



June 2018

SWITZERLAND

2018 ARTICLE IV CONSULTATION—PRESS RELEASE; STAFF REPORT; AND STATEMENT BY THE EXECUTIVE DIRECTOR FOR SWITZERLAND

Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. In the context of the 2018 Article IV consultation with Switzerland, the following documents have been released and are included in this package:

- A **Press Release** summarizing the views of the Executive Board as expressed during its June 11, 2018 consideration of the staff report that concluded the Article IV consultation with Switzerland.
- The **Staff Report** prepared by a staff team of the IMF for the Executive Board's consideration on June 11, 2018, following discussions that ended on March 26, 2018, with the officials of Switzerland on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on May 29, 2018.
- An **Informational Annex** prepared by the IMF staff.
- A **Statement by the Executive Director** for Switzerland.

The document listed below have been or will be separately released.

Selected Issues

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IMF Executive Board Concludes 2018 Article IV Consultation with Switzerland

On June 11, 2018, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation¹ with Switzerland.

The economy has adjusted to the large cumulative exchange rate appreciation that took place since the global financial crisis. After a subdued start to 2017, GDP growth accelerated to 1.1 percent last year, and the positive momentum continued in Q1:2018, although at a slightly reduced pace. The improved external outlook, together with the depreciation since mid-2017, are expected to energize the economy and lift GDP growth to 2½ percent in 2018, before it gradually moderates to 1¾ percent over the medium term. After five years of falling or flat prices, headline inflation turned positive in mid-2016 and had risen to 1.0 percent in May 2018. Inflation is expected to increase to the upper half of the target band in 2018–19, and to subsequently revert to the mid-point. The better global environment had—until recently—halted safe-haven appreciation pressures, and the franc weakened by around 8 percent in real effective terms during mid-2017 to April 2018. The current account surplus has remained large and relatively stable around 10 percent of GDP.

Policies adopted in recent years have aided the recovery and mitigated risks. The two-pronged approach to monetary policy—combining a negative interest rate with foreign currency purchases—has supported the return of modest inflation and the recovery of growth. A series of macroprudential measures was introduced targeting systemic risk in the real estate market, although prices remain high relative to household income and exposure to mortgage debt is elevated. The fiscal position has remained strong with sustained small surpluses and declining public debt.

The Swiss economy continues to face important challenges. Rising international trade tensions could impact Switzerland's externally-oriented economy and more uncertain geopolitics could rekindle safe-haven pressures, sharply appreciating the franc. A resurgence in global inflation could trigger an abrupt policy tightening by major central banks, leading to spillovers to Swiss

¹ Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. A staff team visits the country, collects economic and financial information, and discusses with officials the country's economic developments and policies. On return to headquarters, the staff prepares a report, which forms the basis for discussion by the Executive Board.

property prices. Population aging and slower immigration will create funding gaps in the public pension system. Uncertainty regarding long-term Swiss-EU relations could affect cross-border flows. Initiatives leading to abrupt institutional changes could undermine public confidence, and further delays in meeting international standards on corporate income taxation (CIT) could reduce Switzerland's appeal as an investment destination.

Executive Board Assessment²

Executive Directors commended the Swiss authorities for skillfully navigating the economy through challenging times. Despite the substantial pressures on the exchange rate since the global financial crisis, the economy continues to demonstrate resilience. Prospects remain favorable, with moderate growth and inflation. The outlook is nevertheless subject to risks, including from international trade tensions, renewed safe-haven pressures, imbalances in the mortgage and property markets, and uncertainty about corporate tax reform. Directors underscored the need for continued vigilance and sustained reform to raise potential growth and competitiveness.

Directors concurred that the current accommodative stance of monetary policy is appropriate. With inflationary pressures expected to remain low, they recommended that future decisions be gradual and well-communicated, guided by domestic conditions while also taking into consideration actions by major central banks. Directors considered that the two-pronged monetary policy has effectively supported inflation and growth. They saw merit in clearly assigning policy tools to help further enhance communications with markets, using interest rates to address cyclical conditions and interventions to respond to excessive foreign exchange market volatility.

Directors agreed that the debt brake fiscal rule has served Switzerland well, contributing to the reduction in public debt and counter-cyclical support. Given constraints on monetary policy, most Directors encouraged the authorities to adopt a balanced structural position by utilizing the available fiscal space, which would allow for a more balanced mix of macroeconomic policies in support of domestic demand, facilitating the reduction of the high current account surplus. A number of Directors saw a need to remain prudent, noting that additional fiscal spending should depend on the nature of the shock. Directors welcomed recent initiatives to increase the flexibility of spending within and outside of the rule, and consideration of possible amendments to address persistent budget underruns.

Directors commended the authorities for the progress in enhancing the resilience of the banking sector, including through the tightening of macroprudential policies. They noted vulnerabilities from sustained low interest rates and elevated exposures to real estate by both financial institutions and households. In this regard, Directors saw scope for targeting macroprudential

² At the conclusion of the discussion, the Managing Director, as Chairman of the Board, summarizes the views of Executive Directors, and this summary is transmitted to the country's authorities. An explanation of any qualifiers used in summings up can be found here: <http://www.imf.org/external/np/sec/misic/qualifiers.htm>.

measures to contain risk-taking in the property market and removing tax incentives that encourage leveraged acquisition of real estate.

Directors emphasized the importance of continued structural reform to enhance productivity and preserve Switzerland as a prime destination for foreign investment. Specifically, they encouraged reforming the pension system to ensure its long-term viability and further enhancing compliance with international standards on taxation, tax transparency, and AML/CFT. Promptly adopting the corporate income tax reform would help boost investment by small- and medium-sized firms, encourage R&D, and improve competitiveness of labor-intensive sectors.

Switzerland: Selected Economic Indicators, 2016–23								
	2016	2017	2018	2019	2020	2021	2022	2023
Staff projections								
Real GDP (percent change)	1.4	1.1	2.3	2.0	1.9	1.7	1.7	1.7
Total domestic demand	0.4	0.3	1.5	1.5	1.5	1.4	1.4	1.3
Private consumption	1.5	1.2	1.5	1.3	1.5	1.5	1.5	1.5
Public consumption	1.6	1.0	1.5	1.0	1.0	1.0	1.0	1.0
Gross fixed investment	3.0	3.2	2.5	2.0	1.9	1.1	1.1	1.1
Inventory accumulation 1/	-1.4	-1.3	-0.4	0.0	0.0	0.0	0.0	0.0
Foreign balance 1/	1.1	0.8	1.1	0.7	0.6	0.5	0.5	0.5
Nominal GDP (billions of Swiss francs)	659.0	668.2	691.4	713.1	733.7	753.3	773.4	794.0
Savings and investment (percent of GDP)								
Gross national saving	32.5	33.5	33.9	33.4	33.5	33.5	32.8	32.5
Gross domestic investment	23.1	23.7	23.6	23.6	23.8	23.8	23.3	23.2
Current account balance	9.4	9.8	10.2	9.8	9.7	9.6	9.5	9.3
Prices and incomes (percent change)								
GDP deflator	-0.6	0.3	1.1	1.1	1.0	1.0	1.0	1.0
Consumer price index (period average)	-0.4	0.5	1.0	1.1	1.0	1.0	1.0	1.0
Consumer price index (end of period)	0.0	0.9	1.2	1.1	1.0	1.0	1.0	1.0
Nominal hourly earnings	0.7	0.7	1.1	1.1	1.0	1.0	1.0	1.0
Unit labor costs (total economy)	-0.2	1.0	0.3	0.3	0.4	0.6	0.5	0.6
Employment and slack measures								
Unemployment rate (in percent)	3.3	3.2	3.0	3.0	2.9	2.8	2.8	2.8
Output gap (in percent of potential)	-0.2	-0.6	0.1	0.6	0.9	0.0	1.1	1.2
Capacity utilization	81.0	81.6
Potential output growth	1.6	1.5	1.6	1.6	1.6	1.6	1.5	1.5
General government finances (percent of GDP)								
Revenue	33.4	33.4	33.4	33.4	33.4	33.4	33.4	33.4
Expenditure	33.0	33.0	32.8	33.0	33.1	33.1	33.1	33.1
Balance	0.4	0.4	0.6	0.4	0.4	0.3	0.3	0.3
Cyclically adjusted balance	0.4	0.6	0.3	0.3	0.3	0.3	0.3	0.3
Gross debt 2/	41.9	41.8	40.3	38.7	37.3	36.1	34.9	33.8
Monetary and credit (percent change, average)								
Broad money (M3)	3.0	3.6
Domestic credit, non-financial	3.1	2.5
Three-month SFr LIBOR	-0.7	-0.7
Yield on government bonds (7-year)	-0.6	-0.3
Exchange rates (levels)								
Swiss francs per U.S. dollar (annual average)	1.0	1.0
Swiss francs per euro (annual average)	1.1	1.1
Nominal effective rate (avg., 2000=100)	124.1	123.4
Real effective rate (avg., 2000=100) 3/	112.2	107.4

Sources: Haver Analytics; IMF's Information Notice System; Swiss National Bank; and IMF Staff estimates.

1/ Contribution to growth. Inventory accumulation also includes statistical discrepancies and net acquisitions of valuables.

2/ Reflects new GFSM 2001 methodology, which values debt at market prices. Calculated as the sum of Federal, Cantonal, Municipal and Social security gross debts.

3/ Based on relative consumer prices.



SWITZERLAND

STAFF REPORT FOR THE 2018 ARTICLE IV CONSULTATION

May 29, 2018

KEY ISSUES

Context. The economy has adjusted to the large cumulative exchange rate appreciation that took place since the global financial crisis. Growth is expected to reach 2½ percent this year and to stabilize around 1¾ percent over the medium term. A resurgence of capital inflows, abrupt policy tightening by major central banks, sharp adjustment in property prices and changes to long-term Swiss-EU relations pose two-sided risks to the outlook. The two-pronged approach to monetary policy has supported the return of modest inflation and the recovery of growth. A series of macroprudential measures was introduced targeting systemic risk in the real estate market, although prices remain high relative to household income. The fiscal position has remained strong with sustained small surpluses and declining public debt. Population aging and slower immigration will create funding gaps in the public pension system. Initiatives leading to abrupt institutional changes could undermine public confidence, and further delays in meeting international standards on corporate income taxation (CIT) could reduce Switzerland's appeal as an investment destination.

Key Policy Recommendations:

- Maintain monetary accommodation for now. Future tightening should be data-dependent while also taking account of decisions by major central banks;
- Maintain a structurally-balanced fiscal position to relieve pressure on monetary policy and gradually shift the composition of growth from net exports. Use the substantial fiscal space for a discretionary stimulus during a severe or prolonged downturn;
- Reinforce the macroprudential framework for real estate, with a focus on investment property, to limit future buildup of risk and strengthen capacity to respond if risks materialize;
- Meet international standards on corporate income tax (CIT) in a timely manner and continue to make progress in ensuring the integrity of the financial system;
- Raise the retirement age and increase the working population to ensure adequate own- and public-resources for retirement and link the guaranteed conversion rate in the second pillar pension scheme to a long-term market interest rate; and
- Sustain innovation and life-long learning through the CIT reform, adequate funding of scientific education and continuing to expand the pool of highly-skilled Swiss and foreign workers.

Approved By
Thanos Arvanitis
(EUR) and Martin
Kaufman (SPR)

Discussions took place in Zurich and Bern during March 15–26, 2018. The staff team comprised R. van Elkan (head), A. Apostolou, D. Benedek and S. Choi (all EUR). S. Hebous (FAD) participated in part of the mission. P. Inderbinen (Alternate Executive Director) and S. Waelti (Senior Advisor to the Executive Director) attended some of the meetings. O. Ftomova, T. Scutaru and R. Vega (all EUR) supported the mission from headquarters.

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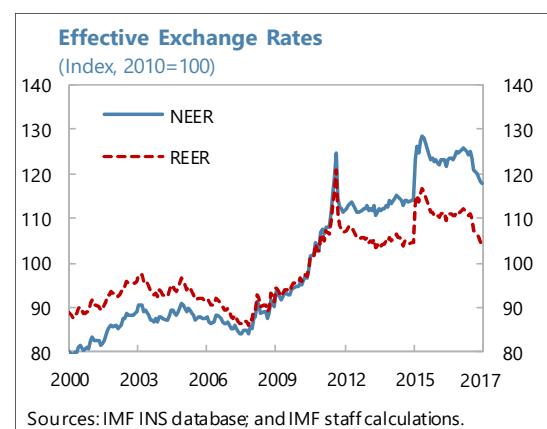
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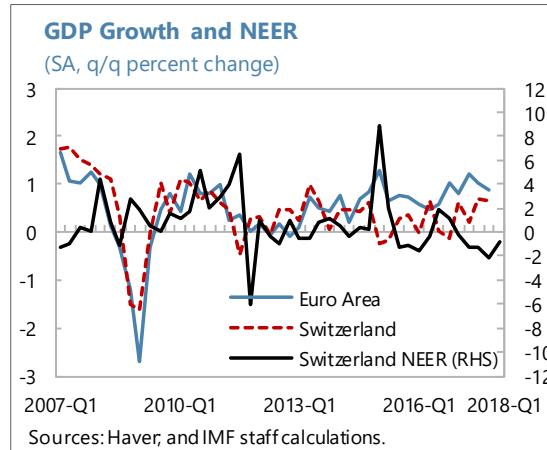
CONTEXT

1. The Swiss economy has adjusted to the large cumulative exchange rate appreciation that occurred since the onset of the global financial crisis (GFC). As one of the most open and sophisticated economies, Switzerland has long been at the forefront of product and technology innovation, which has underpinned a secular trend real appreciation. However, since the GFC, safe-haven inflows and operational limits on interest rates caused the real exchange rate to temporarily overshoot its long-run trend, slowing output and employment growth, even as the large current account surplus—which includes net foreign income—remained broadly unchanged. More recently, efficiency gains and nominal and real depreciation have helped to restore profit margins, positioning the economy to benefit from the acceleration in world activity.

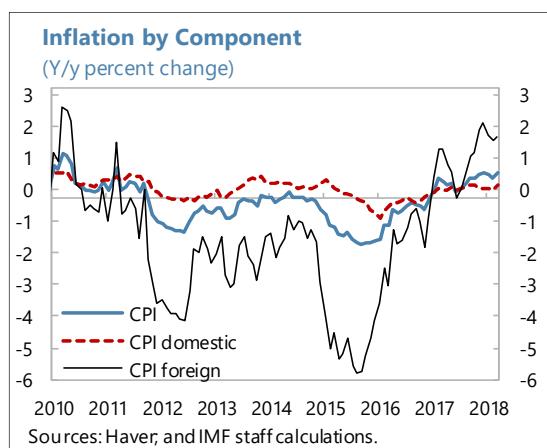


RECENT DEVELOPMENTS

2. After a subdued start to 2017, GDP growth accelerated in the second half of the year. Output grew by 1.1 percent last year, driven mainly by final domestic demand. Growth was some 0.4 percentage points lower than in 2016 partly due to the absence of foreign-generated earnings from major biennial international sporting events and whose parent-entities are based in Switzerland (Box 1). Excluding this effect, GDP growth has generally been on an increasing path, benefitting since mid-2017 from buoyant external demand, while firms rebuilt profit margins following the sizable depreciation of the franc. The positive momentum is thought to have continued in Q1:2018, although at a slightly reduced pace.



3. Underlying price and wage momentum is gradually rising, although inflation remains subdued. After five years of falling or flat prices, headline inflation turned positive in mid-2016 and had risen to 0.8 percent in April 2018, largely on increasing world energy prices and depreciation of the franc since mid-2017. Domestically-sourced



inflation, while now positive, was dampened by a 0.3 percentage point reduction in the VAT rate at the beginning of 2018, reaching only around 0.3 percent. After falling sharply, capacity utilization has recovered and at 84 percent in early 2018, was just short of its post-crisis peak. The labor market has tightened, with registered unemployment decreasing to 3 percent (4.8 percent on the ILO definition, which includes those ineligible for benefits) and growing shortages of skilled workers on lower immigration owing to stronger regional economic conditions. While output dropped below potential following the appreciation in 2015, the negative output gap is estimated to have narrowed to about ½ percentage point as of end-2017.

Box 1. Internationally-Active Entities and Economic Statistics

Fees from trademark licensing and broadcast rights generated by the European Football Championships and the summer Olympics contributed 0.3 percentage points to Swiss GDP in 2016, even though these events were not held in Switzerland. This attribution is consistent with international statistical conventions (both ESA and SNA), whereby foreign-sourced profits are allocated to Switzerland because it is the home base of their parent associations (UEFA and IOC). The absence of similar sporting events in 2017 contributed to a decrease in GDP by 0.2 percentage point, thereby creating a year-to-year swing in GDP growth of about 0.4 percentage points. As similar sporting events are scheduled for 2018 (FIFA World Cup and winter Olympics) and every future even-numbered year, this effect on output and growth will be a biennial occurrence.

Switzerland is home to numerous merchanting companies (mainly commodity traders) that purchase and sell goods in international markets, but without the goods ever entering Switzerland. Profits from this activity accrue to Switzerland and are recorded in GDP and (on a net basis) in goods exports. With most of the income invested abroad (rather than locally), these activities raise the saving-investment balance and hence the current account. Merchanting contributes about 4 percent of GDP to the current account each year.

These examples serve to highlight the role that globalization of firms' real and financial activities and cross-border separation of companies from their foreign owners can have on traditional economic statistics. As noted by Avdjiev and others (2018), increasing cross border integration creates a growing tension between the nature of economic activity and the measurement system that attempts to keep up with it.¹ Switzerland is not unique in this regard. The growing importance of multinationals and ownership of valuable intangible assets (intellectual property (IP) or trademarks) present a challenge for understanding macroeconomic statistics.

The presence of internationally-active multinationals and entities can have important implications for macroeconomic surveillance and policymaking. First, to the extent that GDP includes activities with little domestic labor or physical-capital inputs, it may not provide an accurate picture of the cyclical position of the economy. Second, the link between the REER and the current account could be dampened, and may even turn positive, if a more appreciated currency encourages offshoring of production. Third, long-run economic forecasts could become more uncertain if GDP depends on multinationals' decisions regarding their country of residence (and hence where income from IP is booked), and which may significantly affect debt sustainability assessments. Fourth, the current account can become disconnected from GDP (but not from national income) through offshoring of production with repatriation of profits, which tilts the current account toward investment income and away from trade.² And fifth, the level of the current account may change depending on whether foreign-ownership of domestic firms is in the form of direct or portfolio investment (see Annex II).

¹ S. Avdjiev and others, "Tracking the International Footprint of Global Firms," Bank of International Settlements Quarterly Review, March 2018.

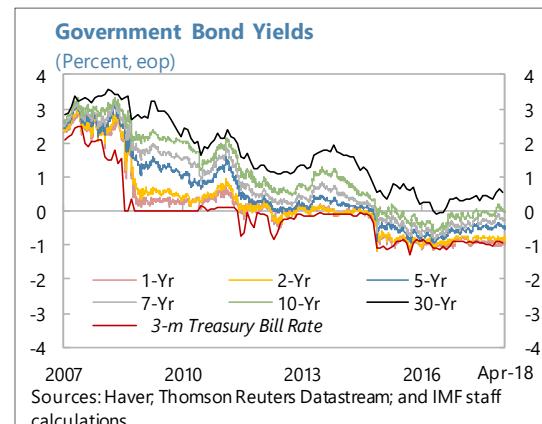
² Rather than the conventional view of domestically-produced goods and services (G&S) that are included in GDP and—when traded—in the trade balance of the current account, it is more realistic to consider (i) domestically-produced G&S, (ii) foreign-generated service exports from domestically-owned IP assets (recorded in GDP and the trade balance) and (iii) foreign-earned income from offshoring of production (not in GDP, but in national income, and not in the trade balance but in the current account).

4. The better global environment had—until recently—halted safe-haven appreciation

pressures. More-benign global and regional political risk sentiment and the prospect of further stimulus withdrawal by major central banks caused the franc to weaken by 7 percent in real effective terms during mid-2017 to March 2018. As a result, the REER had returned to the level that prevailed when the franc was under the floor (late 2011–early 2015), although it remained some 15 percent above its pre-crisis level.

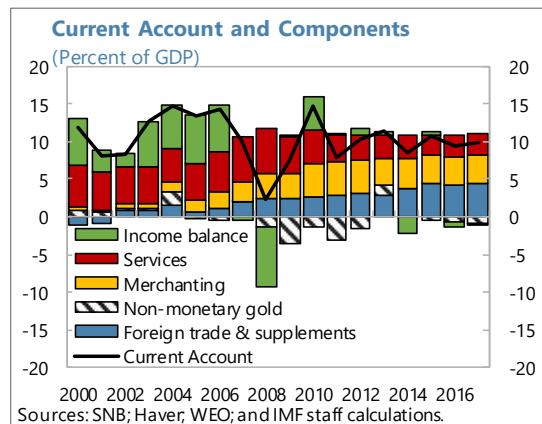
The franc again appreciated in May on rising

international political uncertainty. Interest rates on longer-maturity debt have risen in tandem with those in other advanced economies, steepening the yield curve and pushing yields on maturities of 10 years and longer above zero. Nonetheless, interest rates remain low, fueling search-for-yield that has buoyed real estate investment.



5. Despite substantial swings in the REER, the current account (CA) surplus has remained large and relatively stable.

The surplus, which averaged 10 percent of GDP during the past decade, reflects a concentration on relatively price-insensitive exports (breakthrough pharmaceuticals and luxury goods) and Switzerland's role as a financial hub and host to multinational companies, which affects the income balance. From a saving-investment perspective, the household sector is the primary contributor.



REPORT ON THE DISCUSSIONS

A. Outlook and Risks

6. The improved external outlook, supported by the recent depreciation, is expected to energize the Swiss economy. A boost to investment and net exports from the tailwind of external demand, together with faster expansion of household spending due to confidence effects, are forecast to lift GDP growth to 2½ percent in 2018 (including earnings from international sporting events), before growth gradually moderates to 1¾ percent over the medium term as the global cycle matures. The output gap is forecast to close in late-2018 and to turn modestly positive during 2019–21 before growth returns to potential. Strong external demand and the lower REER will temporarily raise net exports. Inflation is expected to increase to the upper half of the price stability band (0–2 percent) in 2018–19 on the pass-through of recent nominal effective depreciation, and subsequently revert to the mid-point as tightness in the labor market and capacity utilization return to more normal levels. Excluding temporary factors, underlying inflation is expected to increase gradually to the middle of the band.

7. Positive surprises to this outlook are possible, although risks appear tilted downward (Annex I). GDP growth could exceed forecasts if the global upswing were faster and more sustained than currently envisaged. On the other hand, several factors could weaken the outlook. Rising international trade tensions could impact Switzerland's externally-oriented economy. More uncertain geopolitics could rekindle safe-haven pressures, sharply appreciating the franc and eroding competitiveness in less-productive sectors. Financial uncertainty would increase considerably and the exchange rate could be affected in the event the "sovereign money" initiative is approved in the June referendum.¹ A resurgence in global inflation could trigger an abrupt policy tightening by major central banks, leading to volatility spikes in financial markets and spillovers to Swiss property prices. Uncertainty regarding a framework agreement governing Swiss-EU relations could affect cross-border flows. Further delays in meeting international standards on corporate income taxation (CIT) could reduce Switzerland's appeal as an investment destination.

Authorities' Views

8. The growth outlook has improved considerably, supported by robust external demand. Following the exit from the exchange rate floor, realized and potential GDP growth decreased and profit margins were squeezed. The acceleration in global output since early 2017 supported a recovery in Swiss activity, with the impulse from stronger world demand exceeding that from the moderate real depreciation. The positive momentum continued in Q1:2018. The negative output gap has narrowed and is likely to close in the first half of 2018. Export-oriented industries were the first to see demand pick up, with the benefits expected to become more broad-based as the recovery continues. Predicated on sustained robust global growth, Swiss GDP is forecast to expand by 2.4 percent in 2018, driven mainly by exports and investment in equipment. Over the medium term, still-low interest rates and further population growth would sustain growth, although at a somewhat slower pace than in 2018. Under the assumption of a constant policy interest rate at the current level, year-average inflation is forecast to gradually increase to just below 2 percent in 2020.

9. Global economic conditions and pressures on the Swiss franc are key uncertainties for the growth outlook. Protectionist tendencies could weaken external demand, including by disrupting international supply chains and dampening firms' propensity to invest at the global level. All this would negatively affect Swiss exports. Resumption of international political risk could renew demand for the franc as a safe-haven asset. Abrupt decompression of term premia and reduced risk appetite could accompany even a gradual tightening of monetary policies by major central banks. Moreover, if global growth were to turn down, there would be limited scope for further support from monetary policy around the world. On the domestic front, the housing market and construction activity could adjust more abruptly than expected.

¹ The referendum is scheduled for June 10, 2018. The initiative would end fractional reserve banking whereby banks create deposits (which are not fully-backed by—but are fully-convertible into—central bank money), and replace it with a system where all sight deposits are 100 percent-backed by money created by the central bank that enters into circulation "debt free."

B. External Sector Assessment

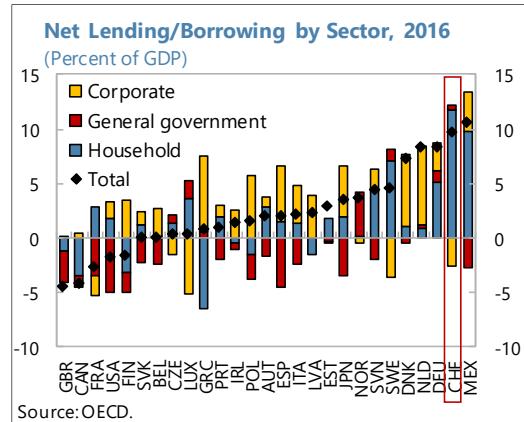
Background

10. The size and composition of the external accounts reflect Switzerland's role as a financial center and headquarters for entities with foreign operations. Persistent large CA surpluses are attributable to the balance on trade in goods and services, merchanting and investment income. Accumulation of these net savings has resulted in a positive net international investment position (NIIP) of 127 percent of GDP, although this is considerably smaller than implied by cumulating past current account surpluses. Gross financial flows and stocks are both very large relative to GDP, owing to the presence of two global systemically-important banks and sizable pass-through investment by foreign-controlled finance and holding companies. International reserves were small prior to the global financial crisis but have risen to 120 percent of GDP (including valuation changes) on several episodes of large-scale purchases as well as more frequent—but smaller—acquisitions. Nonetheless, as of end-March, the REER and NEER were 15 and 31 percent higher than before the crisis, although they have fluctuated more recently.

Staff's Views

11. Several structural factors contribute to Switzerland's large and persistent CA surpluses.

High per capita income, a large prime-saver-aged population alongside rising longevity, and high NIIP whose returns add to the income balance, push up the CA. Switzerland is an attractive location for multinationals and other entities, and their activities influence the balance on trade (merchanting and royalties) and income (return on net foreign assets), although—conceptually—the overall CA balance would unlikely be affected. The recent stability of the CA to large REER swings is partly explained by shifts in the income balance. However, the trade balance has been very stable despite variations in real quantities of net exports, suggesting a role for offsetting changes in the terms of trade.



12. Since the GFC, the Swiss franc has appreciated considerably. High global uncertainty led to strong safe-haven demand for the franc and to a large nominal and real appreciation. At the same time, the SNB purchased foreign currency to partially lean against the appreciation pressures and, in the process, accumulated a large amount of reserves.² Nonetheless, the REER significantly overshot its long-term trend. In recent years, the excessive appreciation was unwound through—on the one hand—a combination of lower Swiss inflation than in trading partners and nominal effective

² Some 85 percent of cumulative fx purchases occurred during surge episodes (defined as monthly purchases in amounts that exceed the average by at least one standard deviation).

depreciation of the franc due to more benign global economic and political outlooks, and continued trend appreciation on the other (Box 2).

13. Switzerland's external position in 2017 was broadly consistent with medium-term fundamentals and desirable policies. Based on a cyclically-adjusted CA surplus of 9.6 percent of GDP and an external balance assessment (EBA) norm of 6.1 percent, the total gap including the unexplained residual equaled 3.5 percentage points of GDP (Annex II). Some Switzerland-specific factors not appropriately treated in the measured CA serve to reduce the CA gap. In particular, the measured CA treats as income (and hence saving) compensation for valuation losses on some debt instruments and considers some retained earnings of multinational corporations (MNCs) owned by foreigners as Swiss income. After accounting for these factors, which amount to around $2\frac{3}{4}$ percent of GDP, the remaining CA gap is about 0.8 percent of GDP, with an uncertainty band of ± 2 percentage points. Notwithstanding especially-high uncertainty, this remaining gap implies that the external sector is within—but close to the upper bound of—the “broadly consistent” range. Given the complexity of Switzerland's external accounts and its status as a financial sector, further exploration of the implications of measurement issues is warranted.

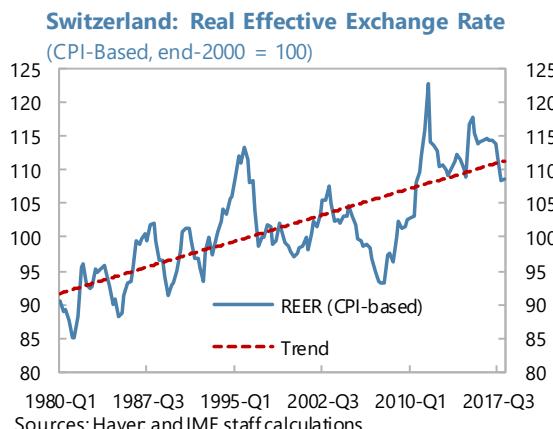
Box 2. Switzerland's Trend Real Appreciation

In addition to high short-term volatility attributable to safe-haven effects, Switzerland's REER is characterized by a gradual long-term appreciation. Depending on the method of estimation (linear or exponential trend), the annual long-run appreciation has been between 0.5 and 0.9 percent since 1980.

The REER can be expressed as a function of the relative price of tradables to nontradables (“internal real exchange rate”) across countries.¹ Therefore, developments in the internal real exchange rate may explain the evolution of the REER. Theory suggests two potential explanations.

First, according to the Balassa-Samuelson hypothesis, faster productivity growth in the tradable sector relative to the nontradable sector drives up wages across the economy but raises the relative price of nontradables, resulting in a real appreciation. Measured productivity in tradables has grown considerably faster than for nontradables in Switzerland. The EBA's REER level regression also

finds that differences in productivity growth of tradable versus nontradable sectors explain much of Switzerland's real appreciation.² However, productivity in Switzerland is likely subject to significant measurement error, especially in knowledge-based sectors where wages are used as the deflator to derive real output. Looking at Switzerland, Natal and others (2015) find no significant role for Balassa-Samuelson effects on the REER.³



Sources: Haver; and IMF staff calculations.

¹ In addition, the RER depends on the nominal exchange rate-adjusted price of tradables across countries. See Reynard, S., “What Drives the Swiss Franc?” Swiss National Bank Working Papers, 2008–14, 2008.

² The REER level regression suggests that much of the increase in the estimated REER since 1991 is explained by the change in the relative productivity between tradables and nontradables in Switzerland compared with other countries.

³ Natal, J. M., T. Mancini Griffoli, C. Meyer and A. Zanetti, “Determinants of the Swiss Franc Real Exchange Rate,” Swiss Journal of Economics and Statistics (SJES), vol. 151(IV), December 2015.

Box 2. Switzerland's Trend Real Appreciation (concluded)

An alternative more-plausible explanation is that of Dutch disease, whereby high-income-generating tradable sectors (typically associated in the literature with natural resources) exert upward pressure on wages and prices of nontradables. The Dutch disease hypothesis relies on growth of real income (rather than productivity differentials) to generate the increase in the internal real exchange rate. A Dutch disease-like phenomenon appears to be a plausible explanation for Switzerland's trend appreciation given a number of large and highly-profitable tradable sectors, including pharmaceuticals and merchanting.

Authorities' Views

14. The Swiss franc remains highly valued but the extent of overvaluation has diminished over the past year. The depreciation of the nominal effective exchange rate that occurred since mid-2017 has helped to moderate the substantial overvaluation that existed previously because of safe-haven pressures. This has helped firms to rebuild their profit margins. Nonetheless, while the REER has declined to the level under the exchange rate floor, it remains above its long-term average. The CA reflects demographic factors (population aging, rising longevity and mandatory pension contributions) and—consistent with international statistical standards—also includes compensation for valuation losses due to inflation and corporate saving belonging to foreign-owned MNCs. While the CA balance does not vary appreciably with changes in the exchange rate, the effect of an appreciation on the real economy varies significantly across the different sectors, with some sectors being highly responsive. The size of the SNB's balance sheet is a by-product of its monetary policy decisions; its increase entails a potentially higher volatility of the SNB's profits in absolute value.

C. Economic Policy Challenges

Challenge One: Preserving Internal and External Balance While Navigating the Cyclical Upswing

Monetary and Exchange Rate Policy

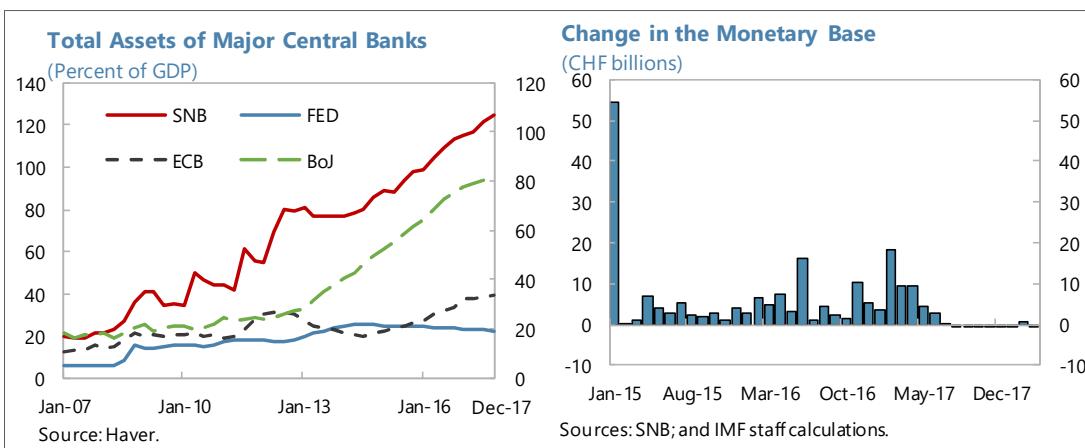
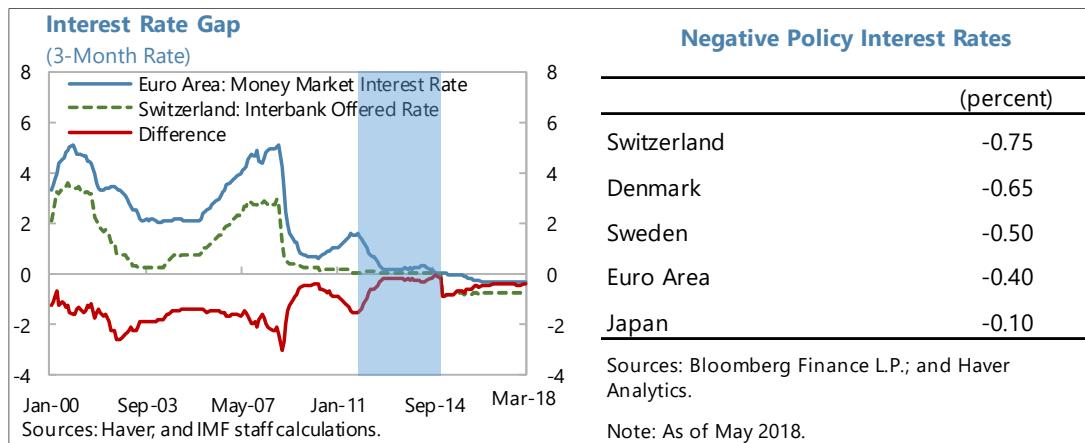
Background

15. Since exiting the exchange rate floor in early 2015, the SNB has utilized dual instruments to pursue an accommodative monetary policy. The interest rate on sight deposits placed at the SNB was set at -0.75 percent, the lowest in the world,³ and unsterilized foreign exchange intervention has leaned against appreciation pressures.⁴ This combination of tools was intended to reduce the attractiveness of the Swiss franc, thereby easing appreciation pressures on the currency, while also supporting domestic demand and raising inflation toward its target. Official

³ This is the mid-point of the target range for the three-month LIBOR (minus 1.25 percent to minus 0.25 percent). The negative policy rate applies only to banks' balances above generally elevated exemption thresholds (tiering), implying that the average rate is considerably less negative than the marginal rate.

⁴ The amount of intervention is reflected in changes in sight deposits at the SNB and currency in circulation.

reserves and sight deposits at the SNB have been broadly unchanged since mid-2017, indicating that discretionary intervention has ceased, although interest income and dividends on the SNB's portfolio would continue to passively expand its balance sheet.



Staff's Views

16. The improved outlook for the Swiss and world economies, together with normalizing steps by major central banks, has relieved pressure on domestic monetary policy. The SNB's two-pronged approach has supported the return of modest inflation and the recovery of growth while shielding the economy from safe-haven surges.⁵ However, both tools face limits. To avoid testing the effective lower bound or excessively pressuring banks' profit margins, the SNB kept its policy rate unchanged since 2015, even as rate reductions by other central banks compressed the negative interest differential, contributing to persistent appreciation pressure. Instead, the SNB prevented a further tightening of monetary conditions through foreign currency purchases—in large amounts at times of intense pressure and in smaller quantities on a more frequent basis. However, a large balance sheet also has its limitations as it is more exposed to valuation risk. The need for

⁵ See accompanying selected issues paper, "Switzerland's Monetary Policy Response to Exchange Market Pressure in a Cross-Country Comparison."

further loosening has been alleviated by the strengthening economy and reversal of safe-haven appreciation pressures since mid-2017.

17. The monetary policy stance is appropriate at this point, and any future tightening should depend on domestic conditions and policy decisions by major central banks. As domestic conditions strengthen and inflation picks up, monetary policy tightening should be gradual and well communicated, accompanied by tools to help absorb any excess liquidity. However, with underlying inflation forecast to rise slowly, the domestic cyclical outlook does not suggest the need for a near-term tightening. Nonetheless, given the elevated uncertainty ahead, policy should remain data-dependent to avoid falling behind the curve that may require potentially-disruptive catchup responses.

18. Exit from the SNB's accommodative policies during the current economic upswing is unlikely to return the pre-crisis configuration of tools. If—as markets currently expect—policy rates of major central banks peak well-below pre-crisis levels, scope for the SNB to raise its policy rate may be constrained, especially if re-widening the negative interest rate differential against other currencies is desired. The SNB, alongside other central banks, is likely to maintain a considerably larger balance sheet than prior to the crisis, with divestments falling well-short of the previous buildup to avoid excessive tightening of monetary conditions. Maintaining large reserves makes earnings and equity susceptible to changes in the value of the franc and volatility in asset prices.

19. A clear assignment of policy tools would enhance effective communication and avoid the impression of targeting the exchange rate. Given lags in policy transmission, the interest rate is best suited for addressing slow-moving cyclical conditions and expected inflation. On the other hand, intervention should be reserved for responding to volatility associated with foreign exchange market surges that would otherwise cause temporary fluctuations in inflation and output, while still accommodating a modest secular trend real appreciation that derives from rising per capita income.

Authorities' Views

20. Monetary policy has been effective at restoring positive inflation in the context of strong safe-haven demand for the Swiss franc. The exchange rate is an important determinant of Swiss inflation and real activity. The SNB's definition of price stability—CPI inflation between 0 and 2 percent—accommodates some pass-through of exchange rate fluctuations. The dual instruments of negative interest rates and foreign exchange intervention, as required, have been necessary to mitigate strong appreciation pressures and stabilize inflation. Exemption thresholds have helped limit the effects of the negative policy rate on banks' profitability. There are no signs of cash hoarding and, in fact, cashless payment transactions have risen.

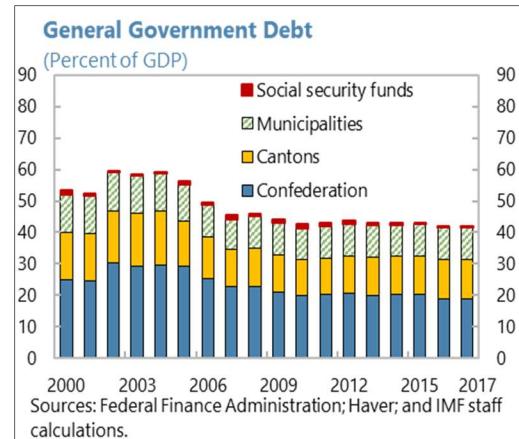
21. The prevailing monetary policy remains appropriate. Underlying inflation is expected to remain low despite the fact that the negative output gap has narrowed, suggesting that maintaining the current expansionary monetary policy is warranted. Policy decisions are based on the forecast for inflation, which is influenced by the interest rate differential with major reserve-currency central

banks. Continued normalization of policies by these large central banks would increase room for maneuver for others. Foreign exchange purchases have diminished alongside moderating safe haven pressures. But with the franc remaining a safe-haven currency and conditions in the foreign exchange market still fragile, the SNB continues to reiterate its willingness to intervene as needed. Tightening prematurely could reignite exchange rate pressures and undermine price stability. Any financial stability concerns should be addressed using macroprudential, rather than monetary, policies.

Fiscal Policy

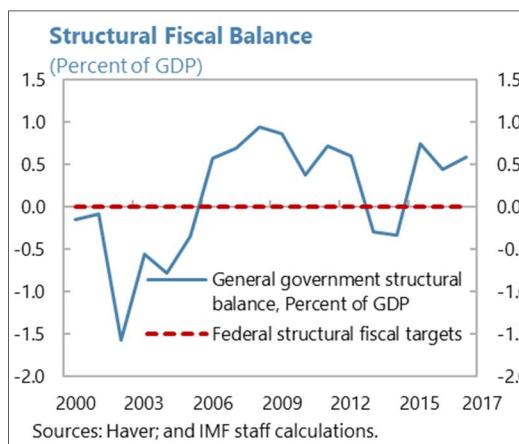
Background

22. Switzerland's fiscal position is strong, with sustained small surpluses and declining public debt. The tax burden is low by international comparison. The federal-level "debt brake" rule, introduced in 2003, together with similar rules in many cantons, has reduced general government debt from around 60 percent of GDP to 42 percent of GDP in 2017. The federal rule calls for a structural (cyclically-adjusted) balance on an ex ante basis. In case of ex post spending overruns, offsetting structural surpluses are required in subsequent years. However, no similar requirement exists for ex post under-spending. Since 2006, spending has been below budgeted amounts each year, on average by 0.3 percent of GDP. New global-budgeting procedures (complementing line-item budgeting) were introduced in 2017 to achieve more-complete execution of appropriated expenditures, but underspending continued.



Staff's Views

23. Recent measures to curtail within-year underspending are welcome, although the tightening bias in the rule's design remains. New measures to raise spending execution closer to budgeted levels (including reserve funds to carry forward allocations to subsequent years) are expected to gain effectiveness over time. Spending outside the perimeter of the rule has also risen, although this reduces budget transparency and efficiency. Preferably, the rule's ex post provision would operate symmetrically—permitting spending to catch up in the following year. This would achieve the stated objective of structural balance,



resulting in moderately-higher fiscal spending each year, and also allowing the rule to better serve its countercyclical function in the event of a downturn. With the public debt ratio projected to decrease to 34 percent of GDP by 2023, consideration could also be given to allowing a larger (smaller) countercyclical response when debt is below (above) long-term sustainable levels.

24. The substantial fiscal space affords valuable flexibility for a discretionary stimulus during a severe or prolonged downturn. Consistent with low public debt and borrowing costs and persistent structural surpluses, this substantial fiscal space exists in macroeconomic and financial market terms (Annex III), in contrast to monetary policy where further large-scale accommodation could be constrained. Substantial space also exists in the context of the debt brake rule, which envisages utilizing fiscal policy to respond to significant adverse events through the “exceptional financial circumstances” clause, which was invoked during the GFC.

25. A symmetric rule would support a better macroeconomic policy mix. A somewhat looser fiscal policy would relieve pressure on monetary policy tools during periods of low inflation. Over the long term, a rebalancing of the mix could increase the contribution of domestic demand, making output less sensitive to currency appreciation.

Authorities' Views

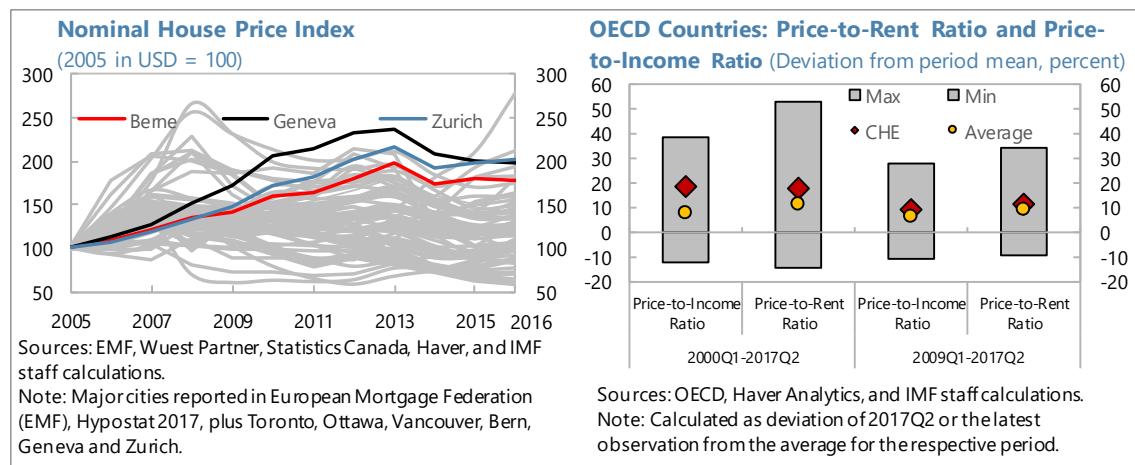
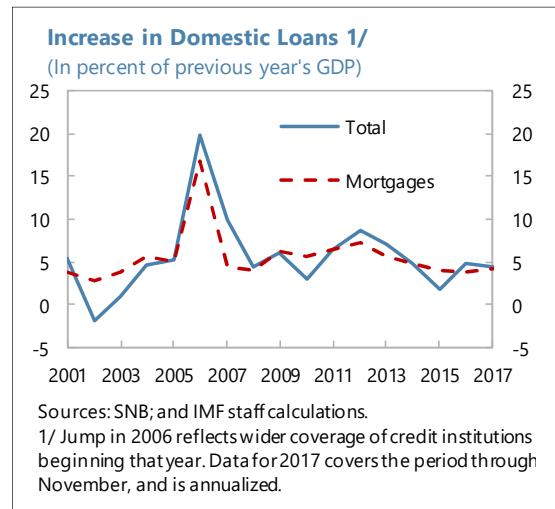
26. The debt brake rule simultaneously delivers debt reduction and economic stabilization, and enjoys broad popular support. The rule has significantly reduced nominal debt, thereby building resilience and creating policy space for extraordinary times. Annual underspending and its macroeconomic consequences are modest. The case for removing the structural surplus by raising spending, rather than lowering taxes, is not obvious as available funding for public infrastructure and education at the federal level is adequate. That said, simplified procedures for within-year supplementary budgets that should reduce incentives to maintain safety margins in spending execution are under consideration. Furthermore, the Federal Council will consider early next year whether structural surpluses should be used to compensate for potential revenue loss from tax reforms or to finance higher expenditure.

27. Policy assignment for economic stabilization depends on the nature of the shock. While Switzerland has fiscal space, whether to use it depends on the source of the downturn. Fiscal spending is effective in offsetting shortfalls in domestic demand. However, additional fiscal spending is less effective at responding to an exchange rate shock, in which case a monetary policy response is more appropriate. Nonetheless, even in that situation, fiscal policy would contribute to macroeconomic stabilization through the automatic stabilizers on tax revenue and provision of unemployment benefits.

Challenge Two: Maintaining Financial Stability Amid Tightening Global Conditions

Background

28. Private sector leverage and real estate exposure is high. The growth rate of mortgage claims has slowed from a high base, but these claims increase by about 5 percentage points of GDP per year. Liquidity and capital of domestically-focused banks exceed regulatory minima, and profits have held up despite narrowing interest spreads.⁶ Following a series of macroprudential tightening measures during 2012–14, property prices subsequently stabilized, but have risen again recently alongside moderating mortgage interest rates. Reflecting their status as attractive global cities and internationally-traded assets, property prices in Geneva and Zurich have been among the fastest growing in the world. However, standard housing-price metrics do not indicate significant misalignment. Newer-vintage mortgages appear riskier, with nearly half exceeding indicative affordability thresholds and also carrying higher loan-to-value ratios, especially those for purchasing investment properties.



⁶ The banking sector encompasses about 260 banks, with the two global systemically-important banks (G-SIBs) (which have sizable domestic operations and are also systemic for the Swiss economy) and three other domestic systemic banks accounting for about 58 percent of system-wide assets.

Switzerland: Selected Macroprudential Regulations Targeting the Real Estate Sector

Regulation	Effective Date	Amending Authority
Loan-to-value (LtV) ratio		
For new mortgages, a minimum 10 percent cash downpayment, excluding use of borrower's pension savings	07/2012	FINMA-approved self-regulation 1/
For that part of a residential mortgage in excess of an 80 percent LtV ratio, 100 percent risk weighting is applied; for the part with an LtV between two-thirds and 80 percent, the risk weight is 75 percent; for the part below an LtV of two-thirds, the risk weight is 35 percent.	01/2013	Legal 2/
Amortization		
Amortize to an LtV ratio of two-thirds within 20 years.	07/2012	FINMA-approved self-regulation 1/
Amortize to an LtV ratio of two-thirds within 15 years, according to a linear schedule.	09/2014	FINMA-approved self-regulation 1/
Countercyclical capital buffer (CCyB) 3/		
CCyB set at 1 percent of direct and indirect exposures secured with Swiss residential property.	09/2013	Legal 4/
CCyB on Swiss residential property exposures raised to 2 percent.	06/2014	Legal 4/

Source: Vujanovic (2016), "Policies to Tame the Housing Cycle in Switzerland," OECD Economics Department Working Paper, No. 1279.

1/ A 100-percent risk-weighting applies to the full amount of new mortgages that do not meet these FINMA-approved requirements, in accordance with the Capital Adequacy Ordinance, Article 72(5).

2/ Capital Adequacy Ordinance, Article 66(2) and Annex 3.

3/ The CCyB was introduced at zero in July 2012, and with a maximum ceiling of 2½ percent. Switzerland was the first country to activate the CCyB. The Swiss CCyB may cover specific credit exposures, in contrast to the EU's CCyB that may only be applied across the board.

4/ Capital Adequacy Ordinance, Article 44 and Annex 7.

Staff's Views

29. Considerable progress has been made in strengthening banking sector resilience.

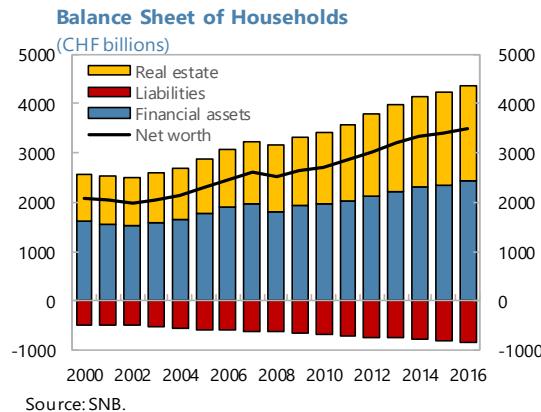
Capital and liquidity buffers have increased across all categories of banks, including as a result of the counter-cyclical capital buffer on real estate exposure. A series of macroprudential and regulatory measures was introduced in 2012–14 that, together with the slowing economy, were effective at containing property prices and moderating mortgage credit growth. For the global systemically-important banks, too-big-to-fail regulations are appropriately calibrated to the relatively small size of their home-country's economy.

30. Sustained low interest rates are encouraging risk taking in some market segments. Low and flattened yield curves and the rebound in economic activity have reignited the search for yield. Competition from nonbanks is putting downward pressure on loan interest rates, even as most retail deposit rates remain floored at zero.⁷ Domestically-oriented banks have stepped up the pace of mortgage lending and increased duration mismatch. Lending standards have slipped, with a significant share of new mortgages clustered near the indicative minimum down-payment level and falling short of loan affordability norms. Construction of new rental properties continues even though vacancy rates are rising and rents are declining. These developments have occurred from a starting point of high concentration of bank lending into mortgages and high house prices and mortgage debt relative to income. In addition, domestic balance sheets are heavily exposed to real estate, which could generate adverse wealth effects that amplify the effect of a fall in real estate prices. New complex financial products have not been tested in a period of heightened financial market volatility, and could impact profits of G-SIBs.

⁷ See accompanying selected issues paper, "Banking Sector Responses to the Negative Interest Rate Policy."

Box 3. Direct and Indirect Exposure to Real Estate

Notwithstanding large net asset positions, balance sheet exposure to real estate is a concern. On the asset side, households and nonfinancial firms have large real estate exposure through direct ownership of property and indirectly through savings in bank deposits, pension and insurance vehicles, and holdings of real-estate-linked equities and investment funds.¹ While much smaller than assets, household's liabilities—at 130 percent of GDP—are among the highest in the world and mostly relate to mortgage borrowing. Eighty six percent of bank loans are for mortgages (83 percent for G-SIBs), while pension funds and insurance companies have shifted their assets toward real estate.²



¹ In addition, households may pledge part of their private pension savings to cover minimum down-payment requirements on mortgages.

² Pension funds invest nearly one-quarter of their assets in various real estate-related vehicles. While pension funds and insurance companies account for less than 10 percent of the direct mortgage lending market, their mortgage books are growing faster than that of banks.

31. Reinforcing the macroprudential framework for real estate is needed. A gradual unwinding of ultra-loose global financial conditions would help to support financial stability, while a rapid tightening—which cannot be precluded—could be disruptive. Measures requiring banks to hold additional capital if they choose to assume more risk helps to absorb future losses but may not curtail the buildup of risk when banks have ample capital buffers or if higher risk is priced into interest rates. Also, current self-regulation by banks may not be sufficiently timely or fully internalize the additional system-wide risk their lending generates. A more-flexible system for amending regulation would ensure the timeliness of policy responses.

32. Several measures are advised to limit future risk buildup and increase capacity to respond if risks materialize. Stricter regulatory limits on loan-to-value and debt-to-income ratios should be adopted, with only limited exemptions allowed. The tax deductibility of mortgage interest payments for private households should be removed alongside the elimination of taxation of imputed rental income. Mortgages on investment property should carry a surcharge on the applicable risk weight in a manner consistent with Basel III requirements as published in December 2017. Intensified monitoring of individual banks that share similar business models, especially in regionally-concentrated markets, is advised. Guarantees on cantonal banks should be removed. To prevent regulatory arbitrage, nonbank mortgage lending should be subject to similar macroprudential standards as for banks, where it is not already the case. The strengthened supervisory focus on cyber risk in the financial sector is welcome, and stress testing and building defenses against cybersecurity attacks, which could be highly-disruptive and impose large costs, should be stepped up. Financial sector oversight should remain vigilant and independent.

Authorities' Views

33. Misalignment in the mortgage and real estate markets has inched up. Driven by search for yield, investor's demand for rental apartments and other investment properties is high. Leverage in the build-to-let segment is also high, accounting for about one-third of bank mortgages. Loan affordability risk has risen, with about half of new loans issued exhibiting increased loan-to-income ratios. While only a small share of the mortgage market, nonbanks are exerting downward pressure on banks' lending rates. Nonetheless, stress tests indicate that domestically-oriented banks have sufficient capital to cope with a sharp increase in interest rates or correction in house prices, although a combined shock could have significant effects on some banks. The market share of G-SIBs in the Swiss mortgage market has decreased, although risks may rise under adverse global scenarios.

34. Previous measures to contain financial stability risks were successful, and further measures are being considered. Demand-side measures—such as minimum down-payment and amortization requirements—may be more effective than capital-based measures at preventing the buildup of risk when banks exceed capital requirements. Nonetheless, sufficient capital is needed to absorb any losses that may incur, and greater differentiation of risk weights will be introduced between income-generating and owner-occupied mortgages on the one hand, and among different loan-to-value buckets, consistent with new Basel III guidelines. With changes in mandatory regulation requiring legal amendments, voluntary self-regulation by banks may be more timely and, moreover, any measures must be endorsed and supervised by FINMA. In addition, FINMA exercises close oversight of activities where regulation may not fully reflect prevailing risks. Eliminating mortgage interest deductibility for individuals and imputed rental income from the tax base would reduce incentives for households to maintain high debt. Switzerland exceeds global minimum standards as regards regulation of systemic banks, reflecting the large size of these banks' balance sheets relative to Swiss GDP. While delineating supervisory and regulatory authority is appropriate, preserving independent and robust supervision is critical.

Challenge Three: Supporting Resilience and Competitiveness While Meeting the Demands of Aging

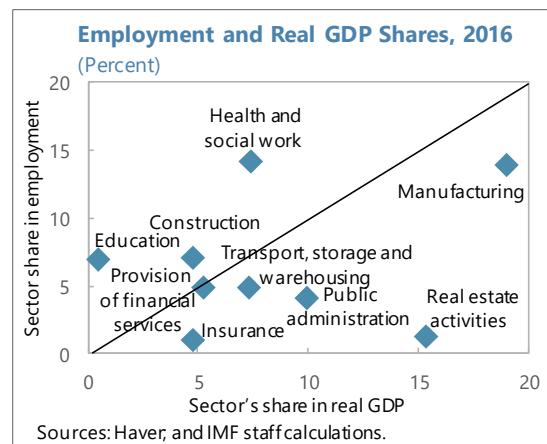
Background

35. Long-term sustainability of the public (first-pillar) and occupational (second-pillar) pension systems remains a concern, especially given rejection of a previous reform proposal. A referendum proposal that was voted down in late 2017 would have raised the retirement age for women from 64 to 65 years (same as for men), lowered the minimum conversion rate at which pension savings are converted into annuities in the private defined-contribution pillar, and raised the VAT rate by 0.3 percentage points with earmarking to support the public pay-as-you-go pension pillar. Implications for the long-term trajectory of public debt will depend on population growth, labor force participation, number of years in work and life expectancy.

36. Considerable heterogeneity exists across sectors in terms of labor productivity, consistent with the uneven effect of real appreciation. While some sectors adapted by increasing foreign procurement or relocating all or part of production abroad, more immobile sectors, such as tourism and retail trade, which face foreign competition and also tend to be relatively labor intensive, were more heavily impacted.

37. Compliance with international standards and obligations is being strengthened. A recent

follow-up report on progress in adopting priority AML/CFT recommendations concluded that considerable progress had been made in addressing deficiencies, and that effective implementation to address significant risks arising from tax evasion, private wealth management, and crypto-assets should continue. The automatic exchange of information on tax matters with the EU and other states and territories began in 2018 and the list of countries has been broadened. Following the rejection in a referendum of an earlier proposal, parliament is discussing a new proposal for reforming CIT that abolishes preferential tax regimes, in compliance with the OECD's Base Erosion and Profit Shifting project and initiatives by the EU, including by equalizing treatment of multinationals and local firms (Box 4). The major part of the reform—abolishing preferential tax regimes—would enter into effect in 2020, at the earliest.



Box 4. Reforming the Corporate Income Tax¹

A hallmark of the Swiss corporate income tax (CIT) system is the large role played by sub-national taxes. On average, the combined (federal, cantonal, and municipal) weighted effective tax rate on corporate income is about 19.6 percent, but with considerable heterogeneity across cantons. Additionally, Switzerland has preferential tax regimes that significantly reduce effective rates for Swiss-based companies.

The Swiss government has proposed a reform of the CIT, but agreement has yet to be reached. The current proposal—known as "Tax Proposal 17"—foresees, inter alia, (i) phasing out preferential tax regimes to meet international standards; (ii) introducing tax deductions for R&D expenditure; and (iii) introducing a patent box regime that offers a lower effective CIT rate on income from qualified intellectual property assets. The reform maintains the federal structure, whereby cantons and municipalities may offer different CIT rates, provided a minimum level of taxation is applied. The proposed CIT reform has implications for tax competition between cantons. Moreover, revenue-sharing from the federal government to the cantons is expected to increase, and cantons are expected to lower their statutory CIT rates in response. The new expected combined CIT rate (13.9 percent unweighted average)—together with the incentives for innovation—would maintain Switzerland's position as a relatively low tax location while meeting international standards. Following the reform, some MNCs would face a higher CIT rate, while others—mainly domestic firms—would see a tax cut. The patent box mitigates the increase in the tax rate for MNCs with qualifying income, but the rate would remain higher than the pre-reform rate for companies that currently benefit from preferential tax regimes.

Eliminating preferential regimes can make cross-cantonal CIT differences significantly more important in firms' location and investment decisions. Potential decisions by firms to relocate across cantons, and by MNCs to potentially relocate abroad, would affect aggregate revenue, and these effects remain somewhat uncertain. The revenue effect on individual cantons would also depend on the share of CIT revenue they derive from non-MNCs, which will benefit from a tax rate cut, and the revenue elasticity of taxable income. Measures to prevent potential corporate income shifting between cantons should be strengthened.

¹ See the accompanying selected issues paper "Taxation of Corporations in Switzerland."

Staff's Views

38. Population aging makes pension system reform essential. Life expectancy in Switzerland is high and rising, but has not been reflected in the official retirement age. Longer time in retirement encourages people to save increasing amounts, which tends to compress investment yields and induce even more saving, supported by tax incentives for pension contributions. Working longer or linking the official retirement age to life expectancy is an effective way to improve system viability and ensure the population has sufficient post-retirement resources. Immigration and raising the full-time employment of women—whose participation is discouraged by high childcare costs—remain important sources of new pension contributors. For the second pillar, sustainability would be improved by linking the guaranteed conversion rate to the market yield on a long-term sovereign bond and life expectancy at retirement.

39. A flexible and dynamic economy affords resilience to appreciation pressures, and all sectors should benefit from Switzerland's highly-profitable activities. High value-added sectors bring numerous advantages to the Swiss economy, but also pull up wages and prices. The resulting real appreciation may encourage offshoring of production with re-shoring of profits that gradually reduce the sensitivity of GDP and the CA to the exchange rate. Nonetheless, more labor-intensive, less internationally-mobile sectors that compete internationally may still be affected unless they raise productivity. Improving competitiveness in sectors where productivity growth is lagging is therefore essential. Adopting the recently-proposed CIT reform could support this goal by lowering the cost of investment for SMEs. Continued adequate funding of science, technology, engineering and mathematics (STEM) education and expanding the pool of highly-skilled Swiss and foreign workers would help to sustain innovation and ensure a workforce ready for life-long learning. These measures would help to preserve Switzerland's high-and-stable share of labor income in GDP and relatively-low inequality of post-redistribution income.

40. Maintaining Switzerland's reputation as a global business destination and innovation leader requires regulatory certainty and continued adherence to international commitments. Meeting international standards on CIT in a timely manner is critical to dispel uncertainty and avoid reputational risk that could negatively impact investment and growth. The reform is also an opportunity to encourage R&D activities and SME investment. With capital often channeled through chains of related companies located in different countries, the macroeconomic effects will also depend on CIT reforms in other jurisdictions. The proactive and balanced approach to regulation of fintech and initial coin offerings is consistent with Switzerland's receptiveness to cutting-edge technologies. The authorities are cognizant of the associated money laundering risks, and controls are required when converting into and out of fiat money. To better address ML/TF risks inherent in cross-border activity, priority should be given to addressing shortcomings identified in the 2016 FATF mutual evaluation report (including enhancing preventative measures, entity transparency and international cooperation). Switzerland continues to make progress on improving tax transparency, with the first automatic exchange of tax information due this year.

Authorities' Views

41. Pension funds face the dual challenge of low interest rates and rising longevity.

Pension reform remains a priority, notwithstanding the earlier setback. The current plan is to initially focus on the first pillar and to unify the retirement age at 65 while also increasing earmarked revenue, either through a higher contribution or VAT rate. Curtailing incentives for early retirement is also under consideration. Demographic developments, in particular, the relatively large proportion of prime-age savers and a high life expectancy, as well as the relatively large and highly developed mandatory pension system, contribute to the high household saving rate.

42. Switzerland's competitiveness and prosperity depend on its capability to spur productivity growth through competition in the domestic market. Switzerland's productivity growth is below average by international comparison. While productivity growth remains high in the export-oriented sectors, it has been modest in the domestic oriented sectors. The new growth policy of the Swiss government reflects these challenges. The main principles include, *inter alia*, the enhancement of competition on the domestic market, the continuation of the integration of Switzerland in the global economy, and the strengthening of framework conditions to facilitate entrepreneurship. Switzerland welcomes new technologies, and has set light regulatory requirements for fintech startups to encourage innovation and competition, while ensuring the integrity of the financial system. The proposed corporate tax reform would abolish non-compliant tax regimes while remaining internationally competitive and benefiting domestic companies and their employees. The macroeconomic implications of the reform also depend on changes to the international tax environment and dynamic factors. Prompt adoption is critical to dispel uncertainty about the investment environment.

STAFF APPRAISAL

43. The Swiss economy has largely absorbed the substantial real appreciation that occurred since the onset of the global financial crisis. Several bouts of intense safe-haven pressure caused the exchange rate to overshoot its long-run appreciation trend, slowing output and employment growth and squeezing profit margins, even as the current account surplus remained largely unchanged. Sustained efficiency gains by the private sector, very accommodative monetary policy and—more recently—robust global growth and a weaker appetite for safe assets have enabled the Swiss economy to gradually normalize. As a result, growth has picked up, the output gap has narrowed, and inflation is firmly above zero, although still low.

44. Prospects for the Swiss economy are favorable, but risks are present. The tailwind of strong foreign demand is expected to fuel net exports and investment, with GDP growth rising to 2¼ percent in 2018 and then moderating gradually to 1¾ percent over the medium term. The current account, inflation and the output gap are forecast to temporarily overshoot their longer-run levels, before subsiding and converging to internal and external balance. However, this outlook could be affected by global developments, including rising international trade tensions, renewed geopolitical risk or an abrupt tightening of financial conditions. Switzerland-specific considerations,

such as high mortgage debt and property prices, delays with CIT reform, adoption of the “sovereign money” initiative and lack of clarity on long-term Swiss-EU relations, could also depress growth.

45. Switzerland’s external position is broadly in line with medium-term fundamentals.

Saving net of investment is pushed up by high per-capita income, the large prime-saver-aged population and rising longevity. Excluding items not appropriately treated in conventional measures, the current account is close to the level predicted on the basis of Switzerland’s economic fundamentals. The overvaluation of the REER that followed the exit from the exchange rate floor in 2015 had been unwound by 2017 through a combination of equilibrium appreciation and depreciation of the actual REER. Until recently, the REER had seen some further depreciation.

46. The current accommodative monetary policy remains appropriate. Improved outlooks for the Swiss and world economies, in addition to normalizing steps by some central banks, alleviated the need for further loosening by the SNB, and no foreign exchange purchases occurred since mid-2017. With underlying inflation expected to increase only slowly, the policy interest rate should remain on hold for now. Future policy decisions should depend on domestic conditions and the inflation outlook while also considering actions by major central banks that affect the interest rate differential with the franc. A clearer assignment of policy tools would enhance communications, with the interest rate focusing on slow-moving cyclical conditions, and foreign exchange intervention best-suited to countering strong exchange market pressures that would otherwise create temporary volatility in inflation and output. However, policy should accommodate a moderate trend real appreciation in line with relative income.

47. Operating the fiscal debt brake rule in a symmetrical manner would support a more balanced macroeconomic policy mix. The tightening bias in the rule’s execution contributed to a rapid and sizable reduction in public debt. Substantial fiscal space now exists for adopting a balanced structural position, as the debt brake rule itself stipulates. This would also help to relieve pressure on monetary policy tools, especially during periods of low inflation, while gradually increasing the role of domestic demand in GDP, which would make output less-sensitive to future appreciation pressures. Recent measures to promote higher fiscal spending both within and outside the perimeter of the rule are welcome. However, allowing the rule’s ex post provision to operate symmetrically—such that underspent amounts could be carried forward to the following year—would bring greater transparency and efficiency.

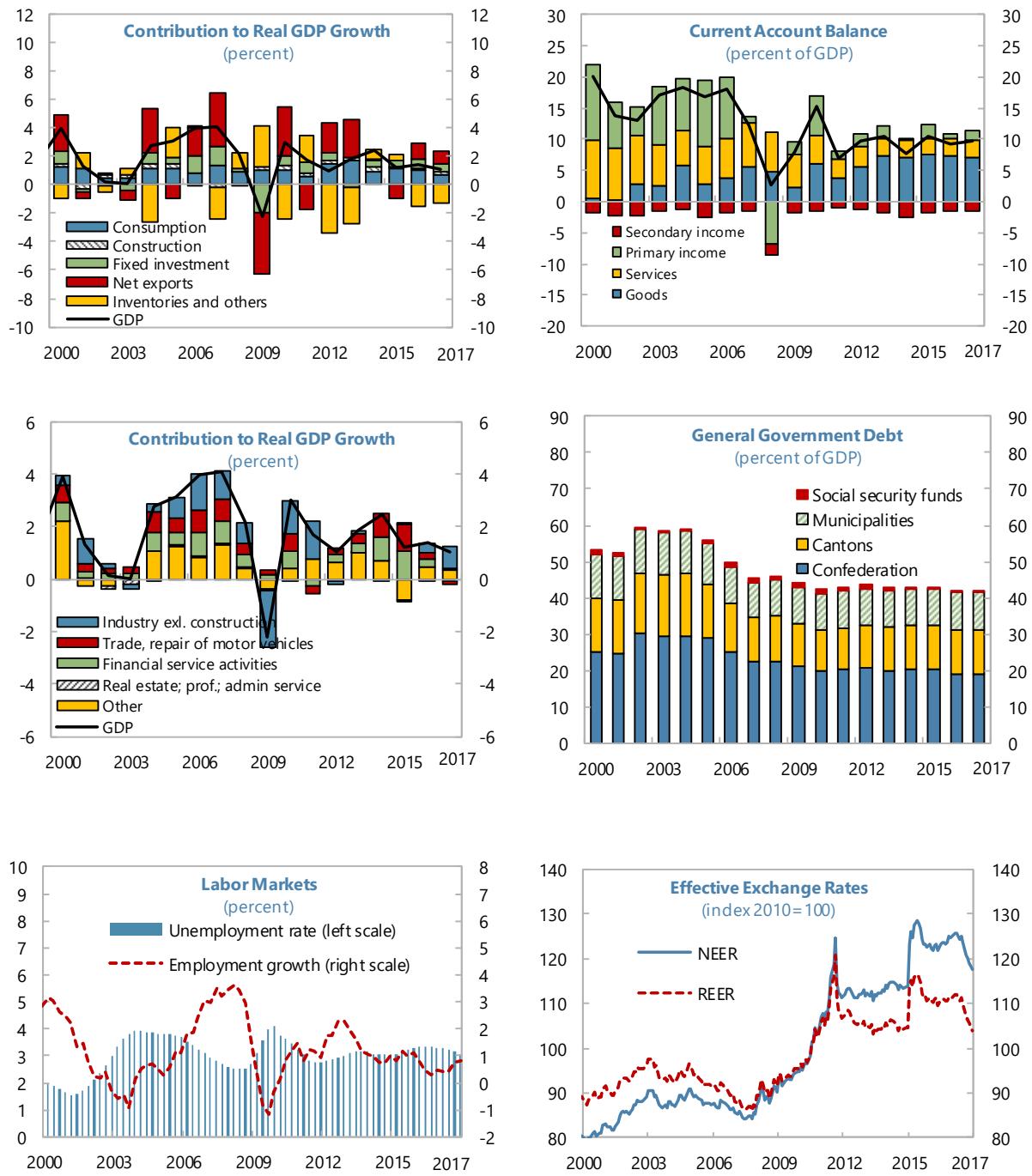
48. Targeted macroprudential measures are needed to contain risk-taking in the property market. Resilience of internationally-active and domestically-focused banks has been strengthened. A series of earlier measures helped to contain property prices and moderate mortgage credit growth. However, sustained low interest rates and the pickup in economic activity have reignited search for yield, particularly in the build-to-let real estate segment. Given households’ high direct and indirect exposure to real estate, a price correction could generate large negative wealth effects. In the presence of sizable capital buffers, capital-based measures may not be effective on their own at preventing the build-up of risk. Therefore, stricter regulatory limits on loan-to-value and debt-to-income ratios should accompany higher risk weights on mortgages on investment property. Relying on self-regulation by banks may not produce an adequate or timely tightening response.

Eliminating the tax deductibility of mortgage interest payments from the personal income tax, and removing imputed rental income from the tax base, would reduce incentives for leveraged real estate acquisition. Financial supervision should remain vigilant and independent.

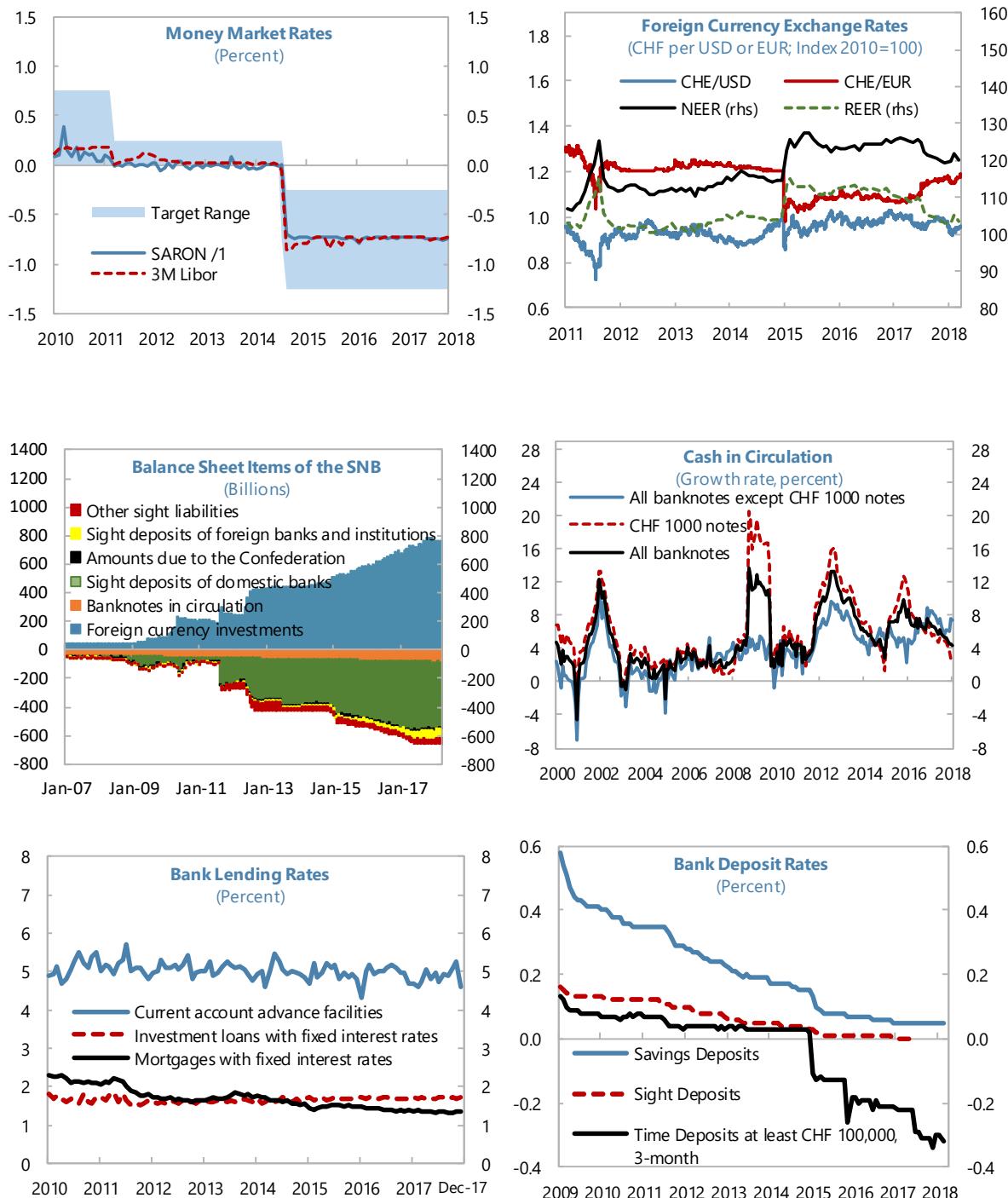
49. Adjustment of the pension system parameters would support the sustainability of the social safety net. Population aging, together with high and rising life expectancy, will increase future obligations. Raising the retirement age or linking it to life expectancy would improve system viability. Tying the guaranteed conversion rate to the market yield on long-term sovereign bonds and life expectancy at retirement would strengthen the stability of the second pillar scheme.

50. Continuing to meet international standards and maintain regulatory certainty is essential to preserve Switzerland as a prime destination for foreign investment. Adopting the CIT reform would signal stability and encourage domestic investment in R&D. It would also help support competitiveness of the more labor-intensive sectors with weaker productivity growth. Continuing to address remaining deficiencies in the AML/CFT framework, continuing to improve tax transparency, and balancing receptiveness to innovation with a proactive approach to protecting financial stability and integrity is urged.

51. It is recommended that the next Article IV consultation be held on the standard 12-month cycle.

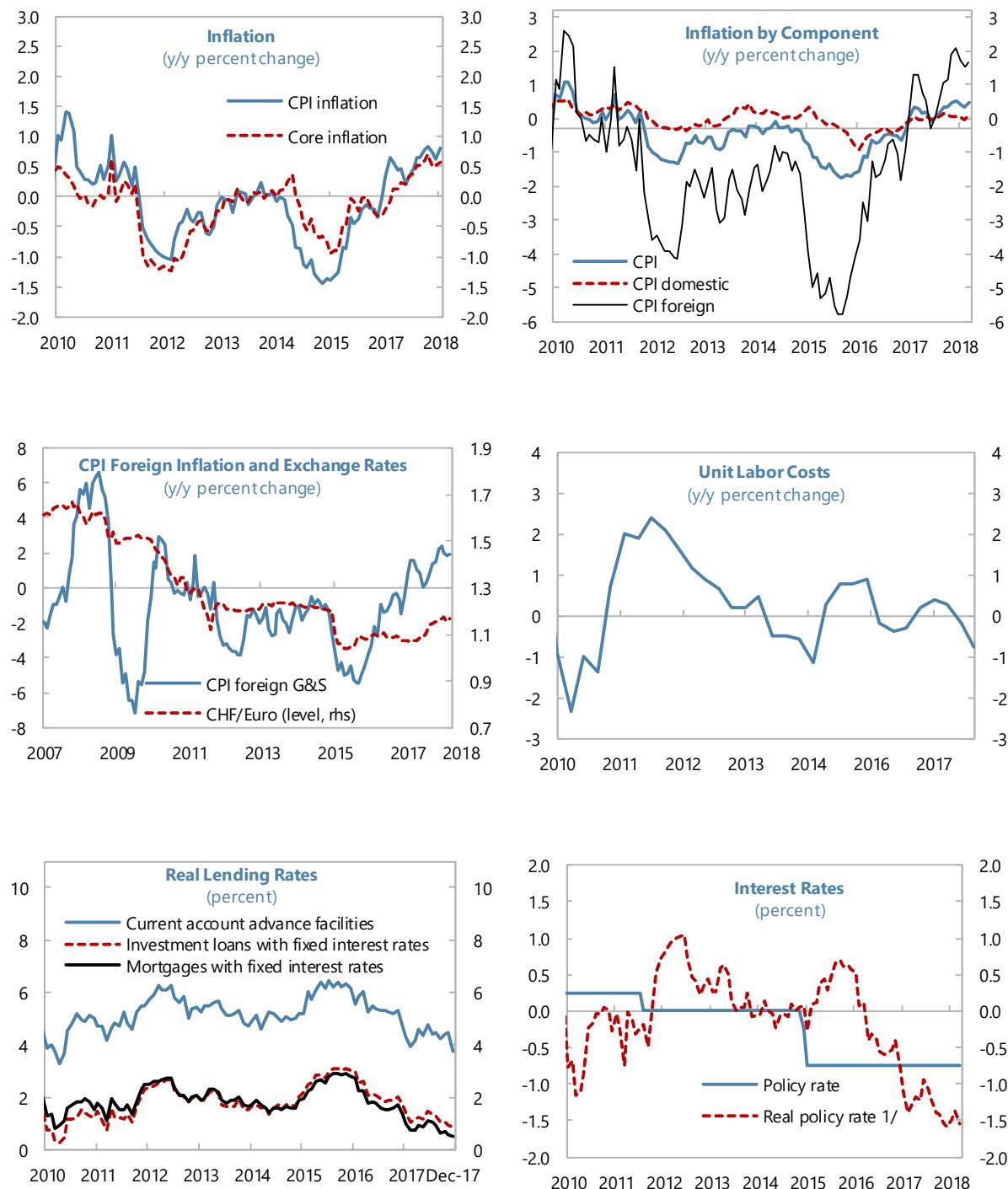
Figure 1. Switzerland: The Long View, 2000–17

Sources: Haver Analytics; Federal Finance Administration; Information Notice System; State Secretariat for Economic Affairs; and Swiss National Bank.

Figure 2. Switzerland: Monetary Policy, 2000–18

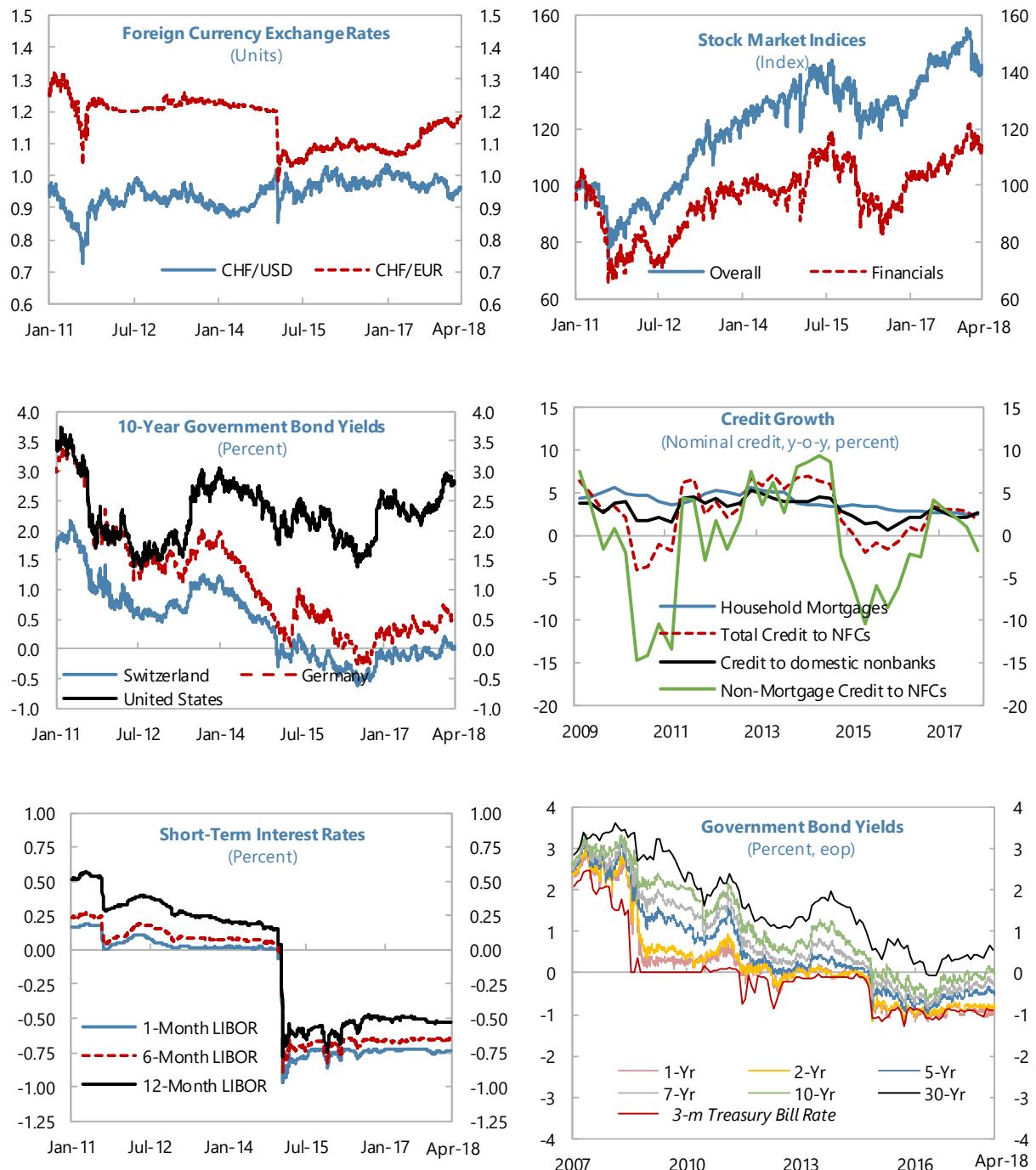
Sources: Swiss National Bank; Haver; and IMF staff calculations.

1/ SARON (Swiss Average Rate Overnight) is an overnight average rate referencing the Swiss Franc interbank repo market.

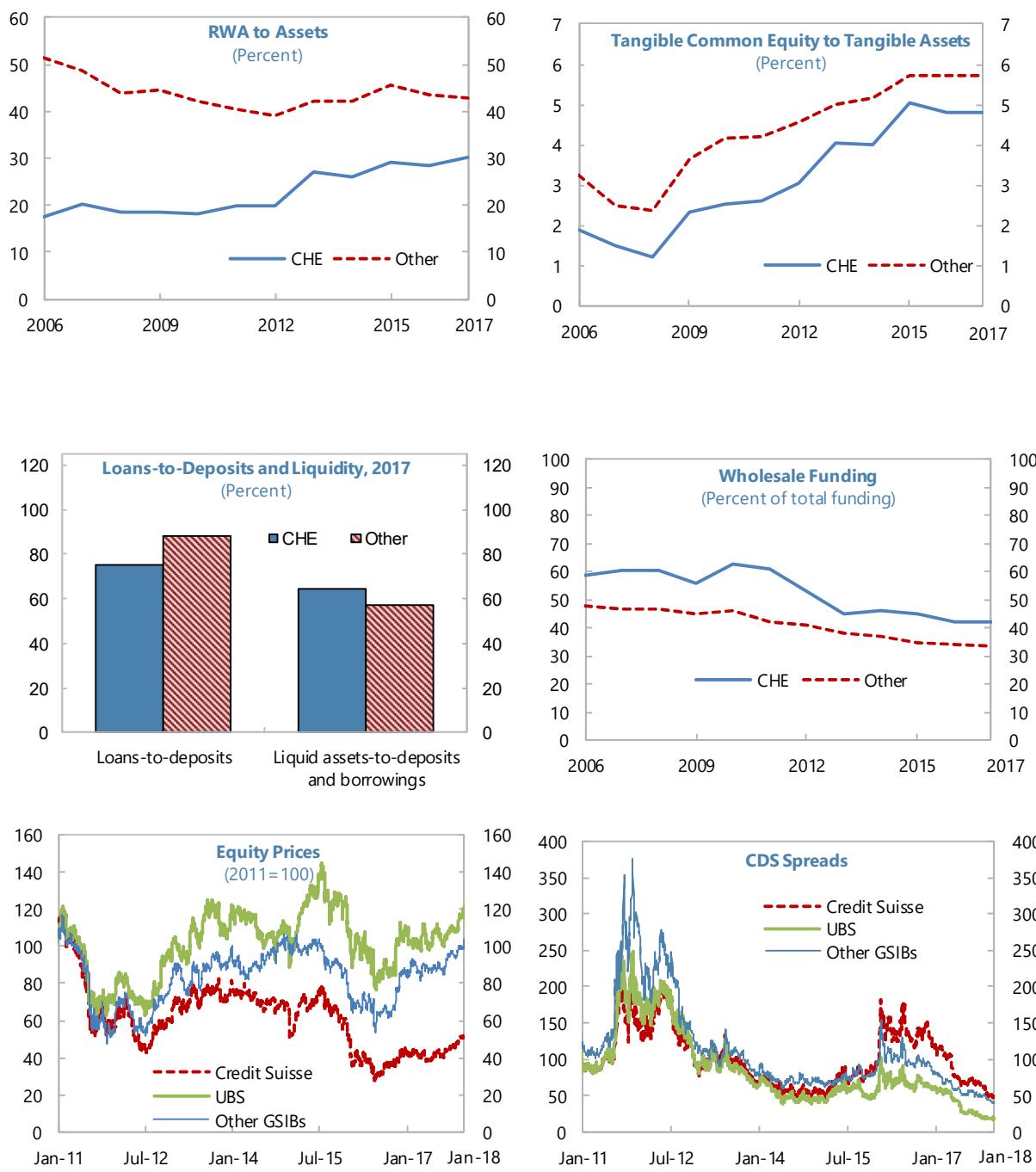
Figure 3. Switzerland: Selected Monetary Indicators, 2007–18

Sources: Haver Analytics; Swiss Federal Statistics Office; and Swiss National Bank.

1/ Nominal rate minus inflation.

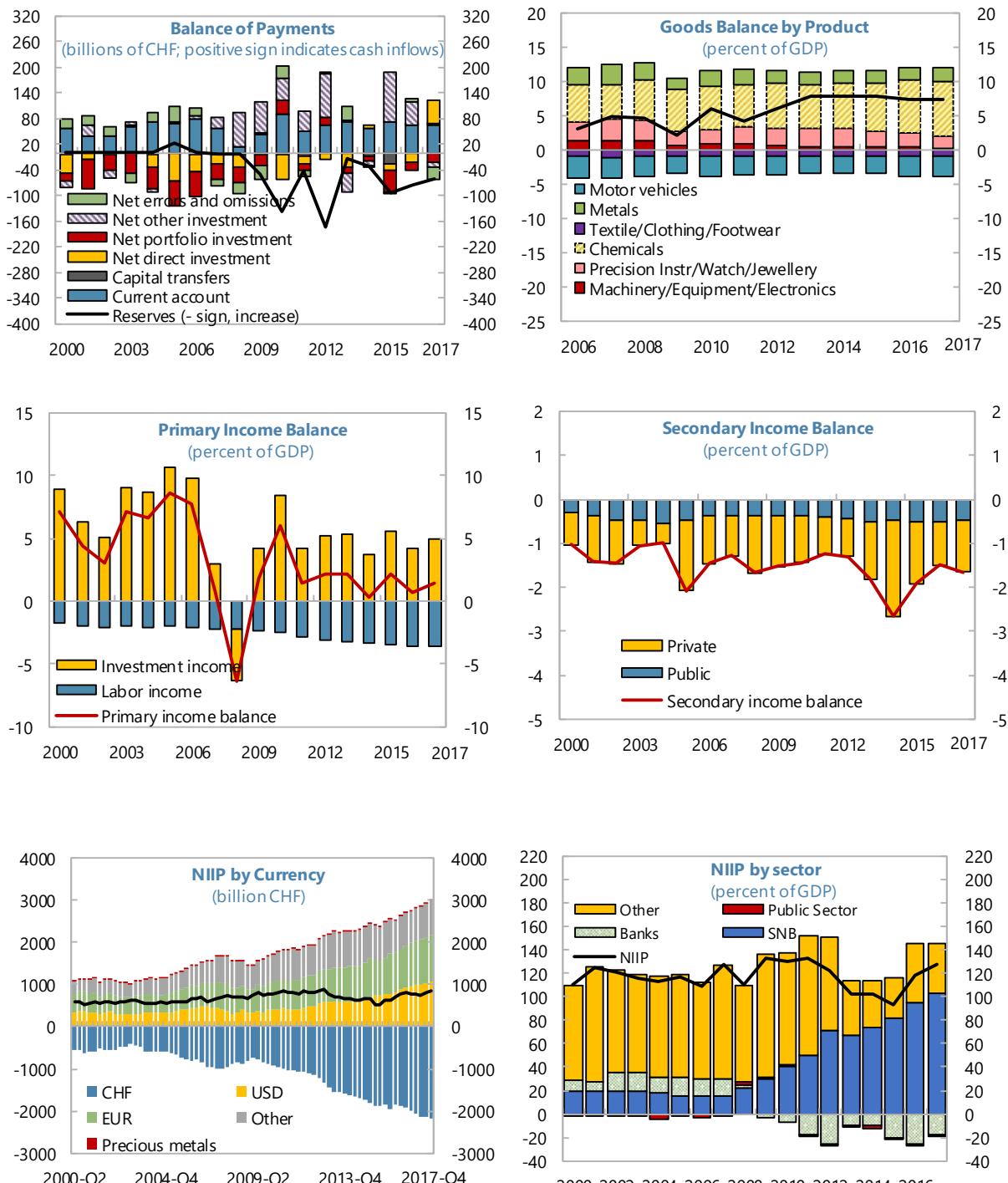
Figure 4. Switzerland: Selected Financial Indicators, 2007–18

Sources: Thomson Reuters Datastream; Haver; and IMF staff calculations.

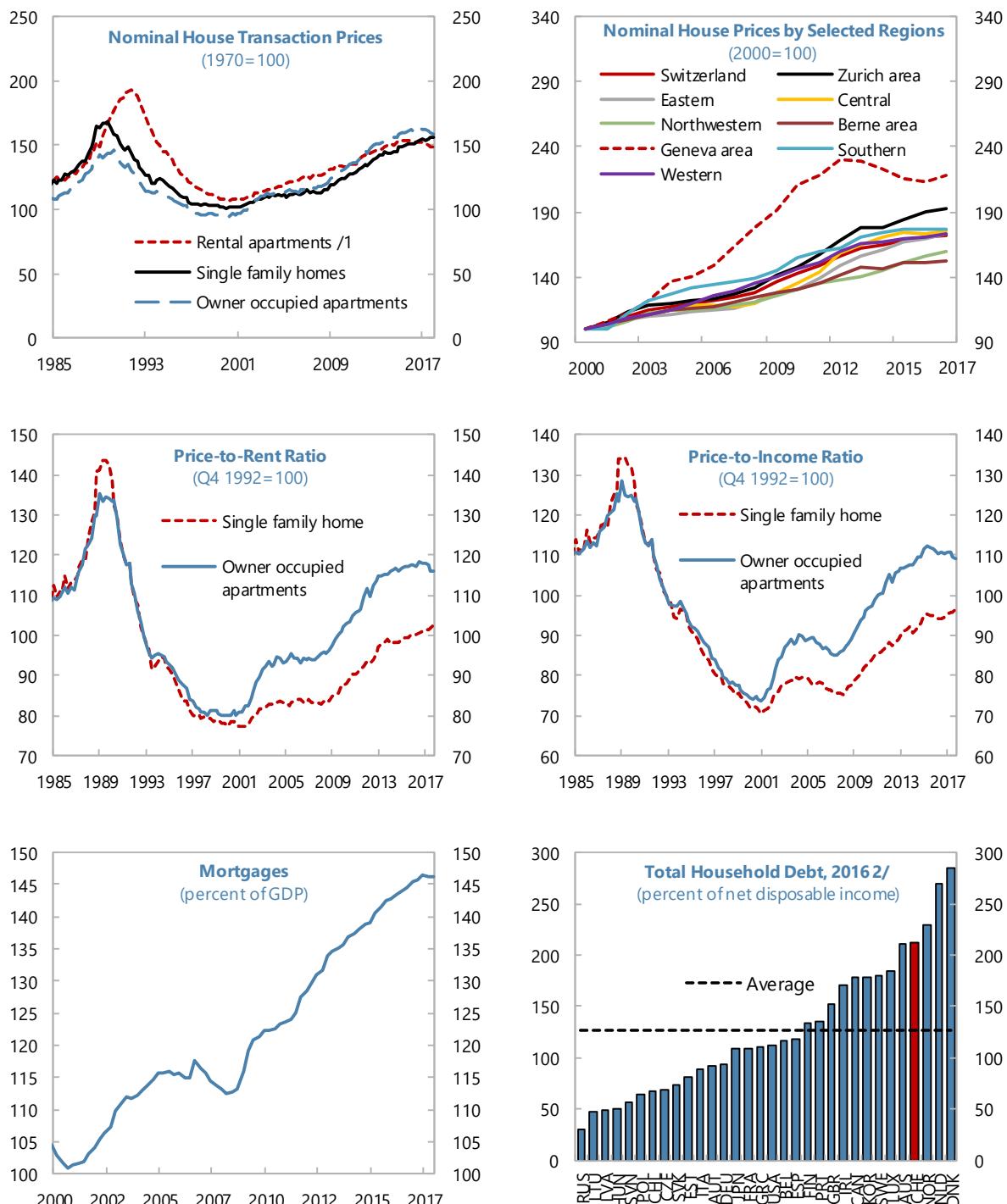
Figure 5. Switzerland: Indicators for Global Systemic Banks, 2006–17 1/

Sources: Thomson Reuters Datastream database; S&P Global Market Intelligence database; and IMF staff calculations.

1/ Switzerland numbers are for Credit Suisse and UBS. "Other" includes Citigroup, Deutsche Bank, HSBC, JP Morgan Chase, Barclays, BNP, Bank of America, New York Mellon, Goldman Sachs, Mitsubishi, Morgan Stanley, Royal Bank of Scotland, Bank of China, BBVA, BPCE, Crédit Agricole, ING, Mizuho, Nordea, Santander, Société Générale, Standard Chartered, State Street, Sumitomo, UniCredit, Wells Fargo, Commerzbank, and Lloyds.

Figure 6. Switzerland: External Accounts and Exchange Rates, 2000–2017

Sources: Swiss National Bank; World Development Indicators database; and Haver Analytics.

Figure 7. Switzerland: Housing Markets, 1985–2017

Sources: Haver Analytics; IMF Global House Price Index; OECD; State Secretariat for Economic Affairs; Swiss National Bank; and Wuest and Partner.

1/ Refers to rents in this segment.

2/ 2015 data for HUN, RUS and CHL.

Table 1. Switzerland: Selected Economic Indicators, 2016–23

	2016	2017	2018	2019	2020	2021	2022	2023
	Staff projections							
Real GDP (percent change)	1.4	1.1	2.3	2.0	1.9	1.7	1.7	1.7
Total domestic demand	0.4	0.3	1.5	1.5	1.5	1.4	1.4	1.3
Private consumption	1.5	1.2	1.5	1.3	1.5	1.5	1.5	1.5
Public consumption	1.6	1.0	1.5	1.0	1.0	1.0	1.0	1.0
Gross fixed investment	3.0	3.2	2.5	2.0	1.9	1.1	1.1	1.1
Inventory accumulation 1/	-1.4	-1.3	-0.4	0.0	0.0	0.0	0.0	0.0
Foreign balance 1/	1.1	0.8	1.1	0.7	0.6	0.5	0.5	0.5
Nominal GDP (billions of Swiss francs)	659.0	668.2	691.4	713.1	733.7	753.3	773.4	794.0
Savings and investment (percent of GDP)								
Gross national saving	32.5	33.5	33.9	33.4	33.5	33.5	32.8	32.5
Gross domestic investment	23.1	23.7	23.6	23.6	23.8	23.8	23.3	23.2
Current account balance	9.4	9.8	10.2	9.8	9.7	9.6	9.5	9.3
Prices and incomes (percent change)								
GDP deflator	-0.6	0.3	1.1	1.1	1.0	1.0	1.0	1.0
Consumer price index (period average)	-0.4	0.5	1.0	1.1	1.0	1.0	1.0	1.0
Consumer price index (end of period)	0.0	0.9	1.2	1.1	1.0	1.0	1.0	1.0
Nominal hourly earnings	0.7	0.7	1.1	1.1	1.0	1.0	1.0	1.0
Unit labor costs (total economy)	-0.2	1.0	0.3	0.3	0.4	0.6	0.5	0.6
Employment and slack measures								
Unemployment rate (in percent)	3.3	3.2	3.0	3.0	2.9	2.8	2.8	2.8
Output gap (in percent of potential)	-0.2	-0.6	0.1	0.6	0.9	0.0	1.1	1.2
Capacity utilization	81.0	81.6
Potential output growth	1.6	1.5	1.6	1.6	1.6	1.6	1.5	1.5
General government finances (percent of GDP)								
Revenue	33.4	33.4	33.4	33.4	33.4	33.4	33.4	33.4
Expenditure	33.0	33.0	32.8	33.0	33.1	33.1	33.1	33.1
Balance	0.4	0.4	0.6	0.4	0.4	0.3	0.3	0.3
Cyclically adjusted balance	0.4	0.6	0.3	0.3	0.3	0.3	0.3	0.3
Gross debt 2/	41.9	41.8	40.3	38.7	37.3	36.1	34.9	33.8
Monetary and credit (percent change, average)								
Broad money (M3)	3.0	3.6
Domestic credit, non-financial	3.1	2.5
Three-month SFr LIBOR	-0.7	-0.7
Yield on government bonds (7-year)	-0.6	-0.3
Exchange rates (levels)								
Swiss francs per U.S. dollar (annual average)	1.0	1.0
Swiss francs per euro (annual average)	1.1	1.1
Nominal effective rate (avg., 2000=100)	124.1	123.4
Real effective rate (avg., 2000=100) 3/	112.2	107.4

Sources: Haver Analytics; IMF's Information Notice System; Swiss National Bank; and IMF Staff estimates.

1/ Contribution to growth. Inventory accumulation also includes statistical discrepancies and net acquisitions of valuables.

2/ Reflects new GFSM 2001 methodology, which values debt at market prices. Calculated as the sum of Federal, Cantonal, Municipal and Social security gross debts.

3/ Based on relative consumer prices.

Table 2. Switzerland: Balance of Payments, 2016–23

	2016	2017	2018	2019	2020	2021	2022	2023
	Staff projections							
(In billions of Swiss francs, unless otherwise indicated)								
Current account	62	66	71	70	71	72	73	74
Goods balance	49	48	55	52	57	58	63	66
Exports	311	309	330	340	356	371	389	407
Imports	262	260	275	288	299	314	326	341
Service balance	19	19	14	23	22	24	25	26
Net primary income	4	9	11	5	5	5	7	6
Net secondary income	-10	-11	-10	-10	-13	-14	-22	-25
Private capital and financial account	77	39	60	51	57	56	58	58
Capital transfers	3	-13	-5	-9	-7	-8	-8	-8
Financial account	74	53	66	60	64	64	66	66
Net foreign direct investment	24	18	21	19	20	20	20	20
Net portfolio investment	19	36	28	32	30	31	30	30
Net financial derivatives	7	1	4	3	3	3	3	3
Net other investment	-53	-64	13	7	11	11	12	13
Change in reserves	77	61	0	0	0	0	0	0
Net errors and omissions	10	-29	0	0	0	0	0	0
(In percent of GDP, unless otherwise indicated)								
Current account	9.4	9.8	10.2	9.8	9.7	9.6	9.5	9.3
Goods balance	7.4	7.2	8.0	7.3	7.7	7.6	8.2	8.4
Exports	47.2	46.2	47.8	47.7	48.5	49.3	50.3	51.3
Imports	39.8	39.0	39.8	40.4	40.7	41.6	42.1	42.9
Service balance	2.9	2.8	2.1	3.2	3.0	3.1	3.3	3.3
Net primary income	0.7	1.4	1.6	0.7	0.7	0.7	0.9	0.8
Net secondary income	-1.5	-1.7	-1.5	-1.5	-1.7	-1.9	-2.9	-3.2
Private capital and financial account	11.7	5.9	8.7	7.2	7.8	7.5	7.5	7.3
Capital transfers	0.4	-1.9	-0.8	-1.3	-1.0	-1.1	-1.0	-1.0
Financial account	11.3	7.9	9.5	8.5	8.8	8.5	8.5	8.3
Net foreign direct investment	3.6	2.6	3.0	2.7	2.7	2.6	2.6	2.5
Net portfolio investment	3.0	5.4	4.0	4.5	4.0	4.1	3.9	3.8
Net financial derivatives	1.0	0.2	0.6	0.4	0.4	0.4	0.4	0.4
Net other investment	-8.0	-9.5	1.9	1.0	1.5	1.5	1.6	1.6
Change in reserves	11.7	9.2	0.0	0.0	0.0	0.0	0.0	0.0
Net errors and omissions	1.5	-4.4	0.0	0.0	0.0	0.0	0.0	0.0
Memorandum items:								
Net IIP (in percent of GDP)	118.8	126.9	121.5	123.0	125.4	127.9	129.7	131.5
Official reserves (billions of U.S. dollars, end-period)	644.3	762.2
Reserve cover (in months of imports)	21.9

Sources: Haver Analytics; Swiss National Bank; and IMF staff estimates.

Table 3. Switzerland: SNB Balance Sheet, 2010–17

	2010	2011	2012	2013	2014	2015	2016	2017
(Millions of Swiss francs; unless otherwise indicated)								
Assets								
Gold	43,988	49,380	50,772	35,565	39,630	35,467	39,400	42,494
Foreign currency reserves	203,810	257,504	432,209	443,275	510,062	593,234	696,104	790,125
IMF, international, and monetary assistance loans	6,038	8,057	7,332	6,834	6,664	6,486	5,903	5,577
Swiss franc repos	...	18,468
U.S. dollar repos	...	371
Swaps against Swiss francs
Money market, Swiss franc securities, other	16,119	12,300	9,121	4,709	4,845	4,965	5,095	5,110
Total assets	269,955	346,079	499,434	490,382	561,202	640,152	746,502	843,306
Liabilities								
Currency in circulation (banknotes)	51,498	55,729	61,801	65,766	67,596	72,882	78,084	81,639
Sight deposits	48,917	216,701	369,732	363,910	387,666	469,034	530,049	573,679
Repo, SNB bills and time liabilities	121,052	15,086
Foreign currency and other liabilities	5,897	5,441	9,825	12,682	19,635	37,183	53,841	50,821
Provisions and equity capital	42,591	53,123	58,075	48,023	86,305	61,053	84,527	137,168
Total liabilities	269,955	346,079	499,434	490,382	561,202	640,152	746,502	843,306
Memorandum items:								
Nominal GDP (billions of Swiss francs)	609	621	626	638	650	654	659	668
Balance sheet, percent of GDP	44.3	55.7	79.7	76.8	86.4	97.9	113.3	126.2
Banknotes, percent of total liabilities	19.1	16.1	12.4	13.4	12.0	11.4	10.5	9.7
Refinancing operations, percent of total assets	...	5.4
Provisions and equity capital, percent of total assets	15.8	15.3	11.6	9.8	15.4	9.5	11.3	16.3
Monetary base 1/	90,208	137,728	284,381	360,765	375,305	455,863	504,140	551,849

Sources: Swiss National Bank; and IMF staff estimates.

1/ Currency in circulation and sight deposits of domestic banks.

Table 4. Switzerland: General Government Finances, 2016–23

	2016	2017	2018	2019	2020	2021	2022	2023								
	Estimate		Staff projections													
(In billions of Swiss francs, unless otherwise specified)																
General government																
Revenue	220	223	231	238	245	252	258	265								
Expenditure	217	220	227	235	243	249	256	263								
Net lending/net borrowing	3	3	4	3	3	2	2	2								
Confederation (Federal government) 1/																
Revenue	72	73	75	77	80	82	84	86								
Expenditure	71	69	73	74	77	80	82	85								
Net lending/net borrowing	1	4	2	3	3	1	2	2								
Cantons																
Revenue	90	92	95	96	98	100	103	105								
Expenditure	89	91	94	96	97	99	103	105								
Net lending/net borrowing	1	1	1	1	1	1	0	0								
Communes/municipalities																
Revenue	47	48	49	49	50	51	52	54								
Expenditure	47	48	49	49	50	51	52	54								
Net lending/net borrowing	0	0	1	0	0	0	0	0								
Social security 2/																
Revenue	62	63	63	64	65	66	68	69								
Expenditure	62	62	63	63	65	66	67	69								
Net lending / net borrowing	1	1	1	1	1	1	1	1								
General government gross debt 3/																
Confederation (Federal government) 1/	276	280	279	276	274	272	270	268								
Cantons	131	127	123	120	118	117	116	114								
Communes/municipalities	83	84	85	86	86	86	86	86								
Social security 2/	64	65	66	66	66	66	66	66								
	3	4	5	5	5	4	3	2								
(In percent of GDP)																
General government operations																
Revenue	33.4	33.4	33.4	33.4	33.4	33.4	33.4	33.4								
Expenditure	33.0	33.0	32.8	33.0	33.1	33.1	33.1	33.1								
Net lending/net borrowing	0.4	0.4	0.6	0.4	0.4	0.3	0.3	0.3								
Confederation (Federal government) 1/	0.1	0.6	0.4	0.5	0.4	0.2	0.2	0.2								
Cantons	0.1	0.1	0.2	0.1	0.1	0.1	0.0	0.0								
Communes/municipalities	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0								
Social security	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1								
General government gross debt 4/																
Confederation (Federal government) 1/	41.9	41.8	40.3	38.7	37.3	36.1	34.9	33.8								
Cantons	19.8	19.0	17.8	16.8	16.1	15.5	15.0	14.4								
Communes/municipalities	12.6	12.6	12.3	12.0	11.7	11.4	11.1	10.8								
Social security 2/	9.6	9.7	9.5	9.2	8.9	8.7	8.5	8.3								
	0.5	0.6	0.7	0.8	0.6	0.5	0.4	0.3								
<i>Memorandum items:</i>																
Nominal GDP (billions of francs)	659	668	691	713	734	753	773	794								
Output gap (percent)	-0.2	-0.6	0.1	0.6	0.9	0.0	0.0	0.0								
General Government cyclically adjusted balance	0.4	0.6	0.3	0.3	0.3	0.3	0.3	0.3								

Sources: Federal Ministry of Finance; and IMF staff estimates.

1/ Includes the balance of the Confederation and extrabudgetary funds (Public Transport Fund, ETH, Infrastructure Fund, Federal Pension Fund).

2/ Includes old age, disability, survivors protection scheme as well unemployment and income loss insurance.

3/ Forecasted

Table 5. Switzerland: General Government Operations, 2008–17

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
(In billions of Swiss francs, unless otherwise specified)										
Revenue	194.2	192.8	197.0	203.1	203.9	208.8	210.9	219.1	220.1	223.2
Taxes	123.1	121.0	123.7	126.2	126.8	129.8	131.5	136.5	138.6	138.7
Taxes on income, profits, and capital gains	74.5	72.8	73.6	75.7	76.3	78.3	79.3	83.7	85.1	83.8
Taxes on goods and services	37.3	36.6	38.3	39.0	38.9	39.3	39.4	39.6	39.5	42.0
Taxes on property	9.7	9.9	10.0	9.8	9.9	10.4	10.9	11.2	11.8	11.1
Taxes on international trade and transactions	1.0	1.0	1.1	1.0	1.0	1.1	1.1	1.1	1.1	1.1
Social contributions	37.0	38.3	38.7	41.3	42.3	43.0	43.5	44.3	44.7	44.7
Grants	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3
Other revenue	33.9	33.4	34.5	35.4	34.7	35.7	35.6	38.1	36.5	39.4
Of which: property income	9.1	8.6	8.5	8.9	7.1	7.3	6.3	8.1	7.0	7.8
Expenditure	182.6	189.9	194.9	198.5	201.5	211.5	212.3	214.9	217.5	220.4
Expense	181.4	188.1	192.9	196.6	200.5	210.1	210.9	213.0	215.9	218.6
Compensation of employees	41.5	43.5	44.7	45.8	46.9	47.8	48.6	49.4	49.9	49.7
Purchases/use of goods and services	20.4	21.4	21.6	22.0	22.6	23.5	24.0	24.2	24.2	24.5
Interest expense	6.1	5.5	5.2	4.8	4.4	4.0	3.7	3.6	3.2	3.8
Social benefits	60.4	65.2	67.1	67.6	69.2	71.4	72.8	74.1	76.3	77.7
Expense n.e.c.	53.0	52.4	54.2	56.4	57.3	63.4	61.7	61.7	62.3	62.9
Net acquisition of nonfinancial assets	1.1	1.8	2.0	1.9	1.0	1.4	1.4	2.0	1.6	1.8
Net operating balance	12.7	4.8	4.2	6.5	3.4	-1.3	0.0	6.2	4.2	4.6
Net lending/borrowing	11.6	3.0	2.2	4.6	2.4	-2.7	-1.4	4.2	2.6	2.8
Net acquisition of financial assets	...	8.9	-18.4	11.8	21.2	-5.4	41.4	-23.7	21.3	25.4
Net incurrence of liabilities	...	6.0	-20.5	7.2	18.8	-2.6	42.8	-28.0	18.7	22.6
(In percent of GDP)										
Revenue	32.3	32.7	32.4	32.7	32.6	32.7	32.5	33.5	33.4	33.4
Taxes	20.5	20.5	20.3	20.3	20.2	20.3	20.2	20.9	21.0	20.8
Taxes on income, profits, and capital gains	12.4	12.4	12.1	12.2	12.2	12.3	12.2	12.8	12.9	12.5
Taxes on goods and services	6.2	6.2	6.3	6.3	6.2	6.2	6.1	6.1	6.0	6.3
Taxes on property	1.6	1.7	1.6	1.6	1.6	1.6	1.7	1.7	1.8	1.7
Taxes on international trade and transactions	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Social contributions	6.2	6.5	6.3	6.6	6.7	6.7	6.7	6.8	6.8	6.7
Other revenue	5.7	5.7	5.7	5.7	5.5	5.6	5.5	5.8	5.5	5.9
Expenditure	30.4	32.2	32.0	32.0	32.2	33.1	32.7	32.9	33.0	33.0
Expense	30.2	31.9	31.7	31.6	32.0	32.9	32.5	32.6	32.8	32.7
Compensation of employees	6.9	7.4	7.3	7.4	7.5	7.5	7.5	7.6	7.6	7.4
Purchases/use of goods and services	3.4	3.6	3.5	3.5	3.6	3.7	3.7	3.7	3.7	3.7
Interest expense	1.0	0.9	0.8	0.8	0.7	0.6	0.6	0.6	0.5	0.6
Social benefits	10.1	11.1	11.0	10.9	11.1	11.2	11.2	11.3	11.6	11.6
Expense n.e.c.	8.8	8.9	8.9	9.1	9.1	9.9	9.5	9.4	9.5	9.4
Net acquisition of nonfinancial assets	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.2	0.3
Net operating balance	2.1	0.8	0.7	1.0	0.5	-0.2	0.0	0.9	0.6	0.7
Net lending/borrowing	1.9	0.5	0.4	0.7	0.4	-0.4	-0.2	0.6	0.4	0.4
Net acquisition of financial assets	...	1.5	-3.0	1.9	3.4	-0.8	6.4	-3.6	3.2	3.8
Net incurrence of liabilities	...	1.0	-3.4	1.2	3.0	-0.4	6.6	-4.3	2.8	3.4

Source: Federal Ministry of Finance.

Table 6. Switzerland: Bank Soundness Indicators, 2010–17

	2010	2011	2012	2013	2014	2015	2016	2017:Q2
Capital adequacy								
Regulatory capital as percent of risk-weighted assets 1/	17.1	16.6	16.9	18.7	16.6	17.0	16.1	17.4
Regulatory Tier I capital as percent of risk-weighted assets 1/	15.4	15.4	15.7	17.8	16.1	16.6	15.7	17.0
Non-performing loans net of provisions as percent of tier I capital	6.0	5.4	5.0	4.5	3.7	3.8	3.9	3.0
Asset quality and exposure								
Non-performing loans as percent of gross loans	0.9	0.8	0.8	0.8	0.7	0.7	0.7	0.7
Sectoral distribution of bank credit to the private sector (percent)								
Households	68.3	68.8	68.4	68.0	68.6	69.5	69.4	69.4
Agriculture and food industry	1.3	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Industry and manufacturing	3.0	2.9	2.7	2.4	2.1	1.9	1.8	1.8
Construction	1.6	1.7	1.6	1.6	1.6	1.6	1.6	1.6
Retail	3.2	3.1	3.0	2.8	2.9	2.6	2.8	2.6
Hotels and restaurants / Hospitality sector	1.1	1.1	1.0	0.9	0.9	0.9	0.9	0.8
Transport and communications	0.9	0.7	0.8	0.8	0.8	0.8	0.8	0.8
Other financial activities	0.5	0.5	0.6	0.8	0.7	0.7	0.5	0.6
Insurance sector	0.6	0.4	0.6	0.6	0.6	0.4	0.6	0.7
Commercial real estate, IT, R&T	12.1	12.4	12.8	13.3	13.6	13.6	13.8	13.1
Public administration (excluding social security)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Education	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1
Healthcare and social services	1.1	1.1	1.2	1.3	1.3	1.4	1.4	1.4
Other collective and personal services	1.0	1.0	0.9	0.9	0.8	0.8	0.8	0.8
Other 2/	5.3	5.0	5.0	5.3	4.7	4.4	4.3	4.1
Earnings and profitability								
Gross profits as percent of average assets (ROAA)	0.3	0.5	0.1	0.3	0.1	0.2	0.3	0.3
Gross profits as percent of average equity capital (ROAE)	4.3	6.9	2.1	3.6	2.1	2.9	3.2	3.5
Net interest income as percent of gross income	27.9	31.1	31.6	32.3	34.5	34.1	34.5	31.6
Non-interest expenses as percent of gross income	73.3	72.0	73.7	71.6	69.4	72.9	76.6	69.6
Liquidity								
Liquid assets as percent of total assets 3/	10.3	15.5	17.0	12.5	11.9
Liquid assets as percent of short-term liabilities	23.3	33.9	35.4	47.4	47.4
High-quality liquid assets as percent of net cash outflows	140.3	152.7	144.7
Net long position in foreign exchange as percent of capital	-36.7	-56.9	-44.5	-38.8	-45.6	-72.8	-95.1	-82.6

Source: Swiss National Bank.

1/ Based on parent company consolidation. This consolidation basis equals the CBDI approach defined in FSI compilation guide plus foreign bank branches operating in Switzerland, and minus overseas deposit-taking subsidiaries.

2/ Mining and extraction, production and distribution of electricity, natural gas and water, financial intermediation, social security, ex-territorial bodies and organizations, other.

3/ In 2015, the indicator was redefined in line with Basel III regulations, leading to a series break. The 2015 value under the new definition is not yet available.

Annex I. Risk Assessment Matrix¹

Source of Risks	Relative Likelihood	Expected Impact	Policy Response
Global Risks			
Tighter global financial conditions. Against the backdrop of continued monetary policy normalization and increasingly stretched valuations across asset classes, an abrupt change in global risk appetite (e.g., due to higher-than-expected inflation in the U.S.) could lead to sudden, sharp increases in interest rates and associated tightening of financial conditions. Higher debt service and refinancing risks could stress leveraged firms, households, and vulnerable sovereigns, including through capital account pressures in some cases.	High	Medium The nonfinancial private sector, especially households, have a large debt stock (although financial assets of households are larger than liabilities). An abrupt increase in interest rates could stress leveraged borrowers. This may also reduce real estate prices, thereby lowering the value of collateral for mortgages (85 percent of bank loans). Higher interest payments and negative wealth effects could curtail consumption and investment.	A pre-emptive slowing of bank lending to the private sector (which is expanding by 5 percentage points of GDP per year) through macroprudential measures is needed to prevent a further increase in vulnerabilities. In the event of a growth slowdown, and given substantial fiscal space, a countercyclical discretionary fiscal stimulus would be warranted.
Further pressure on traditional bank business models. Legacy problems, and potential competition from non-banks curtail banks' profitability globally. Loss of confidence if such profitability challenges are not addressed could increase the risk of distress at one or more major banks with possible knock-on effects on the broader financial sector and for sovereign yields in vulnerable economies. Migration of activities outside of the traditional banking sector, including provision of financial services by fintech intermediaries, raises competitive pressures on traditional banks, making risk monitoring and mitigation more difficult.	Medium	Medium The banking sector accounts for a sizable share of Swiss GDP and employment. Pressure on traditional bank business models would adversely affect sector profitability unless banks actively adjust to the new business environment. Such pressures could arise from the need to comply with new international initiatives on AML/CFT or to curtail bank secrecy and tax avoidance schemes. Brexit could affect Swiss G-SIBs' EU funding models.	Strengthen the macroprudential framework and bank and insurance supervision to help curtail vulnerabilities. Ensure full compliance and effective implementation of relevant international tax-sharing and AML standards. Make preparations for alternative EU banking "gateways."
Cyber-attacks on interconnected financial systems and broader private and public institutions that trigger systemic financial instability or widely disrupt socio-economic activities.	Medium	Medium Cyber-attacks would disrupt financial operations and encourage the adoption of substitute forms of financial intermediation, including fintech.	Ensure adequate cyber-security defenses in vital infrastructure (finance, energy, telecommunications, transportation). Develop strategies to limit financial stability risks that could arise in the context of fintech.

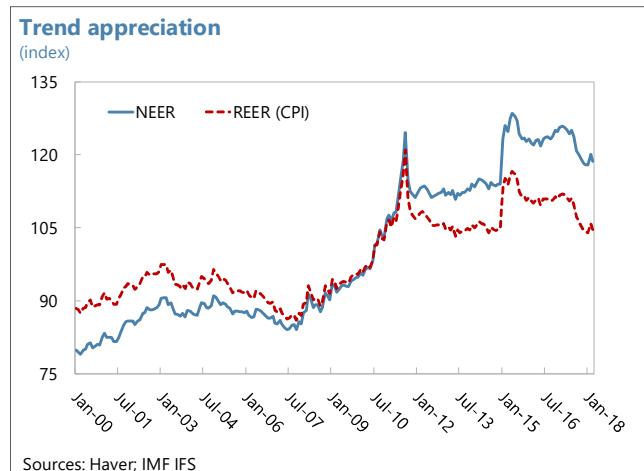
¹ The Risk Assessment Matrix (RAM) shows events that could materially alter the baseline path (the scenario most likely to materialize in the view of IMF staff). The relative likelihood is the staff's subjective assessment of the risks surrounding the baseline ("low" is meant to indicate a probability below 10 percent, "medium" a probability between 10 and 30 percent, and "high" a probability between 30 and 50 percent). The RAM reflects staff views on the source of risks and overall level of concern as of the time of discussions with the authorities. Non-mutually exclusive risks may interact and materialize jointly.

Source of Risks	Relative Likelihood	Expected Impact	Policy Response
Global Risks			
Policy uncertainty. Two-sided risks to U.S. growth with uncertainties about the positive short-term impact of the tax bill on growth and the extent of potential medium-term adjustment to offset its fiscal costs; uncertainty associated with negotiating post-Brexit arrangements and NAFTA and associated market fragmentation risks; and evolving political processes, including elections in several large economies, weigh on the whole on global growth.	Medium	Medium	Continue to work with international partners to secure the benefits of economic integration and cooperation across Europe and internationally.
Structurally weak growth in key advanced economies. Low productivity growth (U.S., euro area and Japan), high debt, and failure to fully address crisis legacies by undertaking structural reforms amidst persistently low inflation (euro area and Japan) undermine medium-term growth.	High	Medium	Improve domestic productivity to increase resilience and competitiveness. Allow full operation of the structural-balance fiscal rule and, if the downturn is sustained, allow a discretionary fiscal stimulus. Some room for a modest decrease in the policy interest rate may also exist.
Country-Specific Risks			
Resumption of safe haven inflows in response to renewed global risk-off sentiment. The Swiss franc would appreciate.	Medium	High	Use targeted foreign exchange purchases to prevent a sharp appreciation of the Swiss franc. Allow full operation of the structural-balance fiscal rule, but allow a temporary discretionary fiscal stimulus if the downturn is deep and/or sustained.
Political events that result in a reversal of goods, labor, and financial integration with the EU. Uncertainty regarding long-term Swiss-EU relations could affect cross-border flows.	Low	High	Seek to limit economic fallout by preserving efficient flows of goods, labor and financial services with the EU.
Delay in adopting an internationally-compliant CIT or approval of the "sovereign money" initiative.	Low	High	Use the "exceptional" circumstances clause in the fiscal rule to inject a discretionary stimulus.

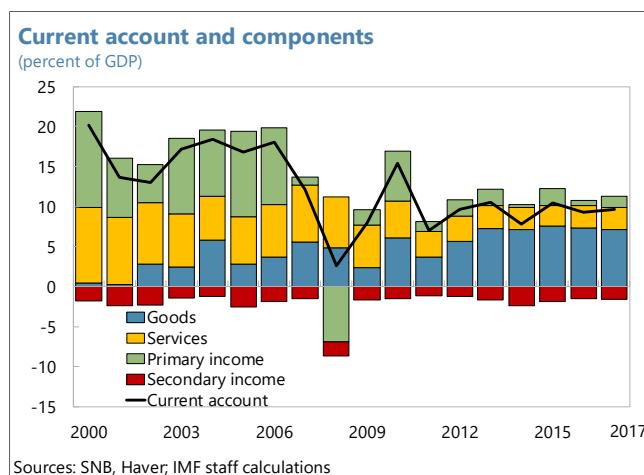
Annex II. External Sector: Developments and Assessment

A. External Sector Developments

1. The REER has experienced considerable volatility since the onset of the GFC. The Swiss franc is considered a safe haven, and tends to appreciate during episodes of global and regional risk aversion. A sharp appreciation in 2011 prompted the adoption of a floor of the franc against the euro. Removal of the floor in early-2015 coincided with a further sharp appreciation, and the SNB responded by adopting a negative policy interest rate and purchasing foreign currency. Since mid-2017, the Swiss franc has depreciated in nominal and real effective terms, and in Spring 2018, the REER had returned to the level that prevailed during the exchange rate floor and was around 11 percent above the level in 2000.

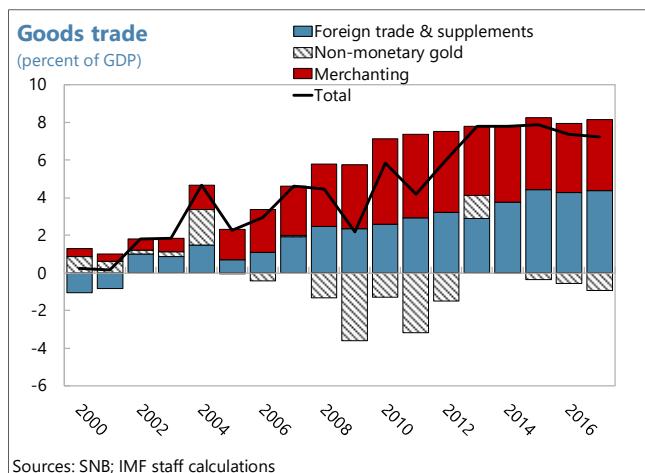


2. The current account surplus has declined since the global financial crisis, but remains large and relatively stable. Over the past decade, the Swiss current account surplus has averaged around 10 percent of GDP. However, the composition has changed. The primary income balance has fallen, reflecting a decline in investment income due lower income from FDI and lower interest rates. The surplus on services trade has also decreased on reduced exports of financial and insurance services due to the retrenchment of cross-border banking since the global financial crisis. These declines have been partly offset by an increase in the surplus on trade in goods, largely owing to the merchanting and pharmaceutical sectors.



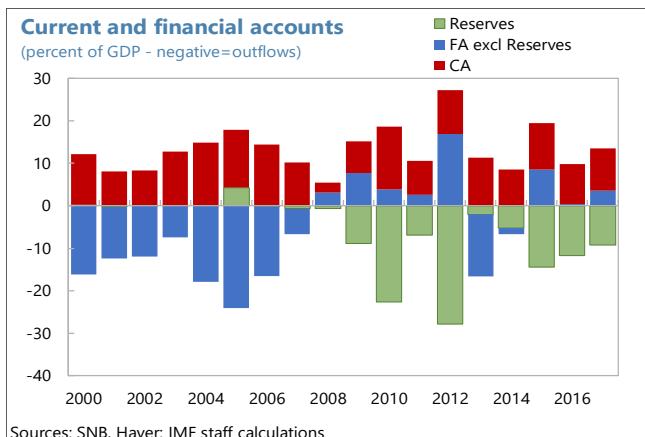
3. The goods trade surplus is now the largest component of the current account.

The contribution of merchanting and chemicals (pharmaceuticals) have both risen over the past decade, with merchanting contributing 4 percentage points and pharmaceuticals around 10 percentage points to the current account, with the total of other sectors running a deficit. Net trade in nonmonetary gold, reflecting processing of imports for re-export, is generally modest, but saw large net outflows following the onset of the GFC.



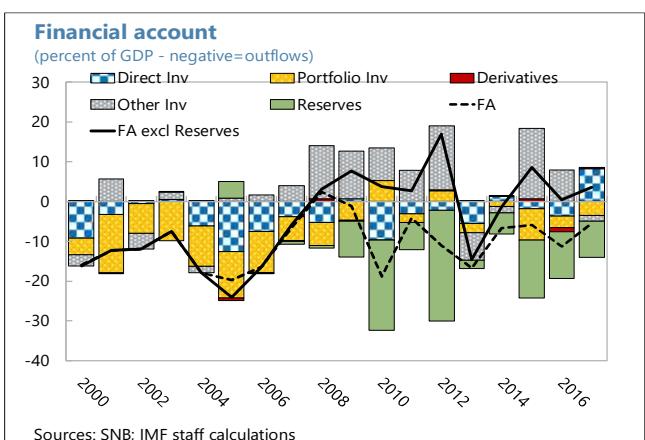
4. Since the crisis, intervention by the SNB has replaced private sector financial outflows.

Before the crisis, private sector financial net outflows broadly counterbalanced the current account surplus, neutralizing the effect on the exchange rate. Since then, private net outflows have dried up, and there were inflows in several years. In addition to the change in direction, the composition of private financial flows has also shifted, with fewer related to FDI and portfolio investment, and more "other investment" flows that include currency and deposits. To mitigate the resulting appreciation pressure, the SNB accumulated foreign reserves. From around 15 percent of GDP in 2007, foreign reserves had increased substantially to around 120 percent of GDP at end 2017.



5. Switzerland's NIIP has remained relatively stable, but gross positions have risen strongly.

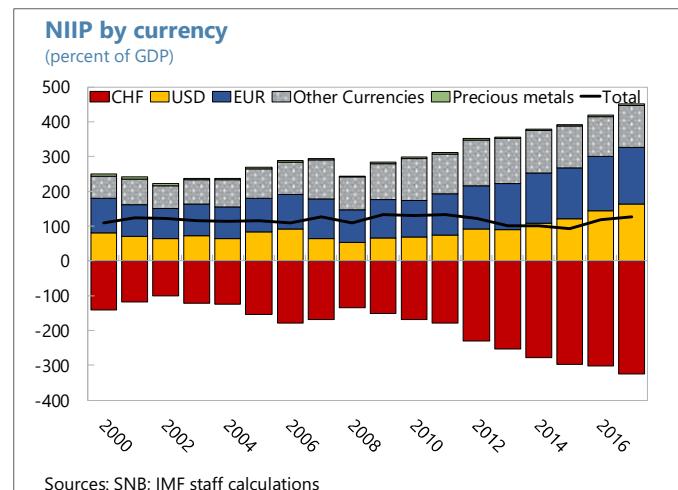
The NIIP reached a positive 127 percent of GDP at end 2017, after fluctuating within a relatively narrow range. However, gross foreign assets and liabilities have increased, reaching 714 and 587 percent of GDP, respectively. Gross international liabilities are primarily denominated in franc, while gross foreign assets are denominated in foreign currencies. By



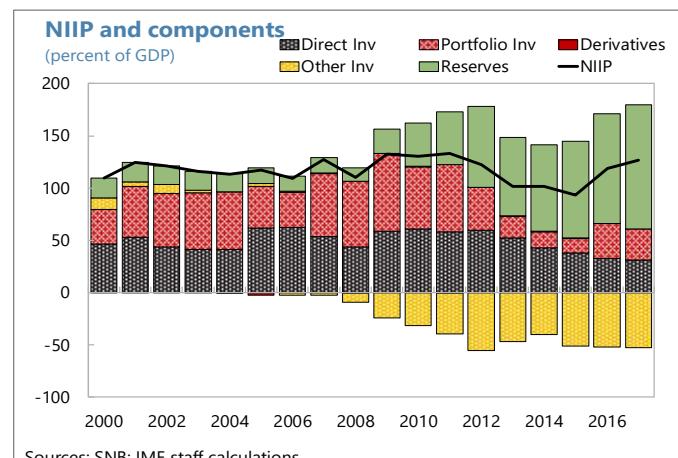
type of investment, the dominant position of FDI and portfolio investment assets in total NIIP has been replaced by international reserves. "Other investment" liabilities have risen since the GFC.

6. The NIIP has not increased in line with the cumulative current account surplus.

The NIIP is determined by financial transactions (the corollary of the current account surplus), valuation changes on existing foreign assets and liabilities, and statistical issues. Cumulative current account surpluses since 2000 are much larger than the change in the NIIP over this period. Part of this deviation is explained by valuation losses. Given the large currency exposures in the NIIP, appreciation of the franc in recent years has reduced the franc-equivalent of foreign assets. According to the SNB, valuation losses during 2011–16 amounted to CHF200 billion, of which half was due to the exchange rate. Depreciation of the franc and higher prices of foreign assets resulted in valuation gains in 2017.



Sources: SNB; IMF staff calculations



Sources: SNB; IMF staff calculations

B. External Sector Assessment

7. In 2017, Switzerland's CAS increased and the REER depreciated. The CAS widened to 9.8 percent of GDP in 2017 from 9.4 percent of GDP the previous year. In year-average terms, the CPI-based REER decreased by 2 percent in 2017, and as of April 2018, it had weakened a further 4 percent compared with the 2017 average.

Current Account Approach

8. According to the Fund's External Balance Assessment (EBA) current account model, Switzerland's estimated norm for 2017 was 6.1 percent of GDP. This reflects mainly the contribution of demographics (life expectancy at prime age, interacted with future old-age dependency ratio) NFA, and per capita GDP. The total gap between the cyclically-adjusted current account and the norm was 3.5 percent of GDP, with a contribution from policy deviations in Switzerland and the rest of the world of minus 0.5 percent of GDP.

9. Two Switzerland-specific factors are not appropriately treated in the current account, leading to some overstatement:¹

- Retained earnings on portfolio equity investment.***

The bias arises because foreigners have larger holdings of portfolio equity in Swiss-registered companies than Swiss residents have in foreign-listed companies. This reflects the large market value of the Swiss stock exchange, and the substantial foreign portfolio investment in these companies.² When these Swiss companies choose to reinvest their earnings (rather than distributing them as dividends) the corresponding saving is attributed to Switzerland, notwithstanding that the ultimate beneficiaries include foreign shareholders.³ The large foreign ownership of Swiss companies through portfolio investment therefore overstates the current account surplus. Estimates of the size of this bias can be obtained from portfolio equity stocks in the NIIP and financial market data. Following Fischer and others (2018), the methodology assumes that the dividend payout ratio for cross-border holdings of portfolio equity for a given country is the same as the dividend payout ratio on portfolio equity for that country as a whole.⁴ Three different approaches are considered, to take account of data limitations and uncertainties about some key assumptions.⁵ EBA estimates of the portfolio equity retained earnings bias show that the 5-year average (2012–16) for Switzerland was around 1 percent of GDP, but with some degree of uncertainty.

Switzerland--2018 External Balance Assessment (for the year 2017) percent of GDP		
a	Current Account (actual)	9.8
b	Cyclical contributions	0.2
c=a-b	Current Account (cyclically adjusted)	9.6
d	EBA current account norm	6.1
e=c-d	Total gap	3.5
	<i>of which</i>	
	policy gap contribution	-0.5
	unexplained residual	4.0
f	Adjustments for measurement issues	2.7
	<i>of which</i>	
	valuation losses due to inflation	1.8
	retained earnings on portfolio equity	1.0
g=e-f	Remaining current account gap	0.8

*Either both cyc-adj or neither (best to use neither)

¹ In both instances, the NIIP is correctly measured. These CA adjustments correct for conceptual biases in BPM, and narrow somewhat the gap between cumulative CASs and the change in the NIIP.

² Jordan, Thomas, "High Swiss Current Account Surplus: Consequences for SNB Monetary Policy?," speech at the University of Basel, Faculty of Business and Economics, Basel, November 23, 2017.

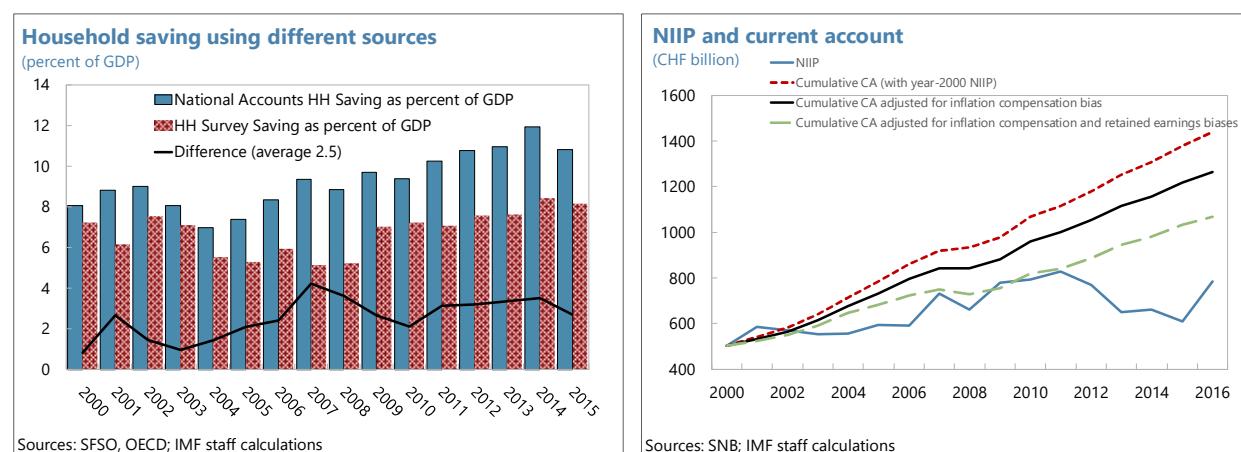
³ Retained earnings are that part of profit that is not distributed as dividends. Portfolio equity investment is defined as ownership of less than 10 percent of total equity, whereas FDI is defined as ownership of at least 10 percent. The BPM treatment of retained earnings on portfolio equity investment differs from that of FDI. In the latter case, retained earnings are recorded in the CA as if they were paid out, with an offsetting (as if) FDI inflow in the financial account. For portfolio equity investment, no entries are recorded for retained earnings in either the CA or the financial account.

⁴ See Fischer and others (2018), "Financial Centers and the Retained Earnings Bias," unpublished manuscript, Swiss National Bank.

⁵ The approaches are: (i) the flow approach, which relies on recorded income streams on foreign portfolio equity positions to proxy distributed dividends, (ii) the stock approach, which relies on gross portfolio equity investment positions and stock market data; and (iii) the hybrid approach, which relies on international portfolio equity income flows to capture distributed dividends.

- **Inflation compensation on fixed-income securities.** Interest received or paid on fixed income instruments includes compensation for valuation changes due to expected inflation.⁶ However, BPM6 does not differentiate between the real return and compensation for valuation changes, treating both as income or payment. The extent of bias depends on the level of inflation (not merely cross-country inflation differences). For Switzerland, where residents receive income on their large holdings of fixed-income foreign assets, the extent of bias has nonetheless declined gradually because inflation in countries whose fixed-income assets are held by Swiss residents is also decreasing, despite the growing stock of such foreign assets. This inflation distortion is estimated using data on inflation rates and the currency composition of international debt positions. EBA estimates of the inflation-compensation bias, using data from country authorities and expected inflation approximated by either realized inflation or the 5-year-ahead consensus inflation forecast, show that the 5-year average (2012–16) for Switzerland was around 1.8 percent of GDP, but with some degree of uncertainty.

10. Together, these two adjustments account for around 2.7 percentage points of GDP, reducing the remaining CA gap to 0.8 percent of GDP, within the [-1, 1] interval consistent with broadly in line with fundamentals. However, the uncertainty band is a relatively wide ±2 percentage points. Adjusting the current account for these two measurement biases reduces the gap between the cumulative current account and the change in the NIIP. Because household saving is derived as a residual, these biases tend to overstate the household saving rate. This is suggested by the systematic excess (2.5 percent of GDP on average) of household saving as reported in the national accounts and that obtained from the household survey (see chart). Moreover, adjusting the current account for both these conceptual biases significantly narrows the gap between the cumulative current account and the change in the NIIP.



⁶ As per the Fisher equation, the nominal interest rate is equal to the real interest rate plus expected inflation. Equivalently, in an international context, and assuming uncovered interest parity holds, a country with higher expected inflation can be expected to see its currency depreciate relative to others', thereby eroding the value of assets denominated in its currency.

REER Approaches

11. The EBA REER index and level models suggest Switzerland's REER was 15–23 percent overvalued on average during 2017. Policy gaps account for little of the total gaps. The estimated REERs, which exhibit an increasing trend, reflect mainly the influence of per capita income and net foreign assets. The empirical finding of a large REER gap likely reflects the mean-reversion properties of the empirical model in the context of prior rapid appreciation episodes. However, due to measurement issues, these results may not fully capture the secular improvement in productivity, especially in knowledge-based sectors. Based on the CA gap, the REER gap is assessed to be in the range of [-5.3, +2.3] percent on average in 2017. The REER has depreciated somewhat during early 2018.

Overall Assessment

12. Switzerland's external position was broadly consistent with medium-term fundamentals and desirable policies in 2017, although this assessment is subject to especially-high uncertainty. REER overvaluation that followed the exit from the exchange rate floor in 2015 had been unwound by 2017. Were the recent real depreciation to continue, future assessments could be affected.

Table 1. Switzerland: External Sector Assessment

	Switzerland	Overall Assessment
Foreign asset and liability position and trajectory	<p>Background. Switzerland is a financial center with a positive net international investment position (NIIP) of 127 percent of GDP and gross foreign asset and liability positions of 714 and 587 percent of GDP, respectively, at end-2017. The NIIP-to-GDP ratio is about unchanged from its peak in 2011 at 133 percent, having subsequently declined steadily—despite CA surpluses averaging about 10 percent of GDP—reflecting mainly persistent negative valuation effects, but recovered by around 35 percentage points from 2015 to 2017 partly on account of valuation gains.^{1/} Valuation changes reflect fluctuations in exchange rates and prices of securities and precious metals that interact with mismatches between assets and liabilities in terms of currencies and financial instruments.^{2/}</p> <p>Assessment. Switzerland's large gross liability position and the volatility of financial flows present some risk, but these are mitigated by its large gross asset position and the fact that most external liabilities are denominated in Swiss francs. Nonetheless, given the large gross positions and compositional mismatch between assets and liabilities, relatively modest changes in exchange rates and asset prices can have a material effect on the NIIP.</p>	<p>Overall Assessment:</p> <p>Switzerland's external position was broadly consistent with medium-term fundamentals and desirable policies in 2017, although this assessment is subject to especially-high uncertainty. REER overvaluation following the exit from the floor in 2015 had been unwound by 2017. Were the recent real depreciation to continue, future assessments could be affected.</p>
Current account	<p>Background. Switzerland has run large CA surpluses, averaging about 10 percent of GDP since 2006. The composition of the CA has changed considerably during this period. While in earlier years the largest component was the income balance, in recent years this has been replaced to a large extent by the trade balance. Within the latter, goods (which include merchanting) have been responsible for an increasing share of the surplus, particularly the chemical and pharmaceutical categories. The CA surplus increased to 9.8 percent of GDP in 2017 from 9.4 percent of GDP in 2016.</p> <p>Assessment. Based on a cyclically-adjusted CA surplus of 9.6 percent of GDP and an EBA CA norm of 6.1 percent of GDP (which partly reflects the demand for saving by the large share of prime-age savers), the total gap including the unexplained residual equaled to 3.5 percentage points of GDP in 2017, of which the policy gap contributed -0.5 percentage points (mainly due to excessive private sector credit). Some Switzerland-specific factors not appropriately treated in the measured underlying CA lower the CA gap: (i) inclusion of retained earnings on portfolio equity investment and (ii) compensation for valuation losses on fixed income securities arising for inflation that is recorded as income.^{3/} After accounting for these factors, staff estimates a remaining CA gap of about 0.8 percent of GDP (with a range of ±2 percentage points).^{4/}</p>	<p>Potential Policy Responses:</p> <p>Macroeconomic policies should be geared toward ensuring balanced contributions to GDP growth from domestic and external demand. This objective requires moving to—and maintaining—a structurally-neutral fiscal stance, which would also ease the burden on monetary policy that faces operational limits during periods of economic weakness or safe-haven appreciation pressures. In addition, monetary policy should continue to accommodate a modest secular trend real appreciation via timely adjustment of the policy interest rate to keep inflation within target. Foreign currency intervention should be reserved for addressing large exchange market pressures that would otherwise cause temporary volatility in inflation and output. In addition, reforming the corporate income tax would encourage investment by SMEs, thereby reducing net saving.</p>
Real exchange rate	<p>Background. The CPI-based REER appreciated by 25 percent during 2007–17, including two episodes of rapid appreciation in response to safe-haven inflows. The first spike occurred in July 2011, and led the SNB to establish a floor of 1.20 for the CHF/EUR exchange rate in September 2011. After appreciating sharply following the exit from the floor on January 15, 2015, the REER moderated, initially on account of a partial unwinding of the overshooting of the nominal effective exchange rate and, subsequently, on lower inflation in Switzerland than in its trading partners. The average REER for 2017 weakened by 2 percent relative to the 2016 average, and as of March 2018, it had weakened a further 4 percent (compared with the 2017 average).</p> <p>Assessment. The EBA REER index and level models suggest the average REER in 2017 was 15–23 percent overvalued, with policy gaps accounting for a modest amount of the total gap. To a large extent, this finding reflects the “reversion to trend” properties of the empirical model in the context of the prior rapid appreciation episodes. However, due to measurement issues, these results may not fully capture the secular improvement in productivity, especially in knowledge-based sectors. Based on the CA gap, staff assesses the REER gap to have been in the range of [-5.3, +2.3] percent in 2017.</p>	

Table 1. Switzerland: External Sector Assessment (concluded)

	Switzerland	Overall Assessment
Capital and financial accounts: flows and policy measures	<p>Background. In recent years, Switzerland has experienced large inflows in the form of currency and deposits, in part due to its status as a safe haven. Since 2007, these cumulative net inflows amounted to about 75 percent of GDP. To reduce the attractiveness of these inflows, since January 15, 2015 banks' placements at the SNB (above a certain threshold) have been subject to a negative interest rate of 0.75 percent. These inflows stopped during 2017. There are no restrictions on financial flows.</p> <p>Assessment. Financial flows are large and volatile, reflecting Switzerland's status as a financial center and a safe haven, with inflows tending to accelerate during periods of heightened global and regional uncertainty.</p>	
Foreign exchange intervention and reserves level	<p>Background. Foreign exchange reserves amounted to USD811 bn (120 percent of GDP) at end-2017, up USD 132 bn (including valuation changes) since end-2016, with the bulk of the increase taking place in first half of 2017. About 75 percent was accumulated during 2009–15, including to defend the previous exchange rate floor. Since exiting the floor, the SNB has intervened periodically, purchasing sizable volumes in response to large appreciation pressures from safe-haven surges, as well as more frequently but in smaller amounts. Purchases ceased in mid-2017.</p> <p>Assessment. Reserves are large relative to GDP but more moderate when compared with short-term foreign liabilities. The high level of reserves reflects monetary policy operations aimed at avoiding persistent undershooting of inflation (which averaged -0.3 percent during 2012–17) as a result of inflow surges, given the limited scope for significant further easing via other monetary policy tools. In particular, the supply of domestic assets available for purchase is very limited, and the interest rate on banks' deposits at the SNB is -0.75 percent, which is the lowest in the world. Past interventions also helped to avoid potential exchange rate overvaluation.</p>	
Technical Background Notes	<p>1/ Other stock-flow adjustments include changes in statistical sources, such as changes in the number of entities surveyed and items covered, although their quantitative importance is not known.</p> <p>2/ As a result, an appreciation (depreciation) of the Swiss franc has a negative (positive) effect on the NIIP, while a symmetric percentage increase in share prices in Switzerland and abroad would reduce the NIIP.</p> <p>3/ The underlying CA is adjusted for: (i) retained earnings on portfolio equity investment that are not recorded in the income balance of the CA under BPM6; and (ii) the recording of nominal interest on fixed income securities under the BPM framework, which compensates for expected valuation losses (due to inflation and/or nominal exchange rate movements), even though this stream compensates for the (anticipated) erosion in the real value of debt assets and liabilities. Adjusting for both of these effects, and taking into account the lagged NFA contribution to the norm, the underlying CA would need to be reduced by about 2½ percent of GDP.</p> <p>4/ The CA gap range reflects the uncertainty inherent in the assessment.</p>	

Annex III. Public Sector Debt Sustainability Analysis¹

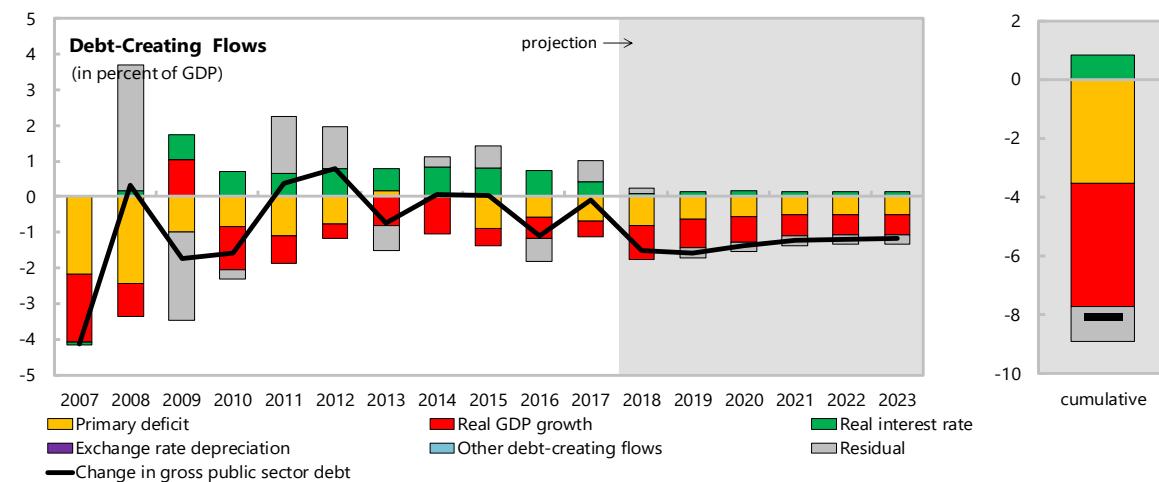
- 1. Summary:** Public debt sustainability risks remain contained due to the low stock of public debt and conservative spending, underpinned by conservative implementation of fiscal rules. Switzerland has substantial fiscal space, both in economic terms and within the debt brake rule. Public finances have run small structural surpluses leading to declining general government gross debt. However, prospective aging of the population will weigh on Switzerland's future potential output and fiscal situation. For most indicators on fiscal space Switzerland remains below benchmark levels, except for long-term adjustment needs to address the cost of aging. Switzerland's debt reduction has been anchored on its fiscal rule.
- 2. Baseline scenario:** The key assumptions underlying the baseline scenario are a gradual but steady recovery of economic growth and the continued adherence to federal and sub-federal fiscal rules. Under the baseline scenario, public debt is projected to decline from 41.9 percent of GDP in 2016 to below 34 percent of GDP in 2023. Gross financing needs are expected to decline from 2.6 percent of GDP in 2016 to around 1.7 percent of GDP during the medium term.
- 3. Stress tests:** The main risk to debt dynamics is a negative growth shock. Other risks such as an adverse interest rate shock or a shock to financing needs affect the public debt trajectory only to a minor extent.
 - **Real GDP growth shock.** Real GDP growth rates are assumed to be one standard deviation (1.4 percent) below the baseline during 2019–20. Under this scenario, the debt-to-GDP ratio rises to 40.4 percent in 2020 (about 3 percentage points higher than the baseline).
 - **Primary balance shock.** The primary balance in 2019–20 is hit by a negative shock of 0.4 percent of GDP. This shock results in a debt-to-GDP ratio that is about 0.8 percentage point above the baseline during 2020–23.
 - **Real interest rate shock.** The nominal interest rate increases by 200 basis points during 2019–23. The debt-to-GDP ratio becomes slightly higher than the baseline but continues declining.
 - **Real exchange rate shock.** This scenario assumes that the nominal CHF/USD exchange rate increases by 9 percent in 2019 relative to its 2016 level. As with other non-growth-related shocks, the impact of this shock on the trajectory of public debt is minor.
 - **Combined shock.** A simultaneous combination of the previous three shocks would result in debt-to-GDP ratio that approached 40.4 percent in 2020 (approximately 3 percentage points higher than the baseline). However, after 2020, the debt would start declining on a trajectory that is parallel to the one under the baseline scenario.

¹ General government includes the federal government, cantonal governments, municipal governments, and the social security fund.

Figure 1. Switzerland Public Sector Debt Sustainability Analysis (DSA)—Baseline Scenario
 (In percent of GDP, unless otherwise indicated)

	Debt, Economic and Market Indicators ^{1/}									As of May 02, 2018		
	Actual			Projections						Sovereign Spreads		
	2007-2015 ^{2/}	2016	2017	2018	2019	2020	2021	2022	2023	EMBIG (bp) ^{3/}		
Nominal gross public debt	43.7	41.9	41.8	40.3	38.7	37.3	36.1	34.9	33.8	-44		
Public gross financing needs	1.8	2.6	2.6	2.2	2.2	1.9	1.8	1.7	1.7	5Y CDS (bp)	11	
Real GDP growth (in percent)	1.7	1.4	1.1	2.3	2.0	1.9	1.7	1.6	1.7	Ratings		
Inflation (GDP deflator, in percent)	0.5	-0.6	0.3	1.1	1.1	1.0	1.0	1.0	1.0	Moody's	Aaa	Aaa
Nominal GDP growth (in percent)	2.2	0.8	1.4	3.5	3.1	2.9	2.7	2.7	2.7	S&Ps	AAA	AAA
Effective interest rate (in percent) ^{4/}	1.8	1.1	1.4	1.4	1.5	1.4	1.4	1.4	1.5	Fitch	AAA	AAA

	Contribution to Changes in Public Debt									cumulative	debt-stabilizing
	2007-2015	2016	2017	2018	2019	2020	2021	2022	2023		
Change in gross public sector debt	-0.7	-1.1	-0.1	-1.5	-1.6	-1.4	-1.2	-1.2	-1.2	-8.1	primary
Identified debt-creating flows	-1.2	-0.4	-0.7	-1.7	-1.3	-1.1	-1.0	-0.9	-0.9	-6.9	balance ^{5/}
Primary deficit	-1.0	-0.6	-0.7	-0.8	-0.6	-0.6	-0.5	-0.5	-0.5	-3.5	
Primary (noninterest) revenue and gr ^{6/}	32.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.2	198.8	
Primary (noninterest) expenditure	31.1	32.5	32.4	32.3	32.5	32.6	32.6	32.6	32.6	195.3	
Automatic debt dynamics ^{5/}	-0.2	0.1	0.0	-0.8	-0.7	-0.6	-0.5	-0.4	-0.4	-3.4	
Interest rate/growth differential ^{6/}	-0.2	0.1	0.0	-0.8	-0.7	-0.6	-0.5	-0.4	-0.4	-3.4	
Of which: real interest rate	0.6	0.7	0.4	0.1	0.1	0.2	0.1	0.1	0.2	0.8	
Of which: real GDP growth	-0.7	-0.6	-0.4	-0.9	-0.8	-0.7	-0.6	-0.6	-0.6	-4.2	
Exchange rate depreciation ^{7/}	0.0	0.0	0.0	
Other identified debt-creating flows	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
0 (negative)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Contingent liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Please specify (2) (e.g., ESM and Eurozone)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Residual, including asset changes ^{8/}	0.4	-0.7	0.6	0.1	-0.3	-0.3	-0.3	-0.3	-0.3	-1.2	



Source: IMF staff.

1/ Public sector is defined as general government.

2/ Based on available data.

3/ Long-term bond spread over German bonds.

4/ Defined as interest payments divided by debt stock (excluding guarantees) at the end of previous year.

5/ Derived as $[(r - \pi(1+g) - g + ae(1+r))/(1+g+\pi+gr)]$ times previous period debt ratio, with r = interest rate; π = growth rate of GDP deflator; g = real GDP growth rate; a = share of foreign-currency denominated debt; and e = nominal exchange rate depreciation (measured by increase in local currency value of U.S. dollar).

6/ The real interest rate contribution is derived from the numerator in footnote 5 as $r - \pi(1+g)$ and the real growth contribution as $-g$.

7/ The exchange rate contribution is derived from the numerator in footnote 5 as $ae(1+r)$.

8/ Includes asset changes and interest revenues (if any). For projections, includes exchange rate changes during the projection period.

9/ Assumes that key variables (real GDP growth, real interest rate, and other identified debt-creating flows) remain at the level of the last projection year.

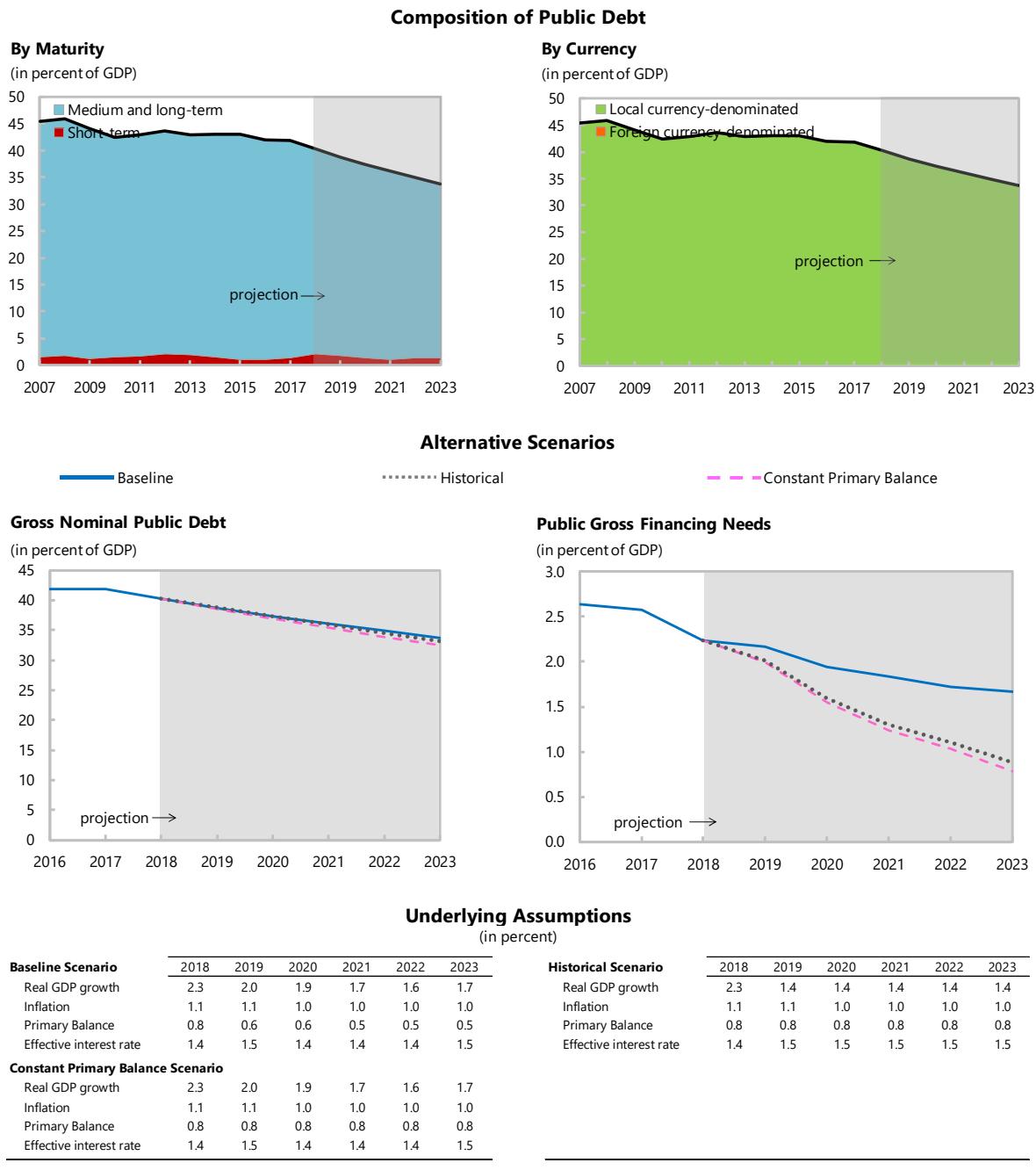
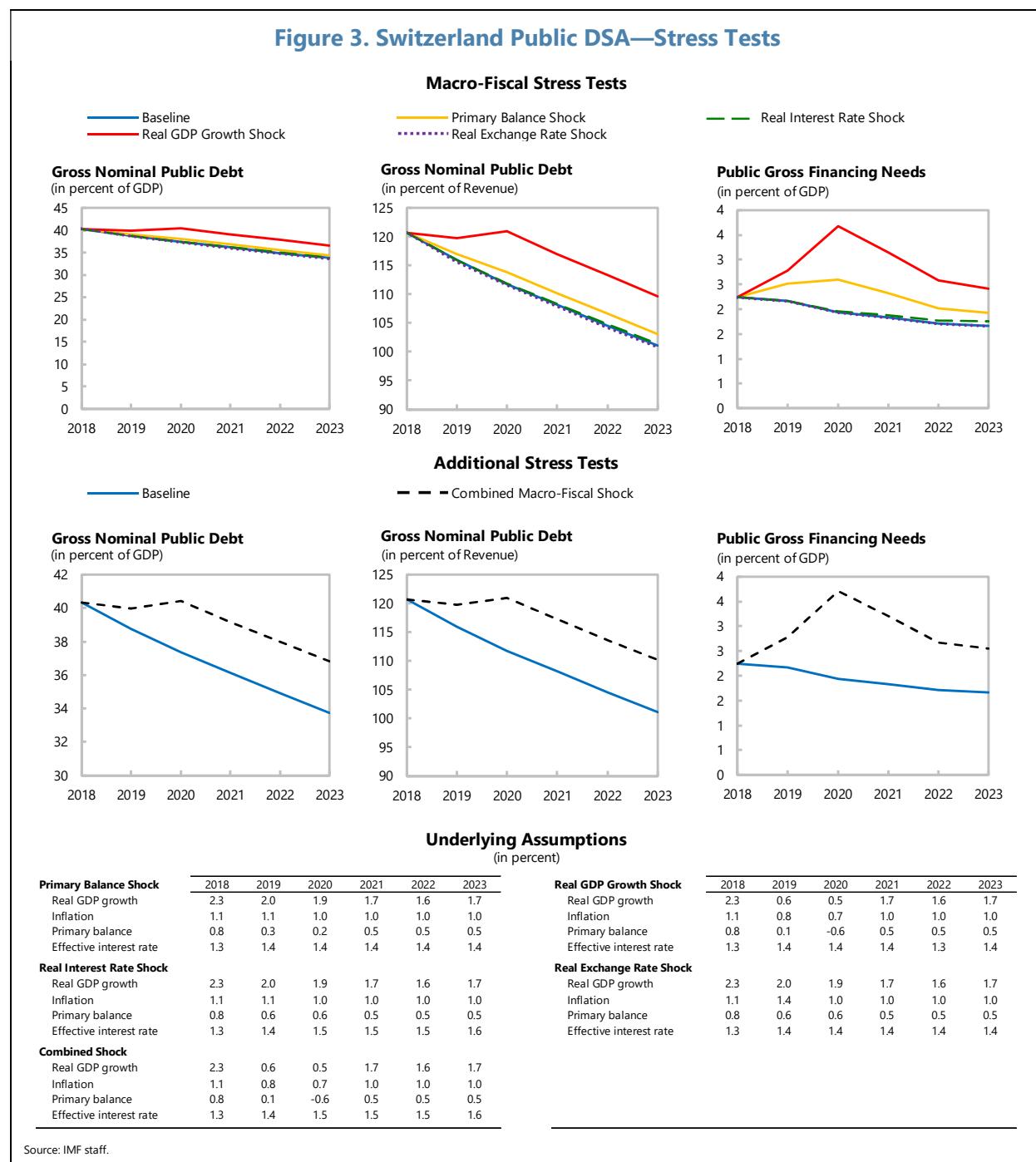
Figure 2. Switzerland Public DSA—Composition of Public Debt and Alternative Scenarios

Figure 3. Switzerland Public DSA—Stress Tests

Annex IV. Status of Previous Recommendations

2016 Article IV Recommendations	Policy Actions
Fiscal Policy	
Utilize fully the room available under the existing fiscal debt brake framework.	Budget underruns at the federal-level have continued. A review of the design of the debt brake rule found systematic underruns, but new measures are under consideration.
Adjust pension system parameters to protect the viability of the social safety net.	The 'reform 2020' package was voted down in a referendum in September 2017.
Corporate income tax reform is needed to comply with international standards, and may also help raise investment by small and medium-sized domestic firms.	A corporate tax reform package intended to comply with international obligations was voted down in a referendum in February 2017. Work is ongoing on new reform proposal.
Monetary Policy	
In the event of sustained weak inflation and inflow pressures, widen modestly the negative interest rate differential against major central banks.	The policy interest rate has remained unchanged since it was lowered to -0.75 percent in early 2015. However, other major central banks (notably the Fed) have raised their short-term rates, thereby widening Switzerland's effective policy rate differential without the need for action by the SNB. With domestic-sourced inflation gradually rising, there was no need for the SNB to lower its policy rate.
Utilize foreign currency purchases only to address capital inflow surges. Allow some real appreciation.	Evolving global cyclical and political conditions have reduced the extent of safe haven surges, and hence the need for foreign exchange purchases. Foreign exchange purchases ceased in mid-2017.
Financial Sector Policy	
Stand ready to adopt new macroprudential measures if credit and house prices again turn up, with a focus on the build-to-let segment.	No changes have been made to the macroprudential toolkit.
Continue to encourage the large Swiss cross-border banks to implement new too-big-to-fail regulations.	The Swiss G-SIBs are gradually phasing-in the new TBTF regulations.
Strengthen buffers for D-SIBs.	Regulations for D-SIBs are unchanged.
Ensure banks' risk weights adequately reflect risk and encourage greater disclosure of weights.	Banks' IRB models will be adjusted in line with the revised Basel III Standards on risk weights.
Adapt to the evolving regulatory landscape.	Basel reforms are being implemented.
Structural Reforms	
Resolve uncertainty regarding the referendum on immigration in a constructive manner.	The parliament approved a measure to comply with the immigration referendum.
Continue to implement the sharing of tax information obligations and make progress on strengthening the AML/CFT framework.	AML efforts are ongoing to address deficiencies identified in the FATF's 2016 mutual evaluation report. Automatic exchange of tax information with numerous countries—under the OECD's initiative—began in 2018.
Source: IMF staff.	



SWITZERLAND

STAFF REPORT FOR THE 2018 ARTICLE IV CONSULTATION— INFORMATIONAL ANNEX

May 29, 2018

Prepared By

European Department

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FUND RELATIONS

(As of March 31, 2018)

Membership Status: Joined May 29, 1992; Article VIII

General Resources Account

	SDR Million	Percent Quota
Quota	5,771.10	100.00
Fund holdings of currency	5,757.95	99.77
Reserve position in Fund	13.16	0.23
New arrangements to borrow	592.17	

SDR Department

	SDR Millions	Percent Allocation
Net cumulative allocation	3,288.04	100.00
Holdings	3,278.02	99.70

Outstanding Purchases and Loans: None

Financial Arrangements: None

Projected Payments to Fund:¹

(SDR Million; based on existing use of resources and present holdings of SDRs):

	Forthcoming				
	2018	2019	2020	2021	2022
Principal					
Charges/Interest	0.17	0.18	0.18	0.18	0.18
Total	0.17	0.18	0.18	0.18	0.18

Exchange Rate Arrangement:

The de jure exchange rate arrangement is free floating. The exchange rate of the Swiss franc is determined by market forces in the foreign exchange market, and all settlements are made at free market rates. On January 15, 2015, the SNB ended the exchange rate floor of CHF 1.20 per euro, and the franc has since been floating. However, the SNB may intervene in the foreign exchange market. The SNB publishes information regarding its foreign exchange transactions in its annual accountability report. The de facto exchange rate regime is a floating arrangement as the exchange rate has been

¹ When a member has overdue financial obligations outstanding for more than three months, the amount of such arrears will be shown in this section.

floating between 1.08 and 1.20 CHF per euro, with occasional SNB intervention, over the last 12 months.

Switzerland has accepted the obligations of Article VIII, Sections 2, 3, and 4, and maintains a system free of restrictions on the making of payments and transfers for current international transactions except for restrictions in place for security reasons notified to the Fund pursuant to Decision No. 144-(52/51).

On May 15, 2018, Switzerland notified the IMF of the exchange restrictions that have been imposed against certain countries, individuals, and entities, in accordance with relevant UN Security Council resolutions and EU regulations.

Latest Article IV Consultation: The last Article IV consultation was concluded on November 21, 2016, with the staff report published on December 15, 2016. Switzerland is on the standard 12-month consultation cycle.

Technical Assistance: None

Resident Representatives: None

Financial System Stability Assessment Update and ROSCs:

- A Financial System Stability Assessment Update was conducted in 2013–14, and the report was issued on May 28, 2014. A new update is scheduled for 2019.
- Reports on the Observance of Standards and Codes (Basel core principles, IAIS core principles, and IOSCO objectives and principles) were conducted in 2013–14, and the report was issued on May 28, 2014.

STATISTICAL ISSUES

(As of May 2018)

I. Assessment of Data Adequacy for Surveillance
General: Data provision is adequate for Fund surveillance. Switzerland publishes timely economic statistics and posts most of the data and the underlying documentation on the internet.
National Accounts: National Accounts are timely (including the expenditure, production and income approaches). GDP by canton and a detailed disaggregation of GDP by industry are published with a significant lag, however, with 2016 data being released in late 2018. Responsibility for national accounts compilation is split between two different agencies: quarterly national accounts are published by the State Secretariat for Economic Affairs, and annual national accounts are published by the Federal Statistics Office.
Price Statistics: Consumer price indices and producer and import price indices are collected by the Federal Statistical Office. They are published monthly with a base period of December 2015. The Federal Statistical Office is developing additional producer price indexes for services and construction (currently published just twice a year).
Government Finance Statistics: General government finance statistics are compiled by the Federal Finance Administration. Data for general government are finalized with eight months lag, mainly due to delays in compiling fiscal accounts at the level of cantons and communes. With the exception of financial transactions in financial assets and liabilities, the conceptual and methodological reconciliation with the Swiss system of national accounts of the Federal Statistical Office was completed with the publication of 7 September 2017. The Swiss National Bank publishes statistics on outstanding and new bond issues by the Swiss confederation.
Monetary and Financial Statistics: The Swiss National Bank reports monetary statistics for the monetary authorities, deposit money banks, and other banking institutions for publication in the IMF's <i>International Financial Statistics</i> on a monthly basis. However, data are reported using report forms that are not fully consistent with the Standardized Report Forms developed based on the IMF's <i>Monetary and Financial Statistics Manual</i> .
Financial Sector Surveillance: Switzerland reports 12 core Financial Soundness Indicators (FSIs) and 9 additional FSIs for deposit takers, and 3 FSIs for real estate markets. All FSIs are reported on an annual basis. The FSI data and metadata have been posted on the IMF's FSI website.
External Sector Statistics: BOP and international investment position data are published based on the sixth edition of the IMF's Balance of Payments and International Investment Position Manual (BPM6). Official data in BPM6 format are available from 1999 onwards. To ensure that new and old data are comparable and to ensure that data users have long data series at their disposal, the SNB formally reclassified the old data series in line with BPM6. Switzerland reports to the IMF annual data on the Coordinated Direct Investment Survey and semi-annual data on the Coordinated Portfolio Investment Survey.

II. Data Standards and Quality

In June 1996, Switzerland subscribed to the IMF's Special Data Dissemination Standard (SDDS), and its metadata are currently posted on the Dissemination Standards Bulletin Board. Switzerland is in full observance of SDDS requirements, and is availing itself of the SDDS's flexibility options on dissemination of production index data (for periodicity and timeliness) and of wages and earnings data (for periodicity). The Swiss Federal Council has announced its support for Switzerland's participation in the IMF's extended statistical standard SDDS Plus. Implementing the requirements of SDDS Plus in Switzerland—a task in which an interagency working group (SIF, SNB, FSO, FFA, FSIO, SECO, and FINMA) plays an active role—will take several years.

Switzerland: Table of Common Indicators Required for Surveillance					
(As of May 25, 2018)					
	Date of Latest Observation	Date Received	Frequency of Data ⁷	Frequency of Reporting ⁷	Frequency of Publication ⁷
Exchange Rates	Same day	Same day	D and M	M and M	D and M
International Reserve Assets and Reserve Liabilities of the Monetary Authorities ¹	Mar 18	Apr 18	M	M	M
Reserve/Base Money	Mar 18	Apr 18	M	M	M
Broad Money	Mar 18	Apr 18	M	M	M
Central Bank Balance Sheet	Apr 18	May 18	M	M	M
Consolidated Balance Sheet of the Banking System	Apr 18	Apr 18	M	M	M
Interest Rates ²	Same day	Same day	D and M	M and M	D and M
Consumer Price Index	April 18	May 18	M	M	M
Revenue, Expenditure, Balance and Composition of Financing ³ – General Government ⁴	2016	Mar 18	A	A	A
Revenue, Expenditure, Balance and Composition of Financing ³ – Central Government	2016	Mar 18	A	A	A
Stocks of Central Government and Central Government-Guaranteed Debt ⁵	2016	Mar 18	A	A	A
External Current Account Balance	Q4/17	Mar 18	Q	Q	Q
Exports and Imports of Goods and Services	Mar 18	Apr 18	M	M	M
GDP/GNP	Q4/17	Mar 18	Q	Q	Q
Gross External Debt	Q4/18	Mar 18	Q	Q	Q
International Investment Position ⁶	Q4/17	Mar 18	Q	Q	Q

¹ Any reserve assets that are pledged or otherwise encumbered should be specified separately. Also, data should comprise short-term liabilities linked to a foreign currency but settled by other means as well as the notional values of financial derivatives to pay and to receive foreign currency, including those linked to a foreign currency but settled by other means.

² Both market-based and officially-determined, including discount rates, money market rates, rates on treasury bills, notes and bonds.

³ Foreign, domestic bank, and domestic nonbank financing.

⁴ The general government consists of the central government (budgetary funds, extra budgetary funds, and social security funds) and state and local governments.

⁵ Including currency and maturity composition.

⁶ Includes external gross financial asset and liability positions vis-à-vis nonresidents.

⁷ Daily (D); weekly (W); monthly (M); quarterly (Q); annually (A); irregular (I); and not available (NA).

**Statement by Mr. Paul Inderbinen, Alternate Executive Director for Switzerland
and Mr. Sébastien Waelti, Senior Advisor to the Executive Director**
June 11, 2018

On behalf of our Swiss authorities, we would like to thank staff for the useful set of reports that provide a thorough and insightful analysis of the macroeconomic situation. In most respects, the authorities share staff's assessment of the challenges going forward and they welcome the candid policy recommendations, which are a valuable contribution to the domestic policy debate in Switzerland.

Outlook

The authorities broadly agree with staff on the outlook. Supported by the acceleration in global output growth since early 2017, economic activity in Switzerland has gained pace. In the first quarter of 2018, despite losing some momentum compared with the second half of 2017, growth remained broad-based across sectors and strong at 0.6 percent against the previous quarter. The authorities expect the dynamic recovery to continue, with above potential growth in 2018 and 2019. According to the latest forecasts of the Federal Government's Expert Group, GDP is projected to grow by 2.4 percent in 2018 and 2.0 percent in 2019, respectively. That said, this outlook is subject to risks, especially those related to the international economic environment. In particular, as illustrated by recent developments, an increase in international political risk can renew demand for the Swiss franc as a safe-haven asset. Further, spiraling protectionist tendencies could affect global economic conditions and external demand. On the domestic side, imbalances on the mortgage and real estate markets persist, and an abrupt adjustment could have macroeconomic repercussions.

Fiscal policy

The "debt brake" fiscal rule at the federal level has served Switzerland well, contributing to a structurally balanced budget. General government debt stands at just over 40 percent of GDP, with sound public finances at all levels of government. This ensures the financing of, among other things, a high-quality education system and an extensive public infrastructure.

Recent measures to curtail within-year underspending, particularly the introduction of new global-budgeting procedures, are expected to curb future budget underruns. Aside from that, budget underruns in recent years have led the government to task a group of experts with reviewing the debt brake rule. Measures are under consideration, including a simplification of procedures for within-year supplementary budgets that should reduce incentives to maintain safety margins in spending execution. The Ministry of Finance will continue to monitor the development of budget underruns. In spring 2019 the Federal Council will consider possible amendments to the rule, based on a report of the Ministry of Finance. In

addition, the domestic sectors of the economy are currently performing well, and fiscal policy is not a suitable tool to address the economic effects of exchange rate shocks. Therefore, the authorities continue to regard the fiscal stance as adequate. Prudent levels of public debt will continue to help ensure Switzerland's fiscal sustainability and increase resilience to long-term trends and future shocks.

Monetary policy

The authorities agree with staff that the current accommodative monetary policy remains appropriate. Despite the depreciation of the franc since mid-2017, the Swiss franc remains highly valued. Also, CPI inflation remains low and is expected to increase only gradually. Moreover, the recent appreciation of the Swiss franc against the euro has shown that the situation in the foreign exchange market remains fragile and that monetary conditions can change rapidly. The negative interest rate on sight deposits and the SNB's willingness to intervene in the foreign exchange market as necessary therefore remain essential. This keeps the attractiveness of Swiss franc investments low and eases pressure on the currency.

Financial sector policies

As mentioned by staff, considerable progress has been achieved in strengthening the resilience of the banking sector. Capital and liquidity buffers have increased across all categories of banks. Regulation for systemic banks is more stringent than international minimum standards. The authorities concur with staff that this is appropriate, given the importance of these banks and the size of their balance sheets relative to the size of the Swiss economy. In addition, macroprudential measures introduced between 2012 and 2014 have helped to contain risks in the real estate and mortgage markets, particularly with respect to owner-occupied residential real estate, where the growth in lending volumes has come down.

Nevertheless, imbalances in the real estate and mortgage markets persist, and affordability risks in mortgage lending have increased. Notably, the search for yield induced by the current low interest rate environment has fueled the market for income-producing real estate (IPRE).

Meanwhile, the overall resilience of the banking system has not deteriorated. The authorities are cognizant of the risks from high exposures to real estate and from high household debt. FINMA exercises close oversight of activities and has already intensified its supervisory activities in the area of IPRE. Also, greater differentiation of risk weights between income-producing and owner-occupied mortgages, as well as among different loan-to-value buckets, is foreseen under the revised Basel III standardized approach. The authorities will continue to closely monitor developments in the real estate and mortgage markets. They agree that further measures should be considered, as necessary, to reinforce the prudential framework, with a focus on IPRE and affordability risks, to limit a future buildup of risk and strengthen the resilience of the banking sector.

The authorities concur that regulatory arbitrage by nonbank mortgage lenders should be prevented. In this context, we would like to highlight that mortgage lending by insurance companies constitutes only a small part of the mortgage market and is subject to requirements that are no less strict overall than those for mortgage lending by banks. This is evidenced by the resulting lower risk profile of the mortgage portfolios of Swiss insurers. Apart from that, we agree that it is crucial for financial supervision to remain vigilant and independent. Also, from a long-term perspective, the authorities agree with staff on the merits of eliminating the tax deductibility of mortgage interest payments for individuals along with removing taxation of imputed rental income. Conversely, they do not share staff's concerns with respect to the timeliness of self-regulation. To the contrary, self-regulation has demonstrated its effectiveness and can typically be deployed more swiftly than changes in mandatory regulation, given that the latter necessitate legal amendments.

External sector assessment

The authorities welcome the careful analysis of the Swiss external sector. In particular, they appreciate the formal treatment of retained earnings on portfolio equity by multinationals and of inflation compensation on debt instruments as contributors to the current account. These factors have a significant impact on the current account not only of Switzerland, but also of other countries. The authorities agree with staff that further work is warranted to better understand how financial center characteristics influence external accounts. Moreover, as rightly noted by staff, demographic factors play an important role in the determination of the current account. Further work is needed to understand how the interaction between pension systems and demographics affects the current account.

Structural issues

The authorities concur that pension reform is essential to maintain a sustainable and effective social safety net against the backdrop of an aging population and the low interest environment. Following the rejection of the “reform 2020” package in a referendum, the strategy is now to focus on reforming the first pillar initially. Unification of the retirement age at 65, increasing earmarked revenue, and strengthening incentives for working longer are key elements of the planned reform.

Finally, corporate tax reform and, with it, the abolishment of non-compliant tax regimes is a key policy priority of the government. A swift adoption of the proposed corporate tax reform is crucial to dispel uncertainty while maintaining a competitive corporate tax system. Parliament is currently discussing the reform proposal.