

Swiss Confederation Rating Report



Credit strengths

- Diversified and wealthy economy
- Prudent fiscal management
- Strong external position
- Deep and liquid capital markets

Credit weaknesses

- Adverse demographics
- Large and concentrated banking sector
- Exposure to real estate risk

Ratings and Outlook

Foreign currency

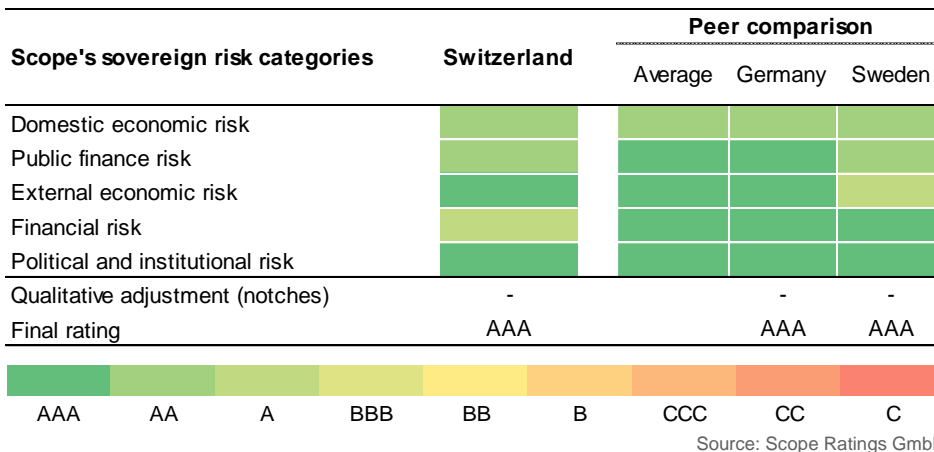
Long-term issuer rating	AAA/Stable
Senior unsecured debt	AAA/Stable
Short-term issuer rating	S-1+/Stable

Local currency

Long-term issuer rating	AAA/Stable
Senior unsecured debt	AAA/Stable
Short-term issuer rating	S-1+/Stable

Rating rationale and Outlook: Switzerland's AAA rating is underpinned by the resilience of its economy, low levels of indebtedness and prudent fiscal management. Switzerland also benefits from a strong external position, the safe-haven status of the Swiss franc, and highly developed capital markets providing liquidity. However, unfavourable demographics, a large and concentrated banking sector and exposure to mortgages remain challenges. The Stable Outlook reflects our assessment that the risks Switzerland faces remain manageable.

Figure 1: Sovereign scorecard results



NB. The comparison is based on Scope's Core Variable Scorecard (CVS), which is determined by the relative rankings of key sovereign credit fundamentals. The CVS peer group average is shown together with two selected countries chosen from the entire CVS peer group. The CVS rating can be adjusted by up to three notches depending on the size of relative credit strengths or weaknesses.

Lead analysts

Levon Kameryan
 +49 69 6677389-21
l.kameryan@scoperatings.com

Team leader

Dr Giacomo Barisone
 +49 69 6677389-22
g.barisone@scoperatings.com

Scope Ratings GmbH

Neue Mainzer Straße 66-68
 60311 Frankfurt am Main
 Phone +49 69 6677389 0

Headquarters

Lennéstraße 5
 10785 Berlin
 Phone +49 30 27891 0
 Fax +49 30 27891 100
info@scoperatings.com
www.scoperatings.com

Bloomberg: SCOP

Positive rating-change drivers

- Not applicable

Negative rating-change drivers

- Sharp correction in housing market, weighing on growth and banks
- Uncontrolled exchange-rate appreciation damaging growth

Resilient performance, despite appreciation pressures on franc**Domestic economic risk****Growth outlook**

Growth has been gaining momentum in the wake of the sharp exchange-rate appreciation following the Swiss National Bank (SNB)'s decision to exit the exchange-rate floor. In 2017, year-on-year real GDP growth stood at 1.6% driven mainly by capital formation and private consumption and accelerated to 3.2% in the first and second quarter of 2018 owing to favourable developments in the exchange rate and strong external demand. In line with the estimates of the Federal Government and the IMF, we expect GDP growth to average 2.4% for 2018 due to the continued strong performance of Switzerland's main trading partners and healthy domestic demand driven by investment and favourable labour market trends. Growth is expected to flatten out to 2.0% in 2019, as global economic growth slows down.

The modest increase in Switzerland's unemployment rate in 2016 has been corrected as economic activity has picked up, and is expected to fall to 3% in 2018. After more than two years of deflation, year-on-year growth in the Consumer Price Index returned to positive territory in 2017, averaging 0.5%, driven by rising oil and import prices. In our view, inflation will remain close to but below 1% over 2018-19, reflecting the robust oil price outlook and the lagged effect of depreciation of the Swiss franc against the euro at end-2017, constrained by gradually abating economic growth.

The main risks to the medium-term growth outlook stem from international trade tensions and regional political uncertainty, which could create renewed upward pressures on the Swiss franc. This has been demonstrated in several instances by SNB's heavy currency interventions leading to a quadrupling in the size of its balance sheet since the financial crisis.

Economic policy framework

Switzerland benefits from an exceptionally wealthy and well-diversified economy with real GDP per capita on a purchasing power parity basis more than 40% higher than the euro-area and OECD averages.

Accommodative monetary policy supporting economic recovery and modest inflation

The SNB's monetary policy has been effective in controlling appreciation pressures, preventing prolonged periods of sustained deflation, and helping the economic recovery by means of negative interest rates and currency interventions. As the inflation outlook remains weak and safe-haven pressures on the Swiss franc remain, we expect only a gradual normalisation of the policy stance over the next few quarters, following a rise in major central banks' key interest rates.

In our opinion, the adoption of a corporate tax reform, which was once rejected in a referendum in February 2017, is important to eliminate existing legal uncertainties and maintain the attractiveness of Switzerland's investment environment. The Swiss Parliament's final decision regarding the amended reform package is expected in autumn 2018, with relevant measures entering into force in 2020 if no referendum is held. Furthermore, policy measures aimed at improving productivity gains in the domestic economy (as opposed to the very competitive external sector) will be important to raise the medium-term potential growth outlook, currently estimated by the IMF at around 1.5%.

Public finance risk

Sustained fiscal performance underpinned by 'debt brake' rule

In our view, Switzerland has adequate fiscal space given its balanced public finances and low debt burden. Its position is further bolstered by favourable financing costs.

Switzerland's sustained fiscal record is underpinned by its well-established and effective 'debt brake' rule that was introduced in 2003 and is anchored in the Federal Constitution. The rule requires the confederation to maintain a cyclically adjusted balanced budget on an ex-ante basis. Surpluses in periods of economic expansion are used to offset deficits in periods of economic contraction, and expenditures may only be increased if matched by a subsequent rise in receipts, with an exemption clause for extraordinary situations. We note that the mechanism has contributed to significant reductions in government debt and proved to be resilient in economic downturns.

Fiscal performance remained strong in 2017, with the general government surplus¹ improving to 1.3% of GDP, up almost 1 pp from 2016, due to the strong budgetary performance of the confederation and cantons. In line with the estimates of the Federal Finance Administration, we expect the headline surplus to remain close to but below 1% over 2018-19, with the confederation remaining the largest contributor to the budget.

Favourable debt structure; highly liquid capital markets

Switzerland benefits from highly liquid capital markets; the safe-haven status of the franc; a robust debt management strategy, reflected in an increasing average term to maturity that reached 10 years at end-2017 for the confederation's market debt (and 21 years for bonds issued in 2017) a more than three-year increase since 2010; and low refinancing risks, as the share of debt requiring refinancing within the next 12 months stood at only 18% of the total stock. Given historically low interest rates, the average yield of bonds issued by the Federal Treasury in 2017 stood at 0.15%, a slight recovery from 2016. The Swiss government borrows in local currency, which eliminates exchange-rate risks.

Debt sustainability analysis

We assess Switzerland's medium-term public debt dynamics as strong, owing to relative robustness across several scenarios over the projection horizon to 2023, including a stressed scenario which incorporates a combined growth, interest-rate, primary-balance and foreign-currency shock. In 2017, public debt according to the IMF definition stood at around 43% of GDP (Maastricht-defined debt was 29.5%).

Strong debt dynamics, but long-term sustainability challenges

Our baseline scenario, in line with the IMF forecast, foresees a decline in debt over the projection horizon to around 35% of GDP, supported by positive primary balances and extremely low/negative financing costs. However, long-term challenges to debt sustainability remain due to adverse demographics. According to the long-term sustainability report published by the Federal Department of Finance, demographics-related expenditure will rise from 17.3% of GDP in 2013 to 20.8% of GDP by 2045 in the baseline scenario. This increase is due to higher expenditure on healthcare, long-term care, old-age and survivors' insurance, and disability insurance. The rise will correspond to an increase of around 24 pp in the debt-to-GDP ratio by 2045. Furthermore, in an assessment of total government liabilities including the net present value of future pension and healthcare obligations, Switzerland ranks seventh among 30 advanced economies, with a ratio of 175% of GDP, above the UK (161%), Germany (154%), Austria (152%) and Norway (139%), but significantly below Japan (277%), the USA (261%) and Belgium (198%)².

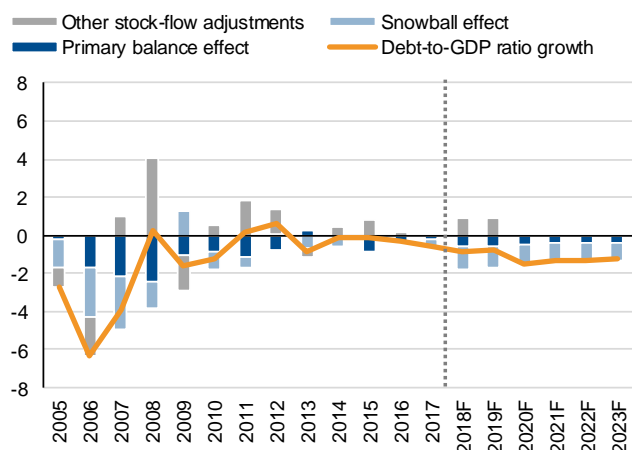
Against this backdrop, we note that Switzerland's proposed pension reform was rejected

¹ The general government budget is the sum of the budgets of the confederation, the cantons, municipalities and social security funds.

² IMF Fiscal Monitor, April 2018, calculations Scope Ratings GmbH.

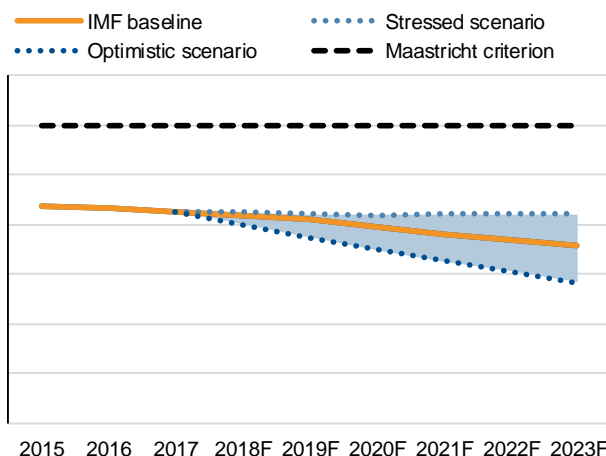
by a popular vote in September 2017. The package would have: i) aligned the retirement age for women (currently 64) with that for men (65) and raised the earliest-possible retirement age from 58 to 62; ii) reduced the minimum retirement-conversion rate from 6.8% to 6.0%; iii) raised VAT by 0.6% to provide more financing for social security; and iv) expanded some compensatory measures.

Figure 2: Contribution to gov't debt changes, % of GDP



Source: IMF, Scope Ratings GmbH

Figure 3: General government debt, % of GDP



Source: IMF, Scope Ratings GmbH

Scenario	Period	Real GDP growth (%)	Primary bal. (% of GDP)	Real eff. int. rate (%)	Debt, end period (% of GDP)
History	2013-17	1.6	0.2	0.8	42.8
IMF baseline	2018-23	1.9	0.5	-0.6	35.7
Optimistic scenario		2.4	1.0	-1.2	28.4
Stressed scenario		0.9	0.0	0.6	42.0

External economic risk

Switzerland has an open and very competitive external sector. The export base is highly diversified, both in terms of products and destination markets. Since 1981, Switzerland has persistently generated large current account surpluses, which have averaged around 10% of GDP since 2006, resulting in a large positive net international investment position of 127% of GDP in 2017. The vulnerability of the economy to short-term external shocks is mitigated by the strong domestic currency.

While the exchange rate remains elevated against the euro compared to the period just before the SNB's exit from the exchange-rate floor, the flexibility and resilience of the external sector (with a large share of relatively price-insensitive exports such as pharmaceuticals) have helped to mitigate potential negative repercussions of competitiveness pressures. Furthermore, the trade balance is set to contribute positively to growth in 2018 and 2019, driven by the robust performance of the global economy.

Financial stability risk

The financial sector is a central pillar of the Swiss economy. The sector's total assets amount to more than 500% of GDP, owing primarily to two global systemically important Swiss banks – Credit Suisse (A+/Stable Outlook) and UBS (AA-/Stable Outlook) – making Switzerland's banking system one of the largest financial sectors in the world relative to GDP. Overall credit quality remains high at Swiss banks, reflected in

Sound external position supported by the strong reserve currency

**Well-capitalised banking sector,
but high exposure to real estate**

continuously low levels of non-performing loans (less than 1% of total loans). However, the prolonged low interest rate environment has put pressure on banks' profitability (the average interest rate margin for domestically focused banks decreased in 2017 to 1.21%³), which we expect to persist.

Important vulnerabilities stem from rising household debt (around 128% of GDP or 200% of disposable income in 2016), and Swiss banks' high mortgages exposure, which accounts for around 85% of total domestic bank lending, reflecting risks in a period of historically low interest rates. Mortgage loan growth remained stable at 2.7% YoY at end-2017, and the share of new mortgages with a high loan-to-value ratio has increased further. These exposures will prove challenging due to imbalances in the real estate sector, reflected in historical high affordability risks as measured by elevated household loan-to-income ratios up 10 pp since 2013 to around 50% in 2017⁴. Risks are moderated, however, by Swiss households' large financial assets, amounting to 370% of GDP.

We view the authorities' efforts to address the too-big-to-fail (TBTF) issue positively, with revised TBTF2 regulations. The new regulations are more stringent, leading to improvements in the capital ratios of Credit Suisse and UBS. Both banks have been meeting – or are on track to meet – the revised capital requirements. However, given the interconnectedness of the economy and the financial sector, measures aimed at the full implementation of regulatory requirements and resolution planning remain essential.

Institutional and political risk**Sound political institutions**

Switzerland's political system is characterised by strong democratic institutions and predictable consensus-orientated policies. The composition of the Federal Council, Switzerland's executive board, has traditionally been divided among the country's four main political parties. It is currently made up of two Swiss People's Party (SVP) representatives, two Social Democrat (SP) representatives, two Liberal (FDP) representatives and one Christian Democrat Party (CVP) representative. In the federal election held in October 2015, the right-wing SVP received 29.4% of the vote, followed by the left-wing SP with 18.8% of the vote. The centre-right FDP and the CVP gained 16.4% and 11.6%, respectively. The next federal elections are scheduled in 2019, followed by a parliamentary vote on a new Federal Council. According to the recent polls, the dominance of right to centre-right political parties is set to continue.

One of the most important policy issues for the government has been dealing with the outcome of a February 2014 referendum launched by the SVP to impose immigration quotas. In December 2016, the Swiss Parliament approved an immigration law that avoids outright quotas on EU immigrants, but instead prioritises Switzerland-based job seekers over EU citizens. While the EU has welcomed the law as compatible with the agreement on the free movement of people, the SVP has already collected more than 100,000 signatures (still to be validated by the Federal Chancellery) necessary for a national vote to discontinue the existing free movement agreement with the EU. If the initiative is accepted in a national vote, the Swiss government would have one year to negotiate the end of the free movement of people with the EU – if no solution is found, it would be cancelled unilaterally.

**Challenges in Swiss-EU
framework negotiations**

A further challenge to bilateral relations is the status of the Swiss stock exchange in the EU market in the light of negotiations on a broader framework agreement between Switzerland and the EU. In December 2017 the EU granted one-year stock market equivalence to Switzerland, while the Federal Council adopted a contingency measure

³ SNB's Financial Stability Report, 2018

⁴ SNB's Financial Stability Report, 2018

Very strong environmental, social and governance performance

under which, if no extension is made by December 2018, it would require EU stock exchanges to apply for permission to trade in Switzerland. While the negotiations with the EU will be a key focus in Swiss politics ahead of the federal elections, we expect constructive bilateral relations to continue.

We note that in June 2018 Swiss voters rejected the ‘Vollgeld Initiative’ which proposed replacing Switzerland’s fractional reserve banking structure with a sovereign money system that would stop private banks from creating money and would print ‘debt-free’ money for direct allocation.

Environmental, social and governance factors

Scope considers environmental, social and governance issues during the rating process based on Scope’s sovereign methodology. Governance-related factors are explicitly captured in our assessment of ‘Institutional and Political Risk’, for which Switzerland has one of the highest scores as measured by the World Bank’s Worldwide Governance Indicators. The socially-related factors captured in Scope’s Core Variable Scorecard (CVS) are Switzerland’s very high per capita income, low level of unemployment but high and increasing old-age dependency ratio. Furthermore, income inequality before taxes and transfers is one of the lowest among OECD economies, and the Gini coefficient is around the OECD average⁵. In 2017, Switzerland was ranked the most competitive economy in the world for the ninth consecutive year by the World Economic Forum. Swiss Exchange became a partner in the Climate Bonds Initiative in early 2018, promoting a green bond issuance target of USD 1trn by 2020. Overall, growth in the sustainable investment market in Switzerland was strong in 2017 at 82%, reaching CHF 390.6bn. Sustainable funds account for roughly 9% of the total Swiss fund market⁶. In addition to via the CVS, Scope accounts for Switzerland’s social and environmental strengths and weaknesses via Scope’s QS evaluation of Switzerland’s ‘growth potential’, ‘macro-economic stability and sustainability’ and ‘market access and funding sources’.

Outlook and rating-change drivers

The Stable Outlook reflects our assessment that the risks Switzerland faces remain manageable given its significant strengths.

The Outlook could be changed if: i) a sharp correction in the housing market weighs on growth and financial stability and/or ii) exchange-rate appreciation becomes uncontrollable, damaging competitiveness and economic growth.

Foreign- versus local-currency ratings

Swiss debt is issued in local currency. Because of the country’s history of openness to trade and capital flows, and the Swiss franc’s reserve-currency status, we see no evidence that Switzerland would differentiate between any contractual debt obligations based on currency denomination.

Recent rating actions

	Rating action	Outlook
29 September 2017	Affirmation AAA	Stable
05 May 2017	Under review	Developing

Source: Scope Ratings GmbH

⁵ OECD Economic Surveys November 2017, Switzerland.

⁶ Swiss Sustainable Finance, Swiss Sustainable Investment Market Study 2018.

I. Appendix: CVS and QS results

Sovereign rating scorecards

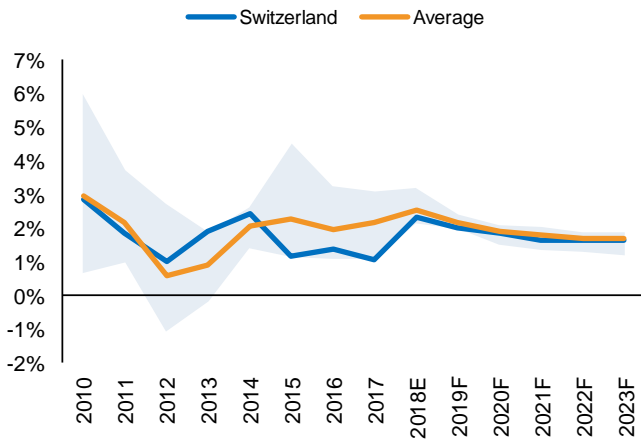
Scope's Core Variable Scorecard (CVS), which is based on the relative rankings of key sovereign credit fundamentals, signals an indicative 'AAA' ('aaa') rating range for the Swiss Confederation. This indicative rating range can be adjusted by up to three notches on the Qualitative Scorecard (QS) depending on the size of relative credit strengths or weaknesses versus peers based on analysts' qualitative findings. For the Swiss Confederation, the QS signalled relative credit strengths for the following analytical categories: i) economic policy framework; ii) fiscal policy framework; iii) market access and funding sources; iv) current-account vulnerabilities; and v) banking-sector oversight and governance. Relative credit weakness was signalled for: i) financial imbalances and financial fragility. The combined relative credit strengths and weaknesses generate no adjustment and signal a sovereign rating of AAA for Switzerland.

CVS		QS							
Rating indicator	Category weight	Maximum adjustment = 3 notches							
		+2 notch	+1 notch	0 notch	-1 notch	-2 notch			
Domestic economic risk Real GDP growth Real GDP volatility GDP per capita Nominal GDP Inflation rate Unemployment rate Old-age dependency ratio	35%	Growth potential of the economy	Excellent outlook, strong growth potential	Strong outlook, good growth potential	Neutral	Weak outlook, growth potential under trend	Very weak outlook, growth potential well under trend or negative		
		Economic policy framework	Excellent	Good	Neutral	Poor	Inadequate		
		Macro-economic stability and sustainability	Excellent	Good	Neutral	Poor	Inadequate		
		Public finance risk Primary balance Interest payments Gross debt Gross financing needs	30%	Fiscal policy framework	Exceptionally strong performance	Strong performance	Neutral	Weak performance	Problematic performance
		Debt sustainability		Exceptionally strong sustainability	Strong sustainability	Neutral	Weak sustainability	Not sustainable	
		Market access and funding sources		Excellent access	Very good access	Neutral	Poor access	Very weak access	
External economic risk External debt Currency turnover/reserves Net international investment position (NIIP) Current account balance	15%	Current account vulnerability		Excellent	Good	Neutral	Poor	Inadequate	
External debt sustainability		Excellent	Good	Neutral	Poor	Inadequate			
Vulnerability to short-term external shocks		Excellent resilience	Good resilience	Neutral	Vulnerable to shock	Strongly vulnerable to shocks			
Institutional and political risk Worldwide Governance Indicators		10%	Perceived willingness to pay	Excellent	Good	Neutral	Poor	Inadequate	
Recent events and policy decisions	Excellent		Good	Neutral	Poor	Inadequate			
Geopolitical risk	Excellent		Good	Neutral	Poor	Inadequate			
Financial risk Non-performing loans (NPLs) Tier 1 ratio Credit to GDP gap (bubble) Credit to GDP gap (imbalance)	10%	Banking sector performance	Excellent	Good	Neutral	Poor	Inadequate		
Banking sector oversight and governance		Excellent	Good	Neutral	Poor	Inadequate			
Financial imbalances and financial fragility		Excellent	Good	Neutral	Poor	Inadequate			
Indicative rating range QS adjustment		aaa AAA	* Implied QS notch adjustment = (QS notch adjustment for domestic economic risk)*0.35 + (QS notch adjustment for public finance risk)*0.30 + (QS notch adjustment for external economic risk)*0.15 + (QS notch adjustment for institutional and political risk)*0.10 + (QS notch adjustment for financial stability risk)*0.10						
Final rating	AAA								

Source: Scope Ratings GmbH

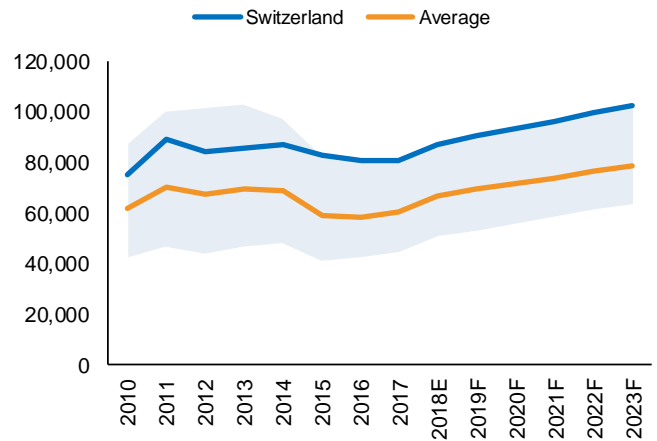
II. Appendix: Peer comparison

Figure 6: Real GDP growth



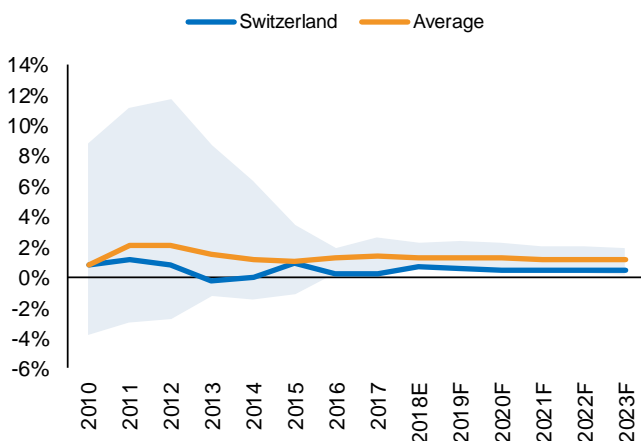
Source: IMF, calculations Scope Ratings GmbH

Figure 7: GDP per capita, USD



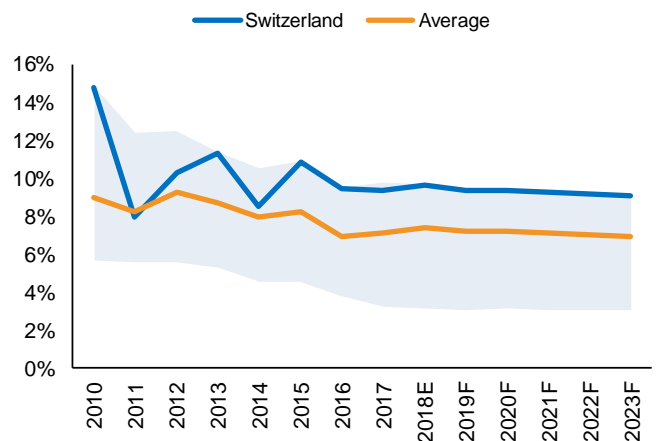
Source: IMF, calculations Scope Ratings GmbH

Figure 8: Primary balance, % of GDP



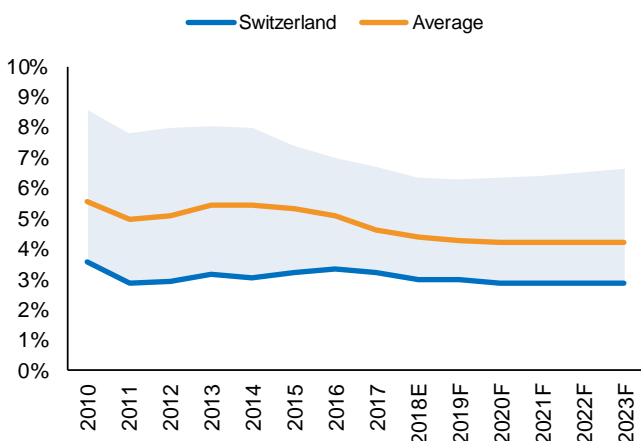
Source: IMF, Calculation Scope Ratings GmbH

Figure 9: Current account balance, % of GDP



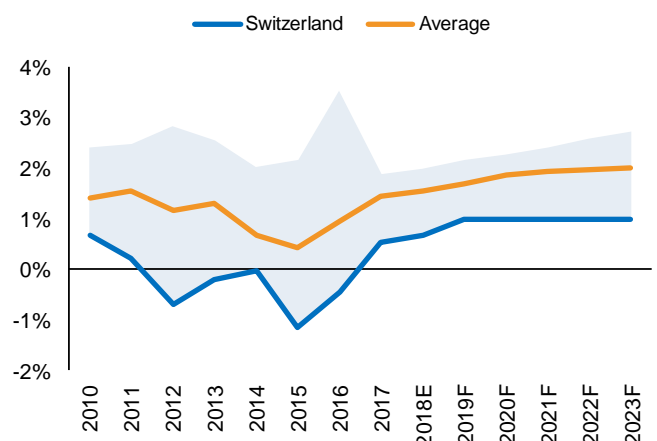
Source: IMF, Calculation Scope Ratings GmbH

Figure 10: Unemployment rate



Source: IMF, Calculations Scope Ratings GmbH

Figure 11: Inflation rate



Source: IMF, Calculations Scope Ratings GmbH

III. Appendix: Statistical tables

	2013	2014	2015	2016	2017	2018E	2019F
Economic performance							
Nominal GDP (CHF bn)	638.3	649.8	653.7	659.0	668.2	689.4	710.1
Population ('000s)	8,039.0	8,140.0	8,238.0	8,327.0	8,420.0	8,541.0	8,644.0
GDP per capita PPP (USD)	60,108.5	61,902.2	63,648.3	63,881.7	65,006.5	-	-
GDP per capita (CHF)	79,403.6	79,827.1	79,346.2	79,137.8	79,357.2	80,708.1	82,147.7
Real GDP, % change	1.9	2.4	1.3	1.6	1.6	2.4	2.0
GDP growth volatility (10-year rolling SD)	1.8	1.8	1.8	1.6	1.4	1.4	0.6
CPI, % change	-0.2	0.0	-1.1	-0.4	0.5	0.7	1.0
Unemployment rate (%)	3.2	3.0	3.2	3.3	3.2	3.0	3.0
Investment (% of GDP)	22.5	23.2	23.1	23.1	23.7	23.6	23.6
Gross national savings (% of GDP)	33.8	31.7	34.0	32.5	33.0	33.3	33.0
Public finances							
Net lending/borrowing (% of GDP)	-0.4	-0.2	0.6	0.4	1.3	0.8	0.6
Primary net lending/borrowing (% of GDP)	-0.2	0.0	0.9	0.6	1.5	1.0	0.8
Revenue (% of GDP)	32.7	32.5	33.5	33.4	34.2	33.5	32.9
Expenditure (% of GDP)	33.1	32.7	32.8	33.0	32.9	32.7	32.3
Net interest payments (% of GDP)	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Net interest payments (% of revenue)	0.7	0.8	0.6	0.6	0.6	0.5	0.5
Gross debt (% of GDP)	42.9	43.0	43.0	41.8	42.7	40.7	39.4
Net debt (% of GDP)	23.8	23.8	23.9	24.1	23.1	22.2	21.4
Gross debt (% of revenue)	131.2	132.5	128.3	125.1	124.9	121.5	119.8
External vulnerability							
Gross external debt (% of GDP)	232.8	251.0	256.3	261.9	268.7	-	-
Net external debt (% of GDP)	-	-	-	-	-	-	-
Current-account balance (% of GDP)	11.3	8.5	10.9	9.4	9.3	9.7	9.4
Trade balance (% of GDP)	7.8	7.8	7.9	7.4	7.2	-	-
Net direct investment (% of GDP)	5.4	-1.3	1.8	3.6	-8.2	-	-
Official forex reserves (EOP, USD bn)	488.6	499.0	560.6	634.9	762.1	-	-
REER, % change	-1.0	1.1	5.9	-2.1	-1.6	-	-
Nominal exchange rate (AVG, CHF/EUR)	1.2	1.2	1.1	1.1	1.1	-	-
Financial stability							
Non-performing loans (% of total loans)	0.8	0.7	0.7	0.7	0.7	-	-
Tier 1 ratio (%)	16.7	17.1	18.3	18.1	18.3	-	-
Private debt (% of GDP)	210.3	225.2	228.3	238.7	-	-	-
Credit-to-GDP gap (%)	9.4	5.9	5.7	11.5	9.3	-	-

Source: IMF, European Commission, Swiss National Bank, World Bank, BIS, Scope Ratings GmbH



Scope ratings GmbH

Headquarters Berlin

Lennéstraße 5
D-10785 Berlin

Phone +49 30 27891-0

London

Suite 301
2 Angel Square
London EC1V 1NY

Phone +44 203-457 0 4444

Oslo

Haakon VII's gate 6
N-0161 Oslo

Phone + 47 21 623142

Frankfurt am Main

Neue Mainzer Straße 66-68
D-60311 Frankfurt am Main

Phone +49 69 66 77 389-0

Madrid

Paseo de la Castellana 95
Edificio Torre Europa
E-28046 Madrid

Phone +34 914 186 973

Paris

33 rue La Fayette
F-75009 Paris

Phone +33 1 8288 5557

Milan

Via Paleocapa 7
IT-20121 Milan

Phone +39 02 30315 814

info@scoperatings.com
www.scoperatings.com

Disclaimer

© 2018 Scope SE & Co. KGaA and all its subsidiaries including Scope Ratings GmbH, Scope Analysis, Scope Investor Services GmbH (collectively, Scope). All rights reserved. The information and data supporting Scope's ratings, rating reports, rating opinions and related research and credit opinions originate from sources Scope considers to be reliable and accurate. Scope cannot, however, independently verify the reliability and accuracy of the information and data. Scope's ratings, rating reports, rating opinions, or related research and credit opinions are provided "as is" without any representation or warranty of any kind. In no circumstance shall Scope or its directors, officers, employees and other representatives be liable to any party for any direct, indirect, incidental or otherwise damages, expenses of any kind, or losses arising from any use of Scope's ratings, rating reports, rating opinions, related research or credit opinions. Ratings and other related credit opinions issued by Scope are, and have to be viewed by any party, as opinions on relative credit risk and not as a statement of fact or recommendation to purchase, hold or sell securities. Past performance does not necessarily predict future results. Any report issued by Scope is not a prospectus or similar document related to a debt security or issuing entity. Scope issues credit ratings and related research and opinions with the understanding and expectation that parties using them will assess independently the suitability of each security for investment or transaction purposes. Scope's credit ratings address relative credit risk, they do not address other risks such as market, liquidity, legal, or volatility. The information and data included herein is protected by copyright and other laws. To reproduce, transmit, transfer, disseminate, translate, resell, or store for subsequent use for any such purpose the information and data contained herein, contact Scope Ratings GmbH at Lennéstraße 5, D-10785 Berlin.

Scope Ratings GmbH, Lennéstraße 5, 10785 Berlin, District Court for Berlin (Charlottenburg) HRB 192993 B, Managing Director: Torsten Hinrichs.