'606	12.7	398'348	6.1	418'655	5.1	429'626	2.6
Total demand (+)	2.3	1'096'629	-2.7	-	4.5	-	3.7	-	3.3	-	2.5
5. Imports of goods and services (+)	3.0	396'780	-3.2	-	5.0	-	6.4	-	7.3	-	3.1
thereof: goods (+)	2.1	265'259	-1.7	277'227	4.5	298'662	7.7	321'745	7.7	332'080	3.2

Table A-2											
Detailed historical data and forecasts for Switzerland 2010–2024											
b) Nominal Gross Domestic Product (GDP) and Gross National Income (GNI): Expenditures											
(Million Swiss franc at current prices; per cent change against previous year and mean per cent change, respectively)											
	10-19	2020		2021		2022		2023		2024	
		(1)		(1)		(2)		(3)		(3)	
1. Consumption	1.5	442'862	-3.1	454'057	2.5	479'042	5.5	496'189	3.6	508'768	2.5
thereof: private households and NPISHs	1.4	358'532	-4.6	365'286	1.9	388'773	6.4	404'713	4.1	416'534	2.9
general government	1.7	84'330	3.6	88'771	5.3	90'269	1.7	91'476	1.3	92'234	0.8
2. Gross fixed capital formation	2.3	184'613	-3.3	194'782	5.5	201'214	3.3	211'502	5.1	216'833	2.5
thereof: construction	2.0	65'673	-1.0	65'506	-0.3	67'136	2.5	69'556	3.6	70'606	1.5
machinery and equipment	2.4	118'940	-4.5	129'276	8.7	134'078	3.7	141'947	5.9	146'226	3.0
Domestic final demand	1.7	627'475	-3.2	648'838	3.4	680'256	4.8	707'692	4.0	725'601	2.5
3. Changes in inventories	-	8'270	-	-7'760	-	-8'732	-	-3'343	-	-3'359	-
Domestic demand (*)	1.8	635'745	-2.1	641'079	0.8	671'524	4.7	704'348	4.9	722'241	2.5
4. Exports of goods and services (*)	2.9	373'754	-9.3	435'016	16.4	485'660	11.6	495'240	2.0	511'370	3.3
thereof: goods excl. merchanting	2.8	216'006	-6.1	249'218	15.4	267'291	7.3	274'220	2.6	282'582	3.0
merchanting (net)	5.0	42'473	-0.5	58'492	37.7	74'389	27.2	66'455	-10.7	64'936	-2.3
services	2.5	115'275	-17.3	127'305	10.4	143'980	13.1	154'566	7.4	163'852	6.0
Total demand (*)	2.2	1'009'499	-4.9	1'076'094	6.6	1'157'184	7.5	1'199'588	3.7	1'233'611	2.8
5. Imports of goods and services (*)	3.3	314'837	-8.6	344'433	9.4	386'172	12.1	402'519	4.2	413'272	2.7
thereof: goods (*)	2.6	184'862	-9.6	203'727	10.2	238'351	17.0	244'456	2.6	250'534	2.5
services	4.5	129'975	-7.2	140'705	8.3	147'821	5.1	158'063	6.9	162'738	3.0
Gross Domestic Product	1.7	694'662	-3.1	731'662	5.3	771'012	5.4	797'069	3.4	820'339	2.9
without large international sports events	1.7	694'662	-3.1	729'426	5.0	768'667	5.4	796'822	3.7	816'716	2.5
6. Balance of property income	-	9'165	-	9'795	-	20'711	-	22'390	-	24'230	-
7. Balance of labour income	-	-26'240	-	-27'265	-	-29'228	-	-30'777	-	-31'772	-
8. Balance of production taxes	-	0	-	0	-	0	-	0	-	0	-
Gross National Income	1.2	677'586	-2.1	714'191	5.4	762'495	6.8	788'683	3.4	812'796	3.1
(1) Preliminary calculation from the Federal Statistical Office (FSO)											
(2) KOF estimation 15 June 2023											
(3) KOF forecast 15 June 2023											
(*) Adjusted by the non-cyclical exports and imports of valuables, i.e. precious metals incl. non-monetary gold and stones, gems as well as objects of art and antiquities. This adjustment has no influence on the GDP.											
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In the forecast period the growth rates of the trade in valuables are the same as the predicted ones for the goods without valuables, causing fluctuations in the net acquisitions of valuables.											
3. Net acquisitions of valuables (+)	-	14'122	-	3'575	-	-3'078	-	3'060	-	3'976	-
Domestic demand (+)	1.4	649'867	0.5	644'654	-0.8	668'446	3.7	707'620	5.9	726'144	2.6
4. Exports of goods and services (+)	3.2	446'716	-6.9	522'196	16.9	589'719	12.9	610'541	3.5	628'988	3.0
thereof: goods (+)	3.5	331'441	-2.7	394'891	19.1	445'738	12.9	455'976	2.3	465'136	2.0
Total demand (+)	2.1	1'096'583	-2.7	1'166'850	6.4	1'258'164	7.8	1'318'161	4.8	1'355'132	2.8
5. Imports of goods and services (+)	2.8	401'922	-1.9	435'189	8.3	487'153	11.9	521'092	7.0	534'794	2.6
thereof: goods (+)	2.0	271'947	0.8	294'483	8.3	339'332	15.2	363'029	7.0	372'055	2.5

Table A-3											
Detailed historical data and forecasts for Switzerland 2010–2024											
c) Implicit deflators of Gross Domestic Product (GDP): Expenditures											
(Indices, 2019 = 100; per cent change against previous year and mean per cent change, respectively)											
	10-19	2020		2021		2022		2023		2024	
		(1)	(1)	(1)	(1)	(2)	(2)	(3)	(3)	(3)	(3)
1. Consumption	0.0	99.7	-0.3	100.2	0.5	102.4	2.2	104.6	2.1	106.1	1.5
thereof: private households and NPISHs	-0.1	99.6	-0.4	99.8	0.2	102.2	2.4	104.3	2.1	105.9	1.5
general government	0.8	100.1	0.1	101.8	1.7	103.4	1.6	105.7	2.3	107.2	1.3
2. Gross fixed capital formation	-0.2	99.9	-0.1	101.2	1.3	104.8	3.6	107.8	2.8	107.8	0.0
thereof: construction	0.3	100.1	0.1	102.9	2.8	110.3	7.2	115.5	4.8	116.1	0.5
machinery and equipment	-0.4	99.8	-0.2	100.3	0.5	102.2	1.9	104.1	1.9	104.0	-0.2
Domestic final demand	0.0	99.7	-0.3	100.5	0.7	103.1	2.6	105.5	2.3	106.6	1.0
3. Inventory changes	-	-	-	-	-	-	-	-	-	-	-
Domestic demand (*)	0.0	-	0.9	-	0.3	-	2.6	-	3.5	-	1.0
4. Exports of goods and services (*)	-0.9	95.1	-4.9	99.5	4.7	105.4	5.9	103.5	-1.8	103.1	-0.5
thereof: goods excl. merchanting	-1.4	96.7	-3.3	98.7	2.2	101.3	2.6	99.7	-1.7	99.0	-0.6
merchanting (net)	0.0	88.9	-11.1	121.2	36.4	153.6	26.7	132.8	-13.5	132.3	-0.4
services	-0.3	94.5	-5.5	93.6	-1.0	96.6	3.2	100.6	4.1	100.4	-0.2
Total demand (*)	-0.4	-	-1.3	-	2.0	-	4.0	-	1.3	-	0.4
5. Imports of goods and services (*)	-0.8	97.4	-2.6	101.4	4.1	106.9	5.4	105.7	-1.1	105.3	-0.4
thereof: goods (*)	-1.0	96.4	-3.6	101.7	5.5	110.0	8.2	107.6	-2.2	106.8	-0.7
services	-0.5	98.8	-1.2	101.0	2.2	102.3	1.3	102.9	0.6	103.0	0.1
Gross Domestic Product	-0.2	99.3	-0.7	100.3	1.1	103.6	3.3	106.2	2.5	107.0	0.8
without large international sports events	-0.2	99.3	-0.7	100.3	1.1	103.6	3.3	106.2	2.5	107.0	0.8
(1) Preliminary calculation from the Federal Statistical Office (FSO)						(3) KOF forecast 15 June 2023					
(2) KOF estimation 15 June 2023											
(*) In the forecast period the growth rates of the trade in valuables are the same as the predicted ones for the goods without as well as objects of art and antiquities. This adjustment has impacts on the deflators.											
(+) FSO publish the national account data without those adjustments. For comparison reasons we list the non-adjusted figures in the lines below. In the forecast period the growth rates of the trade in valuables are the same as the predicted ones for the goods without valuables.											
3. Net acquisitions of valuables (+)	-	-	-	-	-	-	-	-	-	-	-
Domestic demand (+)	0.0	-	1.3	-	0.1	-	2.6	-	3.6	-	0.9
4. Exports of goods and services (+)	-0.5	98.1	-1.9	102.1	4.0	107.8	5.6	106.7	-1.0	106.2	-0.5
thereof: goods (+)	-0.5	99.5	-0.5	105.1	5.7	111.9	6.4	108.9	-2.7	108.3	-0.6
Total demand (+)	-0.2	-	0.0	-	1.8	-	4.0	-	1.4	-	0.3
5. Imports of goods and services (+)	-0.2	101.3	1.3	104.5	3.2	109.9	5.2	109.6	-0.3	109.0	-0.5
thereof: goods (+)	-0.1	102.5	2.5	106.2	3.6	113.6	7.0	112.8	-0.7	112.0	-0.7

Table A-4					
Detailed historical data and forecasts for Switzerland 2020–2024					
d) Current account					
(Million Swiss franc at current prices)					
	2020	2021	2022	2023	2024
	(1)	(1)	(2)	(3)	(3)
Goods (balance) (*)	73'616	103'983	103'328	96'218	96'984
Services (balance)	-14'700	-13'400	-3'841	-3'497	-1'516
Property income (balance)	9'165	9'795	20'711	22'390	24'230
Labour income (balance)	-26'240	-27'265	-29'228	-30'777	-31'772
Goods, services and primary income (balance) (*)	41'841	73'112	90'971	84'334	87'926
Current transfer (secondary income, balance)	-18'291	-14'847	-14'263	-14'745	-15'175
Current account balance (*)	23'550	58'265	76'708	69'589	72'751
Current account balance in per cent of GDP (*)	3.4	8.0	9.9	8.7	8.9
(1) Preliminary calculation from the Federal Statistical Office (FSO) (3) KOF forecast 15 June 2023					
(2) KOF estimation 15 June 2023					
(*) Adjusted by the non-cyclical exports and imports of valuables, i.e. precious metals incl. non-monetary gold and stones, gems as well as objects of art and antiquities.					
(+ FSO publish the national account data without those adjustments. For comparison reasons we list the non-adjusted figures in the lines below. In the forecast period the growth rates of the trade in valuables are the same as the predicted ones for the goods without valuables.					
Goods (balance) (+)	59'494	100'408	106'407	93'159	93'009
Goods, services and primary income (balance) (+)	27'719	69'537	94'050	81'275	83'951
Current account balance (+)	9'428	54'690	79'786	66'530	68'775
Current account balance in per cent of GDP (+)	1.4	7.5	10.3	8.3	8.4

Table A-5											
Detailed historical data and forecasts for Switzerland 2010–2024											
e) Disposable income, consumption and saving of private households and non-profit institutions serving households (NPISH)											
(Million Swiss franc at current prices; per cent change against previous year and mean per cent change, respectively)											
	10-19	2020		2021		2022		2023		2024	
		(1)		(1)		(2)		(3)		(3)	
Disposable income of private households	1.2	452'879	3.0	459'012	1.4	473'682	3.2	482'133	1.8	493'767	2.4
Private consumption	1.4	358'532	-4.6	365'286	1.9	388'773	6.4	404'713	4.1	416'534	2.9
Saving (4)	-0.1	94'347	47.9	93'727	-0.7	84'909	-9.4	77'420	-8.8	77'233	-0.2
Saving (5)	0.8	131'365	25.9	130'299	-0.8	122'030	-6.3	115'098	-5.7	115'476	0.3
Saving rate (4,6)	-	-	20.8	-	20.4	-	17.9	-	16.1	-	15.6
Saving rate (5,6)	-	-	26.8	-	26.3	-	23.9	-	22.1	-	21.7
(1) Preliminary calculation from the Federal Statistical Office (FSO), KOF (4) Excluding adjustment for change in pension entitlements											
(2) KOF estimation 15 June 2023 (5) Including adjustment for change in pension entitlements											
(3) KOF forecast 15 June 2023 (6) Saving in % of disposable income											

Table A-6						
Detailed historical data and forecasts for Switzerland 2010–2024						
f) Macroeconomic data outside of the National Accounts						
(Per cent change against previous year and mean per cent change, respectively)						
	10-19	2020	2021	2022	2023	2024
Monetary variables						
Real exchange rate of the Swiss franc	0.8	4.0	-2.5	-0.8	1.6	0.3
Government bonds, 10 years (1)						
- annual average	0.6	-0.5	-0.2	0.8	1.4	1.9
- end-of-year	0.5	-0.5	-0.1	1.6	1.7	2.0
3-months-CHF-SARON (1)						
- annual average	-0.3	-0.7	-0.7	-0.1	1.6	1.9
- end-of-year	-0.3	-0.7	-0.7	0.9	1.9	1.9
Consumer prices						
- annual average	0.0	-0.7	0.6	2.8	2.2	1.5
- end-of-year	-0.1	-0.8	1.5	2.8	2.1	1.2
Employment and labour market						
No. of workers	1.3	0.0	1.3	2.6	1.9	1.2
No. of workers, full time equivalents (FTE)	1.1	0.2	1.0	2.7	2.1	1.0
Employment	1.3	-0.5	0.6	1.5	2.1	1.3
Total hours worked	0.7	-3.7	2.5	1.7	1.4	0.7
Labour productivity per FTE (2)	0.8	-2.6	2.8	-0.7	-0.9	0.7
Labour productivity per hour (2)	1.2	1.4	1.4	0.3	-0.2	1.0
Gross Domestic Income per FTE (2)	0.7	-3.0	3.2	0.0	-0.8	0.4
Nominal wages (wage index)	0.7	0.8	-0.2	0.9	2.2	1.8
Average wage compensation per FTE (3)	0.9	1.1	2.0	1.3	1.8	2.0
Unemployment rate, ILO definition (1)	4.7	4.8	5.1	4.3	4.1	4.2
Unemployment rate, registered, Seco definition (1)	2.9	3.1	3.0	2.1	1.8	2.0
Population and per capita indicators						
Population	1.0	0.7	0.8	0.9	1.4	1.2
Real Gross Domestic Product per capita	0.9	-3.1	3.4	1.1	-0.5	0.9
Real Gross National Income per capita (4)	0.4	-2.2	4.3	3.4	-0.2	0.3
(1) Level						
(2) Without large international sports events						
(3) Wage compensation per employee (full time equivalents)						
(4) Using deflator of private consumption						

Table 1-1						
Growth contribution to the Swiss Gross Domestic Product 2010-2024 (1)						
(per cent change against previous year's GDP at previous' year's prices and mean per cent change, respectively)						
	10-19	2020	2021	2022	2023	2024
Private consumption	0.8	-2.2	0.9	2.0	1.0	0.7
General government consumption	0.1	0.4	0.4	0.0	-0.1	-0.1
Construction investment	0.2	-0.1	-0.3	-0.4	-0.1	0.1
Machinery and equipment investment	0.5	-0.7	1.4	0.3	0.7	0.6
Domestic final demand	1.6	-2.6	2.4	1.9	1.5	1.3
Inventory changes and statistical deviations	-	-0.1	-1.9	-0.1	-0.3	0.1
Domestic demand	1.7	-2.7	0.5	1.8	1.2	1.4
Exports	2.0	-2.7	6.0	3.2	2.4	2.3
Total demand	3.7	-5.3	6.5	5.0	3.6	3.7
./. Imports	1.8	-3.0	2.3	3.0	2.7	1.6
Gross Domestic Product	1.9	-2.4	4.2	2.0	0.9	2.1
thereof: contribution of foreign trade	0.3	0.3	3.7	0.3	-0.3	0.8
large international sports events	0.0	0.0	0.3	0.0	-0.3	0.4
(1) Unlike the national accounts the figures are adjusted by the non-cyclical exports and imports of valuables, i.e. precious metals incl. non-monetary gold and stones, gems as well as objects of art and antiquities (cf. Table A-1 and appendix).						

Table 2-1						
Balance of accounts: Federal Government, Cantons, Municipalities and National Insurances 2010–2024						
(Million Swiss franc at current prices)						
	10-19 (C)	2020 (C,E)	2021 (C,E)	2022 (E)	2023 (E)	2024 (E)
Federal Government	2 642	-15 125	-11 246	-1 304	-2 076	-1 415
Cantons	-352	-4 894	2 988	1 655	-459	2 337
Municipalities	-554	-1 255	-132	-76	-409	-169
Total without National Insurances	1 736	-21 274	-8 390	275	-2 944	753
National Insurances	1 326	2 298	1 679	5 249	4 037	4 744
General Government	3 063	-18 976	-6 711	5 524	1 093	5 497
in % of GDP	0.4	-2.7	-0.9	0.7	0.1	0.7
(C) Calculation of the Federal Finance Administration (FFA) (E) KOF estimation and forecast 15 June 2023						

Table 3-1								
Historical data and forecasts for the world economy 2010–2024								
(in trillion US-Dollar; change against previous year at previous year's prices in % or mean change in %) (1)								
	2019		10-19	2020	2021	2022	2023	2024
	nominal	in %						
Gross Domestic Product								
World (total)								
Weighted by Nominal GDP Shares	87.3	100		-3.3	6.5	3.1	2.2	2.6
Weighted by Shares in Swiss Exports				-4.5	5.6	3.0	1.4	2.0
Weighted by PPP-Adjusted GDP Shares				-3.1	6.7	3.4	2.7	3.0
Important Country Aggregates (2)								
Euro Area	13.3	15	1.4	-6.3	5.3	3.5	1.0	1.6
European Union	15.6	18	1.6	-5.8	5.4	3.6	0.8	1.7
G20	80.9	93	3.1	-3.3	6.5	3.1	2.2	2.5
OECD	54.8	63	2.1	-4.4	5.7	2.9	1.6	2.1
Europe	20.3	23	1.7	-6.4	5.7	3.6	0.8	1.6
Germany	3.9	4	2.0	-4.1	2.6	1.9	-0.2	1.4
France	2.7	3	1.4	-7.9	6.8	2.6	0.4	0.8
Italy	2.0	2	0.3	-9.0	7.0	3.8	1.2	1.3
United Kingdom	3.4	4	2.0	-11.0	7.6	4.1	0.3	0.6
Central and Eastern Europe	1.4	2	3.1	-3.5	6.4	4.6	1.2	3.1
North America	23.2	27	2.3	-2.9	5.9	2.2	1.3	1.4
United States of America	21.4	24	2.3	-2.8	5.9	2.1	1.3	1.4
East Asia	26.3	30	5.2	-0.2	6.8	2.8	4.5	4.1
China	15.8	18	7.6	1.8	8.9	3.0	5.8	4.8
Japan	4.6	5	1.2	-4.3	2.2	1.0	1.0	1.3
Southeast Asia	5.9	7	4.1	-2.3	4.5	3.8	3.0	4.2
South Asia (incl. India)	3.1	4	7.2	-6.2	9.0	6.8	5.9	6.1
Central Asia and Russia	1.9	2	1.1	-2.1	4.4	-4.3	-0.2	1.1
Latin America	7.1	8	2.1	-7.3	7.9	4.3	0.7	2.0
Africa und Middle East	3.6	4	4.0	-1.4	8.2	5.6	3.2	3.9
Oceania (incl. Australia)	1.7	2	2.7	-1.7	5.3	3.5	2.2	2.4
Consumer Prices								
Euro Area								
Germany			1.4	0.3	2.6	8.4	6.3	3.5
France			1.4	0.4	3.2	8.7	7.0	3.4
Italy			1.3	0.5	2.1	5.9	6.8	4.3
Italy			1.3	-0.1	1.9	8.7	6.9	3.2
Further countries								
United States of America			1.8	1.3	4.7	8.0	4.3	2.7
United Kingdom			2.2	0.9	2.6	9.1	8.5	5.2
China			2.6	2.4	1.0	2.0	0.6	2.6
Japan			0.6	0.0	-0.2	2.5	3.4	2.2
Globally Relevant Variables								
World Trade (3)			3.5	-5.1	10.4	3.2	-1.5	1.6
Brent Crude Oil (US-Dollar per Barrel)			77.9	41.8	70.7	100.8	78.7	78.0
Euro/US Dollar Exchange Rate			1.25	1.14	1.18	1.05	1.08	1.09
€STR			0.2	-0.4	-0.6	0.0	3.2	3.8
US SOFR			1.1	0.3	0.0	1.6	5.0	5.3
10-Year German Bund Yield			1.3	-0.5	-0.3	1.2	2.6	3.2
10 Year US Treasury Bond Yield			2.5	0.9	1.4	3.0	4.2	6.0
(1) Historical Data: OECD, IMF, Eurostat, national statistical agencies. Forecasts: KOF								
(2) The aggregates are defined in the appendix.								
(3) Source: Centraal Planbureau (CPB), Netherlands								
The KOF provides a comprehensive report on its international projections in the publication «KOF International Forecasts».								