

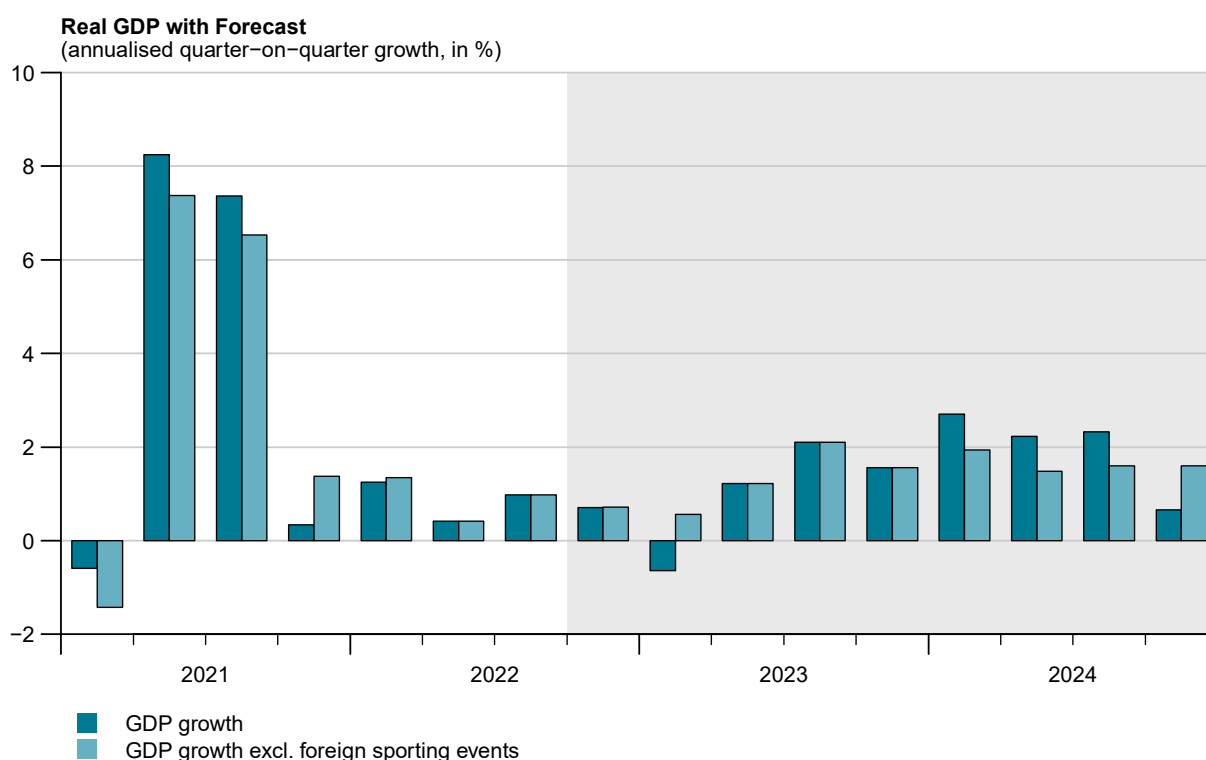
## Executive summary of KOF's economic forecast for winter 2022

15 December 2022

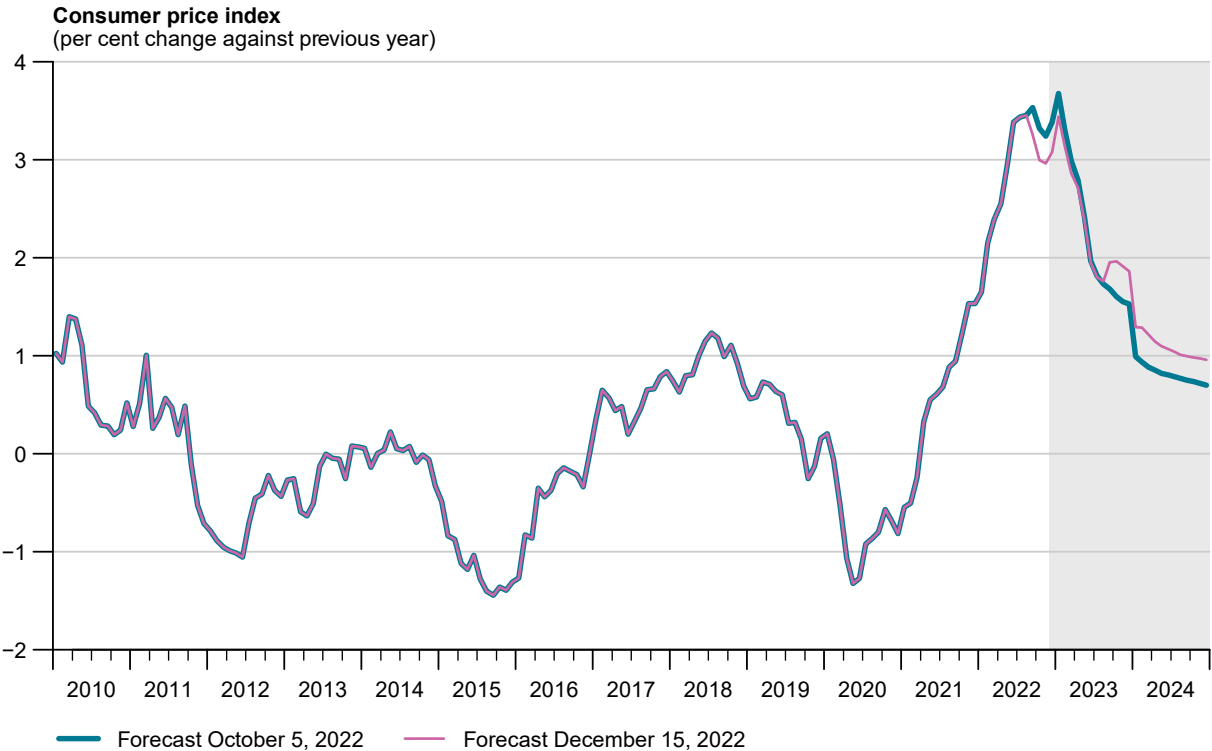
This is a summary of the 2022 winter forecast for Switzerland, released by the KOF Swiss Economic Institute at ETH Zurich on 15 December 2022, with a forecast horizon up to the end of 2024.

### ENERGY CRISIS STILL ACTING AS A DRAG ON THE SWISS ECONOMY

The energy crisis, the broad-based rise in inflation and the expiry of catch-up effects in the wake of the COVID-19 pandemic have been causing international economic indicators to plummet for some time now. A decline in overall economic output is expected in some countries for this winter or the first half of 2023. The Swiss economy will not be able to escape this trend entirely. However, it should manage to avert a recession owing to its comparatively high resilience, although its level of output is likely to stagnate. The main reason for this is the manufacturing sector, where the previously sharp increase in output is unlikely to continue. On the demand side this is causing exports and investment to flatten out. Overall, real Swiss GDP will rise by 2.0 per cent on average this year (2.1 per cent adjusted for major sporting events), by only 0.7 per cent in 2023 due to the aforementioned stagnation in the first half of the year, and by 2.1 per cent in 2024 (adjusted for major sporting events, 1.0 per cent and 1.7 per cent, respectively). KOF has changed its economic outlook very little and has hardly revised its GDP forecast at all compared with the autumn forecast for 2023.



However, the risk of energy shortages and a related economic crash has declined since the autumn. The labour market should be able to withstand this tough period. Although employment growth is weakening, there will be no significant increase in unemployment. Swiss consumer price inflation has recently fallen slightly owing to a decline in oil prices. At around 3 per cent it is far below inflation in other European countries but well above the inflation target for the Swiss National Bank (SNB). As regulated energy prices will be raised in the first quarter of 2023, there will be further inflationary pressures. The expiry of base effects will then cause inflation to fall over the course of 2023. KOF expects consumer prices to rise by 2.9 per cent year on year for 2022 as a whole, by 2.3 per cent in 2023 and by 1.1 per cent in 2024. Over the coming months the SNB is likely to slightly raise its key interest rate, which is currently (as at 14 December) 0.5 per cent, in response to current price pressures and the interest-rate hikes in other countries. KOF is forecasting a key interest rate of 1.5 per cent for spring 2023.



**International energy crisis and high inflation are having a negative impact on the Swiss economy**

Although the economic situation in Europe was quite encouraging until recently, expectations have been steadily deteriorating for some time. KOF expects to see recessions in Germany, France, Italy and other Swiss trading partners during the first half of 2023. There are several reasons for this. The catch-up effects arising from the COVID-19 pandemic – in particular the normalisation of the savings ratio – are coming to an end, and fiscal stimuli launched during this period are expiring. This automatically results in a reduction of GDP growth rates. In addition, Russia’s conflict with the West has rapidly driven up energy prices, and core prices have also risen sharply as production capacities have barely kept pace with strong aggregate demand during the post-pandemic recovery. Given their increased costs, companies are cutting back on production and investment. Moreover, household consumption is suffering from inflation-related real wage decreases.

The Swiss economy will be seriously affected by these international developments through three channels. Firstly, exports of goods are likely to be flat in the first half of 2023 owing to weaker international demand. The external contribution to GDP will fall accordingly. Secondly, the gloomy international outlook means that companies are investing more cautiously in Switzerland than before, as domestic investment is partly used to boost future export production. And, thirdly, the international energy price surge and the shortage of production capacity are fuelling price increases in Switzerland. Accordingly, higher costs here are dampening consumption and investment, albeit to a lesser extent than in other countries. KOF expects the global economy to recover gradually in 2024 and to have correspondingly positive effects on Swiss exports.

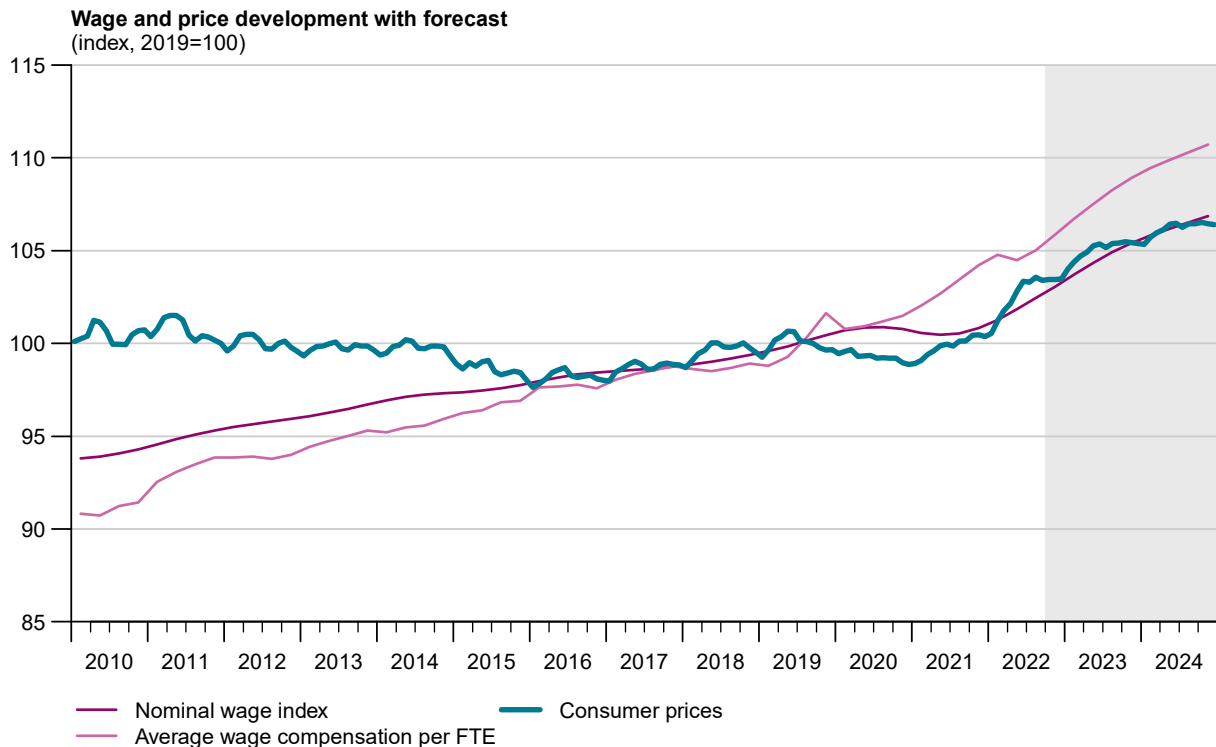
### **SNB will continue to raise interest rates, but interest differentials with other countries should rise further**

KOF expects the SNB to continue to gradually raise its key interest rate from its current level of 0.5 per cent (as at 14 December). The reason for this is the rise in inflation and the prospect that it will not fall significantly until at least spring 2023. Since inflation in Switzerland is considerably lower than that in the euro area, however, the SNB's interest-rate hikes are likely to be lower than those of the European Central Bank. KOF expects the SNB's key interest rate to be 1.5 per cent in March 2023. This should further widen the interest-rate differential with the euro area. This increase in interest-rate spreads will weaken the Swiss franc, all other things being equal. This will counter the upward pressure on the franc that will arise during the impending economic crisis in Europe ('safe haven' effect) and which the SNB will accept to a certain extent since it will dampen inflation and – all other things being equal – price competitiveness will improve because of the existing inflation differential with other countries. It should be noted that the rising key interest rate is likely to push up the mortgage reference rate over the forecasting period. This automatically leads to rent increases, which in turn results in higher inflation and could raise the question of further interest-rate hikes.

### **Employment growth is flatlining, but unemployment remains low**

Although the labour market has been booming in 2022, employment growth is likely to level out from the end of this year as the economy slows. In export-led sectors, such as parts of the manufacturing industry, employment could even fall in 2023. Weaker employment growth will mean that joblessness will not fall any further. However, KOF does not expect to see any noticeable increase in unemployment either because, for this to happen, the performance of the economy in the coming year would have to be much worse. The unemployment rate as defined by the International Labour Organization (ILO) should be 4.2 per cent this year. KOF is forecasting 4.1 per cent and 4.3 per cent for 2023 and 2024, respectively. The internationally incomparable unemployment rates calculated by Switzerland's State Secretariat for Economic Affairs (SECO) are 2.2 per cent for this year and next year and 2.3 per cent in 2024.

Real wages are expected to decline by 1.3 per cent in 2022, having already fallen by 0.8 per cent in 2021 and risen by 1.5 per cent in 2020 (according to the Swiss Wage Index). One reason for this trend is that workers and trade unions had hardly priced any previous inflation increases into their wage demands. With inflation still high, wage settlements next year are likely to be higher than before. Despite weak economic activity, moreover, the buoyant labour market situation means that wage rises will more than compensate for the inflation-related loss of purchasing power, resulting in a forecast that real wages will grow slightly by 0.1 per cent in 2023 and 0.6% in 2024.



### Industry is stagnating

Industrial output increased rapidly after the first wave of coronavirus had subsided in 2020 and then stagnated at a high level from the first quarter of 2022. The economic crisis in Europe is likely to cause a slight decline in manufacturing output (excluding the pharmaceutical industry) in the final quarter of 2022 and the first half of 2023. Only then is output expected to bounce back. Even pharmaceutical production will make hardly any positive contribution during the winter half-year. Although this sector is relatively independent of international economic cycles, output even here has been stagnating since the second quarter of 2022 after it had previously grown significantly owing to the COVID-19 pandemic, among other things. According to figures in the national accounts, construction output has been falling sharply since the end of 2021. This is in marked contrast to KOF's Business Tendency Surveys and the labour market situation for this sector. KOF expects to see a return to normal growth rates in the final quarter of 2022 and throughout 2023. The services sector is also expected to flatten during the winter half-year after previously benefiting from COVID-related catch-up effects. Business-related services in particular are likely to be hit by the international economic crisis in the first half of 2023.

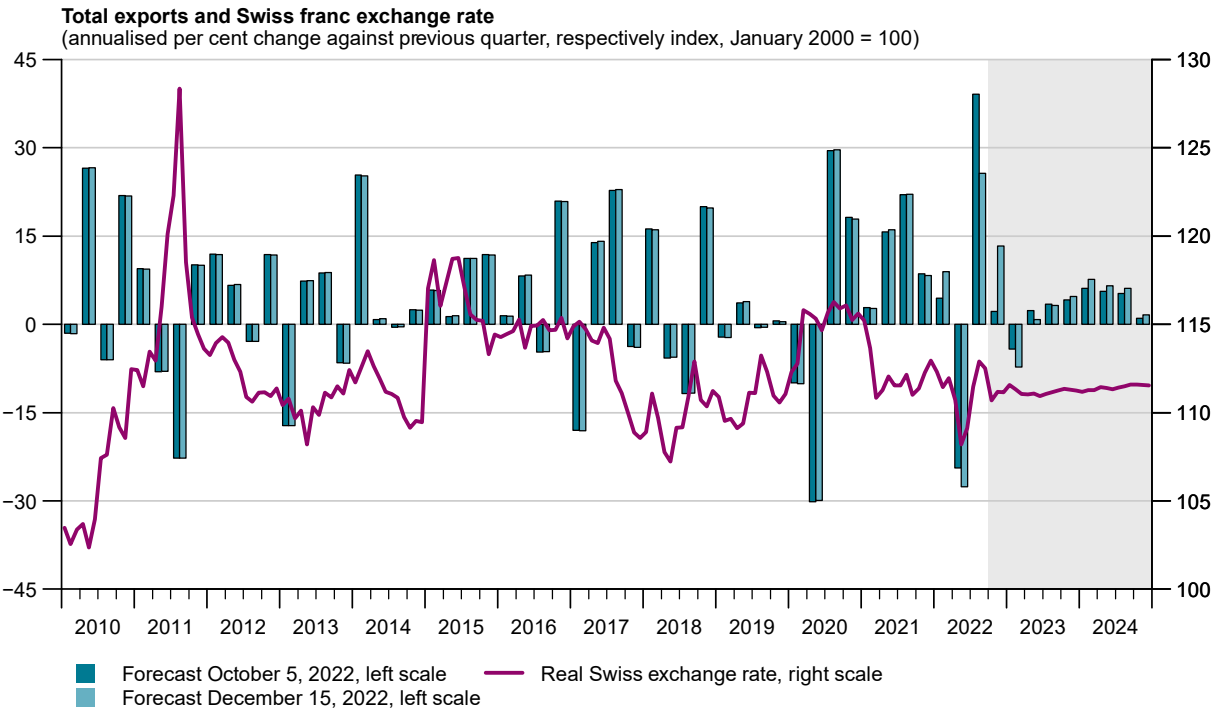
### Weak economic activity is affecting all demand-side components

Consumer sentiment, as surveyed by SECO, has been in freefall since the second half of 2021 and hit a new historic low in October. Nevertheless, private consumption is forecast to grow by an impressive 4.1 per cent in 2022 mainly owing to statistical overhang effects from last year and catch-up effects after the COVID-19 pandemic in the first half of 2022. Growth in consumption is likely to be below average throughout 2023. The reason for this is the decline in real disposable incomes. On the other hand, the encouraging labour market situation and probably, also, further COVID-related catch-up effects will prevent any stagnation. KOF is forecasting an increase of 2 per cent in private consumption for 2023 as a whole. This rate is significantly higher than the trend rates for 2023 owing to overhang effects. KOF expects private consumption growth to decline to 1.3 per cent in 2024.

The public sector is expected to make a strongly negative contribution to GDP in 2023 as COVID-related one-off spending expires. After surging during the COVID-19 pandemic, government consumption will decline, resulting in a negative GDP contribution of 2.9 per cent for 2023. KOF is forecasting a further, albeit more modest, decline of 0.5 per cent for 2024. According to this forecast, however, government consumption is unlikely to return to its pre-pandemic levels.

Elevated energy costs, high geopolitical uncertainty, deteriorating funding conditions and falling earnings are depressing companies' propensity to invest. Decreasing capacity utilisation is also reducing the need for expansion investment. The fact that, according to KOF's investment survey of autumn 2022, a relatively high proportion of firms are planning to cut their investment in 2023 compared with 2022 is a clear indication of the weak levels of investment. KOF is forecasting below-average increases of 2.2 per cent and 2.3 per cent in equipment investment for this year and next year, respectively. It expects equipment investment to grow by 3.9 per cent in 2024.

Exports are likely to level out in the first half of 2023 owing to the weak international economy. The same applies to imports. As exports account for a larger volume than imports, however, foreign trade will make a below-average contribution to GDP. As an economic recovery is forecast for Europe in the second half of 2023, exports should also pick up then. KOF expects exports to increase by 2.1 per cent for 2023 as a whole after rising by 4.7 per cent this year. It is forecasting growth of 5.3 per cent in exports for 2024.



It is worth noting that the still relatively low number of foreign tourists in Switzerland (Chinese travellers, among others, are staying away) is more than compensated for by the fact that the Swiss are continuing to spend a lot of their holidays at home rather than abroad.

### **Risk of energy shortages has decreased**

The risk of an energy crisis in Switzerland and elsewhere in Europe has recently declined. The reasons for this – apart from lower energy consumption due to the economic slowdown – are the mild temperatures in autumn, abundant rainfall and, presumably, increasingly successful efforts to save energy and switch to less scarce energy resources. International gas storage facilities are well stocked, the levels of Swiss hydropower reservoirs are currently above average, and the preparation of private and public-sector emergency plans for the eventuality of energy shortages has reduced planning uncertainty. Only unexpectedly slow progress on the ramp-up of French nuclear power plants after recent repairs and maintenance is hampering mitigation of the energy crisis risk because Switzerland traditionally has to supplement its electricity needs with nuclear power imports from France during the winter.

In addition to the energy crisis risk there are the usual downside risks. For example, central banks could be forced to take drastic action if inflation is more stubborn than expected and inflation expectations become further entrenched. Also, the coronavirus pandemic could return if a new, lethal variant proves immune to existing vaccines. The geopolitical conflicts over Ukraine and Taiwan could escalate further, even though China and the United States seem to have recently found a somewhat better understanding again. And on the horizon, there are already signs of a new potential debt crisis looming in Europe as a result of rapidly increasing government spending. But there are also upside risks: China, for example, could experience an economic recovery after it recently abandoned its zero-COVID policy, which will also have a positive impact on the global economy. Furthermore, this policy reversal will mitigate international supply problems. In addition, energy prices and overall inflation could fall faster than expected, which would lower production costs and allow interest-rate cuts. And, finally, the international economy could prove to be much more resilient than generally expected because, at present, the situation is still better than sentiment.

**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											
<b>Detailed historical data and forecasts for Switzerland 2010–2024</b>											
<b>a) Real Gross Domestic Product (GDP): Expenditures</b>											
(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 (1)		2021 (1)		2022 (2)		2023 (3)		2024 (3)	
1. Consumption	1.5	444 386	-2.8	-	2.0	-	3.5	-	1.0	-	0.9
thereof: private households and NPISHs	1.6	360 118	-4.1	366 056	1.6	381 051	4.1	388 547	2.0	393 456	1.3
general government	1.0	84 268	3.5	87 191	3.5	87 931	0.8	85 403	-2.9	84 983	-0.5
2. Gross fixed capital formation	2.5	184 837	-3.1	-	4.2	-	0.1	-	1.3	-	2.8
thereof: construction	1.7	65 619	-1.0	63 663	-3.0	61 031	-4.1	60 589	-0.7	60 931	0.6
machinery and equipment	2.9	119 218	-4.3	128 918	8.1	131 812	2.2	134 835	2.3	140 075	3.9
<b>Domestic final demand</b>	<b>1.8</b>	<b>629 223</b>	<b>-2.9</b>	<b>-</b>	<b>2.6</b>	<b>-</b>	<b>2.5</b>	<b>-</b>	<b>1.1</b>	<b>-</b>	<b>1.5</b>
3. Changes in inventories	-	768	-	-4 728	-	-6 554	-	-11 323	-	-10 800	-
<b>Domestic demand (*)</b>	<b>1.9</b>	<b>629 991</b>	<b>-3.0</b>	<b>-</b>	<b>0.6</b>	<b>-</b>	<b>2.7</b>	<b>-</b>	<b>0.3</b>	<b>-</b>	<b>1.6</b>
4. Exports of goods and services (*)	3.8	393 186	-4.6	-	11.1	-	4.7	-	2.1	-	5.3
thereof: goods excl. merchanting	4.3	223 448	-2.9	252 376	12.9	267 188	5.9	268 093	0.3	282 777	5.5
merchanting (net)	5.0	47 775	12.0	48 250	1.0	42 497	-11.9	43 129	1.5	44 038	2.1
services	2.9	121 963	-12.5	135 994	11.5	149 785	10.1	158 402	5.8	168 425	6.3
<b>Total demand (*)</b>	<b>2.6</b>	<b>1 023 177</b>	<b>-3.6</b>	<b>-</b>	<b>4.5</b>	<b>-</b>	<b>3.5</b>	<b>-</b>	<b>1.1</b>	<b>-</b>	<b>3.1</b>
5. Imports of goods and services (*)	4.1	323 328	-6.2	-	5.1	-	6.7	-	1.8	-	5.3
thereof: goods (*)	3.6	191 807	-6.2	200 361	4.5	216 834	8.2	217 786	0.4	230 457	5.8
services	5.0	131 521	-6.1	139 285	5.9	145 449	4.4	151 319	4.0	158 056	4.5
6. Statistical difference	-	0	-	-	-	-	-	-	-	-	-
thereof: chaining of expenditure components	-	0	-	-631	-	-3 095	-	-3 473	-	-4 629	-
inventory valuation	-	0	-	-8 051	-	-5 126	-	-5 795	-	-6 038	-
<b>Gross Domestic Product</b>	<b>1.9</b>	<b>699 849</b>	<b>-2.4</b>	<b>729 394</b>	<b>4.2</b>	<b>744 028</b>	<b>2.0</b>	<b>749 301</b>	<b>0.7</b>	<b>764 705</b>	<b>2.1</b>
without large international sports events	1.9	699 849	-2.4	726 504	3.8	741 625	2.1	749 123	1.0	761 806	1.7
(1) Preliminary calculation from the Federal Statistical Office (FSO) (3) KOF forecast 15 December 2022											
(2) KOF estimation 15 December 2022											
(*) 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.											
3. Net acquisitions of valuables (+)	-	6 043	-	1 173	-	2 237	-	1 976	-	3 336	-
<b>Domestic demand (+)</b>	<b>1.3</b>	<b>636 034</b>	<b>-1.6</b>	<b>-</b>	<b>-0.2</b>	<b>-</b>	<b>2.9</b>	<b>-</b>	<b>0.3</b>	<b>-</b>	<b>1.8</b>
4. Exports of goods and services (+)	3.7	455 220	-5.2	-	12.4	-	5.6	-	1.8	-	5.3
thereof: goods (+)	4.1	333 257	-2.2	375 606	12.7	390 940	4.1	392 938	0.5	412 592	5.0
<b>Total demand (+)</b>	<b>2.3</b>	<b>1 096 629</b>	<b>-2.7</b>	<b>-</b>	<b>4.5</b>	<b>-</b>	<b>3.4</b>	<b>-</b>	<b>1.0</b>	<b>-</b>	<b>3.3</b>
5. Imports of goods and services (+)	3.0	396 780	-3.2	-	5.0	-	5.8	-	1.5	-	5.4
thereof: goods (+)	2.1	265 259	-1.7	277 227	4.5	295 041	6.4	296 337	0.4	313 577	5.8

Table A-2											
<b>Detailed historical data and forecasts for Switzerland 2010–2024</b>											
<b>b) Nominal Gross Domestic Product (GDP) and Gross National Income (GNI): Expenditures</b>											
(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	480 842	5.9	496 046	3.2	504 705	1.7
thereof: private households and NPISHs	1.4	358 532	-4.6	365 286	1.9	389 698	6.7	405 481	4.0	413 310	1.9
general government	1.7	84 330	3.6	88 771	5.3	91 144	2.7	90 565	-0.6	91 395	0.9
2. Gross fixed capital formation	2.3	184 613	-3.3	194 782	5.5	201 541	3.5	207 517	3.0	215 026	3.6
thereof: construction	2.0	65 673	-1.0	65 506	-0.3	67 123	2.5	69 329	3.3	70 347	1.5
machinery and equipment	2.4	118 940	-4.5	129 276	8.7	134 417	4.0	138 189	2.8	144 680	4.7
<b>Domestic final demand</b>	<b>1.7</b>	<b>627 475</b>	<b>-3.2</b>	<b>648 838</b>	<b>3.4</b>	<b>682 383</b>	<b>5.2</b>	<b>703 564</b>	<b>3.1</b>	<b>719 731</b>	<b>2.3</b>
3. Changes in inventories	-	8 270	-	-7 760	-	-6 436	-	-11 865	-	-11 419	-
<b>Domestic demand (*)</b>	<b>1.8</b>	<b>635 745</b>	<b>-2.1</b>	<b>641 079</b>	<b>0.8</b>	<b>675 947</b>	<b>5.4</b>	<b>691 699</b>	<b>2.3</b>	<b>708 312</b>	<b>2.4</b>
4. Exports of goods and services (*)	2.9	373 754	-9.3	435 016	16.4	481 000	10.6	484 043	0.6	511 815	5.7
thereof: goods excl. merchanting	2.8	216 006	-6.1	249 218	15.4	272 513	9.3	272 313	-0.1	286 538	5.2
merchanting (net)	5.0	42 473	-0.5	58 492	37.7	65 757	12.4	61 207	-6.9	61 921	1.2
services	2.5	115 275	-17.3	127 305	10.4	142 730	12.1	150 523	5.5	163 356	8.5
<b>Total demand (*)</b>	<b>2.2</b>	<b>1 009 499</b>	<b>-4.9</b>	<b>1 076 094</b>	<b>6.6</b>	<b>1 156 947</b>	<b>7.5</b>	<b>1 175 742</b>	<b>1.6</b>	<b>1 220 127</b>	<b>3.8</b>
5. Imports of goods and services (*)	3.3	314 837	-8.6	344 433	9.4	385 799	12.0	389 493	1.0	411 613	5.7
thereof: goods (*)	2.6	184 862	-9.6	203 727	10.2	238 604	17.1	234 145	-1.9	246 764	5.4
services	4.5	129 975	-7.2	140 705	8.3	147 195	4.6	155 348	5.5	164 849	6.1
<b>Gross Domestic Product</b>	<b>1.7</b>	<b>694 662</b>	<b>-3.1</b>	<b>731 662</b>	<b>5.3</b>	<b>771 149</b>	<b>5.4</b>	<b>786 249</b>	<b>2.0</b>	<b>808 513</b>	<b>2.8</b>
without large international sports events	1.7	694 662	-3.1	728 867	4.9	768 841	5.5	786 249	2.3	805 598	2.5
6. Balance of property income	-	9 165	-	9 795	-	9 220	-	11 463	-	14 016	-
7. Balance of labour income	-	-25 004	-	-26 262	-	-28 044	-	-27 495	-	-28 982	-
8. Balance of production taxes	-	0	-	0	-	0	-	0	-	0	-
<b>Gross National Income</b>	<b>1.2</b>	<b>678 823</b>	<b>-1.9</b>	<b>715 194</b>	<b>5.4</b>	<b>752 324</b>	<b>5.2</b>	<b>770 217</b>	<b>2.4</b>	<b>793 547</b>	<b>3.0</b>
(1) Preliminary calculation from the Federal Statistical Office (FSO) (3) KOF forecast 15 December 2022											
(2) KOF estimation 15 December 2022											
(*) 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.											
3. Net acquisitions of valuables (+)	-	14 122	-	3 575	-	-2 584	-	-4 340	-	-4 408	-
<b>Domestic demand (+)</b>	<b>1.4</b>	<b>649 867</b>	<b>0.5</b>	<b>644 654</b>	<b>-0.8</b>	<b>673 363</b>	<b>4.5</b>	<b>687 358</b>	<b>2.1</b>	<b>703 904</b>	<b>2.4</b>
4. Exports of goods and services (+)	3.2	446 716	-6.9	522 196	16.9	581 521	11.4	584 490	0.5	617 510	5.6
thereof: 00	3.5	331 441	-2.7	394 891	19.1	438 791	11.1	433 967	-1.1	454 154	4.7
<b>Total demand (+)</b>	<b>2.1</b>	<b>1 096 583</b>	<b>-2.7</b>	<b>1 166 850</b>	<b>6.4</b>	<b>1 254 884</b>	<b>7.5</b>	<b>1 271 848</b>	<b>1.4</b>	<b>1 321 413</b>	<b>3.9</b>
5. Imports of goods and services (+)	2.8	401 922	-1.9	435 189	8.3	483 736	11.2	485 600	0.4	512 900	5.6
thereof: goods (+)	2.0	271 947	0.8	294 483	8.3	336 541	14.3	330 252	-1.9	348 051	5.4



Table A-3											
<b>Detailed historical data and forecasts for Switzerland 2010–2024</b>											
<b>c) Implicit deflators of Gross Domestic Product (GDP): Expenditures</b>											
(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	102.5	2.4	104.7	2.1	105.5	0.8
thereof: private households and NPISHs	-0.1	99.6	-0.4	99.8	0.2	102.3	2.5	104.4	2.0	105.0	0.7
general government	0.8	100.1	0.1	101.8	1.7	103.7	1.8	106.0	2.3	107.5	1.4
2. Gross fixed capital formation	-0.2	99.9	-0.1	101.2	1.3	104.6	3.4	106.3	1.7	107.2	0.8
thereof: construction	0.3	100.1	0.1	102.9	2.8	110.0	6.9	114.4	4.0	115.5	0.9
machinery and equipment	-0.4	99.8	-0.2	100.3	0.5	102.0	1.7	102.5	0.5	103.3	0.8
<b>Domestic final demand</b>	<b>0.0</b>	<b>99.7</b>	<b>-0.3</b>	<b>100.5</b>	<b>0.7</b>	<b>103.1</b>	<b>2.7</b>	<b>105.2</b>	<b>2.0</b>	<b>106.0</b>	<b>0.8</b>
3. Changes in inventories	-	-	-	-	-	-	-	-	-	-	-
<b>Domestic demand (*)</b>	<b>0.0</b>	<b>-</b>	<b>0.9</b>	<b>-</b>	<b>0.3</b>	<b>-</b>	<b>2.7</b>	<b>-</b>	<b>2.0</b>	<b>-</b>	<b>0.8</b>
4. Exports of goods and services (*)	-0.9	95.1	-4.9	99.5	4.7	105.1	5.6	103.6	-1.4	104.0	0.4
thereof: goods excl. merchanting	-1.4	96.7	-3.3	98.7	2.2	102.0	3.3	101.6	-0.4	101.3	-0.2
merchanting (net)	0.0	88.9	-11.1	121.2	36.4	154.7	27.6	141.9	-8.3	140.6	-0.9
services	-0.3	94.5	-5.5	93.6	-1.0	95.3	1.8	95.0	-0.3	97.0	2.1
<b>Total demand (*)</b>	<b>-0.4</b>	<b>-</b>	<b>-1.3</b>	<b>-</b>	<b>2.0</b>	<b>-</b>	<b>3.9</b>	<b>-</b>	<b>0.5</b>	<b>-</b>	<b>0.6</b>
5. Imports of goods and services (*)	-0.8	97.4	-2.6	101.4	4.1	106.5	5.0	105.6	-0.8	106.0	0.4
thereof: goods (*)	-1.0	96.4	-3.6	101.7	5.5	110.0	8.2	107.5	-2.3	107.1	-0.4
services	-0.5	98.8	-1.2	101.0	2.2	101.2	0.2	102.7	1.4	104.3	1.6
<b>Gross Domestic Product</b>	<b>-0.2</b>	<b>99.3</b>	<b>-0.7</b>	<b>100.3</b>	<b>1.1</b>	<b>103.6</b>	<b>3.3</b>	<b>104.9</b>	<b>1.2</b>	<b>105.7</b>	<b>0.8</b>
without large international sports events	-0.2	99.3	-0.7	100.3	1.1	103.7	3.3	105.0	1.2	105.7	0.8
(1) Preliminary calculation from the Federal Statistical Office (FSO)						(3) KOF forecast 15 December 2022					
(2) KOF estimation 15 December 2022											
(*) 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 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 (+)	-	-	-	-	-	-	-	-	-	-	-
<b>Domestic demand (+)</b>	<b>0.0</b>	<b>-</b>	<b>2.2</b>	<b>-</b>	<b>-0.6</b>	<b>-</b>	<b>1.6</b>	<b>-</b>	<b>1.8</b>	<b>-</b>	<b>0.6</b>
4. Exports of goods and services (+)	-0.5	98.1	-1.9	102.1	4.0	107.7	5.5	106.3	-1.3	106.6	0.3
thereof: goods (+)	-0.5	99.5	-0.5	105.1	5.7	112.2	6.8	110.4	-1.6	110.1	-0.3
<b>Total demand (+)</b>	<b>-0.2</b>	<b>-</b>	<b>0.0</b>	<b>-</b>	<b>1.8</b>	<b>-</b>	<b>4.0</b>	<b>-</b>	<b>0.3</b>	<b>-</b>	<b>0.6</b>
5. Imports of goods and services (+)	-0.2	101.3	1.3	104.5	3.2	109.8	5.1	108.6	-1.1	108.8	0.2
thereof: goods (+)	-0.1	102.5	2.5	106.2	3.6	114.1	7.4	111.4	-2.3	111.0	-0.4

Table A-4					
<b>Detailed historical data and forecasts for Switzerland 2020–2024</b>					
<b>d) Current account</b>					
(Million Swiss franc at current prices)					
	2020	2021	2022	2023	2024
	(1)	(1)	(2)	(3)	(3)
<b>Goods (balance) (*)</b>	<b>73 616</b>	<b>103 983</b>	<b>99 666</b>	<b>99 374</b>	<b>101 695</b>
Services (balance)	-14 700	-13 400	-4 464	-4 825	-1 493
Property income (balance)	9 165	9 795	9 220	11 463	14 016
Labour income (balance)	-25 004	-26 262	-28 044	-27 495	-28 982
<b>Goods, services and primary income (balance) (*)</b>	<b>43 078</b>	<b>74 115</b>	<b>76 377</b>	<b>78 519</b>	<b>85 235</b>
Current transfer (secondary income, balance)	-18 322	-15 035	-15 822	-16 123	-16 617
<b>Current account balance (*)</b>	<b>24 756</b>	<b>59 080</b>	<b>60 555</b>	<b>62 396</b>	<b>68 619</b>
<b>Current account balance in per cent of GDP (*)</b>	<b>3.6</b>	<b>8.1</b>	<b>7.9</b>	<b>7.9</b>	<b>8.5</b>
(1) Preliminary calculation from the Federal Statistical Office (FSO) (3) KOF forecast 15 December 2022					
(2) KOF estimation 15 December 2022					
(*) 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.					
<b>Goods (balance) (+)</b>	<b>59 494</b>	<b>100 408</b>	<b>102 250</b>	<b>103 715</b>	<b>106 103</b>
<b>Goods, services and primary income (balance) (+)</b>	<b>28 956</b>	<b>70 540</b>	<b>78 961</b>	<b>82 860</b>	<b>89 643</b>
<b>Current account balance (+)</b>	<b>10 634</b>	<b>55 504</b>	<b>63 139</b>	<b>66 736</b>	<b>73 027</b>
<b>Current account balance in per cent of GDP (+)</b>	<b>1.5</b>	<b>7.6</b>	<b>8.2</b>	<b>8.5</b>	<b>9.0</b>

Table A-5											
<b>Detailed historical data and forecasts for Switzerland 2010–2024</b>											
<b>e) Disposable income, consumption and saving of private households and non-profit institutions serving households (NPISH)</b>											
(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)	
<b>Disposable income of private households</b>	<b>1.3</b>	<b>455 764</b>	<b>3.6</b>	<b>465 123</b>	<b>2.1</b>	<b>479 194</b>	<b>3.0</b>	<b>486 777</b>	<b>1.6</b>	<b>496 602</b>	<b>2.0</b>
Private consumption	1.4	358 532	-4.6	365 286	1.9	389 698	6.7	405 481	4.0	413 310	1.9
Saving (4)	0.3	97 232	51.7	99 838	2.7	89 496	-10.4	81 296	-9.2	83 292	2.5
Saving (5)	1.1	134 250	28.3	136 410	1.6	126 617	-7.2	118 974	-6.0	121 535	2.2
Saving rate (4,6)	-	-	21.3	-	21.5	-	18.7	-	16.7	-	16.8
Saving rate (5,6)	-	-	27.2	-	27.2	-	24.5	-	22.7	-	22.7
(1) Preliminary calculation from the Federal Statistical Office (FSO), KOF (4) Excluding adjustment for change in pension entitlements											
(2) KOF estimation 15 December 2022 (5) Including adjustment for change in pension entitlements											
(3) KOF forecast 15 December 2022 (6) Saving in % of disposable income											

Table A-6						
<b>Detailed historical data and forecasts for Switzerland 2010–2024</b>						
<b>f) Macroeconomic data outside of the National Accounts</b>						
(Per cent change against previous year and mean per cent change, respectively)						
	10-19	2020	2021	2022	2023	2024
<b>Monetary variables</b>						
Real exchange rate of the Swiss franc	0.8	3.9	-2.6	-0.9	0.1	0.2
Government bonds, 10 years (1)						
- annual average	0.6	-0.5	-0.2	0.8	1.7	2.2
- end-of-year	0.5	-0.5	-0.1	1.1	2.0	2.3
3-months-CHF-SARON (1)						
- annual average	-0.3	-0.7	-0.7	-0.2	1.3	1.5
- end-of-year	-0.3	-0.7	-0.7	0.7	1.5	1.5
<b>Consumer prices</b>						
- annual average	0.0	-0.7	0.6	2.9	2.3	1.1
- end-of-year	-0.1	-0.8	1.5	3.1	1.9	1.0
<b>Employment and labour market</b>						
No. of workers	1.3	0.0	1.3	2.5	1.0	1.3
No. of workers, full time equivalents (FTE)	1.1	0.2	1.0	2.6	0.9	1.2
Employment	1.3	-0.5	0.2	1.2	0.9	1.3
Total hours worked	0.9	-3.7	2.5	1.8	1.0	1.1
Labour productivity per FTE (2)	0.8	-2.6	2.8	-0.5	0.1	0.4
Labour productivity per hour (2)	1.0	1.4	1.3	0.2	0.0	0.6
Nominal wages (wage index)	0.7	0.8	-0.2	1.5	2.4	1.7
Average wage compensation per FTE (3)	0.9	1.1	2.0	1.9	2.7	2.1
Unemployment rate, ILO definition (1)	4.7	4.8	5.1	4.2	4.1	4.3
Unemployment rate, registered, Seco definition (1)	2.9	3.1	3.0	2.2	2.2	2.3
<b>Population and per capita indicators</b>						
Population	1.0	0.7	0.8	0.9	1.3	1.2
Real Gross Domestic Product per capita	0.9	-3.1	3.4	1.1	-0.6	0.9
Real Gross National Income per capita (4)	0.4	-2.2	4.3	1.7	-1.0	1.2
(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						
<b>Growth contribution to the Swiss Gross Domestic Product 2010-2024 (1)</b>						
(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	0.1	-0.3	-0.1
Construction investment	0.2	-0.1	-0.3	-0.4	-0.1	0.0
Machinery and equipment investment	0.5	-0.7	1.4	0.4	0.4	0.7
Domestic final demand	1.6	-2.6	2.4	2.2	1.0	1.3
Changes in inventories	-	0.0	-0.8	-0.3	-0.6	0.1
Domestic demand	1.7	-2.7	0.5	2.3	0.3	1.4
Exports	2.0	-2.7	6.0	2.8	1.3	3.3
Total demand	3.7	-5.3	6.5	5.1	1.6	4.7
./. Imports	1.8	-3.0	2.3	3.1	0.9	2.6
<b>Gross Domestic Product</b>	<b>1.9</b>	<b>-2.4</b>	<b>4.2</b>	<b>2.0</b>	<b>0.7</b>	<b>2.1</b>
thereof: contribution of foreign trade	0.3	0.3	3.7	-0.3	0.4	0.7
large international sports events	0.0	0.0	0.4	-0.1	-0.3	0.4
Statistical differences from chaining and inventory valuation	-	0.0	-1.1	0.4	0.0	0.0
(1) Unlike the national accounts the figures are adjusted by the non-cyclical exports and imports of variables, 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						
<b>Balance of accounts: Federal Government, Cantons, Municipalities and National Insurances 2010–2024</b>						
(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	-4 113	-503	-86
Cantons	-352	-4 894	1 772	3 142	3 504	3 642
Municipalities	-554	-1 256	-812	-42	113	260
Total without National Insurances	1 736	-21 274	-10 286	-1 013	3 115	3 816
National Insurances	1 326	2 298	1 679	3 712	3 054	3 950
General Government	3 063	-18 977	-8 607	2 700	6 169	7 766
in % of GDP	0.4	-2.7	-1.2	0.4	0.8	1.0
(C) Calculation of the Federal Finance Administration (FFA) (E) KOF estimation and forecast 15 December 2022						

	2019		10-19	2020	2021	2022	2023	2024
	nominal	in %						
<b>Gross Domestic Product</b>								
<b>World (total)</b>								
Weighted by Nominal GDP Shares	87.4	100		-3.4	6.3	3.1	1.5	2.6
Weighted by Shares in Swiss Exports				-4.6	5.5	2.9	0.5	1.9
Weighted by PPP-Adjusted GDP Shares				-3.3	6.5	3.3	1.9	2.9
<b>Important Country Aggregates (2)</b>								
Euro Area	13.3	15	1.4	-6.3	5.3	3.3	0.1	1.4
European Union	15.6	18	1.6	-5.8	5.3	3.5	0.3	1.6
G20	81.0	93	3.0	-3.3	6.4	3.1	1.5	2.5
OECD	54.8	63	2.1	-4.5	5.6	3.0	0.7	1.9
<b>Europe</b>	<b>20.3</b>	<b>23</b>	<b>1.7</b>	<b>-6.4</b>	<b>5.6</b>	<b>3.6</b>	<b>0.2</b>	<b>1.4</b>
Germany	3.9	4	2.0	-4.1	2.6	1.8	-0.7	1.4
France	2.7	3	1.4	-7.9	6.8	2.5	-0.3	0.8
Italy	2.0	2	0.3	-9.1	6.7	3.8	0.0	0.6
United Kingdom	3.4	4	2.0	-11.0	7.5	4.4	-0.7	0.2
Central and Eastern Europe	1.4	2	3.1	-3.5	6.1	5.3	1.9	3.1
<b>North America</b>	<b>23.2</b>	<b>27</b>	<b>2.3</b>	<b>-3.0</b>	<b>5.8</b>	<b>1.9</b>	<b>0.3</b>	<b>1.7</b>
United States of America	21.4	24	2.3	-2.8	5.9	1.8	0.3	1.7
<b>East Asia</b>	<b>26.4</b>	<b>30</b>	<b>5.2</b>	<b>-0.3</b>	<b>6.5</b>	<b>3.1</b>	<b>3.5</b>	<b>4.0</b>
China	15.9	18	7.7	1.8	8.6	3.2	4.5	4.8
Japan	4.6	5	1.2	-4.7	1.7	1.4	0.0	1.1
Southeast Asia	5.9	7	4.1	-2.3	4.4	3.9	3.2	4.2
<b>South Asia (incl. India)</b>	<b>3.2</b>	<b>4</b>	<b>7.2</b>	<b>-6.8</b>	<b>8.4</b>	<b>6.5</b>	<b>6.0</b>	<b>5.7</b>
<b>Central Asia and Russia</b>	<b>1.9</b>	<b>2</b>	<b>1.2</b>	<b>-2.6</b>	<b>4.5</b>	<b>-6.7</b>	<b>-5.9</b>	<b>-0.1</b>
<b>Latin America</b>	<b>7.2</b>	<b>8</b>	<b>2.1</b>	<b>-7.5</b>	<b>7.8</b>	<b>4.4</b>	<b>0.9</b>	<b>2.3</b>
<b>Africa und Middle East</b>	<b>3.6</b>	<b>4</b>	<b>2.9</b>	<b>-1.3</b>	<b>8.1</b>	<b>6.0</b>	<b>2.7</b>	<b>3.3</b>
<b>Oceania (incl. Australia)</b>	<b>1.7</b>	<b>2</b>	<b>2.7</b>	<b>-2.0</b>	<b>4.9</b>	<b>3.7</b>	<b>2.2</b>	<b>2.9</b>
<b>Consumer Prices</b>								
<b>Euro Area</b>								
Germany			1.4	0.3	2.6	8.6	7.5	2.6
France			1.4	0.4	3.2	8.8	7.9	2.5
Italy			1.3	0.5	2.1	5.9	5.3	1.5
Further countries			1.3	-0.1	1.9	8.8	8.4	2.0
United States of America			1.8	1.2	4.7	8.1	3.9	2.5
United Kingdom			2.2	0.9	2.6	9.1	8.4	3.0
China			2.6	2.4	1.0	2.0	1.8	2.0
Japan			0.6	0.0	-0.2	2.5	2.4	0.3
<b>Globally Relevant Variables</b>								
World Trade (3)			3.5	-5.2	10.2	3.9	-0.7	2.1
Brent Crude Oil (US-Dollar per Barrel)			77.9	41.8	70.7	101.6	91.5	92.9
Euro/US Dollar Exchange Rate			1.25	1.14	1.18	1.05	1.04	1.04
€STR			0.2	-0.4	-0.6	0.0	2.7	2.8
US SOFR			1.1	0.3	0.0	1.7	5.0	5.1
10-Year German Bund Yield			1.3	-0.5	-0.3	1.2	2.6	3.4
10 Year US Treasury Bond Yield			2.5	0.9	1.4	3.0	5.2	5.9
(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».								