

IMF Country Report No. 16/381

# SWITZERLAND

December 2016

## 2016 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 2016 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 November 21, 2016 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 Switzerland, following discussions that ended on September 26, 2016, 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 November 4, 2016.
- An Informational Annex prepared by the IMF staff.
- A Statement by the Executive Director for Switzerland.

The IMF's transparency policy allows for the deletion of market-sensitive information and premature disclosure of the authorities' policy intentions in published staff reports and other documents.

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### International Monetary Fund Washington, D.C.



Press Release No. 16/561 FOR IMMEDIATE RELEASE December 15, 2016 International Monetary Fund 700 19<sup>th</sup> Street, NW Washington, D. C. 20431 USA

#### IMF Executive Board Concludes 2016 Article IV Consultation with Switzerland

On November 21, 2016, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation<sup>1</sup> with Switzerland.

The economy withstood relatively well the sharp appreciation that followed the exit from the exchange rate floor. Economic performance has continued to firm in 2016 with support from domestic and external demand. GDP growth is forecast to reach 1.5 percent in 2016, and to stabilize at 1.7 percent over the medium term. Inflation is expected to return to positive territory in 2017 and to continue to rise to the middle of the target band. However, important external and domestic risks could affect this outlook, including a resurgence in global financial market volatility, renewed concerns about the financial health of large global banks, sharp swings in domestic property prices and changes in Swiss-EU economic relations.

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—together with support from fiscal policy helped to avert sustained deflation, a prolonged slowdown of the economy and an increase in unemployment following the exit from the exchange rate floor. A series of macroprudential measures stabilized house prices following an extended period of continuous increases, although prices remain high relative to household income and exposure to mortgage debt is elevated. The recently introduced stricter capital standards for the Swiss global banks (G-SIBs)—to be fully adopted by 2019—are intended to further boost their financial strength and insulate the domestic economy from financial contagion.

The Swiss economy continues to face important challenges. Weaker external demand and the possibility of further large capital inflows may warrant additional policy support and some rebalancing of policies. The global low interest rate environment could rekindle house prices and financial stability risks. Population aging and slower immigration will create funding gaps in the

<sup>&</sup>lt;sup>1</sup> 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.

public pension system, while minimum mandated interest rates for private pensions that exceed market rates could affect long-run viability. Corporate tax reform is expected to trim future fiscal revenue. Productivity enhancements would increase flexibility to absorb shocks and help preserve the high standard of living.

#### **Executive Board Assessment**<sup>2</sup>

Executive Directors welcomed the resilience of the Swiss economy to the appreciation that followed the exit from the exchange rate floor, and commended the authorities' policy response, which shielded the economy and set the conditions for a rapid recovery. Medium-term growth prospects have also improved owing to the gradual unwinding of the real appreciation. Directors, however, noted that a resurgence of capital inflows, sharp swings in domestic property prices, concerns over large global banks, or changes to Swiss-EU economic relations could pose challenges. They agreed that continued skillful policy management will be important going forward.

Directors considered the Swiss National Bank's two-pronged monetary policy, which combines a negative interest rate and foreign exchange purchases, effective at averting a prolonged slowdown and sustained deflation. They noted that the Swiss franc's status as a safe haven currency could shape the policy response, and that sharp appreciations were recently avoided despite episodes of capital inflow surges. While over the longer term Directors saw scope for additional upward flexibility of the franc, most Directors recommended that consideration be given to a modest widening of the negative interest rate differential to deal with sustained inflow pressures in the context of an overvalued exchange rate, thereby reducing the need for frequent small foreign currency purchases and slowing the growth of the Swiss National Bank's already large balance sheet. A few Directors, however, expressed concern that monetary policy is being overburdened and any further real depreciation would increase the current account surplus.

Directors welcomed the counter cyclical stabilization and scope for extraordinary support provided under the fiscal debt brake rule, and observed that public debt had declined to moderate levels. Given the available fiscal space and constraints on monetary policy, Directors saw scope for additional fiscal support, including by fully utilizing the room available under the existing debt brake framework. A few Directors, however, did not see the need at this point to adapt fiscal policy to allow for higher spending or as suitable to address an overvalued currency.

Directors commended the earlier tightening of macroprudential policies that contributed to the recent stabilization of house prices. They noted however, the elevated exposure to real estate by borrowers and lenders, and the risk that competition among lenders could drive down interest

<sup>&</sup>lt;sup>2</sup> 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: <u>http://www.imf.org/external/np/sec/misc/qualifiers.htm</u>.

rates, triggering a renewed upswing in the mortgage credit house price cycle. Timely preparation of new property related measures and strengthened supervision is therefore appropriate.

Directors considered the recently introduced too-big-to-fail regulations for large Swiss cross border banks as appropriately more stringent than the Basel minimum requirements, reflecting these banks' large size relative to the Swiss economy and their systemic risk profile. More generally, they agreed that review of risk weights that banks use in their internal ratings based models is warranted and greater public disclosure of these weights should be considered, in line with the forthcoming revisions to Basel requirements, to strengthen the credibility of banks' financial reporting.

Directors recommended continued structural reforms to support medium term growth and reduce risks. Early adjustment of pension system parameters would help ensure the long-term viability of the social safety net. Continuing to meet international standards, particularly the AML/CFT and tax transparency standards, is essential to preserve Switzerland as a prime destination for foreign investment and protect the integrity of its banks. Directors highlighted that strengthening productivity would help insulate the economy from future exchange rate shocks and a possible slowing in the growth of the labor force, while the corporate income tax reform could boost investment by small and medium-sized firms. Continuing to welcome foreign workers and maintaining close economic ties with the EU would help safeguard Switzerland's high standard of living.

Switzerland: So	2014	2015	2016	2017	2018	2019	2020	2021
	2014	2013	2010	2017	Staff pro		2020	2021
Real GDP (percent change)	2.0	0.8	1.5	1.6	1.6	1.6	1.7	1.7
Total domestic demand	2.0	1.9	1.4	1.5	1.4	1.3	1.4	1.4
Final domestic demand	1.7	1.3	1.7	1.7	1.5	1.4	1.4	1.4
Private consumption	1.2	1.0	1.2	1.4	1.5	1.5	1.4	1.
Public consumption	1.5	2.2	2.5	1.6	1.2	1.0	1.0	1.0
Gross fixed investment	2.8	1.5	2.7	2.2	1.7	1.5	1.4	1.
Inventory accumulation 1/	0.3	0.5	-0.3	-0.2	-0.1	-0.1	0.0	0.0
Foreign balance 1/	0.2	-0.9	0.3	0.3	0.4	0.4	0.5	0.
Nominal GDP (billions of Swiss francs)	643.8	645.6	651.9	661.1	673.3	687.9	704.5	722.
Savings and investment (percent of GDP)								
Gross national saving	31.8	34.3	33.7	33.6	33.4	33.3	33.1	33.
Gross domestic investment	23.0	23.0	23.7	24.0	24.2	24.3	24.3	24.
Current account balance	8.8	11.3	10.0	9.5	9.2	9.0	8.9	8.
Prices and incomes (percent change)								
GDP deflator	-0.6	-0.5	-0.5	-0.2	0.2	0.6	0.7	0.
Consumer price index (period average)	0.0	-1.1	-0.4	0.1	0.5	0.8	0.9	1.
Consumer price index (end of period)	-0.3	-1.3	0.0	0.3	0.7	0.8	0.9	1.
Nominal hourly earnings	0.7	0.4	0.8	1.2	1.7	1.9	1.9	1.
Unit labor costs (total economy)	0.1	1.3	-0.2	0.8	1.3	1.6	1.5	1.
Employment and slack measures								
Unemployment rate (in percent)	3.0	3.2	3.4	3.3	3.3	3.2	3.1	3.
Output gap (in percent of potential)	-0.3	-0.8	-0.7	-0.6	-0.4	-0.3	-0.2	0.
Capacity utilization	82.0							
Potential output growth	1.4	1.3	1.5	1.4	1.4	1.5	1.6	1.
General government finances (percent of GDP)								
Revenue	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.
Expenditure	32.9	32.6	32.7	32.7	32.6	32.6	32.5	32.
Balance	-0.2	0.1	0.0	0.0	0.1	0.1	0.1	0.
Cyclically adjusted balance	-0.1	0.3	0.2	0.2	0.2	0.2	0.2	0.
Gross debt 2/	46.6	46.6	46.1	45.5	44.7	43.9	42.7	41.4
Monetary and credit (percent change, average)								
Broad money (M3)	3.3	1.6						
Domestic credit, non-financial	2.7	0.6						
Three-month SFr LIBOR	0.0	-0.8						
Yield on government bonds (7-year)	0.4	-0.3						
Exchange rates (levels)								
Swiss francs per U.S. dollar (annual average)	0.9	1.0						
Swiss francs per euro (annual average)	1.2	1.1						
Nominal effective rate (avg., 2000=100)	115.4	124.8						
Real effective rate (avg., 2000=100) 3/	104.6	112.4						

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 2016 ARTICLE IV CONSULTATION**

November 4, 2016

## **KEY ISSUES**

**Context**. The economy has adapted well to the appreciation that followed the exit from the exchange floor. Growth is expected to reach 1½ percent this year and to stabilize at around 1¾ percent over the medium term. A resurgence of capital inflows, a sharp adjustment in property prices, renewed concerns over large global banks and changes to Swiss-EU relations pose risks to this outlook. The two-pronged approach to monetary policy helped avert a prolonged slowdown and sustained deflation by limiting further appreciation, with some support from fiscal policy. Elevated exposure to mortgage debt continues, and low interest rates could rekindle a credit-driven upswing in house prices. Population aging and slower immigration will create funding gaps in the public pension system, while minimum mandated interest rates for private pensions that exceed market rates could affect viability. The Swiss systemically-important global banks are continuing to build their financial strength. Corporate tax reform is expected to trim future tax revenue.

**Key policy recommendations**. Macroeconomic policies should remain supportive, with some fine tuning of policy tools. In the financial sector, preserving stability in the current low interest rate setting and adapting to the evolving regulatory landscape are priorities. Structural reforms are needed to build resilience to exchange rate and other shocks:

- in the event of sustained inflow pressures, widen modestly the negative interest rate differential against major central banks to allow foreign currency purchases to be utilized mainly for capital inflow surges;
- utilize fully the room available under the existing fiscal debt brake framework;
- adjust pension system parameters to protect the viability of the social safety net;
- stand ready to adopt new macroprudential measures if credit and house prices again turn up, with a focus on the build-to-let segment;
- continue to encourage the large Swiss cross-border banks to implement new too-big-to-fail regulations, strengthen buffers for D-SIBs, ensure banks' risk weights adequately reflect risk and encourage greater disclosure of weights; and
- fully comply with international standards and agreements and strengthen
  productivity to ensure Switzerland remains a prime investment destination that is
  open to foreign workers and has the resilience to absorb exchange rate and other
  shocks.

Approved By	Discussions took place in Zurich and Bern during September 15–26,
Mahmood Pradhan	2016. The staff team comprised R. van Elkan (head), T.
and Martin Kaufman	Gudmundsson, M. Mrkaic and K. Shirono (all EUR). M. Pradhan
	(deputy director, EUR) joined the final meeting. D. Heller (Executive
	Director) and P. Inderbinen (Alternate Executive Director) attended
	some of the meetings. O. Ftomova and R. Vega (both EUR)
	supported the mission from headquarters.

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## CONTEXT

**1. The Swiss economy has performed solidly during 2010–15**. GDP growth averaged 1<sup>3</sup>/<sub>4</sub> percent, the unemployment rate has been broadly steady around 3 percent, and the external sector performed well, with the current account surplus averaging 11 percent of GDP. In addition, real incomes had been boosted by sustained decreases in prices of imported products. More generally, growth has been in line with the average for advanced economies, supported by a favorable business environment (for 2016, the World Economic Forum again ranked Switzerland the globally most competitive country).

2. This solid performance occurred despite challenges stemming from Switzerland's status as a safe haven. Global risk-off episodes (most recently following the Brexit vote) and monetary policy easing by the major central banks have triggered intermittent capital inflow surges into Switzerland. As a result, the nominal and real effective exchange rates (NEER and REER) appreciated by 40 percent and 24 percent, respectively, since 2008, leading the authorities to introduce and subsequently remove an exchange rate floor against the euro.

**3.** Switzerland's direct democracy and close EU relations have contributed to political stability and widespread support for domestic policies. With Switzerland located in the center of Europe, the EU is a key partner, and their economies, labor markets and policies are closely linked. Notwithstanding this close relationship, the Swiss population adopted a popular initiative in February 2014 to limit mass immigration (Box 1). A solution agreeable to both the Swiss and the EU is being sought.

## **RECENT DEVELOPMENTS**

4. The economy weathered relatively well the sharp appreciation that followed the exit from the exchange rate floor. Activity was dented in early 2015 by the abrupt strengthening of the franc. However, growth subsequently returned, aided by the flexibility of firms and the labor market, to reach 0.8 percent for the year, although this was less than half the pace of 2014. Unemployment edged up to 3.3 percent and the output gap widened to 0.8 percent of potential GDP by the end of the year. The external sector held up well despite the currency shock, aided by some redirection of exports from the euro area (where competitiveness had been eroded) toward countries with currencies linked to the dollar (where Swiss products had gained competitiveness), although profit margins at some companies were sharply squeezed. The drop in the price level helped to cushion domestic spending.

# 5. The appreciation in early 2015 led to a discernible fall in inflation, but the impact on the current account was muted:

• After remaining flat the previous year, consumer prices fell by 1.1 percent in year-average terms (1.3 percent on a year-on-year basis) in 2015. Prices of domestic products dipped only

marginally (consistent with the limited widening of the output gap), but import prices fell sharply, reflecting the appreciation of the franc and the drop in world energy prices.

• The current account surplus widened by 2<sup>1</sup>/<sub>2</sub> percentage points to reach 11.3 percent of GDP in 2015. The increase reflects mainly the improved terms of trade from lower oil prices, the resilience of exports in key sectors and a larger income balance owing to a wider interest rate differential between foreign and domestic financial assets.

6. Economic performance has continued to firm during 2016. Both domestic and external demand have supported the pickup in growth. Deflation continued to unwind as the effect of the early-2015 appreciation dissipated and the Swiss franc remained broadly stable against the euro, with prices in September 2016 decreasing by 0.2 percent over the previous year. Medium-term inflation expectations, which fell sharply in response to the appreciation, have stabilized at (positive) 0.5 percent alongside the pickup in actual inflation. With activity gradually strengthening, the output gap continues to narrow.

7. Swiss interest rates have fallen and the yield curve has flattened in tandem with other advanced economies, although the franc has appreciated more than most other currencies. Yields on Swiss government bonds fell and the franc strengthened sharply following the exit from the exchange rate floor and shift to negative policy rates in late 2014-early 2015. Sovereign yields across all maturities (the longest dated is 50 years) became negative, although longer rates again turned positive in recent weeks. After appreciating by about 15 percent against the euro in early 2015, the franc has steadied in recent months, representing a 12 percent depreciation relative to its strongest level, while the REER has depreciated by 5 percent, although this is still 6 percent stronger than before the exit from the exchange rate floor. As in other countries, equity prices have been supported by low interest rates, although the benchmark SMI index is down 8.5 percent so far this year, possibly reflecting the large share of banks in the index.

## **REPORT ON THE DISCUSSIONS**

#### A. Outlook and Risks

#### Staff's views

8. Growth is expected to remain on a recovery path, and to stabilize at a moderate 1<sup>3</sup>/<sub>4</sub> percent over the medium term. For 2016, GDP is forecast to increase by 1.5 percent, with inflation approaching zero by year end. The pickup in growth is projected to gradually close the output gap, returning inflation to the middle of the target band. However, inflation is expected to remain below levels in key trading partners, facilitating a steady reduction in the REER. The underlying external position in 2015 was moderately weaker than implied by medium-term fundamentals and desirable policy settings (see Box 2). External demand is likely to make a smaller contribution to growth than in the past owing to the more subdued outlook for global trade, leading also to some narrowing of the current account surplus.

9. Risks to this outlook for the Swiss economy, while two sided, maintain a negative skew (Annex II). On the positive side, a faster than envisaged pace of world growth could materialize if consistent and comprehensive policy frameworks were widely adopted, thereby providing a boost to Switzerland's large export sector. However, several adverse global factors—a further decline in the trade content of world demand, increased political risk and inward-looking policies, and an unmooring of inflation expectations that raises forward-looking real interest rates—would weaken demand from abroad. In addition, a resurgence of global financial market volatility or a further loosening of monetary policy by a major central bank could trigger renewed capital inflows into Switzerland, appreciating the already overvalued franc and denting GDP growth. Elevated household debt and banks' concentrated exposure to mortgages could amplify shocks, especially if unemployment were to increase sharply on a sustained basis. Renewed concerns about the financial health of large cross-border banks could spill over to the domestic economy given their interconnectedness and large size relative to Swiss GDP. In addition, Swiss-EU economic relations could be affected in the event no mutually acceptable solution is found in the ongoing discussions regarding immigration.

#### Authorities' views

## **10.** The recent positive momentum of the Swiss economy is expected to continue, supported by sustained global demand and the waning effects of the past appreciation.

Growth is expected to reach 1.5 and about 1.8 percent, respectively, in 2016 and 2017, with both exports and the domestic demand experiencing an upward trend. Continued population growth due to net immigration—although at a somewhat slower pace than in recent years—is also expected to support growth. Strengthening activity is projected to raise inflation to 1 percent by end 2018, gradually reverse the slight pickup in unemployment that occurred since 2015 and eliminate the negative output gap. However, not all industries have benefitted equally from the recovery, and profit margins at a large number of companies have come under pressure, consistent with the SNB's assessment that the Swiss franc remains significantly overvalued.

**11. Risks to growth remain tilted to the downside**. Given the very open Swiss economy, external shocks would directly impact economic growth. Key external risks include a downgrading of global growth or a resurgence of financial market volatility. Switzerland also faces a number of domestic risks, including the possibility that a timely agreement on curtailing immigration is not achieved. A sustained increase in unemployment that spills over to house prices is a tail risk. Further downward pressure on global interest rates, if sustained for an extended period, would pose a significant risk to longer-term financial stability.

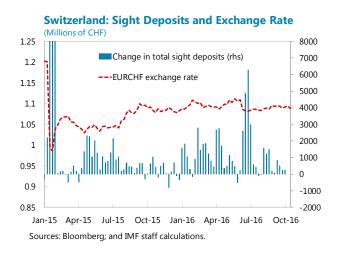
#### **B.** Securing Growth with Macroeconomic Policies

#### Monetary and Exchange Rate Policy

#### Background

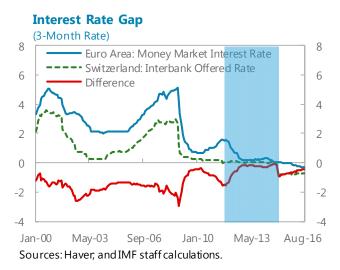
# 12. Since eliminating the exchange rate floor in early 2015, the SNB has pursued a

**two-pronged approach to monetary policy.** The SNB's price stability objective is defined as inflation between 0 and 2 percent. To achieve this goal, the interest rate on sight deposits placed at the SNB is currently set at minus 0.75 percent, the midpoint of the target range for three-month Libor (minus 1.25 to minus 0.25 percent), and which has been



kept unchanged since January 15, 2015. The SNB also intervenes in the foreign exchange market, periodically purchasing large amounts, as well as smaller quantities on a more frequent basis.<sup>1</sup> This combination of tools is intended to reduce the attractiveness of Swiss franc-denominated assets, thereby easing appreciation pressures.

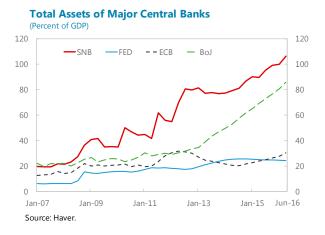
**13.** Compared with other major central banks, the SNB's policy interest rate is the most negative and, relative to GDP, its balance sheet is the largest.<sup>2</sup> Despite the very low rate, the negative interest differential against the ECB policy rate has narrowed considerably to 0.35 percentage points from about 1½–2 percent prior to the GFC. Moreover, with the negative policy rate applying only to balances above elevated exemption thresholds (tiering), the *effective* policy rate is considerably less negative than the *marginal* rate, bringing it close to the current ECB policy rate. The SNB's balance sheet has expanded to 110 percent of GDP, a



90 percentage point increase since the beginning of the GFC.

<sup>&</sup>lt;sup>1</sup> The amount of intervention is reflected in changes in sight deposits at the SNB and currency in circulation. Changes in sight deposits are bi-directional, although FX purchases for intervention dominate.

<sup>&</sup>lt;sup>2</sup> For banks, negative rates apply on deposits exceeding 20 times minimum required reserves. Currently, aggregate reserves exceed this threshold by about 40 percent (CHF120 billion or 20 percent of GDP). Arbitrage opportunities have reportedly encouraged almost all banks to exhaust their buffers.



itegative i oney h	nerest nates
	(percent)
Switzerland	-0.75
Denmark	-0.65
Sweden	-0.50
Euro Area	-0.40
Japan	-0.10
Sources: Bloomberg ar	nd Haver Analytics.

Negative Policy Interest Rates

Note: As of October 2016.

#### Staff's views

# 14. The SNB's two-pronged policy approach and accommodative stance are appropriate to the challenges facing the Swiss economy, and have helped avert a prolonged slowdown and sustained deflation:

- The negative interest differential against major currencies is consistent with the Swiss franc's role as a safe haven currency, which constrains policy independence. Relying on a negative *marginal* rate helps to deter new inflows by encouraging banks to transmit negative rates to large investors, while shielding their retail depositors. This also helped preserve banks' profits, which depend on the *effective* policy rate.<sup>3</sup> However, the move to negative rates has not been sufficient to preserve the interest rate differential with major central banks, contributing to persistent inflow pressures.
- Foreign exchange purchases are warranted to address Switzerland's below-potential output, overvalued REER and sub-par inflation that is largely exchange rate driven. Moreover, FX purchases were effective in preventing a sharp appreciation following the Brexit vote, despite a large jump in inflows, although smaller, higher-frequency purchases are also expanding the SNB's balance sheet.

#### **15.** Some refinements could improve the assignment of policy tools and simplify

**communications**. The negative interest rate differential should be calibrated so as to discourage persistent inflows that can cause prolonged deflation and weaken activity. On the other hand, exchange rate purchases should be reserved primarily to respond to episodic inflow surges to prevent sudden, large exchange rate appreciations. Some widening of the current effective interest rate differential—either by lowering the marginal policy rate or the exemption threshold—should therefore be considered to reduce the need for frequent small-scale interventions. This would also

<sup>&</sup>lt;sup>3</sup> Banks also initially shifted costs to borrowers by raising mortgage lending rates, although rates have since decreased.

slow the increase in the SNB's already-large balance sheet, which continues to trend upward relative to GDP and is subject to valuation changes that can affect public finances.

16. However, operational and stability considerations could at some point limit the room for maneuver. Competition between banks and other lenders could over time bid down bank lending rates, thereby increasing risk taking while also pushing a wider set of deposit rates into negative territory. This could raise incentives for cash hoarding and erode a key source of bank funding. In addition, portfolio diversification can reduce but not eliminate valuation risks on the SNB's balance sheet. Over the longer term, accommodating some gradual appreciation, as was the case prior to the GFC, should be considered. Beyond monetary policy, structural reforms should be considered to narrow the large domestic saving-investment gap and reduce savers' home bias.

#### Authorities' views

**17. The SNB's expansionary two-pronged monetary policy is working well**. With credit continuing to grow at a moderate pace, and the Swiss franc still significantly overvalued, the exchange rate is the primary transmission channel for monetary policy. The negative policy rate has worked well in Switzerland, with the parallel decline in key market rates signaling the effectiveness and credibility of the policy tool. Tiering has helped limit the impact of negative rates on banks' profits, thereby avoiding the need for banks to pass along these rates to smaller depositors. There is little indication of cash hoarding. FX purchases are an important complement to negative policy rates, facilitating the absorption of large safe haven inflows and also avoiding the need to further widen the interest differential vis a vis other major central banks. Utilization of these two instruments is appropriately balanced at present.

**18.** Room is available to ease further, but monetary policy alone cannot support the real economy for an extended period. Keeping interest rates at very negative levels for a long time could eventually encourage cash hoarding and excessive risk taking. Moreover, while there is no upper limit to the size of the SNB's balance sheet, and portfolio diversification has safeguarded its value, currency exposure is a risk. Nonetheless, there is room to lower the policy rate further, if needed. However, addressing the economy's structural shortcomings is beyond the scope of monetary policy.

#### **Fiscal Policy**

#### Background

**19. Switzerland's long-standing fiscal rule has led to a decline in public debt**. The "debt brake" rule, introduced in 2003, requires a balanced cyclically-adjusted federal budget on an ex ante basis, and in case of ex post spending overruns, offsetting structural surpluses are expected in subsequent years. The rule, together with conservative frameworks at other levels of government, has delivered a significant reduction in general government debt, which stood at 46 percent of GDP at end 2015 (Annex III). Moreover, outturns have tended to exceed the targeted balanced structural position.

**20. Several fiscal reform initiatives are in the pipeline**. Options for meeting the fiscal costs of aging—including equalizing the retirement age for men and women and raising VAT rates (currently among the lowest in Europe)—are being discussed by parliament. Eliminating preferential tax treatment of foreign companies currently offered by several cantons is underway by unifying rates for all firms within a canton. The new corporate tax rates are expected to average 14–15 percent, and would likely lead to some revenue loss.

#### Staff's views

**21.** Switzerland has ample fiscal space in view of its negative borrowing costs, moderate and declining public debt and broadly balanced general government finances. The current federal-level debt brake rule allows automatic stabilizers to dampen the business cycle and provides flexibility for extraordinary spending in the event of "exceptional financial circumstances."<sup>4</sup> With about 70 percent of general government spending occurring outside the boundaries of the rule, the rule may not in practice significantly impede the use of fiscal space.

**22.** Despite a goal of structural balance, the rule is implemented in a somewhat tighter manner and could benefit from some refinements in its application. A tendency to not fully spend budget appropriations and a conservative approach to estimating potential output have led to systematic ex post structural surpluses that have accumulated to 4 percent of GDP since 2003. With some two-thirds of the budget pre-committed as transfers to other levels of government, spending compression is focused on the remaining relatively narrow set of categories, including education, which can have implications for longer-term growth and competitiveness. With fiscal policy providing less support than envisaged under the rule, additional pressure is also placed on monetary policy. Reducing within-year underspending or permitting underspent amounts to be used the following year by allowing symmetric operation of the rule's ex post provision would alleviate this issue. On the other hand, increased transfers to the cantons to partially compensate them for CIT reform-related revenue loss will further squeeze other federal spending.

**23.** In the event of a prolonged downturn or deep recession, a discretionary fiscal stimulus would provide essential support to economic activity. Moderate public debt, negative borrowing costs and broadly balanced budgets suggest the presence of ample fiscal space to respond with a discretionary stimulus in the event of a sizable negative output gap. Supporting the economy by temporarily setting aside the rule is permitted under the "exceptional financial circumstances" clause, and would avoid overburdening monetary policy.

24. The authorities' proactive approach will help address challenges to pension system sustainability. With average life expectancy of 83 years, raising retirement ages for men and women (currently 65 and 64, respectively), together with increasing VAT rates, is essential to generate new resources to help fill the expected deficit in the first pillar, pay-as-you-go pension system. Additional pressure is being felt in the private second pillar scheme where the legally-mandated minimum

<sup>&</sup>lt;sup>4</sup> An absolute majority of both chambers of the Swiss parliament is required to increase the expenditure ceiling according to the exceptional financial circumstances clause.

conversion rate used to translate accumulated savings into an annuity is too high relative to long-term interest rates and life expectancy. In addition, despite a reduction last year, the guaranteed interest rate used to compound contributions remains too high. Lowering both the mandated conversion rate and the compounding rate—by indexing them to a long-term sovereign bond—would reduce the risk of contingent fiscal liabilities and help ensure the sustainability of the social safety net.

#### Authorities' views

**25. Fiscal policy in Switzerland follows a prudent approach that simultaneously delivers debt reduction and economic stabilization**. Since the GFC, fiscal policy has supported growth through a healthy pace of infrastructure investment and solid growth in education spending, while also providing temporary targeted support to employment following the 2015 appreciation. As a result, the domestic-oriented economy is performing well. This situation contrasts with that of several other countries where, owing to high public debt, governments have pursued fiscal austerity that necessitated unconventional monetary easing to compensate for weak government demand. The debt brake rule, which enjoys broad popular support, has led to a significant reduction of nominal debt, annual underspending is a modest 0.3 percent of GDP, and there is no need at present for higher fiscal spending.

## 26. The debt brake rule has flexibility in extraordinary times to provide additional stimulus, which the authorities have shown a readiness to use under appropriate conditions.

The "exceptional circumstances" clause has been previously invoked and will be used again in 2017 for migration-related spending. In general, fiscal stimulus is most effective when domestic absorption is weak, while monetary policy is best suited to respond to external shocks or when the export sector is under pressure.

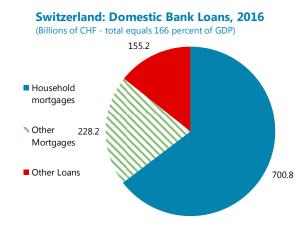
#### 27. Medium-term fiscal challenges can be addressed without an undue increase in taxes.

To stabilize pension system finances, Parliament is expected to agree by early 2017 a combination of a higher retirement age for women and an increase in the range of  $1-1\frac{1}{2}$  percentage points in the VAT rate, which will be earmarked for the Old-Age and Survivors' Insurance. Following full phase-in of the corporate tax reform in 2019, corporate tax rates are likely to be reduced in the majority of the cantons, and while rates levied on foreign companies will increase marginally, other factors will continue to ensure Switzerland remains an attractive foreign investment destination.

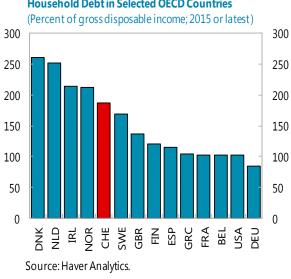
#### С. Preserving Financial Stability in a Low Interest Rate Setting

#### Background

28. Exposure to real estate by lenders and borrowers is high, notwithstanding a relatively low home ownership rate of 45 percent. After 10 successive years of increases that raised house prices by a cumulative 40 percent, prices stabilized in Q2:2016 and the pace of mortgage lending has gradually eased to around 3 percent. This reflects a series of macroprudential measures introduced during 2012–14, including "self regulatory" measures by banks that were adopted in response to moral suasion by the authorities.<sup>5</sup> The increase in the countercyclical capital buffer on mortgages from one to two percent in 2014, a temporary increase in mortgage interest rates in 2015 and some slowdown in population growth also helped to stabilize house prices. More than 80 percent of banks' domestic loans are mortgages (including to corporates), and among new mortgages, about a third have loan to value (LtV) ratios of 75 percent or more. Insurance companies and pension funds have shifted asset allocations toward real estate in search of higher returns. Non-mortgage credit is declining. At about twice disposable income, household debt is one of the highest among OECD countries, although financial assets are several times larger and the total rate of nonperforming loans is a very low 3 percent.



Sources: Haver Analytics; and IMF staff calculations.



**Household Debt in Selected OECD Countries** 

29. The Swiss systemically-important global banks (G-SIBs) (Credit Suisse and UBS)

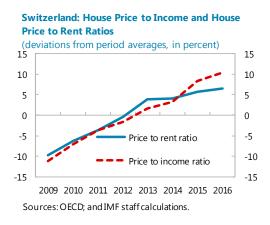
continue to increase capital buffers. In response to the evolving business and regulatory landscape, in recent years these banks have reduced leverage by shrinking their balance sheets (from a combined  $6\frac{1}{2}$  times to  $2\frac{3}{4}$  times GDP) and raising capital, and have shifted toward wealth and asset management where profits have been resilient. However, the operating environment for banking remains challenging. As with other G-SIBs, share prices of the large Swiss banks have fallen

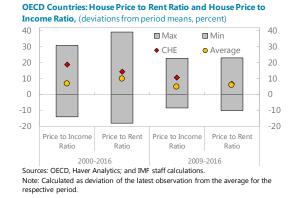
<sup>&</sup>lt;sup>5</sup> Key self-regulatory measures are: buyers must acquire a minimum upfront equity stake of 10 percent in the property through use of own funds (rather than borrowed funds or Pillar 2 or 3 pension assets); mortgages must be paid down to two-thirds of the value of the property within 15 years; and banks are required to value real estate at the lower of market value or purchase price. Banks may still issue mortgages that do not meet these and other self-regulation requirements if they set the risk weight on the entire mortgage to 100 percent.

sharply in recent years, although some recovery has occurred since mid-2016. In July 2016, the Swiss authorities began implementing stricter too-big-to-fail (TBTF2) regulations for their G-SIBs, and which are more conservative than Basel minima, requiring them to have sufficient capital to absorb operating losses and adequate debt capital to fund an orderly resolution.<sup>6</sup>

#### Staff's views

30. Elevated household debt and banks' concentrated exposure to mortgages could amplify macroeconomic shocks, and new measures should be readied and supervision further strengthened. House prices relative to income have grown significantly since the great recession, and while prices have recently stabilized, price to income ratios remain stretched. Average debt per borrower is very high given the relatively low rate of home ownership. A prompt response will be needed if greater competition in credit markets further bids down interest rates and spurs a resurgence of mortgage lending or an acceleration of house prices. The response should target the build-to-rent segment where activity is currently brisk and where larger risk weights and/or faster amortization relative to owner-occupied properties is appropriate to reflect the international tendency for higher default and loss rates on these loans. Greater recourse to legally-binding regulation in preference to banks' self-regulation could ensure any needed changes are implemented in timely manner and that uniform standards apply to all mortgage providers. The stepped up frequency of on-site inspections by the supervisor, FINMA, across all types of banks including cantonal banks, as recommended by the 2014 FSAP—is welcome. Further progress is warranted to refine supervisory arrangements for external bank audits, including to ensure arm's length financial relations between banks and auditors providing supervisory services on behalf of FINMA.7





<sup>6</sup> The authorities adopted enhanced leverage requirements in July 2016 to address the TBTF problem. The regulations, referred to as TBTF2, require the G-SIBs to raise leverage ratios to 5 (against Basel III's requirement of 3) and the total loss absorbing leverage ratio to 10 percent (or 28.6 percent of risk-weighted assets), with linear phasein by end-2019. The Basel III minimum is 18 percent of risk-weighted assets, and to be reached by January 2022.

<sup>7</sup>As regards FINMA's reliance on external auditors, the 2014 FSAP recommended rotating auditing firms, providing them more guidance on their supervisory focus, avoiding actual or perceived conflicts of interest with supervised banks by remunerating them from a FINMA-managed, but bank-financed fund, rather than the audited bank directly compensating the audit firm.

#### 31. The new Swiss G-SIB regulations appropriately reflect the systemic risk characteristics

**of these banks.** The establishment of Swiss holding company structures for the Swiss G-SIBs will help ensure the survivability of core operations critical to the Swiss financial system. The large size of these banks relative to the Swiss economy and their potential role in global risk propagation warrant the requirements on leverage ratios and too-big-too-fail regulations that are more stringent than minimum international standards. This will also help safeguard the Swiss economy from inward spillovers. Attention should also be given to risk weights used in internal ratings-based models and greater disclosure of weights as part of the forthcoming revision to Basel requirements could help to strengthen credibility.

#### Authorities' views

32. Downward pressure on mortgage lending rates could encourage excess supply of

**investment properties.** The revision of the self-regulation rules for mortgage lending (approved by FINMA), the activation and increase of the sectoral CCB targeting risks in the domestic mortgage and real estate markets and the permanent adjustment of risk-weights for high loan-to-value mortgage loans have all helped to stabilize house prices. Tax incentives favor high mortgage debt, but at the same time lead to large financial assets for the same individuals, thereby mitigating financial stability risks. Mandatory amortization and the 20 percent own-funds down payment requirement also partly offset financial stability risks. Moreover, the widespread application of conservative mortgage affordability tests (using an interest rate of 5 percent plus an additional 2 percentage points for taxes and maintenance) and comfortable LtV margins provide buffers in case interest rates rise or house prices decline. However, institutional and private investors—in search of higher yielding assets—have increased activity in build-to-let properties, where prices are vulnerable to higher interest rates or slower immigration. A significant premium on risk weights for investment property mortgages relative to owner-occupied mortgages would be appropriate under new Basel guidelines.

#### 33. FSAP recommendations on onsite bank supervision and auditing are constructive.

While continuing to pursue a risk-based supervision model, FINMA has increased the frequency of onsite inspections across all supervised entities by 10 percent, in line with FSAP recommendations. On the FSAP recommendation regarding the use of audit firms as extended arms of the supervisory authority, measures to improve the efficiency and effectiveness of the regulatory audit framework are being assessed, inter alia by introducing the direct mandating of audit firms by FINMA.

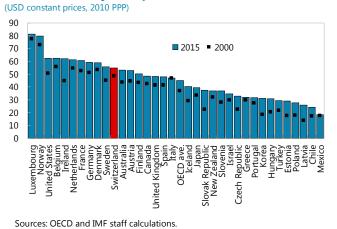
**34.** New regulatory measures solidify the position of the Swiss G-SIBs, but the systemically important domestic banks (D-SIBs) and transparency of risk weights require further attention. The recently implemented stricter capital standards are crucial to reduce the likelihood of spillovers among G-SIBs and from the G-SIBs to the domestic economy thereby increasing financial stability. Reflecting the long phase-in periods, it will take several years to bring the gone-concern capital buffers to the prescribed regulatory levels. To further reduce systemic risks, gone-concern capital requirements for D-SIBs are necessary. Discussions about the implementation of such regulations are currently taking place. Finally, greater transparency on risk weights, expected to be required by the new Basel standards, would be an important improvement.

#### D. Structural Issues

#### Background

**35.** In recent years, Switzerland's GDP growth has been boosted by brisk labor force expansion, while the investment-to-GDP ratio has remained modest. Immigration has brought significant benefits for growth and pension system sustainability by helping to offset the decrease in the Swiss working-age population. However, the investment ratio has remained at about 23 percent, well below the

#### Labor Productivity: GDP per Hour Worked



saving rate. As a result, labor productivity has grown relatively slowly and has been outpaced by real wages.

**36.** Switzerland continues to make progress with implementing international standards for cooperation and information sharing in the financial sector. A comprehensive AML/CFT risk assessment has been published last year and strengthened due diligence requirements for financial intermediaries became effective in 2016. An assessment of the implementation of Financial Action Task Force (FATF) recommendations and of their effectiveness has been adopted by the FATF in October and is scheduled for publication shortly. The legal basis for the automatic exchange of information on tax matters was adopted in 2015, and Switzerland agreed with the EU and several other states and territories that it will begin collecting data in 2017, with data exchange commencing in 2018. Corporate tax reform by the cantons will align the corporate tax code with international initiatives to counter base erosion and profit shifting.

#### Staff's views

**37.** Strengthening productivity would help mitigate possible appreciation shocks while also allowing firms to adapt in the event of a slowdown in labor force growth. Preserving close economic ties with the EU by reaching pragmatic solutions is crucial given sizable trade and economic linkages. Continuing to welcome foreign workers and adequately funding education are also essential to secure long-run growth, especially in frontier technologies. However, increasing the rate of investment would rebalance the capital-labor ratio, and help ensure that Swiss wages remain aligned with productivity levels. The planned harmonization of tax rates on domestic and foreign firms, to be achieved by sharply reducing the upper rate and modestly raising the lower rate, will increase incentives for domestic firms to invest, enabling them to improve efficiency, become more flexible and better cope any future strengthening of the exchange rate.

**38.** Increasing transparency and cooperation in the financial sector helps to level the playing field among participating countries while also protecting Switzerland's integrity as an international financial center. Building on recent progress, the authorities are encouraged to further strengthen the enforcement of FATF and OECD standards. In particular, it is key to ensure

#### SWITZERLAND

private banks and wealth managers comply with customer due diligence requirements, to promote entity transparency, and to sustain effective international cooperation.

#### Authorities' views

**39.** The economy demonstrated resilience and flexibility in response to the large exchange rate appreciation and should continue to build on these achievements. Switzerland strongly supports open markets, and maintaining bilateral agreements with the EU is essential. Structural reforms are needed to increase competitiveness, and continuing to adequately fund research universities is a priority to remain a world leader in innovation and to create private sector spin-offs. However, large capital inflows that result from globally loose monetary policies, remain an ongoing challenge for the economy.

**40.** Switzerland has been an early adopter of numerous international initiatives, and related laws are strictly enforced. However, given Swiss banks' major role in global wealth management, these banks tend to be more exposed than others to money laundering concerns, especially in emerging markets. FINMA has repeatedly warned banks to be vigilant for these risks and has stepped up its efforts by more intensive and proactive supervision. FINMA pursues suspect cases and, imposes administrative sanctions (disgorgement of profits, ban to enter new business relations with PEP) initiates enforcement proceedings against individuals, and forwards cases to the criminal authorities where appropriate.

## **STAFF APPRAISAL**

**41.** The Swiss economy adapted well to the sharp appreciation that followed the exit from the exchange rate floor in early 2015. Flexibility by firms and the labor market, together with an effective monetary and fiscal policy response, helped to cushion the impact and facilitate adjustment. As a result, growth remained positive, the current account surplus was resilient, and consumers' real purchasing power was boosted by the drop in prices. Nonetheless, segments of the economy remain pressured by the moderately overvalued real exchange rate.

**42.** The economy is forecast to return to moderate growth, although downside risks could cloud this outlook. GDP is expected to grow by 1½ percent in 2016, and to stabilize at 1¾ percent over the medium term. This trajectory is consistent with gradually closing the output gap and unwinding the real overvaluation. However, important external and domestic risks could affect this outlook, including renewed capital inflow surges, further weakening of global growth, sharp domestic property price movements, concerns about the health of large global banks and changes to Swiss-EU economic relations.

**43. Monetary policy should remain accommodative by discouraging inflow pressures.** The SNB's two-pronged approach, which combines a negative interest rate and foreign exchange purchases, has helped avert a prolonged slowdown and sustained deflation. This has been achieved

notwithstanding the Swiss franc's role as a safe haven currency, which limits policy independence. Notably, a sharp appreciation following the Brexit vote was avoided despite a jump in inflows.

44. While room for maneuver is ultimately limited, some rebalancing of policy tools would improve policy effectiveness and simplify communications. Scope further remains to widen the negative policy rate differential relative to other major currencies in order to reduce the need for frequent small-scale interventions. This would reserve foreign currency purchases for responding primarily to large episodic inflow surges. However, both tools are subject to increasing costs—risks of cash hoarding and financial instability in the case of negative interest rates, and the potential for valuation losses on the SNB's expanding balance sheet in the case of intervention—which warrants a cautious approach. Given these constraints, over the longer term, some additional upward flexibility for the Swiss franc should be a policy option.

**45.** Within the existing debt brake framework, fiscal policy could provide additional support to the economy. The rule's automatic stabilizers help to dampen the business cycle. However, a tendency to underspend approved allocations and a conservative approach to estimating the output gap results in a tendency to overshoot the structural balance objective that, at the margin, places additional pressure on monetary policy. Moreover, the success of the rule at lowering public debt and keeping budgets broadly balanced, together with the current negative borrowing costs, suggests ample fiscal space exists for a discretionary stimulus in the event a sizable output gap were to open. This flexibility, which is permitted under the rule's "exceptional circumstances" clause, would avoid overburdening monetary policy.

46. Elevated exposure to real estate by borrowers and lenders could amplify shocks, calling for timely preparation of new property-related measures and strengthened supervision. Credit and house price dynamics have slowed in response to previous macroprudential policies and higher lending rates by banks. However, competition among banks and also from nonbank lenders could drive down rates, triggering a renewed upswing in the mortgage credit-and-house price cycle. Pre-emptively preparing new tightening measures is warranted, with a focus on the build-to-let segment and relying on legally-binding regulation. Further progress is

needed to align incentives for external auditors tasked with performing supervisory functions.

**47.** The too-big-to-fail regulations governing the Swiss G-SIBs reflect their systemic risk characteristics and their large size relative to the Swiss economy. These regulations are appropriately more stringent than the Basel minimum requirements. In addition, risk weights used in banks' internal ratings-based models should be reviewed, and in the context of the ongoing Basel review, require banks to provide more information on their weights, which would strengthen the credibility of their financial reporting.

**48. Early adjustment of pension system parameters will help protect the long-term viability of the social safety net.** Rapid population aging will increase future fiscal obligations. Raising retirement ages for women and men and increasing VAT rates with revenue earmarked for pensions will help to narrow the gap in the publicly-funded first pillar pension. Lowering the conversion rate used to calculate annuity payments to better reflect expected interest rates and life expectancy and aligning the rate for compounding premiums with market interest rates would strengthen the stability of the second-pillar, defined-contribution scheme.

**49. Continuing to meet international standards is essential to preserve Switzerland as a prime destination for foreign investment and protect the integrity of its banks.** Widespread international cooperation is needed to achieve a level playing field across jurisdictions, and Swiss legal standards should continue to adapt to evolving AML/CFT and tax transparency standards. Identified lapses, including in those that could arise the context of the recent FATF evaluation, should be vigorously pursued.

**50.** Strengthening productivity would protect the economy from future exchange rate shocks and a possible slowing of the labor force, while keeping it at the technology forefront. Preserving close economic ties with the EU while continuing to welcome foreign workers is essential to safeguard Switzerland's high standard of living. The corporate income tax reform may help raise investment rates by small and medium-sized firms, allowing them to boost productivity, underpin wages and build resilience in the event of an appreciation.

# 51. It is recommended that the next Article IV consultation take place on the standard 12-month cycle.

# Box 1. Possible Implications for EU Relations of the 2014 Referendum Restricting Immigration

**An initiative to limit immigration narrowly won a Swiss referendum vote in 2014.** A binding referendum in February 2014 to introduce quotas for immigration won the popular vote with a slim majority (50.3 percent), and was also approved by a majority of cantons, thereby satisfying the double-majority requirement to amend the constitution. In line with the new constitutional article, a law to limit immigration should be put in place by February 2017.

Impeding the free flow of labor from the EU could breach bilateral treaties and impede Switzerland's access to the single market. Since voting down membership to the European Economic Area in the early 1990s, Switzerland secured access to EU markets through some 120 bilateral accords. A series of core agreements, including a requirement to allow EU citizens to work within Switzerland without restriction, contain a "guillotine clause" that would invalidate all accords if any individual one were terminated. Switzerland is also a member of the Schengen area of border-free travel. Cancellation of these arrangements has the potential to severely constrain Swiss companies' access to EU markets, which absorb more than half of Switzerland's exports and are the source for three-quarters of its imports. It could also impede trade in financial services.

Moreover, the Swiss labor market relies heavily on foreign workers, including highly skilled ones.

Foreigners account for more than half the increase in the labor force, which has grown by 13½ percent since 2002. Many are cross-border commuters from neighboring EU countries, facilitated by Switzerland's inclusion in the Schengen area. At present, there is a significant share of foreign nationals in the working-age population, many of whom are highly skilled and fill critical positions in hi-tech industries. Foreigners also contribute importantly to the Swiss old age pension system. Limits on foreign workers would dampen confidence and investment, as well as impeding output growth.

**No compromise has been reached with the EU, but talks are continuing.** The lower house of parliament has proposed a measure that provides some advance notice of job openings to people residing in Switzerland. The upper house has yet to vote, and any approved measure would need to be discussed with the EU. The Brexit vote could have a bearing on the Swiss-EU discussions, which could extend to broader issues including an institutional framework to allow Swiss laws to adjust swiftly to changes in EU rules.

#### **Box 2. External Sector Assessment**

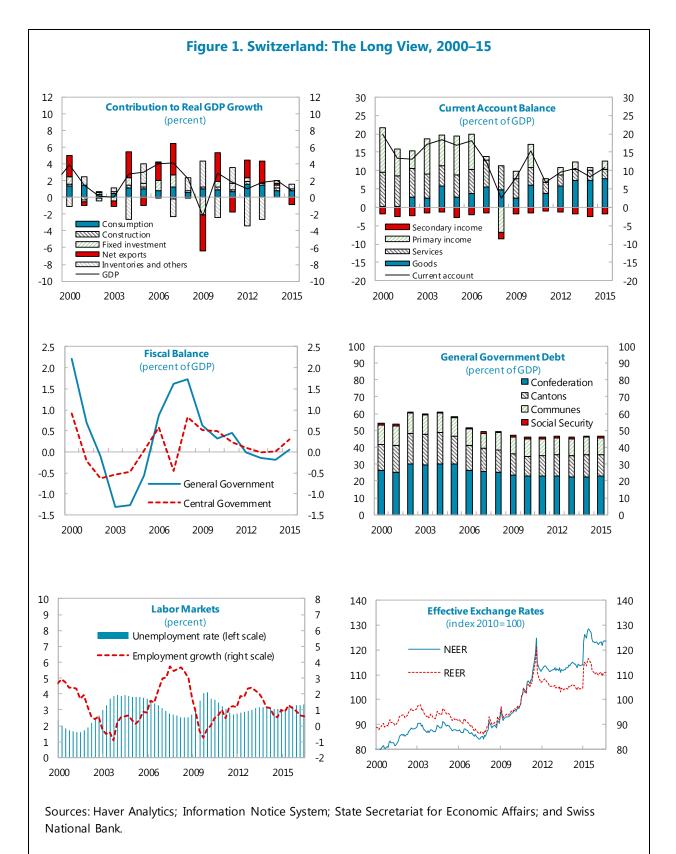
Staff sees the Swiss external position as moderately weaker (and the real exchange rate as moderately stronger) than implied by medium-term fundamentals and desirable policies. The EBA analysis points to a positive current account gap of around 5 percent of GDP in 2015, however, idiosyncratic factors (large exchange rate and other valuation losses on the net international investment position (NIIP), as well as non-traditional inflows; see Annex I) reduce the gap to -4 to +2 percent of GDP. In view of the large valuation losses in recent years, which depend in part on the size of gross foreign assets and liabilities, the realized current account surplus has been insufficient to stabilize the NIIP.<sup>1</sup> Moreover, the EBA REER models suggest the REER was 16–23 percent overvalued on average during 2015, although this reflects in part the implicit mean reversion in the model. Taking into consideration the EBA estimates from both the current account and REER models, as well as staff's broader analysis, staff assesses the franc to have been moderately (10 percent) above the level consistent with fundamentals and desirable policy settings on average during 2015. However, this assessment is subject to considerable uncertainty, in part reflecting inconsistent findings across the EBA models. Subsequent developments (a lower NEER and more negative inflation in Switzerland than in its trading partners) suggest that the extent of overvaluation for 2016 may have decreased.

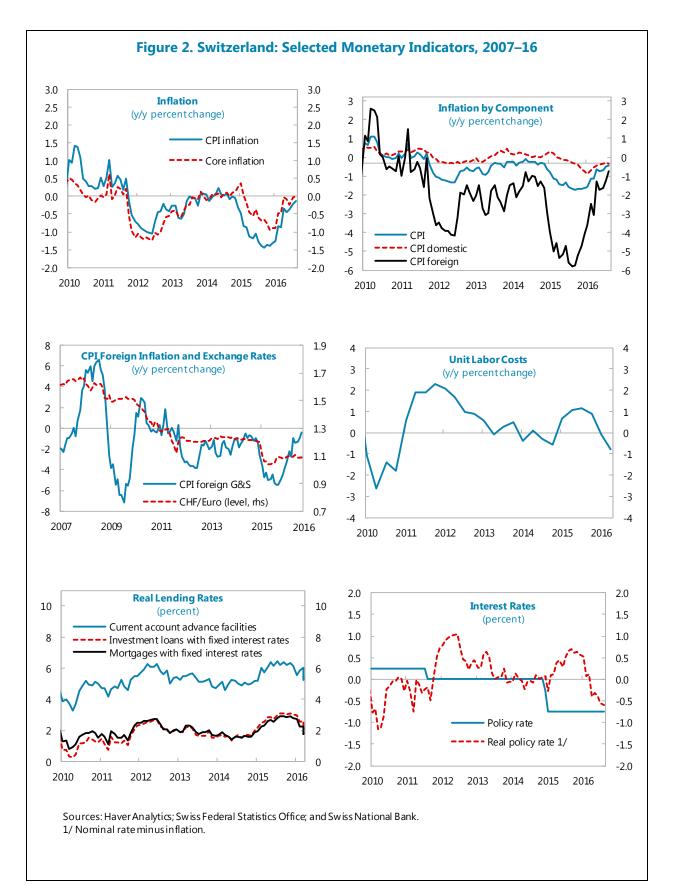
	Cyclically . Actual adjusted norm		Total CA gap	Implied REER gap 1/
Current Account Regression				
Percent of GDP	11.4	6.4	5.0	-10.0
	A I	E. a. J	Total REER	
	Actual	Fitted	gap 2/	
Real Effective Exchange Rate Regressions				
REER Index	4.80	4.69	15.8%	
REER Level	0.52	0.40	23.4%	

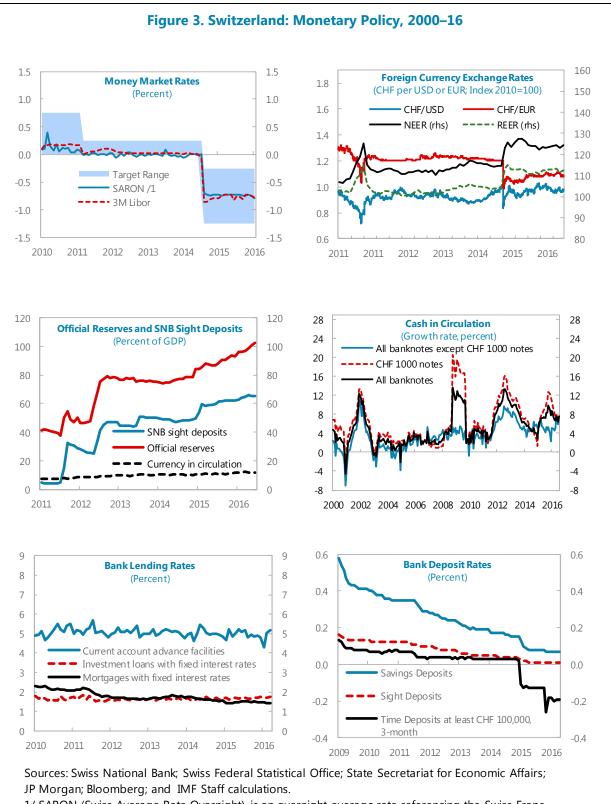
Source: IMF staff calculations.

1/ The figure reported is based on the estimated current account gap and an assumed elasticity with respect to the REER. The elasticity used is a common elasticity assumption of 0.71 for exports and 0.92 for imports, adjusted by the size of exports and imports in GDP. Note that closure of a current account gap generally would require a shift in saving or investment rates as well as a movement in the REER. Negative value denotes undervaluation. 2/ After multilateral consistency adjustment.

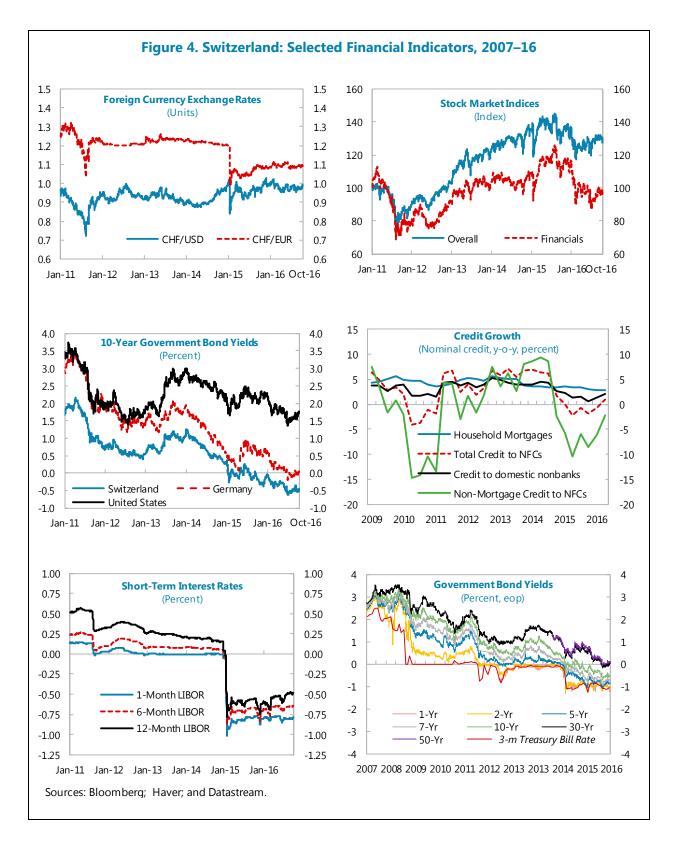
<sup>1</sup>Changes in the NIIP can arise from three sources: (a) acquisition of foreign assets and incurrence of foreign liabilities (the corollary of the current account); (b) changes in the measurement and sampling of data; and (c) changes in the value of assets and liabilities. In the case of Switzerland, valuation effects are likely to be significant in view of (i) the large size of gross foreign assets and liabilities, (ii) large shifts in bilateral exchange rates, (iii) the large imbalance between foreign currency-denominated assets and liabilities owing to the higher share of foreign assets denominated in foreign currency as compared with foreign (and foreign currency denominated) liabilities; and (iv) the larger share of foreign liabilities than foreign assets in the form of equities. Because of (iii) and (iv), the effect of exchange rate and equity price movements on the NIIP is not symmetric. See the Swiss National Bank's "Swiss Balance of Payments and International Investment Position, 2015."

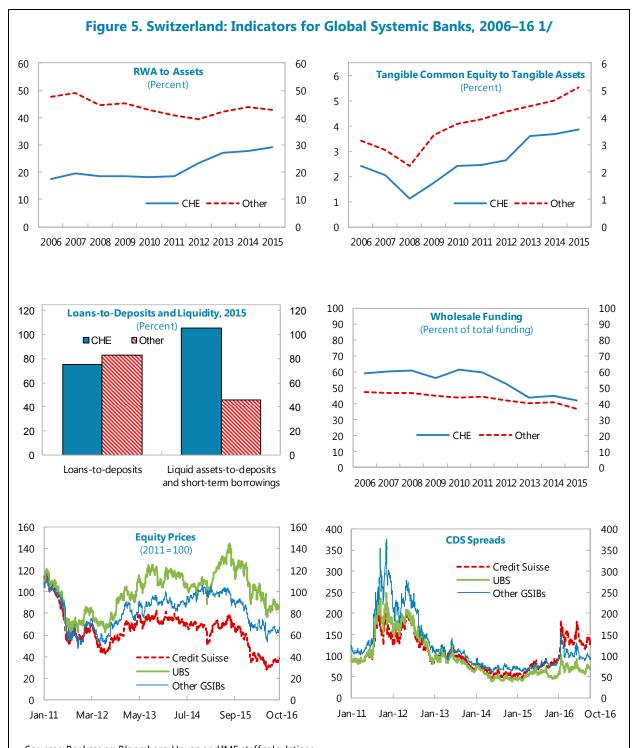




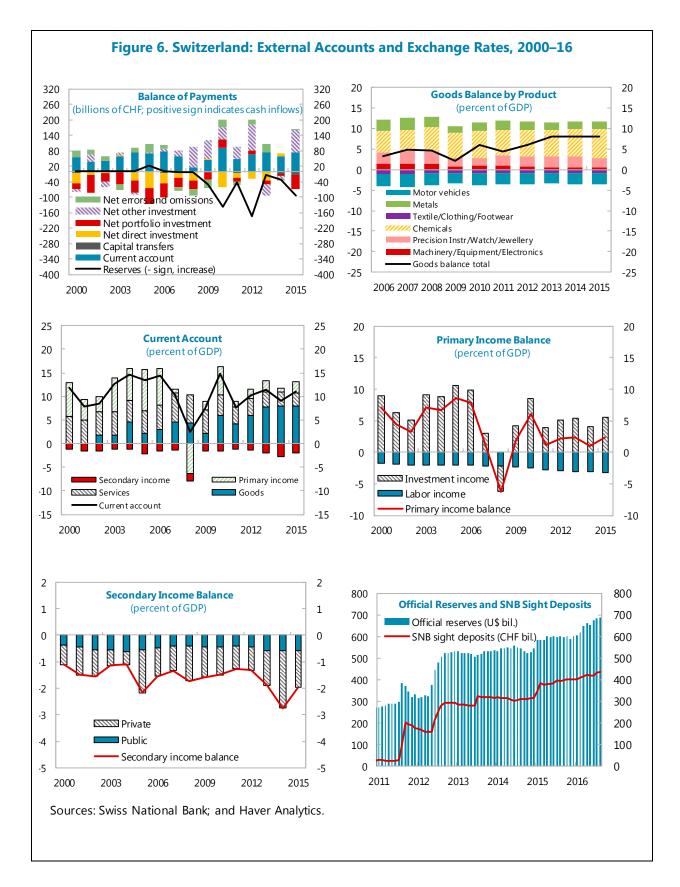


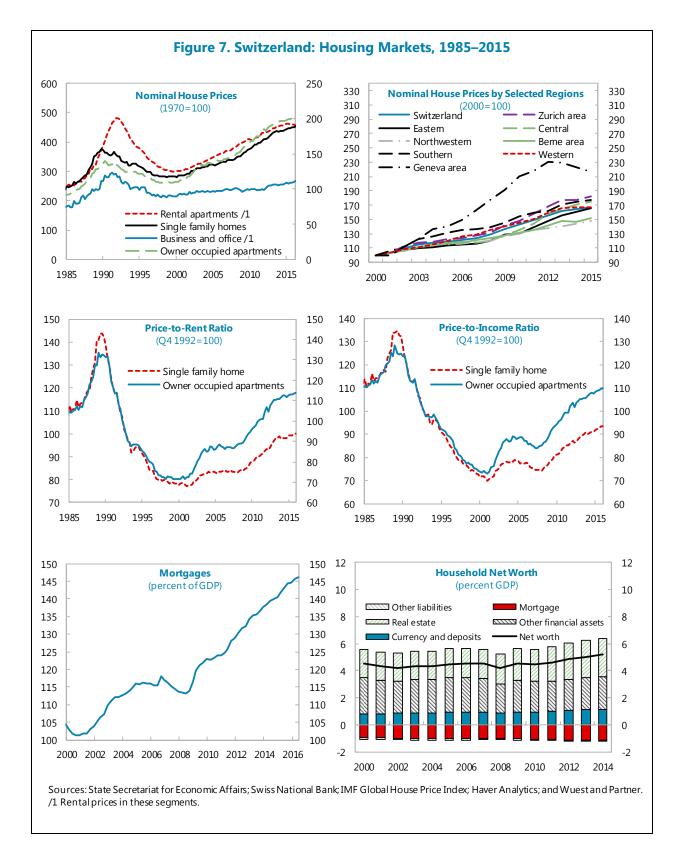
1/ SARON (Swiss Average Rate Overnight) is an overnight average rate referencing the Swiss Franc interbank repo market.





Sources: Bankscope; Bloomberg; Haver, 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.





	2014	2015	2016	2017	2018	2019	2020	2021
					Staff proje	ctions		
Real GDP (percent change)	2.0	0.8	1.5	1.6	1.6	1.6	1.7	1.7
Total domestic demand	2.0	1.9	1.4	1.5	1.4	1.3	1.4	1.4
Final domestic demand	1.7	1.3	1.7	1.7	1.5	1.4	1.4	1.4
Private consumption	1.2	1.0	1.2	1.4	1.5	1.5	1.4	1.5
Public consumption	1.5	2.2	2.5	1.6	1.2	1.0	1.0	1.0
Gross fixed investment	2.8	1.5	2.7	2.2	1.7	1.5	1.4	1.5
Inventory accumulation 1/	0.3	0.5	-0.3	-0.2	-0.1	-0.1	0.0	0.0
Foreign balance 1/	0.2	-0.9	0.3	0.3	0.4	0.4	0.5	0.5
Nominal GDP (billions of Swiss francs)	643.8	645.6	651.9	661.1	673.3	687.9	704.5	722.3
Savings and investment (percent of GDP)								
Gross national saving	31.8	34.3	33.7	33.6	33.4	33.3	33.1	33.1
Gross domestic investment	23.0	23.0	23.7	24.0	24.2	24.3	24.3	24.3
Current account balance	8.8	11.3	10.0	9.5	9.2	9.0	8.9	8.8
Prices and incomes (percent change)								
GDP deflator	-0.6	-0.5	-0.5	-0.2	0.2	0.6	0.7	0.8
Consumer price index (period average)	0.0	-1.1	-0.4	0.1	0.5	0.8	0.9	1.0
Consumer price index (end of period)	-0.3	-1.3	0.0	0.3	0.7	0.8	0.9	1.0
Nominal hourly earnings	0.7	0.4	0.8	1.2	1.7	1.9	1.9	1.9
Unit labor costs (total economy)	0.1	1.3	-0.2	0.8	1.3	1.6	1.5	1.5
Employment and slack measures								
Unemployment rate (in percent)	3.0	3.2	3.4	3.3	3.3	3.2	3.1	3.1
Output gap (in percent of potential)	-0.3	-0.8	-0.7	-0.6	-0.4	-0.3	-0.2	0.0
Capacity utilization	82.0							
Potential output growth	1.4	1.3	1.5	1.4	1.4	1.5	1.6	1.5
General government finances (percent of GDP)								
Revenue	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7
Expenditure	32.9	32.6	32.7	32.7	32.6	32.6	32.5	32.4
Balance	-0.2	0.1	0.0	0.0	0.1	0.1	0.1	0.2
Cyclically adjusted balance	-0.1	0.3	0.2	0.2	0.2	0.2	0.2	0.2
Gross debt 2/	46.6	46.6	46.1	45.5	44.7	43.9	42.7	41.4
Monetary and credit (percent change, average)								
Broad money (M3)	3.3	1.6						
Domestic credit, non-financial	2.7	0.6						
Three-month SFr LIBOR	0.0	-0.8						
Yield on government bonds (7-year)	0.4	-0.3						
Exchange rates (levels)								
Swiss francs per U.S. dollar (annual average)	0.9	1.0						
Swiss francs per euro (annual average)	1.2	1.1						
Nominal effective rate (avg., 2000=100)	115.4	124.8						
Real effective rate (avg., 2000=100) 3/	104.6	112.4						

#### Table 1. Switzerland: Selected Economic Indicators, 2014–21

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

1/ Contribution to growth. Inventory accumulation includes also 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.

	2014	2015	2016	2017	2018	2019	2020	202
				S	taff proje			
(In billio	ns of Swiss fra	ancs, unles	s otherwise	e indicated	)			
Current account	57	73	65	63	62	62	63	64
Goods balance	49	54	48	47	44	42	42	4
Exports	300	292	289	291	294	297	302	30
Imports	251	238	240	244	250	255	260	26
Service balance	18	16	18	17	20	23	25	2
Net primary income	6	15	11	10	10	9	8	
Net secondary income	-17	-12	-12	-11	-12	-12	-13	-1
Private capital and financial account	39	48	41	37	37	36	37	3
Capital transfers	-10	-14	-12	-13	-13	-13	-13	-1
Financial account	49	63	53	50	49	49	50	5
Net foreign direct investment	-10	1	-4	-1	-3	-2	-3	-
Net portfolio investment	6	52	29	41	35	38	36	3
Net financial derivatives	0	1	1	1	1	1	1	
Net other investment	19	-87	23	10	17	13	15	1
Change in reserves	34	95	5	0	0	0	0	
Net errors and omissions	2	4	0	0	0	0	0	
(In p	ercent of GDF	, unless ot	herwise inc	dicated)				
Current account	8.8	11.3	10.0	9.5	9.2	9.0	8.9	8.
Goods balance	7.7	8.3	7.4	7.2	6.5	6.1	5.9	5.
Exports	46.6	45.3	44.3	44.1	43.6	43.2	42.9	42.
Imports	38.9	36.9	36.8	36.9	37.1	37.1	36.9	36.
Service balance	2.8	2.6	2.8	2.6	3.0	3.3	3.6	3.
Net primary income	0.9	2.3	1.6	1.5	1.4	1.3	1.2	1.
Net secondary income	-2.6	-1.8	-1.8	-1.7	-1.7	-1.7	-1.8	-2
Private capital and financial account	6.0	7.5	6.3	5.6	5.5	5.3	5.3	5.
Capital transfers	-1.6	-2.2	-1.9	-2.0	-1.9	-1.9	-1.8	-1.
Financial account	7.6	9.7	8.2	7.5	7.3	7.1	7.1	7.
Financial account		0.2	-0.7	-0.2	-0.4	-0.3	-0.4	-0.
Net foreign direct investment	-1.6	0.2			<b>F</b> 0	5.5	5.2	5.
Net foreign direct investment Net portfolio investment	-1.6 1.0	8.1	4.5	6.2	5.2	5.5		
Net foreign direct investment Net portfolio investment Net financial derivatives	1.0 0.0	8.1 0.2	4.5 0.1	0.1	0.1	0.1	0.1	
Net foreign direct investment Net portfolio investment Net financial derivatives Net other investment	1.0 0.0 2.9	8.1 0.2 -13.5	4.5 0.1 3.5	0.1 1.5	0.1 2.5	0.1 1.8	2.1	2.
Net foreign direct investment Net portfolio investment Net financial derivatives Net other investment Change in reserves	1.0 0.0 2.9 5.3	8.1 0.2 -13.5 14.7	4.5 0.1	0.1	0.1 2.5 0.0	0.1		2.
Net foreign direct investment Net portfolio investment Net financial derivatives Net other investment Change in reserves	1.0 0.0 2.9	8.1 0.2 -13.5	4.5 0.1 3.5	0.1 1.5	0.1 2.5	0.1 1.8	2.1	0. 2. 0. <b>0.</b>
Net foreign direct investment Net portfolio investment Net financial derivatives Net other investment Change in reserves <b>Net errors and omissions</b>	1.0 0.0 2.9 5.3	8.1 0.2 -13.5 14.7	4.5 0.1 3.5 0.8	0.1 1.5 0.0	0.1 2.5 0.0	0.1 1.8 0.0	2.1 0.0	2. 0.
Net foreign direct investment Net portfolio investment Net financial derivatives Net other investment Change in reserves <b>Net errors and omissions</b>	1.0 0.0 2.9 5.3	8.1 0.2 -13.5 14.7	4.5 0.1 3.5 0.8	0.1 1.5 0.0	0.1 2.5 0.0	0.1 1.8 0.0	2.1 0.0	2. 0. <b>0.</b>
Net foreign direct investment Net portfolio investment Net financial derivatives Net other investment Change in reserves <b>Net errors and omissions</b> <b>Memorandum items:</b>	1.0 0.0 2.9 5.3 <b>0.3</b>	8.1 0.2 -13.5 14.7 <b>0.6</b>	4.5 0.1 3.5 0.8 <b>0.0</b>	0.1 1.5 0.0 <b>0.0</b>	0.1 2.5 0.0 <b>0.0</b>	0.1 1.8 0.0 <b>0.0</b>	2.1 0.0 <b>0.0</b>	2. 0.
Net foreign direct investment Net portfolio investment Net financial derivatives Net other investment Change in reserves <b>Net errors and omissions</b> <b>Memorandum items:</b> Net IIP (in percent of GDP)	1.0 0.0 2.9 5.3 <b>0.3</b>	8.1 0.2 -13.5 14.7 <b>0.6</b>	4.5 0.1 3.5 0.8 <b>0.0</b>	0.1 1.5 0.0 <b>0.0</b>	0.1 2.5 0.0 <b>0.0</b>	0.1 1.8 0.0 <b>0.0</b>	2.1 0.0 <b>0.0</b>	2. 0. <b>0.</b>

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

#### Table 3. Switzerland: SNB Balance Sheet, 2010–15

(Millions of Swiss francs; unless otherwise indicated)

	2010	2011	2012	2013	2014	201
Assets						
Gold	43,988	49,380	50,772	35,565	39,630	35,46
Foreign currency reserves	203,810	257,504	432,209	443,275	510,062	593,23
IMF, international, and monetary assistance loans	6,038	8,057	7,332	6,834	6,664	6,48
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	4,96
Total assets	269,955	346,079	499,434	490,382	561,202	640,15
Liabilities						
Currency in circulation (banknotes)	51,498	55,729	61,801	65,766	67,596	72,88
Sight deposits	48,917	216,701	369,732	363,910	387,666	469,03
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	37,18
Provisions and equity capital	42,591	53,123	58,075	48,023	86,305	61,05
Total liabilities	269,955	346,079	499,434	490,382	561,202	640,15
Memorandum items:						
Nominal GDP (billions of Swiss francs)	606	618	624	635	644	64
Balance sheet, percent of GDP	44.5	56.0	80.1	77.3	87.2	99
Banknotes, percent of total liabilities	19.1	16.1	12.4	13.4	12.0	11
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
Monetary base 1/	90,208	137,728	284,381	360,765	375,305	455,86

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

	2014	2015	2016	2017	2018	2019	2020	2021
	Estimate		Staff projections					
(In billions o	of Swiss franc	s, unless ot	herwise sp	ecified)				
General government								
Revenue	210	211	213	216	220	225	230	236
Expenditure	212	211	213	216	220	224	229	234
Net lending/net borrowing	-1	0	0	0	0	1	1	2
Confederation (Federal government) 1/								
Revenue	67	71	72	73	74	75	77	79
Expenditure	67	69	70	72	74	76	77	78
Net lending/net borrowing	0	2	1	0	0	0	0	1
Cantons								
Revenue	85	86	87	88	89	91	94	96
Expenditure	88	88	88	88	90	92	94	96
Net lending/net borrowing	-2	-3	-1	-1	0	-1	0	0
Communes/municipalities								
Revenue	45	45	46	46	47	48	49	50
Expenditure	46	45	46	47	47	48	49	50
Net lending/net borrowing	-1	0	0	0	0	0	0	0
Social security 2/								
Revenue	61	62	62	63	65	66	67	69
Expenditure	59	60	62	63	63	64	67	68
Net lending / net borrowing	2	2	1	1	2	2	1	1
General government gross debt 3/	300 145	301 147	301 148	301 149	301 148	302 148	301 148	299 147
Confederation (Federal government) 1/ Cantons	86	83	148 82	149 81	148 80	148 80	148 80	80
Communes/municipalities	65	65	62 64	64	63	63	63	63
Social security 2/	4	6	6	7	9	11	10	9
	-		0	,	5		10	
	(In perce	ent of GDP)						
General government operations	20 7					207		
Revenue	32.7	32.7	32.7	32.7	32.7	32.7	32.7	32.7
Expenditure	32.9	32.6	32.7	32.7	32.6	32.6	32.5	32.4
Net lending/net borrowing Confederation (Federal government) 1/	-0.2 0.0	0.1 0.3	0.0 0.2	0.0 0.1	0.1 -0.1	0.1 0.0	0.1 0.0	0.2 0.1
Confederation (rederal government) 1/	-0.4	-0.4	-0.2	-0.1	-0.1	-0.1	0.0	0.1
Communes/municipalities	-0.4 -0.1	-0.4 -0.1	-0.2	-0.1	-0.1	-0.1	0.0	0.0
Social security	0.3	0.3	-0.1	0.1	0.1	0.3	0.0	0.0
•								
General government gross debt 3/	46.6	46.6	46.1	45.5 22 F	44.7	43.9	42.7	41.4
Confederation (Federal government) 1/	22.6	22.8	22.8	22.5	22.0	21.5	21.0	20.3
Cantons Communes/municipalities	13.3 10.1	12.9 10.0	12.5 9.8	12.2 9.7	11.9 9.4	11.6 9.2	11.3 9.0	11.1 8.7
Social security 2/	0.7	0.9	9.8 1.0	9.7 1.1	9.4 1.3	9.2 1.6	9.0 1.4	8.7 1.3
	0.7	0.9	1.0	1.1	1.5	1.0	1.4	1.3
Memorandum items:		_		_			_	
Nominal GDP (billions of francs)	644	646	652	661	673	688	705	722
Output gap (percent)	-0.3	-0.8	-0.7	-0.6	-0.4	-0.3	-0.2	0.0
General Government cyclically adjusted balance	-0.1	0.3	0.2	0.2	0.2	0.2	0.2	0.2

### Table 4. Switzerland: General Government Finances, 2014–21

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/ Data are unconsolidated.

Expense       31.1       30.0       30.5       32.1       31.8       32.3       32.5       32.8       32.6         Compensation of employees       7.1       6.9       6.9       7.4       7.4       7.4       7.5       7.6       7.5         Purchases/use of goods and services       3.3       3.1       3.4       3.6       3.5       3.5       3.6       3.7       3.7         Interest expense       1.3       1.2       1.0       0.9       0.9       0.8       0.7       0.6       0.6         Social benefits       11.0       10.5       10.1       11.1       11.1       10.9       11.1       11.3       11.5         Expense n.e.c.       8.4       8.3       9.0       9.0       9.7       9.6       9.6       9.3         Net acquisition of nonfinancial assets       0.1       0.1       0.2       0.3       0.3       0.1       0.1       0.2         Net operating balance       1.0       1.7       1.9       0.9       0.6       0.8       0.1       0.0       0.0		2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Taxes         1086         1149         121.4         120.8         122.2         125.3         128.1         128.8           Taxes on prodits and services         34.6         692         73.7         73.2         76.7         75.8         77.8         78.8           Taxes on income, profits, and capital gains         34.6         55.6         37.2         36.4         38.2         38.9         39.4         93.5           Taxes on international trade and transactions         10         10         10         10         10         10         11         10         11         11           Scala contributions         33.7         35.4         37.1         38.5         38.8         8.9         9.4         42.4         43.1         42.2         20.2         20.2         20.2         20.2         0.2         0.2         0.2         0.2         0.2         0.2         0.2         0.2         0.2         0.2         0.2         0.2         0.2         0.2         0.2         0.2         0.2         0.2         2.2         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0 </td <td></td> <td>(In</td> <td>billions of</td> <td>Swiss fran</td> <td>cs, unless o</td> <td>otherwise s</td> <td>specified)</td> <td></td> <td></td> <td></td> <td></td>		(In	billions of	Swiss fran	cs, unless o	otherwise s	specified)				
Taxes on income, profits, and capital gains       645       645       645       77       737       732       767       758       778       788       788         Taxes on goods and services       346       356       372       364       382       388       391       396         Taxes on goods and services       10       10       10       11       11       10       11	Revenue	172.5	181.7	193.4	193.9	196.7	204.3	203.4	207.8	210.4	211.0
Taxes on proofs and services       346       356       372       364       382       389       388       99.4       95         Taxes on international trade and transactions       10       10       10       10       10       10       10       11       10       11	Taxes	108.6	114.9	121.4	120.8	122.2	126.2	125.3	128.1	129.8	130.1
Taxes on property       8.1       8.8       8.9       9.0       9.0       8.8       8.9       9.4       9.5         Taxes on international trade and transactions       1.0       1.0       1.0       1.0       1.1       1.1       1.0       1.0       1.1       1.1       1.1       1.1         Grants        0.1       0.1       0.2 <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>79.0</td></th<>											79.0
Taxes on international trade and transactions       10       10       10       10       10       11       10       10       11       10       11       11         Social contributions       337       354       37.1       385       38.8       38.3       38.5       38.4       41.4       42.4       42.3         Other revenue       30.1       37.9       35.0       34.4       35.6       35.5       36.4       38.2         Of which: property income       8.3       8.3       9.3       8.5       8.4       8.8       7.0       7.3       7.4         Expenditure       167.8       172.4       18.1       190.2       194.8       201.5       20.4       20.8       211.6         Expense       167.2       171.7       18.4       41.4       41.5       45.7       48.9       48.0       48.5         Purchase/subse of goods and services       17.7       17.9       20.2       21.2       21.4       48.1       49.3       43.0       48.5       48.0       48.0       48.5       48.0       48.0       48.5       48.0       48.0       48.0       48.0       48.0       48.0       48.0       48.0       48.0       48.0	-										39.7
Social contributions       33.7       35.4       37.1       38.5       38.8       41.4       42.4       43.1       42.3         Grants        0.1       0.1       0.2       0.4       0.4       0.4       0.4       0.4       0.4       0.4       0.6       0.6       6.6       6.1       5.5       5.2       4.8       4.5       0.7       1.5       7.6       0.3       1.5       1.5       1.5       1.5       1.5       1.5       1.5       1.5											9.
Grants        0.1       0.1       0.2       0.2       0.2       0.2       0.2       0.2         Other revenue       30.1       37.9       35.0       34.4       35.6       36.6       35.5       36.4       38.2         Of/which: property income       167.8       172.4       183.1       190.2       194.8       20.15       20.3       20.4       20.8       21.16         Expensition of employees       186.2       193.3       41.4       43.5       44.7       45.8       46.9       48.0       43.5         PurchaseStup cod goods and services       177.7       17.9       20.2       22.1       2.1.4       2.1.7       2.2.3       2.6       2.2.9       2.6       2.5       4.8       4.5       3.7       3.8       Social benefits       5.90       60.2       60.5       65.4       67.2       67.7       69.3       71.5       7.40       0.60       0.9       1.6       1.9       1.8       0.5       0.8       1.1       60.0       0.9       1.6       1.9       1.8       0.5       0.8       1.1       60.0       0.9       1.6       1.9       1.8       0.5       0.8       1.1       0.0       0.1       0.1											1.
Other revenue         30.1         37.9         35.0         34.4         35.6         36.6         35.5         36.4         38.2           Of which: property income         8.3         8.3         9.3         8.5         8.4         8.8         7.0         7.3         7.4           Expense         167.2         17.7         182.1         190.2         194.4         20.5         20.4         20.8         21.0           Compensation of employees         38.2         39.3         41.4         43.5         44.7         45.8         46.9         48.0         48.5           Purchases/use of goods and services         17.7         17.9         20.2         21.2         21.4         21.4         21.7         22.3         23.6         23.9           Interest expense         6.9         6.6         6.5         5.5         5.2         4.4         45.5         7.7         69.3         7.15         74.0           Expense n.e.         45.5         47.7         53.9         53.0         54.4         59.7         59.9         61.1         60.8         1.0         0.8         1.5           Net acquisition of financial assets		33.7									42.
Of which: property income         8.3         8.3         9.3         8.5         8.4         8.8         7.0         7.3         7.4           Expenditure         167.8         17.4         183.1         190.2         194.8         20.15         20.34         20.88         211.6           Expense         167.2         17.17         182.1         188.6         192.9         199.7         20.3         20.6         22.6         22.5         2.14         42.5         44.0         48.5         37.7         38.8         2.66         5.5         5.2         4.8         4.5         37.7         38.8         50.01         60.2         60.5         65.4         67.7         6.93         71.5         74.00         74.8         74.5         74.0         74.3         74.8         74.5         74.0         74.3         74.6         74.7         75.9         75.9         75.9         75.9         75.9         75.9         74.0         74.3         74.6         74.7         74.9         74.0         74.3         74.6         74.7         74.9         74.0         74.0         74.0         74.0         74.0         74.0         74.0         74.0         74.0         74.0         74.0											0.
Expenditure       167.8       172.4       183.1       190.2       194.8       201.5       203.4       208.8       211.6         Expense       167.2       171.7       182.1       188.6       192.9       199.7       202.9       207.9       201.1         Compensation of employees       38.2       39.3       41.4       43.5       44.7       45.8       46.9       48.0       48.5         Purchases/use of goods and services       17.7       17.9       202.2       21.2       21.4       21.7       22.3       23.6       23.9         Interest Expense       6.9       6.6       6.1       5.5       5.2       4.8       4.5       3.7       3.8         Social benefits       59.0       60.2       60.5       65.4       67.2       67.7       69.3       71.5       74.0         Net acquisition of nonfinancial assets       .0       7       0.6       0.9       1.6       1.9       1.8       0.5       0.8       1.5         Net lending/borrowing       4.6       9.3       10.3       3.6       1.9       2.9       0.0       -1.0       -1.2         Net equisition of financial assets											38.
Expense167.217.1182.1188.6192.9199.7202.9207.9210.1Compensation of employees38.239.341.443.544.745.846.948.048.5PurchaseXuse of goods and services17.717.720.221.221.421.722.323.623.9Interest expense5.96.06.66.15.55.24.84.53.73.8Social benefits59.060.260.566.467.267.769.371.574.0Expense ne.c.45.547.753.953.054.459.769.961.160.8Net acquisition of nonfinancial assets0.70.60.91.61.91.80.50.81.5Net ending/borrowing4.69.310.33.61.92.90.0-1.0-1.2Net ending/borrowing4.69.310.33.61.92.1625.829.9Net incurrence of liabilities9.22.0.420.120.220.2Taxes on income, profits, and capital gains12.012.012.012.2 </td <td>Of which: property income</td> <td>8.3</td> <td>8.3</td> <td>9.3</td> <td>8.5</td> <td>8.4</td> <td>8.8</td> <td>7.0</td> <td>7.3</td> <td>7.4</td> <td>7.</td>	Of which: property income	8.3	8.3	9.3	8.5	8.4	8.8	7.0	7.3	7.4	7.
Compensation of employees         38.2         39.3         41.4         43.5         44.7         45.8         46.9         48.0         48.5           Purchases/use of goods and services         17.7         17.9         20.2         21.2         21.4         21.7         22.3         23.6         23.9           Interest expense         6.9         6.6         6.1         1.5         5.2         4.8         4.5         3.7         3.8           Social benefits         59.0         60.2         60.5         65.4         67.2         67.7         69.3         71.5         74.0           Expense n.e.c.         45.5         47.7         53.9         53.0         54.4         59.7         59.9         61.1         60.0           Net acquisition of nonfinancial assets         0.7         0.6         0.9         1.6         1.9         1.8         0.5         0.8         1.1           Net acquisition of financial assets            9.2         11.9         21.6         22.8         29.9           Net incurrence of liabilities             9.2         21.7         26.7         31.1           Taxes o	Expenditure	167.8	172.4	183.1	190.2	194.8	201.5	203.4	208.8	211.6	210.
Purchases/use of goods and services         17.7         17.9         20.2         21.2         21.4         21.7         22.3         23.6         23.9           Interst expense         6.9         6.6         6.1         5.5         5.2         4.8         4.5         3.7         3.8           Social benefits         59.0         60.2         60.5         65.4         67.2         69.3         71.5         74.0           Expense n.c.         45.5         47.7         53.9         53.0         54.4         59.7         69.3         71.5         64.0           Net acquisition of nonfinancial assets         0.7         0.6         0.9         1.6         1.9         1.8         0.5         0.8         1.5           Net acquisition of financial assets            9.2         -18.5         11.9         21.6         25.8         29.9           Net incurrence of liabilities             9.2         -18.5         11.9         21.6         25.8         29.9           Net incurrence of liabilities              9.2         20.4         20.1         20.2 <td>Expense</td> <td></td> <td></td> <td>182.1</td> <td></td> <td>192.9</td> <td>199.7</td> <td>202.9</td> <td></td> <td></td> <td>209.</td>	Expense			182.1		192.9	199.7	202.9			209.
Interest expense         6.9         6.6         6.1         5.5         5.2         4.8         4.5         3.7         3.8           Social benefits         59.0         60.2         60.5         65.4         67.2         67.7         69.3         71.5         74.0           Expense n.e.c.         45.5         47.7         53.9         53.0         54.4         59.7         59.9         61.1         60.0           Net acquisition of nonfinancial assets         0.7         0.6         0.9         1.6         1.9         1.8         0.5         0.8         1.5           Net operating balance         5.3         9.9         11.3         5.2         3.8         4.6         0.4         -0.1         0.3           Net equisition of financial assets            9.2         -18.5         11.9         21.6         25.8         29.9           Net equisition of financial assets            9.2         -18.5         11.9         21.6         25.8         29.9           Net acquisition of financial assets             9.2         -18.5         1.9         21.6         22.7	Compensation of employees	38.2	39.3	41.4	43.5	44.7	45.8	46.9	48.0	48.5	48.
Social benefits         59.0         60.2         60.5         65.4         67.2         67.7         69.3         71.5         74.0           Expense n.e.c.         45.5         47.7         53.9         53.0         54.4         59.7         59.9         61.1         60.0           Net acquisition of nonfinancial assets         0.7         0.6         0.9         1.6         1.9         1.8         0.5         0.8         1.5           Net lending/borrowing         4.6         9.3         10.3         3.6         1.9         2.9         0.0         -1.0         0.3           Net lending/borrowing         4.6         9.3         10.3         3.6         1.9         2.9         0.0         -1.0         -1.2           Net acquisition of financial assets            9.2         -1.85         11.9         21.6         2.8         29.9           Net incurrence of liabilities             5.5         -2.04         9.1         2.17         2.67         31.1           Taxes on goods and services         6.4         6.2         6.2         6.3         6.3         6.2         6.2         6.2         6	Purchases/use of goods and services			20.2				22.3			23.
Expense n.e.c. Net acquisition of nonfinancial assets         45.5         47.7         53.9         53.0         54.4         59.7         59.9         61.1         60.0           Net acquisition of nonfinancial assets         0.7         0.6         0.9         1.6         1.9         1.8         0.5         0.8         1.5           Net operating balance Net lending/borrowing         4.6         9.3         10.3         3.6         1.9         2.9         0.0         -1.0         -1.2           Net acquisition of financial assets           9.2         -18.5         11.9         21.6         25.8         29.9           Net incurrence of liabilities            9.2         -18.5         11.9         21.6         25.8         29.9           Net incurrence of liabilities             5.5         -20.4         9.1         21.7         26.7         31.1           Taxes on income, profits, and capital gains         12.0         12.1         12.3         12.6         12.1         12.4         12.2         12.3         12.2           Taxes on goods and services         6.4         6.2         6.2         6.2         6.2<	-										3.
Net acquisition of nonfinancial assets       0.7       0.6       0.9       1.6       1.9       1.8       0.5       0.8       1.5         Net operating balance Net lending/borrowing       5.3       9.9       11.3       5.2       3.8       4.6       0.4       -0.1       0.3         Net lending/borrowing       4.6       9.3       10.3       3.6       1.9       2.9       0.0       -1.0       -1.2         Net acquisition of financial assets          9.2       -18.5       11.9       21.6       25.8       29.9         Net incurrence of liabilities          5.5       -20.4       9.1       21.7       26.7       31.1         Revenue       32.1       31.7       32.4       33.0       32.6       32.7       32.7         Taxes on income, profits, and capital gains       12.0       12.1       12.3       12.6       12.1       12.4       12.2       12.3       12.2         Taxes on goods and services       6.4       6.2       6.2       6.3       6.3       6.2       6.2       6.2       6.2       6.2       6.2       6.2       6.2       6.2       6.2       6.2       6.2       <											73.
Net operating balance       5.3       9.9       11.3       5.2       3.8       4.6       0.4       -0.1       0.3         Net lending/borrowing       4.6       9.3       10.3       3.6       1.9       2.9       0.0       -1.0       -1.2         Net acquisition of financial assets          9.2       -18.5       11.9       21.6       25.8       29.9         Net incurrence of liabilities           5.5       -20.4       9.1       21.7       26.7       31.1         (In percent of GDP)         Revenue         Taxes on income, profits, and capital gains       12.0       12.1       12.3       12.6       12.1       12.4       12.2       12.3       12.2         Taxes on goods and services       6.4       6.2       6.2       6.3       6.3       6.2       6.2       6.2         Taxes on property       1.5       1.5       1.5       1.5       1.4       1.4       1.5       1.5         Taxes on property       1.5       1.5       1.5       1.5       1.6       6.4       6.7       6.8       6.8       6.6         Other revenu	•										59.
Net lending/borrowing       4.6       9.3       10.3       3.6       1.9       2.9       0.0       -1.0       -1.2         Net acquisition of financial assets          9.2       -18.5       11.9       21.6       25.8       29.9         Net incurrence of liabilities          5.5       -20.4       9.1       21.7       26.7       31.1         Revenue       32.1       31.7       32.4       33.0       32.5       33.0       32.6       32.7       32.7         Taxes on income, profits, and capital gains       12.0       12.1       12.3       12.6       12.1       12.4       12.2       12.3       12.2         Taxes on goods and services       6.4       6.2       6.2       6.3       6.3       6.2	Net acquisition of nonfinancial assets	0.7	0.6	0.9	1.6	1.9	1.8	0.5	0.8	1.5	1.
Net acquisition of financial assets           State       2       -18.5       11.9       21.6       25.8       29.9         Net incurrence of liabilities          5.5       -20.4       9.1       21.7       26.7       31.1         (In percent of GDP)         Revenue       32.1       31.7       32.4       33.0       32.5       33.0       32.6       32.7       32.7         Taxes       20.2       20.1       20.3       20.6       20.2       20.4       20.1       20.2       20.2         Taxes on income, profits, and capital gains       12.0       12.1       12.3       12.6       12.1       12.4       12.2       12.2       12.3       12.6         Taxes on goods and services       .6.4       .6.2       .6.2       .6.3       .6.3       .6.2       .6.2       .6.6       .6.4       .6.7       .6.8       .6.8       .6.6         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       0.2       0.2       0.2       0.2       0.2       0.2       0.2 <t< td=""><td>Net operating balance</td><td>5.3</td><td>9.9</td><td>11.3</td><td>5.2</td><td>3.8</td><td>4.6</td><td>0.4</td><td>-0.1</td><td>0.3</td><td>1.</td></t<>	Net operating balance	5.3	9.9	11.3	5.2	3.8	4.6	0.4	-0.1	0.3	1.
Net incurrence of liabilities          5.5       -20.4       9.1       21.7       26.7       31.1         (In percent of GDP:         Revenue       32.1       31.7       32.4       33.0       32.5       33.0       32.6       32.7       32.7         Taxes       20.2       20.1       20.3       20.6       20.2       20.4       20.1       20.2       20.2         Taxes on income, profits, and capital gains       12.0       12.1       12.3       12.6       12.1       12.4       12.2       12.3       12.2         Taxes on goods and services       6.4       6.2       6.2       6.3       6.3       6.2       6.2       6.3         Taxes on property       1.5       1.5       1.5       1.5       1.4       1.4       1.5       1.5         Social contributions       0.2	Net lending/borrowing	4.6	9.3	10.3	3.6	1.9	2.9	0.0	-1.0	-1.2	0.4
Net incurrence of liabilities          5.5       -20.4       9.1       21.7       26.7       31.1         (In percent of GDP:         Revenue       32.1       31.7       32.4       33.0       32.5       33.0       32.6       32.7       32.7         Taxes       20.2       20.1       20.3       20.6       20.2       20.4       20.1       20.2       20.2         Taxes on income, profits, and capital gains       12.0       12.1       12.3       12.6       12.1       12.4       12.2       12.3       12.2         Taxes on goods and services       6.4       6.2       6.2       6.3       6.3       6.2       6.2       6.3         Taxes on property       1.5       1.5       1.5       1.5       1.4       1.4       1.5       1.5         Social contributions       0.2	Net acquisition of financial assets				9.2	-18.5	11.9	21.6	25.8	29.9	34.
Revenue32.131.732.433.032.533.032.632.732.7Taxes20.220.120.320.620.220.420.120.220.2Taxes on income, profits, and capital gains12.012.112.312.612.112.412.212.312.2Taxes on goods and services6.46.26.26.26.36.36.26.26.2Taxes on property1.51.51.51.51.41.41.51.5Taxes on international trade and transactions0.20.20.20.20.20.20.20.2Social contributions6.36.26.26.66.46.76.86.86.6Other revenue5.05.95.95.95.95.75.75.7Expenditure31.230.130.632.432.132.632.632.932.9Expense31.130.030.532.131.832.332.532.832.6Compensation of employees7.16.96.97.47.47.47.57.67.5Purchases/use of goods and services3.33.13.43.63.53.53.63.73.7Interest expense1.31.21.00.90.90.80.70.60.6Social benefits1.010.510.111.111.111.311.5 </td <td></td> <td></td> <td></td> <td></td> <td>5.5</td> <td></td> <td>9.1</td> <td>21.7</td> <td>26.7</td> <td>31.1</td> <td>33.</td>					5.5		9.1	21.7	26.7	31.1	33.
Taxes20.220.120.320.620.220.420.120.220.2Taxes on income, profits, and capital gains12.012.112.312.612.112.412.212.312.2Taxes on goods and services6.46.26.26.26.36.36.26.26.2Taxes on property1.51.51.51.51.51.41.41.51.5Taxes on international trade and transactions0.20.20.20.20.20.20.20.2Social contributions6.36.26.66.46.76.86.86.6Other revenue5.66.65.95.95.95.95.75.75.9Expense31.130.030.532.131.832.332.532.832.6Compensation of employees7.16.96.97.47.47.47.57.67.5Purchases/use of goods and services3.33.13.43.63.53.53.63.73.7Interest expense1.010.510.111.111.09.11.111.311.5Expense n.e.c.8.48.39.09.09.79.69.69.3Net acquisition of nonfinancial assets0.10.10.20.30.30.10.00.0				(In per	cent of GD	DP)					
Taxes20.220.120.320.620.220.420.120.220.2Taxes on income, profits, and capital gains12.012.112.312.612.112.412.212.312.2Taxes on goods and services6.46.26.26.26.36.36.26.26.2Taxes on property1.51.51.51.51.51.41.41.51.5Taxes on international trade and transactions0.20.20.20.20.20.20.20.2Social contributions6.36.26.66.46.76.86.86.6Other revenue5.66.65.95.95.95.95.75.75.9Expense31.130.030.532.131.832.332.532.832.6Compensation of employees7.16.96.97.47.47.47.57.67.5Purchases/use of goods and services3.33.13.43.63.53.53.63.73.7Interest expense1.010.510.111.111.011.111.311.511.51.51.41.41.5Expense n.e.c.8.48.39.09.09.09.79.69.69.39.79.6Net acquisition of nonfinancial assets0.10.10.20.30.30.30.10.00.7 <td>Revenue</td> <td>32.1</td> <td>31.7</td> <td>32.4</td> <td>33.0</td> <td>32.5</td> <td>33.0</td> <td>32.6</td> <td>32.7</td> <td>32.7</td> <td>32.</td>	Revenue	32.1	31.7	32.4	33.0	32.5	33.0	32.6	32.7	32.7	32.
Taxes on income, profits, and capital gains12.012.112.312.612.112.412.212.312.2Taxes on goods and services6.46.26.26.26.36.36.26.26.2Taxes on property1.51.51.51.51.51.41.41.51.5Taxes on international trade and transactions0.20.20.20.20.20.20.20.20.2Social contributions6.36.26.66.46.76.86.86.6Other revenue5.66.65.95.95.95.95.75.75.9Expenditure31.230.130.632.432.132.632.632.932.9Expense31.130.030.532.131.832.332.532.832.6Compensation of employees7.16.96.97.47.47.47.57.67.5Purchases/use of goods and services3.33.13.43.63.53.53.63.73.7Interest expense1.01.0510.111.111.011.111.311.5Expense n.e.c.8.48.39.09.09.09.79.69.69.3Net acquisition of nonfinancial assets0.10.10.10.20.30.30.10.00.0											20.
Taxes on goods and services6.46.26.26.26.36.36.26.26.2Taxes on property1.51.51.51.51.51.51.41.41.51.5Taxes on international trade and transactions0.20.20.20.20.20.20.20.20.2Social contributions6.36.26.66.46.76.86.86.6Other revenue5.66.65.95.95.95.95.75.75.9Expenditure31.230.130.632.432.132.632.632.932.9Expense31.130.030.532.131.832.332.532.832.6Compensation of employees7.16.96.97.47.47.47.57.67.5Purchases/use of goods and services3.33.13.43.63.53.53.63.73.7Interest expense1.31.21.00.90.90.80.70.60.6Social benefits11.010.510.111.111.110.911.111.311.5Expense n.e.c.8.48.39.09.09.09.79.69.3Net acquisition of nonfinancial assets0.10.10.20.30.30.10.00.0											12.
Taxes on property1.51.51.51.51.51.41.41.51.5Taxes on international trade and transactions0.20.20.20.20.20.20.20.2Social contributions6.36.26.26.66.46.76.86.86.6Other revenue5.66.65.95.95.95.95.75.75.9Expenditure31.230.130.632.432.132.632.632.932.9Expense31.130.030.532.131.832.332.532.832.6Compensation of employees7.16.96.97.47.47.47.57.67.5Purchases/use of goods and services3.33.13.43.63.53.53.63.73.7Interest expense1.31.21.00.90.90.80.70.60.6Social benefits11.010.510.111.111.110.911.111.311.5Expense n.e.c.8.48.39.09.09.09.79.69.69.3Net acquisition of nonfinancial assets0.10.10.20.30.30.10.00.0	· · · ·										6.
Taxes on international trade and transactions0.2	-	1.5		1.5			1.4	1.4		1.5	1.
Other revenue5.66.65.95.95.95.95.75.75.9Expenditure31.230.130.632.432.132.632.632.932.9Expense31.130.030.532.131.832.332.532.832.6Compensation of employees7.16.96.97.47.47.47.57.67.5Purchases/use of goods and services3.33.13.43.63.53.53.63.73.7Interest expense1.31.21.00.90.90.80.70.60.6Social benefits11.010.510.111.111.110.911.111.311.5Expense n.e.c.8.48.39.09.09.09.79.69.69.3Net acquisition of nonfinancial assets1.01.71.90.90.60.80.10.00.0		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.
Expenditure       31.2       30.1       30.6       32.4       32.1       32.6       32.6       32.9       32.9         Expense       31.1       30.0       30.5       32.1       31.8       32.3       32.5       32.8       32.6         Compensation of employees       7.1       6.9       6.9       7.4       7.4       7.4       7.5       7.6       7.5         Purchases/use of goods and services       3.3       3.1       3.4       3.6       3.5       3.5       3.6       3.7       3.7         Interest expense       1.3       1.2       1.0       0.9       0.9       0.8       0.7       0.6       0.6         Social benefits       11.0       10.5       10.1       11.1       11.1       10.9       11.1       11.3       11.5         Expense n.e.c.       8.4       8.3       9.0       9.0       9.7       9.6       9.6       9.3         Net acquisition of nonfinancial assets       0.1       0.1       0.2       0.3       0.3       0.1       0.0       0.0	Social contributions	6.3	6.2	6.2	6.6	6.4	6.7	6.8	6.8	6.6	6.
Expense       31.1       30.0       30.5       32.1       31.8       32.3       32.5       32.8       32.6         Compensation of employees       7.1       6.9       6.9       7.4       7.4       7.5       7.6       7.5         Purchases/use of goods and services       3.3       3.1       3.4       3.6       3.5       3.5       3.6       3.7       3.7         Interest expense       1.3       1.2       1.0       0.9       0.9       0.8       0.7       0.6       0.6         Social benefits       11.0       10.5       10.1       11.1       11.1       10.9       11.1       11.3       11.5         Expense n.e.c.       8.4       8.3       9.0       9.0       9.7       9.6       9.6       9.3         Net acquisition of nonfinancial assets       0.1       0.1       0.2       0.3       0.3       0.1       0.1       0.2	Other revenue	5.6	6.6	5.9	5.9	5.9	5.9	5.7	5.7	5.9	5.
Expense       31.1       30.0       30.5       32.1       31.8       32.3       32.5       32.8       32.6         Compensation of employees       7.1       6.9       6.9       7.4       7.4       7.5       7.6       7.5         Purchases/use of goods and services       3.3       3.1       3.4       3.6       3.5       3.5       3.6       3.7       3.7         Interest expense       1.3       1.2       1.0       0.9       0.9       0.8       0.7       0.6       0.6         Social benefits       11.0       10.5       10.1       11.1       11.1       10.9       11.1       11.3       11.5         Expense n.e.c.       8.4       8.3       9.0       9.0       9.7       9.6       9.6       9.3         Net acquisition of nonfinancial assets       0.1       0.1       0.2       0.3       0.3       0.1       0.1       0.2	Expenditure	31.2	30.1	30.6	32.4	32.1	32.6	32.6	32.9	32.9	32.
Compensation of employees7.16.96.97.47.47.47.57.67.5Purchases/use of goods and services3.33.13.43.63.53.53.63.73.7Interest expense1.31.21.00.90.90.80.70.60.6Social benefits11.010.510.111.111.110.911.111.311.5Expense n.e.c.8.48.39.09.09.79.69.69.3Net acquisition of nonfinancial assets0.10.10.20.30.30.10.10.2Net operating balance1.01.71.90.90.60.80.10.00.0	-										32.
Purchases/use of goods and services       3.3       3.1       3.4       3.6       3.5       3.5       3.6       3.7       3.7         Interest expense       1.3       1.2       1.0       0.9       0.9       0.8       0.7       0.6       0.6         Social benefits       11.0       10.5       10.1       11.1       11.1       10.9       11.1       11.3       11.5         Expense n.e.c.       8.4       8.3       9.0       9.0       9.0       9.7       9.6       9.6       9.3         Net acquisition of nonfinancial assets       0.1       0.1       0.2       0.3       0.3       0.1       0.1       0.2         Net operating balance       1.0       1.7       1.9       0.9       0.6       0.8       0.1       0.0       0.0	•						7.4			7.5	7.
Interest expense       1.3       1.2       1.0       0.9       0.9       0.8       0.7       0.6       0.6         Social benefits       11.0       10.5       10.1       11.1       11.1       10.9       11.1       11.3       11.5         Expense n.e.c.       8.4       8.3       9.0       9.0       9.7       9.6       9.6       9.3         Net acquisition of nonfinancial assets       0.1       0.1       0.2       0.3       0.3       0.1       0.1       0.2         Net operating balance       1.0       1.7       1.9       0.9       0.6       0.8       0.1       0.0       0.0		3.3	3.1	3.4	3.6		3.5	3.6	3.7	3.7	3.
Expense n.e.c.         8.4         8.3         9.0         9.0         9.7         9.6         9.6         9.3           Net acquisition of nonfinancial assets         0.1         0.1         0.2         0.3         0.3         0.1         0.1         0.2           Net operating balance         1.0         1.7         1.9         0.9         0.6         0.8         0.1         0.0         0.0	5	1.3		1.0	0.9	0.9	0.8	0.7	0.6	0.6	0.
Net acquisition of nonfinancial assets         0.1         0.1         0.2         0.3         0.3         0.1         0.1         0.2           Net operating balance         1.0         1.7         1.9         0.9         0.6         0.8         0.1         0.0         0.0	1										11.
Net acquisition of nonfinancial assets         0.1         0.1         0.2         0.3         0.3         0.1         0.1         0.2           Net operating balance         1.0         1.7         1.9         0.9         0.6         0.8         0.1         0.0         0.0	Expense n.e.c.	8.4	8.3	9.0	9.0	9.0	9.7	9.6	9.6	9.3	9.
	-										0.
	Net operating balance	1 0	17	19	۵٩	0.6	0.8	01	0.0	0.0	0.
											0.
Net acquisition of financial assets 1.6 -3.0 1.9 3.5 4.1 4.6	Not acquisition of financial accets				1 6	_2 A	1.0		11	16	г
Net acquisition of financial assets           1.6         -3.0         1.9         3.5         4.1         4.6           Net incurrence of liabilities           0.9         -3.4         1.5         3.5         4.2         4.8	-										5. 5.

## Table 5. Switzerland: General Government Operations, 2006–15

т	able 6.	Switzerla	nd: Fin	ancial	Soundnes	ss Indicato	ors, 2007–1	.5

	2007	2008	2009	2010	2011	2012	2013	2014	2015
Banks									
Capital adequacy									
Regulatory capital as percent of risk-weighted assets 1/	12.2 *	15 *	17.5	17.1	16.6	16.9	17.5	16.6	17.0
Regulatory Tier I capital to risk-weighted assets 1/	11.5 *	12.5 *	14.9	15.4	15.4	15.7	16.4	14.8	15.6
Non-performing loans net of provisions as percent of tier I capital 2/	6.3	6.4	7.0	6.0	5.4	5.0	4.7	3.7	3.8
Asset quality and exposure									
Non-performing loans as percent of gross loans 2/	0.8	0.9	1.1	0.9	0.8	0.8	0.8	0.7	0.8
Sectoral distribution of bank credit to the private sector (percent) 3/									
Households	66.2	65.5	67.1	68.3	68.8	68.4	68.0	68.6	69.5
Agriculture and food industry	1.6	1.5	1.3	1.3	1.2	1.2	1.2	1.2	1.2
Industry and manufacturing	3.1	3.0	2.9	3.0	2.9	2.7	2.4	2.1	1.9
Construction	1.6	1.6	1.6	1.6	1.7	1.6	1.6	1.6	1.6
Retail	3.1	3.0	3.1	3.2	3.1	3.0	2.8	2.9	2.6
Hotels and restaurants / Hospitality sector	1.1	1.1	1.1	1.1	1.1	1.0	0.9	0.9	0.9
Transport and communications	0.9	0.9	0.9	0.9	0.7	0.8	0.8	0.8	0.8
Other financial activities	0.0	0.0	0.4	0.5	0.5	0.6	0.8	0.7	0.7
Insurance sector	0.3	0.8	0.5	0.6	0.4	0.6	0.6	0.6	0.4
Commercial real estate, IT, R&T	10.9	11.0	11.3	12.1	12.4	12.8	13.3	13.6	13.6
Public administration (excluding social security)	2.1	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Education	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1
Healthcare and social services	1.0	1.0	1.0	1.1	1.1	1.2	1.3	1.3	1.4
Other collective and personal services	1.5	1.2	1.0	1.0	1.0	0.9	0.9	0.8	0.8
Other 4/	6.4	7.4	7.6	5.3	5.0	5.0	5.3	4.7	4.4
Earnings and profitability									
Gross profits as percent of average assets (ROAA)	0.7	0.3	0.5	0.7	0.7	0.6	0.7	0.7	0.6
Gross profits as percent of average equity capital (ROAE)	13.7	4.8	7.2	10.4	9.8	9.1	9.3	9.9	8.1
Net interest income as percent of gross income	28.1	36.3	30.4	27.9	31.1	31.6	32.3	34.5	35.5
Non-interest expenses as percent of gross income	70.4	85.4	80.1	73.3	72.0	73.7	71.6	69.4	72.9
Liquidity									
Liquid assets as percent of total assets 5/	14.0	16.3	14.2	10.3	15.5	17.0	12.5	11.9	
Liquid assets as percent of short-term liabilities 6/	32.8	37.2	32.9	23.3	33.9	35.4	47.4	47.4	140.1
Net long position in foreign exchange as a percentage of capital	12.9	-13.0	-20.6	-36.7	-56.9	-44.5	-41.0	-45.4	-72.6

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/ From 2007 onwards broader criteria pursuant to national accounting regulations (FINMA-RS 08/2 Art. 228b) has been applied for defining nonperforming loans.

3/ As percent of total credit to the private sector.

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

5/ 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.

6/ The indicator "liquid assets as percent of short-term liabilities" has been replaced by the ratio of high quality liquid assets to net cash outflows. This leads to a break between 2014 and 2015.

\* These ratios were calculated from numbers that originate from the Basel I as well as from the Basel II approach. Therefore, interpretation must be done carefully since they can vary within +/- 10%.

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	Switzerland	<b>Overall Assessment</b>
Foreign asset and liability position and trajectory	<ul> <li>Background. Switzerland is a financial center with a positive net international investment position (NIIP) of about 95 percent of GDP and large gross foreign asset and liability positions of 667 and 571 percent of GDP, respectively, at end-2015. The NIIP to GDP ratio has declined over the last 10 years, despite CA surpluses averaging 10 percent of GDP, due to negative valuation effects and other stock-flow adjustments that have averaged -9.5 percent of GDP per year and been negative in 8 of 10 years. These persistent negative valuation effects have been driven mainly by nominal exchange rate and equity price appreciation. 1/ 2/ These negative valuation effects are projected to continue, including because inflation is projected to remain lower in Switzerland than in other AEs, and the NIIP-to-GDP ratio is projected to continue declining despite continued large CA surpluses.</li> <li>Assessment. Switzerland's large gross liabilities and the volatility of its capital flows present risks, but these are mitigated by Switzerland's large net asset position and foreign reserves.</li> </ul>	Overall Assessment: The underlying external position in 2015 was moderately weaker than implied by medium-term fundamentals and desirable policy settings. However, Switzerland's external assessment is subject to high uncertainty due to
Current account	<b>Background</b> . Switzerland tends to run large CA surpluses, which are volatile due to large temporary swings in the income balance. Preliminary estimates indicate that the CA surplus was 11.4 percent of GDP in 2015, up from 8.8 percent of GDP in 2014. The increase was mainly due to a higher income balance, with the trade balance mostly unchanged. Switzerland's terms of trade improved by less than 2 percent in 2015, with negligible effects on the CA. <b>Assessment</b> . The EBA CA regression approach estimates a CA gap of around 5 percent of GDP in 2015, reflecting a cyclically-adjusted CA surplus of 11.4 percent of GDP and an EBA CA regression-estimated norm of 6.4 percent of GDP. However, as a measure of wealth accumulation, Switzerland's CA surplus is misleadingly high due to several factors: (i) Switzerland's low inflation combined with its large net foreign-currency position, which boosts its net nominal income flows; 1/ (ii) Switzerland's negative net portfolio investment position, which results in large reductions in its NIIP due to equity price appreciation but is not captured in the CA flows; 2/ and (iii) various non-traditional flows (e.g., merchanting activities) that may be only tangentially related to the real Swiss economy. 3/ Adjusting for these effects and taking into account the negative CA gaps implied by the EBA REER models (see below), staff estimate a CA gap ranging from -4 to 2 percent of GDP. The range reflects the unusually high uncertainties related to the anomalies discussed above and the potential for large revisions to the 2015 CA estimate.	various anomalies and contrasting indicators. The modest REER depreciation in the first part of 2016 does not alter the assessment. Potential policy responses: Macroeconomic policies should be geared toward promoting faster growth, exiting deflation, and avoiding imbalances. Continued monetary policy accommodation,
Real exchange rate	<ul> <li>Background. The REER (CPI basis) appreciated by 26 percent from 2007 to 2011. In September 2011, the SNB established a floor of 1.20 for the CHF/EUR exchange rate, and the REER depreciated by 4 percent during 2011–14. The SNB exited from the floor on January 15, 2015, and the REER immediately appreciated. For the full year 2015, the REER was 8 percent above its 2014 level. As of June 2016, the REER was 2 percent below its 2015 average.</li> <li>Assessment. The EBA REER index and level regression-based estimates suggest that the average REER in 2015 was 16–23 percent overvalued. Taking into consideration these estimates, the smaller estimates implied by staff's CA assessment, and staff's broader analysis, staff assesses the franc to be moderately above the level consistent with fundamentals and desirable policy settings in 2015 (REER gap of -5 to 25 percent).</li> </ul>	including if necessary via purchases of foreign assets (given limited options for other methods of monetary easing) should assist these objectives.

	Switzerland	<b>Overall Assessment</b>
Capital and financial accounts: flows and policy measures	<ul> <li>Background. Significant net outward FDI (mostly reinvested earnings) has been a consistent feature of the financial account in recent years, although bank lending flows have become critical since the crisis. The SNB absorbed very large safe-haven inflows (intermediated by the banking system) during 2009–12 through reserve accumulation.</li> <li>Assessment. Safe-haven capital inflows may accelerate in the event of a re-emergence of global market turmoil.</li> </ul>	
FX intervention and reserves level	<ul> <li>Background. The SNB accumulated foreign exchange reserves of about 80 percent of GDP during 2009–15 in various rounds of intervention, including to defend the CHF/EUR floor. By end-2015, the SNB's balance sheet reached 95 percent of GDP. Since the SNB exited from the floor, the franc has floated between 1.00–1.10 CHF/EUR, with the SNB intervening periodically.</li> <li>Assessment. Reserves are large relative to GDP but more moderate relative to external liabilities. Substantial reserves are explained in part by the volatility of capital flows. In recent years, interventions have been monetary policy operations aimed at avoiding persistent inflation undershooting (inflation averaged -0.5 percent during 2012–15) and given limited scope for easing via other monetary policy tools. In particular, the supply of domestic assets available for purchase is limited (the outstanding stock of federal government bonds is 12 percent of GDP), and the interest rate on central bank deposits is very low at -0.75 percent. Interventions have also helped limit exchange rate overvaluation.</li> </ul>	
Technical Background Notes	<ul> <li>1/ Inflation in Switzerland has been, and is expected to remain, roughly 1 percentage point lower than in most other major advanced economies. Consequently, nominal returns tend to be higher on foreign-currency assets than on franc-denominated assets. This in turn boosts Switzerland's income balance given its large net foreign-currency asset position of about 400 percent of GDP. However, this is a nominal and not a real effect—the positive income flow is fully offset by a negative NIIP valuation effect due to nominal appreciation of the franc if the real exchange rate remains constant. For example, a 1 percent nominal appreciation of the franc against all other currencies (due to Swiss inflation that is 1 percentage point lower than foreign inflation) per year reduces Switzerland's NIIP by approximately 4 percent of GDP per year.</li> <li>2/ Switzerland has a negative net equity portfolio position of roughly 70 percent of GDP. Most of the returns on equities are distributed via equity price appreciation (capital gains) rather than via dividends and hence are not captured via income outflows in the CA but rather via negative NIIP valuation effects. Consequently, Switzerland's CA tends to overstate the degree to which CA flows result in net wealth accumulation. For example, 5 percent equity price appreciation gains and s. For example, 5 percent equity price appreciation allows, see Annex 1 of the 2015 Switzerland Article IV staff report.</li> </ul>	

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# Annex II. Risk Assessment Matrix<sup>1</sup>

Source of Risks	Relative Likelihood	Expected Impact	Policy Response
A sharp rise in risk premia with flight to safety	Medium	High Switzerland is a major financial center and is seen as a safe haven. Flight to safety would lead to sharp appreciation pressures on Swiss franc assets. The franc appreciation adds to deflation and hurts Swiss competitiveness and growth.	Ease monetary policy via FX purchases. Temporarily suspend the fiscal rule to allow fiscal stimulus if the downturn is deep and/or sustained.
Reduced financial services by global/regional banks	High	Medium Swiss banks may need to adjust their existing business models to comply with new international initiatives to curtail bank secrecy and tax avoidance schemes, and the process could affect bank profitability. Brexit could limit scope for "passporting" across the EU from the UK.	Compliance and effective implementation of relevant international tax-sharing and AML standards, including those issued by the FATF. Consider alternative EU banking "gateways".
Structurally weak growth in key advanced and emerging economies	High/Medium	<b>High/Medium</b> The Swiss economy is very open to trade and financial flows. A slowdown in Europe or the US – two of its main trading partners – would dampen Swiss GDP growth. Similarly, major EMs (especially in Asia) are an important source of external demand.	Ease monetary policy by further reducing the policy rate. If operational or economic lower-bound constraints on interest rates are hit, consider pre- announced regular FX purchases. Temporarily suspend the fiscal rule to allow a sustained countercyclical stimulus.
Need to renegotiate Switzerland's treaties with the EU as a result of the Swiss referendum on restricting immigration	High	High Re-introducing immigration quotas could restrict access to skilled workers and EU markets, weakening long-run growth. Unilaterally altering migration arrangements with the EU could affect other contracts and areas of cooperation. Brexit is likely to complicate Switzerland's own "Swexit" negotiations with EU.	Seek to limit economic fallout by preserving efficient flows of goods, labor and financial services with the EU.

<sup>&</sup>lt;sup>1</sup> 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.

# **Annex III. Debt Sustainability Analysis<sup>1</sup>**

**Summary:** Public debt sustainability risks remain contained due to the strict implementation of fiscal rules and the low stock of public debt.

**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 46 percent of GDP in 2016 to about 41 percent of GDP in 2021. Gross financing needs are expected to remain around 10 percent of GDP during the medium term.

**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 (1.8 percent) below the baseline during 2016–17. Under this scenario, the debt-to-GDP ratio rises to 49 percent in 2018 (about 4 percentage points higher than the baseline).
- **Primary balance shock.** The primary balance in 2017–18 is hit by a negative shock of 0.4 percent of GDP. This shock results in a debt-to-GDP ratio that is only slightly above the baseline during 2016–21.
- **Real interest rate shock**. The nominal interest rate increases by 200 basis points during 2017–21. 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 8 percent in 2017 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 an increasing debt-to-GDP ratio that approached 49 percent in 2018 (approximately 4 percentage points higher than the baseline). However, after 2018, the debt would start declining on a trajectory that is parallel to the one under the baseline scenario.

<sup>&</sup>lt;sup>1</sup> For the purpose of this analysis, the general government includes the federal government, cantonal governments, municipal governments, and the social security fund.

#### Switzerland Public Sector Debt Sustainability Analysis (DSA) – Baseline Scenario

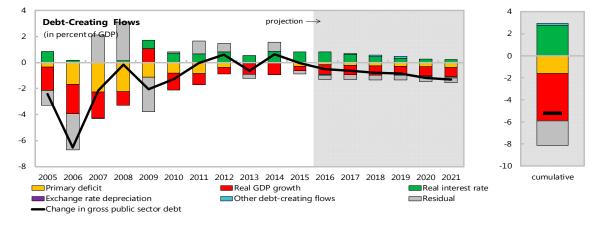
(In percent of GDP, unless otherwise indicated)

#### Debt, Economic and Market Indicators <sup>1/</sup>

	,											
	Actual				Projections					As of October 14, 201		
	2005-2013 2/	2014	2015	2016	2017	2018	2019	2020	2021	Sovereigr	n Spreads	s
Nominal gross public debt	49.0	46.6	46.6	46.1	45.5	44.7	43.9	42.7	41.4	EMBIG (b	p) 3/	-40
Public gross financing needs	9.7	9.5	9.2	9.2	9.8	9.9	9.4	9.1	8.8	5Y CDS (b	op)	17
Real GDP growth (in percent)	2.1	2.0	0.8	1.5	1.6	1.6	1.6	1.7	1.7	Ratings	Foreigr	n Local
Inflation (GDP deflator, in percent)	0.8	-0.6	-0.5	-0.5	-0.2	0.2	0.6	0.7	0.8	Moody's	Aaa	Aaa
Nominal GDP growth (in percent)	3.0	1.4	0.3	1.0	1.4	1.9	2.2	2.4	2.5	S&Ps	AAA	AAA
Effective interest rate (in percent) 4/	1.9	1.3	1.3	1.3	1.2	1.3	1.3	1.4	1.4	Fitch	AAA	AAA

#### **Contribution to Changes in Public Debt**

	Actual				Projections						
	2005-2013	2014	2015	2016	2017	2018	2019	2020	2021	cumulative	debt-stabilizing
Change in gross public sector debt	-1.6	0.6	0.0	-0.5	-0.6	-0.8	-0.9	-1.2	-1.3	-5.2	primary
Identified debt-creating flows	-1.6	-0.1	0.2	-0.1	-0.2	-0.4	-0.5	-0.8	-0.9	-3.0	balance <sup>9/</sup>
Primary deficit	-1.1	0.0	-0.3	-0.2	-0.2	-0.3	-0.3	-0.3	-0.4	-1.6	-0.5
Primary (noninterest) revenue and	l gra 32.1	32.3	32.3	32.3	32.3	32.3	32.3	32.3	32.3	193.9	
Primary (noninterest) expenditure	31.0	32.3	32.0	32.1	32.1	32.1	32.0	32.0	31.9	192.3	
Automatic debt dynamics <sup>5/</sup>	-0.5	0.0	0.5	0.1	-0.1	-0.3	-0.4	-0.5	-0.5	-1.5	
Interest rate/growth differential 6/	-0.5	0.0	0.5	0.1	-0.1	-0.3	-0.4	-0.5	-0.5	-1.5	
Of which: real interest rate	0.5	0.9	0.8	0.8	0.6	0.5	0.3	0.3	0.2	2.8	
Of which: real GDP growth	-1.1	-0.9	-0.4	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-4.3	
Exchange rate depreciation <sup>7/</sup>	0.0	0.0	0.0								
Other identified debt-creating flows	0.0	0.0	0.0	-0.1	0.1	0.1	0.2	0.0	-0.1	0.2	
Please specify (1) (e.g., drawdowr	n of 0.0	0.0	0.0	-0.1	0.1	0.1	0.2	0.0	-0.1	0.2	
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	Eurc 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Residual, including asset changes <sup>8/</sup>	0.0	0.7	-0.2	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-2.2	



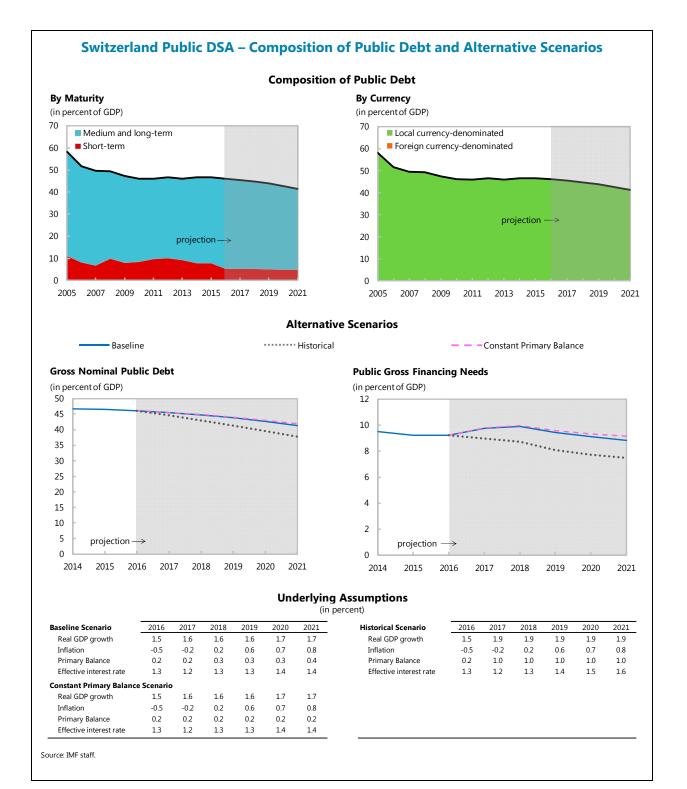
Source: IMF staff.

- 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  $[(r \pi(1+g) g + ae(1+r)]/(1+g+\pi+g\pi))$  times previous period debt ratio, with r = interest rate;  $\pi =$  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.

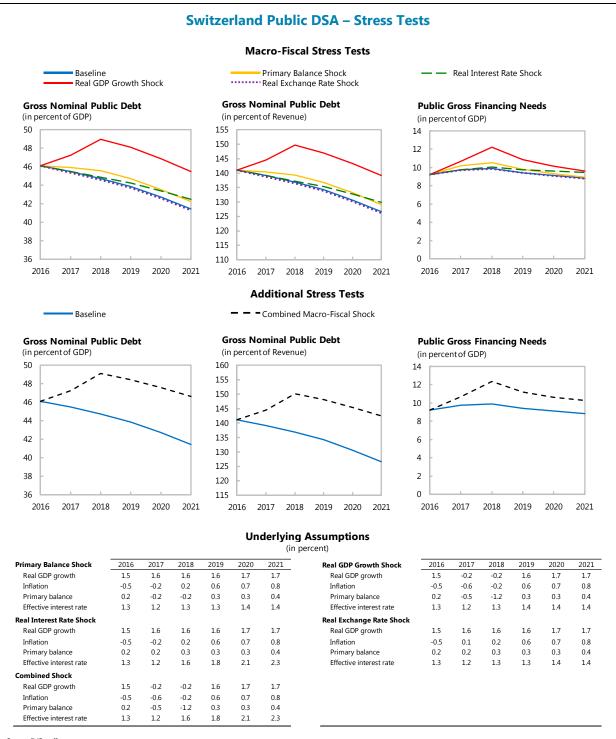
7/ The exchange rate contribution is derived from the numerator in footnote 5 as ae(1+r).

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.



INTERNATIONAL MONETARY FUND 39



Source: IMF staff.

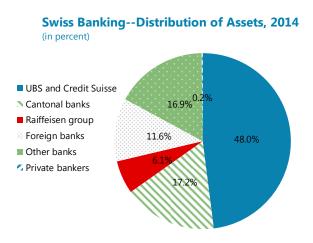
## **Annex IV. The Swiss G-SIBs**

The Swiss banking system is dominated by

**two G-SIBs.** UBS and Credit Suisse (CS) account for 48 percent of on-shore Swiss banking sector assets. The rest comprises 24 cantonal banks (commercial banks owned and in most cases guaranteed by the government), the Raiffeisen (cooperative) group, foreign banks, and smaller regional savings banks and private banks.

UBS's and CS's business activities are predominantly international. Nearly three

quarters of their assets and liabilities are foreign. Income sources are regionally



Sources: Swiss Bankers Association and IMF staff calculations.

diversified. For example, UBS earns only about one quarter of its income in Switzerland, while nearly 40 percent is derived from the Americas, where it holds nearly half of its assets. Finally, asset and wealth management is the largest source of their income, while net interest income represents a smaller share.

Table 1. UBS and Credit Suisse – Income Statements /1 /2								
		UBS		С	Credit Suisse			
	2015	2014	2013	2015	2014	2013		
Net interest income	6,615	6,477	5,736	9,299	9,034	8,115		
Fees and commissions	17,140	17,076	16,287	12,044	13,051	13,226		
Net trading income	5,742	3,842	5,130	1,340	2,026	2,739		
Other income	1,107	632	580	1,114	2,131	1,776		

1/ In million CHF

2/ Sources: 2015 Annual Reports

The large size of their balance sheets (approximately 300 percent of Swiss GDP) and their global systemic importance necessitate strict regulation. In July 2016, the Swiss authorities implemented stricter capital and leverage requirements for the two G-SIBs. The requirements exceed those required by the Basel III regulatory framework and aim to ensure that (i) the banks have enough capital to absorb losses and (ii) in the event of insolvency, banks have enough loss absorbing capital to isolate taxpayers from the too-big-too-fail risk. These new requirements (also known as TBTF2) are planned to be fully phased in by end-2019, with both banks being on track to meet the requirements.

#### **SWITZERLAND**

Table 2. Swiss TBTF Regulation Requirements								
	C	Credit Suiss	e		UBS			
	2015Q1	2016Q1	Target	2015Q1	2016Q1	Target		
Ratios under TBTF1 /1	(in percent of assets) /3							
Going concern capital ratio	13.0	14.2	13.0	14.9	16.8	13.0		
Total capital ratio	16.3	17.5	18.1	20.6	22.7	17.5		
Going concern leverage ratio	3.4	4.1	3.1	3.2	4.0	3.1		
Total leverage ratio	4.2	5.1	4.3	4.5	5.4	4.2		
Ratios under TBTF2 /2	(in percent of assets)							
Going concern capital ratio	-	13.3	14.3	-	16.4	14.3		
Gone concern capital ratio	_	9.6	14.3	_	9.5	14.3		
Going concern leverage ratio	_	3.9	5.0	_	3.9	5.0		
Gone concern leverage ratio	-	2.8	5.0	-	2.2	5.0		
Ratios under Basel III	(in percent of assets)							
CET 1 capital ratio	10.0	11.4	8.5	13.7	14.0	8.0		
Tier 1 leverage ratio	3.6	4.4	3.0	3.4	4.1	3.0		

#### Table 2 Swiss TRTF Regulation Requirements

#### Source: SNB.

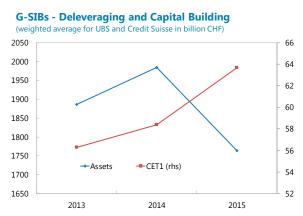
1/ In force until July 1, 2016.

2/ Implemented on July 1, 2016, and must be reached by end 2019.

3/ Leverage ratios are in percent of total assets; other ratios are in percent of RWA.

Note: capital to absorb current operating losses (going concern capital); capital to fund an orderly resolution (gone concern capital).

**UBS and Credit Suisse have improved their** leverage and capital ratios by increasing their capital as well as by reducing assets. After the global financial crisis, the G-SIBs have shrunk their balance sheets, including to meet new capital requirements. During 2013–15 leverage ratios increased by approximately 1/4 of a percentage point through capital raising but also by shrinking balance sheets, mainly affecting their foreignrather than Swiss— exposures.



Sources: Annual Report 2015 and Fund staff calculations

While the G-SIBs are predominantly internationally oriented, their links to the domestic economy are of great importance for macrofinancial stability and economic growth. The G-SIBs play an important role in the domestic economy. They account for approximately 50 percent of all deposits, 40 percent of outstanding mortgages, and 36 percent of employees in the banking sector.<sup>1,2</sup> However, their role in the economy has declined somewhat in response to their need to deleverage, with other domestic banks increasing their shares in domestic credit supply. Moreover, due to their large foreign presence, the G-SIBs could serve as conduits for the inward transfer of global risks to the domestic economy.

<sup>&</sup>lt;sup>1</sup> Share of employees at end-2014.

<sup>&</sup>lt;sup>2</sup> Assuming that their share of value added is proportional to their share of employment, it follows that they account for 35 percent of the value added in the Swiss banking sector or more than 2 percent of Swiss GDP.

# Annex V. 2014 FSAP Update—Status of Key Recommendations

Recommendation	Actions Taken by the Authorities
Short term	
Impose a leverage ratio on the banks that is tougher than international minima.	The Federal Council adopted the amendments to the current too-big-to-fail provisions on 11 May 2016, thereby addressing the need for action identified in the February 2015 evaluation report on too-big-to-fail risks in Switzerland.
	The amended TBTF2 framework entered into force on 1 July 2016 and has a Leverage Ratio calibration which, once fully phased in, will be among the highest in the world. The going-concern leverage ratio requirement will be 5 percent (with at least 3.5 percent CET1) for the two G-SIBs and 4.5 to 4.625 percent (with a minimum of 3 to 3.125 percent CET1) for the three D-SIBs. The gone concern leverage ratio requirement will also be 5 percent for the two G-SIBs, of which 2 percent will be subject to a rebate depending on their demonstrated progress in improving their resolvability beyond the required minimum. The gone concern requirement for D-SIBs is not yet defined for the D-SIBs. The Federal Council is expected to make specific recommendations regarding gone concern requirements for D-SIBs in early 2017.
Remain alert to the build-up of risks in domestic real estate and mortgage markets. Fully enforce self-regulation, and consider further raising the countercyclical capital buffer and introducing additional tools (e.g., debt-to-income (DTI) and loan-to-value (LTV) limits).	Since the FSAP exercise in 2014 the authorities have continued to enforce self-regulation and have required banks to take the following measures: (1) stricter amortization requirements; (2) use of second incomes for financial sustainability evaluation; and (3) valuation of properties for mortgages. Further, FINMA conducted on-site supervisory reviews focusing on investment properties, carried out mortgage stress tests of banks and followed up on any unusual findings.
	FINMA and the SNB closely monitor real estate and mortgage market trends. Lending volumes on the Swiss mortgage market and real estate prices are growing more slowly than in 2014. Imbalances have increased slightly due to comparatively weaker macroeconomic trends, but the resilience of banks has not deteriorated and their capitalization has improved. There are no current plans to introduce new macroprudential tools.

Recommendation	Actions Taken by the Authorities			
Short term				
Bring Financial Market Infrastructures (FMIs) into compliance with new international principles and establish crisis management arrangements between the authorities of FMIs.	With the revision of the National Bank Ordinance in July 2013 the relevant international principles for FMIs were largely incorporated in the Swiss regulatory framework. The relevant provisions of the National Bank Ordinance were later transferred to the Financial Market Infrastructure Act and remaining regulatory gaps have been closed with the entry into force of this new act (and related ordinances) on 1 January 2016. The Financial Market Infrastructure Act is fully compliant with the PFMIs and has been recognized as equivalent with EU CCP regulation (EMIR) by the EU Commission.			
	FINMA and the SNB are currently discussing arrangements to ensure effective coordination and cooperation between the authorities and FMIs in FMI-specific crisis scenarios. As far as foreign authorities are concerned, crisis management mechanisms will be integrated in all updated or newly signed MoUs.			
Establish transparency in the financial sector as a core element of the Swiss "brand," in particular through heightening banks' disclosure requirements, including as regards capital weighting and providing data for adequate risk analysis.	The BCBS's revised pillar 3 disclosure requirements of January 2015 were implemented in the new FINMA Circular 2016/1 and entered into force 1 January 2016. Disclosure requirements have been increased for all institutions. As a next step, FINMA will implement the new Basel proposals which are currently out for consultation (consultative document of March 2016: "Pillar 3 disclosure requirements – consolidated and enhanced framework").			
	Previous measures in this area include the 2014 revision of FINMA's accounting guidelines for banks and securities dealers to require greater transparency and the implementation of the recommendations of the Enhanced Disclosure Task Force by the two big banks, leading to increased transparency regarding RWA.			
	Concerning the two G-SIBs FINMA has motivated both banks to continuously improve their disclosure on risk weighting, with improvements in the qualitative disclosure observed during the last two years. However, they have not quantitatively disclosed the differences between RWA based on internal and standard models.			
	With regard to insurers, Article 111a Insurance Supervision Ordinance requires publication of a financial report at least once a year. On this basis, the new Circular 2016/2 "Disclosure" requires standardized disclosure to provide more comparable and more transparent information to the market and policyholders.			

Recommendation	Actions Taken by the Authorities
Short term	
Overhaul the deposit insurance scheme: make its provisions more transparent; reform its governance; and build-up dedicated ex ante funding with a back-up line of support. Make deposit insurance funds available to finance resolution measures on a least-cost basis.	A review of the Swiss deposit insurance scheme is currently under way. Costs and benefits of a change from the existing ex-post system to an ex-ante funded system, an increase in the target level, and a reduction in the maximum payout period are currently being analyzed. As an additional element, stricter segregation requirements for the custody of financial instruments are also being contemplated. At the end of 2016 the Federal Council will decide on the potential changes to the Swiss deposit insurance scheme.
	There are no plans to make deposit insurance funds available to finance resolution measures on a least-cost basis. From a policy perspective, Switzerland believes that this would create moral hazard issues.
Issue guidance on the cantonal banks' governance, based on their best practice, including reducing political interconnectedness. Issue guidance on guarantees for cantonal banks, to enhance transparency and create a level playing field both across the cantonal banks and with the rest of the banking sector.	A full revision of FINMA Circular 2008/24 "Supervision and Internal Control – Banks" is currently under way which will increase governance requirements in line with relevant international standards. Entry into force is expected in January 2017. The new circular will, inter alia, require systemically important banks to have separate risk committees in their Boards of Directors and a CRO role at Executive Board level. Medium-sized banks will be required to have a separate CRO role without its level being specified.
	This circular on corporate governance for banks will also cover cantonal banks and stipulate requirements for independence of BoD members (e.g. minimum share of independent members and definition of independence).
	No explicit guidance on state guarantees for cantonal banks is planned or likely to occur in the near future.
Ensure that the likely consolidation among the private banks in response to U.S. tax pressures proceeds smoothly.	Market exits and market consolidation in the banking sector continued in 2015 as seven banks and securities dealers ceased operations; 28 institutions are still being assisted as they exit the market voluntarily. This trend mostly affected foreign and smaller wealth management banks, and was driven by general market pressures rather than US tax issues. FINMA is systematically screening the bank population, has identified weak banks and closely monitors each bank exiting the market. Typically, these exits proceed smoothly but require substantial time.

Recommendation	Actions Taken by the Authorities			
Short term				
Issue guidance to auditors to ensure consistency of supervision and undertake more "deep dives" into particular areas of concern. Increase the intensity of onsite supervision, including of middle-sized and smaller banks.	To provide guidance for prudential bank audits, seven detailed "audit programs" were issued: in 2014 on (1) AML/CFT, and in 2015 on (2) internal organization and control systems, (3) compliance risk management, (4) management of legal and reputational risks, (5) central functions in charge of compliance and risk management, (6) preservation of client data confidentiality and (7) IT. Further audit instructions relating to suitability and proper market conduct are to be issued and will become applicable beginning 2017. FINMA is currently assessing the effectiveness and cost/benefit			
	of the regulatory audit system. Options include FINMA becoming the mandating party for the regulatory audit and a more risk-focused approach to the design of regulatory audits. FINMA will present these policy options and possible implementation strategies to the competent FDF by fall 2016.			
	Regarding direct onsite supervision, FINMA has increased the use of this instrument in recent years. The intensity of direct supervision depends on the rating and category of each institution. From 2015 to 2016 the number of supervisory reviews and deep dives is planned to increase from 61 to 74.			
Short to medium term				
Increase FINMA's resources so it can carry out its agenda for supervisory enhancement. The resource pool for highly qualified staff could be expanded.	FINMA is of the opinion that the available resources are currently appropriate to fulfil the authority's legal mandate. In the absence of changes to the legal mandate and new tasks, no general increase in resources is planned. However, FINMA is improving the efficiency of its supervisory processes and reinvests freed up resources in new or increased supervisory activity in line with the authority's risk based supervisory approach.			
Medium term				
Reach agreement with partner supervisors as to the resolution of the country's G-SIFIs.	FINMA has reached a consensus on the resolution strategy of its G-SIBs with the Crisis Management Groups (CMG) of both G-SIBs and has concluded cooperation agreements on crisis management of the Swiss G-SIBs with the CMG members.			
Make available the full range of best practice resolution powers to handle any bank deemed systemic at the time.	As of January 2016, statutory powers to write down debt were incorporated into the Article 31 let. 3 Banking Act. This Article now provides that a restructuring plan may call for a reduction in existing equity, the creation of new equity, the conversion of debt into equity, and a debt reduction/write-off. With respect to the improvement of the legal basis of FINMA's resolution powers, new legislation has been drafted (as an annex to the draft Financial Institutions Act) and is currently being discussed in Parliament. As of January 2016, FINMA has resolution powers over bank holding companies and significant non-regulated group companies (see Art. 2bis Banking Act).			

Recommendation	Actions Taken by the Authorities
Medium term	
Monitor closely the condition of the life insurance firms in advance of the prospective elimination of the palliative measures protecting the companies from the effects of low interest rates, and enhance public understanding of the Swiss Solvency Test.	Even though interest rates have remained low since the introduction of the temporary adjustments to the Swiss Solvency Test in 2013, this measure gave the insurance sector time to take necessary steps. FINMA has analyzed the situation carefully and has decided to phase out the adjustments. In addition, FINMA has lowered the maximum allowable guaranteed interest rate for new Life business to practically zero percent as of 1.1.2017.
	FINMA continues to monitor life insurers closely and shares information on Swiss Solvency Test-related topics with regulators and supervisors in other jurisdictions (e.g. EIOPA and BaFin). In addition, FINMA representatives regularly give presentations about the Swiss Solvency Test, both in Switzerland and abroad.
Prioritize regulatory reform of securities markets, to bring arrangements up to international standards. Enhance focus on conduct of business supervision of banks and securities dealers.	The current regulatory project for a new Federal Financial Services Act (FIDLEG/FFSA) will establish conduct of business rules for all market participants. The current draft aligns relevant Swiss legislation with international standards and EU regulations. The act is planned to enter into force in 2018.
	The Federal Financial Infrastructure Act (FinfraG/FFIA) entered into force in January 2016 and aligns Swiss regulation of securities markets with international standards. Key changes include FMI regulation, pre- and post-trade transparency in derivatives trading, and market conduct requirements.
Pursue legislation to improve policyholder protection, enhance brokers' supervision, and increase the level of public disclosure.	A revision of the Insurance Supervisory Ordinance entered into force in July 2015. This included improvements to policyholder protection, increased public disclosure for insurance companies, and the supervision of insurance brokers.
	Policyholder protection has been enhanced by: (1) extending the Swiss Solvency Test to include reinsurance captives; and (2) raising qualitative requirements, including additional requirements in respect of organization and corporate governance (e.g. independent risk management and compliance functions and the Own Risk and Solvency Assessment (ORSA)). Quantitative measures have been added to the existing qualitative liquidity requirements.
	Public disclosure requirements for insurers have been increased by requiring insurers to report publicly on their activities, profits, risk management, risk profile, methods for defining technical provisions, capital management, and solvability.
	Supervision of insurance brokers has been enhanced through the requirement to report to FINMA certain items from criminal records.

# **Annex VI. Status of Previous Recommendations**

2015 Article IV Recommendations	Policy Actions			
Fiscal Policy				
Continue compliance with the fiscal rule and stand ready to support demand if needed.	The government has continued to adhere to the federal-level debt brake rule, and can utilize the escape clause if the outlook was to deteriorate significantly.			
Move ahead with pension and corporate tax reforms.	First pillar pension system and corporate tax reform are ongoing.			
	Monetary Policy			
Monetary policy should be kept loose, with further easing via a pre-announced program of asset purchases.	Monetary policy has been kept accomodative, with a focus on ad hoc FX purchases. These purchases have enlarged the SNB's balance sheet, with total assets now exceeding GDP. The policy interest rate has remained unchanged since it was lowered to -0.75 percent in early 2015.			
Further enhance communication and articulation of the monetary policy framework.	The authorities view the current articulation of the policy framework as adequate.			
Keep the SNB's capital buffers in line with risks.	The SNB is continuing to rebuild capital buffers.			
	Financial Sector Policy			
Move ahead with TBTF reforms and tighten leverage ratio requirements for G-SIBs.	Further TBTF measures have been signed into law, requiring additional capital on both a going-concern and gone-concern basis. The measures are being gradually phased in by the Swiss G-SIBs.			
Challenge risk weights from internal rating- based (IRB) capital models and increase disclosure requirements.	Banks' IRB models will adjusted in line with upcoming changes to the Basel guidance on risk weights.			
Improve resolvability of G-SIBs.	G-SIBs may be eligible for rebates on their gone concern capital ratio if their resolvability—capacity to easily liquidate assets and pay their creditors—exceeds minimum requirements,			
	Structural Reforms			
Resolve uncertainty regarding the referendum on immigration in a constructive manner.	The lower house has approved a measure to comply with the immigration referendum. Action by the upper house is pending.			
Continue progress on AML/CFT reform.	AML efforts are ongoing and Switzerland's AML/CFT regime has recently been assessed by the FATF.			
Move ahead with reforms to ensure long-run sustainable growth, including improving labor participation of women and access and equity in education.	Public spending on education has increased in recent years.			
Source: IMF staff.				

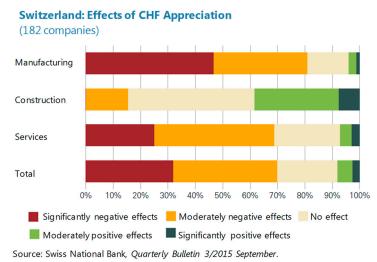
# Annex VII. Firm-Level Effects of the Franc Appreciation Following the Removal of the Exchange Rate Floor

#### The sizable franc appreciation that followed the removal of the floor against the euro

**affected the real economy via numerous channels.** In addition to the noticeable effect on headline inflation, one of the primary effects was to weaken the environment for the exportable sector vis-à-vis its foreign competitors. Although the franc recovered somewhat following the initial shock, it remained 13 percent stronger against the euro six months after the shock than it had been prior to the removal of the floor.<sup>1</sup>

#### The effect on Swiss firms differed substantially by sector but the overall effect was negative.

In a questionnaire by the SNB conducted six months after the removal of the floor, firms were asked about the effect of the currency's appreciation on their operations as well as their initial and expected reactions.<sup>2</sup> As shown in the chart below, the largest negative effects were felt in the manufacturing sector where nearly half of survey respondents reported significantly negative effects, with a further third reporting moderately negative effects. Services were less negatively affected, however, and construction was on the whole positively affected because of the lower price of imports. Overall, approximately 70 percent of firms reported a significantly or moderately negative effect.



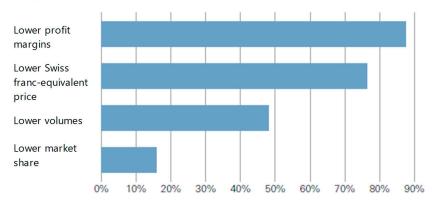
#### The primary channel through which firms were impacted was through their profit margins.

Nearly all adversely-affected firms reduced their franc-equivalent prices, as shown in the following chart. In addition, nearly half of firms saw reduced sales volumes. Domestic sales were particularly affected, with domestic-oriented firms seeing declining sales volume despite reduced margins and lower sales prices.

<sup>&</sup>lt;sup>1</sup> As of October 2016, the franc was 9 percent stronger in nominal terms against the euro than before the floor was removed.

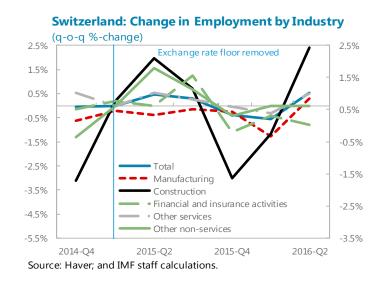
<sup>&</sup>lt;sup>2</sup> See SNB Quarterly Bulletin 3/2015.





Source: Swiss National Bank, Quarterly Bulletin 3/2015 September.

**Despite the finding that nearly half of firms reduced their sales volume, labor market data indicate the appreciation had only a mild effect on employment** (see chart below). Employment in manufacturing appears to have been the most affected, although the effect was generally modest and occurred with a delay of about one year. Overall, the unemployment rate has risen by a limited 0.3 percentage points since the floor was removed, registering 3.2 percent in September 2016. This limited labor market impact could reflect the temporary targeted fiscal support to encourage employment retention by firms, thereby helping firms and workers weather the appreciation.





INTERNATIONAL MONETARY FUND

# SWITZERLAND

November 4, 2016

STAFF REPORT FOR THE 2016 ARTICLE IV CONSULTATION—INFORMATIONAL ANNEX

Prepared By

European Department

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# **FUND RELATIONS**

(As of October 28, 2016)

#### 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	5,758.18	99.78
Reserve position in Fund	12.94	0.22
New arrangements to borrow	968.24	

#### **SDR Department**

	SDR Millions	Percent Allocation
Net cumulative allocation	3,288.04	100.00
Holdings	3,256.41	99.04

#### Outstanding Purchases and Loans: None

#### Financial Arrangements: None

#### Projected Payments to Fund:<sup>1</sup>

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

	Forthcoming				
	2016	2017	2018	2019	2020
Principal					
Charges/Interest	0.00	0.13	0.13	0.13	0.13
Total	0.00	0.13	0.13	0.13	0.13

#### **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

<sup>&</sup>lt;sup>1</sup> When a member has overdue financial obligations outstanding for more than three months, the amount of such arrears will be shown in this section.

rate has been floating between 0.97 and 1.12 CHF per euro, with occasional SNB intervention, following the removal of the floor.

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 13, 2016, 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 March 23, 2015, with the staff report published on May 27, 2015. 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.
- 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 October 2016)

#### 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 2014 data being released in late 2016. 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). A comprehensive producer price index is expected to be compiled in the near future.

**Government Finance Statistics:** General government finance statistics are compiled by the Federal Finance Administration. Data for general government are finalized with a considerable lag, mainly due to delays in compiling fiscal accounts at the level of cantons and communes. Data that are available through 2014 remain of a provisional nature due to ongoing efforts to reconcile data with the Swiss system of national accounts. Revisions may result in changes to the data due to coverage, valuation, and recording of transactions associated with the restructuring and funding of public sector pension funds and payment of retirement benefits. It is planned to publish final data after concluding the reconciliation exercise in the summer of 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 *International Financial Statistics* 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 *Monetary and Financial Statistics Manual*.

**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.

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Switzerland: Table of Common Indicators Required for Surveillance					
(As of October 28, 2016)					
	Date of Latest Observation	Date Received	Frequency of Data <sup>7</sup>	Frequency of Reporting <sup>7</sup>	Frequency of Publication <sup>7</sup>
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 <sup>1</sup>	Aug 16	Sep 16	М	М	М
Reserve/Base Money	Aug 16	Sep 16	М	М	М
Broad Money	Aug 16	Sep 16	М	М	М
Central Bank Balance Sheet	Sep 16	Oct 16	М	М	М
Consolidated Balance Sheet of the Banking System	Oct 16	Oct 16	М	М	М
Interest Rates <sup>2</sup>	Same day	Same day	D and M	M and M	D and M
Consumer Price Index	Sep 16	Oct 16	М	М	М
Revenue, Expenditure, Balance and Composition of Financing <sup>3</sup> – General Government <sup>4</sup>	2013	Jul 16	A	A	A
Revenue, Expenditure, Balance and Composition of Financing <sup>3</sup> – Central Government	Feb 2016	Jul 16	М	М	М
Stocks of Central Government and Central Government-Guaranteed Debt <sup>5</sup>	Q2/16	Sep 16	Q	Q	Q
External Current Account Balance	Q2/16	Sep 16	Q	Q	Q
Exports and Imports of Goods and Services	Sep 16	Oct 16	М	М	М
GDP/GNP	Q2/16	Sep 16	Q	Q	Q
Gross External Debt	Q2/16	Sep 16	Q	Q	Q
International Investment Position <sup>6</sup>	Q2/16	Sep 16	Q	Q	Q

<sup>1</sup> 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.

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

<sup>3</sup> Foreign, domestic bank, and domestic nonbank financing.

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

<sup>5</sup> Including currency and maturity composition.

<sup>6</sup> Includes external gross financial asset and liability positions vis-à-vis nonresidents.

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

## Statement by Paul Inderbinen, Alternate Executive Director for Switzerland and Sebastien Waelti, Senior Advisor to the Executive Director November 21, 2016

On behalf of our Swiss authorities, we would like to thank staff for their valuable report. This report provides a thorough and insightful analysis of the macroeconomic situation, and adds significant value to the domestic policy debate in Switzerland. In most aspects, we share staff's assessment of the challenges going forward and welcome their candid policy recommendations.

## Outlook

We generally agree with staff on the outlook, and expect growth to remain on a recovery path. According to the latest forecasts of the Federal Government's Expert Group published in September this year, GDP growth is projected to reach 1.5 percent in 2016 and 1.8 percent in 2017. While we broadly share staff's assessment of risks, we are somewhat less sanguine that the Swiss economy has already adapted to the appreciation that followed the exit from the exchange rate floor. We still observe slack in the labor market and some underutilization of capital. Further, the effect of the appreciation on exports was more severe in nominal terms, which is reflected in compressed profit margins. The results of the SNB's regional network survey cited in Annex VII of the staff report attest to this.

## **Fiscal Policy**

The debt brake rule has made an important contribution to the sound financial position of the central government by limiting expenditure to the level of estimated structural revenue. In our view, this helps explain why the Swiss economy has weathered the global financial crisis well and has maintained a strong fiscal position. General government debt stands at 46 percent of GDP, and sound public finances prevail at all levels of government. As mentioned in the staff report, the goal of a balanced structural budget at the federal level has been exceeded in the past, and the resulting structural surpluses have led to a nominal debt reduction. The authorities expect a further moderate reduction in the future, as expenditures generally remain below the budgeted amounts.

However, in contrast with staff, we do not see a need to adapt the fiscal rule in order to allow for higher public spending. The domestic-oriented economy is performing well and fiscal policy is not suitable to address an overvalued currency. Therefore, the fiscal stance is considered adequate in the current situation. A further reduction in debt levels will also help increase Switzerland's resilience to external shocks. Moreover, as noted in the staff report, population aging will put pressure on the fiscal position over the longer term.

In this context, we agree that fiscal reforms, notably in the area of old age pensions, are necessary to maintain favorable economic conditions and a sustainable social safety net.

## **Monetary Policy**

We agree with staff that monetary policy needs to remain accommodative to stabilize price developments and support economic activity. Further, we share staff's assessment that the Swiss franc is overvalued. Under the current circumstances, we do not consider a rebalancing of the SNB's policy tools to be necessary. We would like to emphasize that the marginal rate is essential for the effectiveness of the negative interest rate policy, as it is the main determinant of market rates. We view the current activity in foreign exchange markets as efficient and effective in mitigating appreciation pressures.

We acknowledge that the Swiss franc's role as a safe haven currency influences monetary policy but would not go so far as to say that it constrains policy independence. While temporary adverse spillover effects to inflation cannot be completely offset, spillover effects have often proved to be short lived and have not typically offset the SNB's policy of stabilizing inflation in the medium term. If needed, room is available to ease the monetary stance further to ensure price stability in Switzerland in the medium term. In terms of the SNB's balance sheet, there are no immediate constraints. We agree with staff that as the balance sheet expands, the risk of valuation losses increases. However, taking a longer-term perspective, we view the potential for sustained losses as limited. At a more general level, it should be recalled that the objective of a central bank is not to generate profits (or avoid losses), but to fulfil its mandate, in particular ensuring price stability.

## **Financial Sector Policies**

The authorities concur with staff that the stricter requirements for G-SIBs under the revised too-big-to-fail regulations (TBTF2) are appropriate. They share staff's assessment that the size of the large banks relative to the Swiss economy and their systemic importance warrants capital and leverage ratio requirements that are more stringent than international minimum standards. They also agree that attention should be given to model-based risk-weighted assets (RWA) and that improvements in RWA transparency are needed at the international level in order to strengthen the credibility of risk weights. The authorities are of the opinion that the Basel Committee's reforms to risk-weighted capital requirements are key to reduce the excessive variability in the banks' RWA and should not be diluted or delayed.

The authorities share staff's risk assessment regarding developments in the domestic mortgage and real estate markets. While the macroprudential measures introduced between 2012 and 2014 have produced a positive effect, risks remain. The authorities will continue to monitor developments on the mortgage and real estate markets closely. They agree that, should the momentum pick up again, additional macroprudential measures may become necessary, particularly in the build-to-let segment. The authorities also agree with staff that real estate exposures of insurance companies must be closely monitored. It should, however, be pointed out that the total market share of the insurance sector in mortgage lending remains

very small compared to the banking sector. Furthermore, the direct real estate holdings of insurance companies have not increased in recent years.

## **External Assessment**

We welcome the analysis of the factors underlying Switzerland's current account surplus. Several specific factors are important to understand the level and movement of the Swiss current account, including Switzerland's low inflation, which boosts its net nominal income flows; the treatment of retained earnings of multinational corporations; and various nontraditional flows such as merchanting activities. It should be noted that other factors, such as demographic change, as well as past R&D activity in the pharmaceutical and chemical industries, also play an important role.