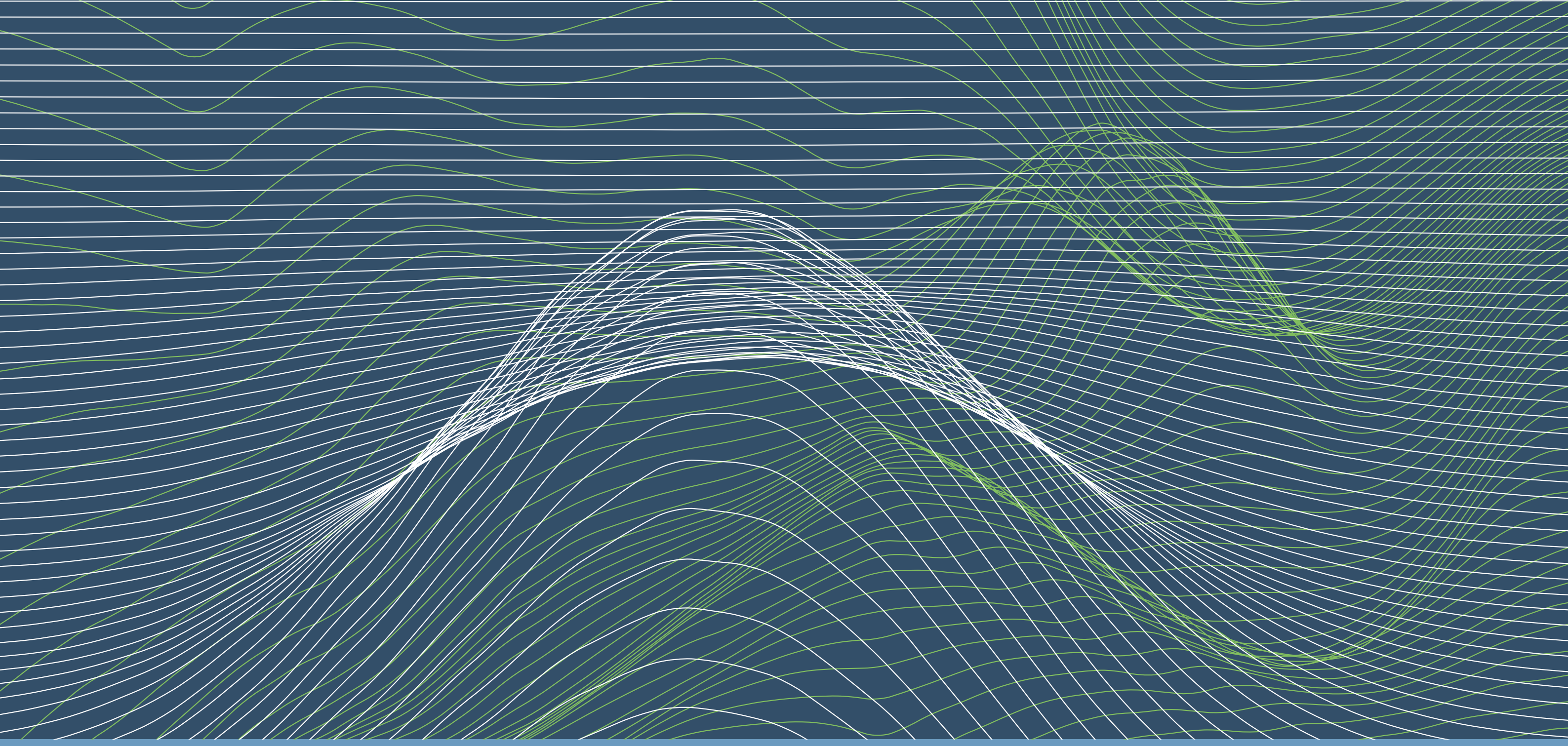

Swiss Balance of Payments and International Investment Position 2016

SCHWEIZERISCHE NATIONALBANK
BANQUE NATIONALE SUISSE
BANCA NAZIONALE SVIZZERA
BANCA NAZIUNALA SVIZRA
SWISS NATIONAL BANK

Swiss Balance of Payments and International Investment Position 2016

Volume 3

SNB BNS

Contents

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Overview

INTRODUCTORY REMARKS

The Swiss National Bank (SNB) compiles the Swiss balance of payments and international investment position according to the guidelines of the International Monetary Fund (IMF) laid down in the *Balance of Payments and International Investment Position Manual* (BPM6).

The balance of payments (current account, capital account and financial account) covers Switzerland's cross-border transactions with other countries over a given period. The international investment position indicates Switzerland's stocks of financial assets and liabilities abroad at the end of this period. Assets and liabilities in the international investment position change, on the one hand, as a result of the transactions recorded in the financial account. On the other, capital gains and losses arising from stock market and exchange rate movements, as well as other changes, also have an impact on capital stocks.

The data on the Swiss balance of payments and international investment position are available on the SNB's data portal (data.snb.ch) under 'International economic affairs'. The data are updated every quarter and explained in a press release. Furthermore, additional information is provided by this annual report, which is published in May.

This annual report is based on the dataset for the fourth quarter of 2016, which was published together with a press release on 24 March 2017. The first section of the annual report covers the 2016 results. The second section covers the longer-term development of the balance of payments and international investment position. Generally it includes a special topic that deals with background information regarding Switzerland's international economic affairs.

The aim of this year's special topic is to improve understanding of the balance of payments and international investment position statistics. The main focus is on the principle of double-entry accounting, which is used in the balance of payments and its main accounts. It also explains the connection between the accounts in the balance of payments, the relationship between the balance of payments and the international investment position, and their integration in the national accounts.

CHANGES IN THE BALANCE OF PAYMENTS AND INTERNATIONAL INVESTMENT POSITION IN 2016

Current account

In 2016, the current account registered a surplus of CHF 70 billion, CHF 5 billion less than in 2015. The decline was largely attributable to the lower receipts surplus for direct investment in primary income. This was offset by a rise in the receipts surplus for trade in goods and services. Furthermore, the expenses surplus for secondary income (current transfers) decreased.

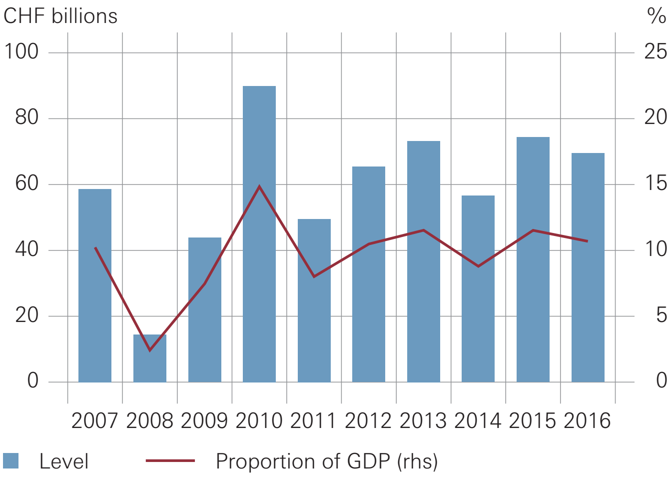
As in previous years, the current account surplus was around 11% of GDP.

As in 2015, goods trade recorded a receipts surplus of CHF 52 billion. Receipts from exports attained a high of CHF 313 billion (2015: CHF 292 billion) and expenses for imports amounted to CHF 261 billion (2015: CHF 240 billion).

The most important components of trade in goods are 'foreign trade total 1' as defined by the foreign trade statistics of the Federal Customs Administration (FCA), trade in non-monetary gold, and merchanting. Receipts from 'foreign trade total 1' increased year-on-year by CHF 8 billion to CHF 211 billion, and expenses by CHF 7 billion to CHF 173 billion. The increase in both receipts and expenses was due mainly to chemical and pharmaceutical products. For trade in non-monetary gold, both receipts from exports and expenses for imports amounted to CHF 12 billion. Net receipts from merchanting rose by CHF 1 billion to CHF 26 billion.

Chart 1

CURRENT ACCOUNT BALANCE



Source: SNB

For trade in services, there was a CHF 19 billion receipts surplus (2015: CHF 18 billion). Receipts came to CHF 113 billion (2015: CHF 109 billion) and expenses to CHF 94 billion (2015: CHF 91 billion). The greatest increases on the receipts side were in receipts from insurance services and from licence fees. On the expenses side, transport, business services, and telecommunications, computer and information services recorded the greatest increases.

Primary income (labour income and investment income) registered a receipts surplus of CHF 8 billion (2015: CHF 18 billion). Receipts came to CHF 126 billion (2015: CHF 150 billion) and expenses amounted to CHF 118 billion (2015: CHF 132 billion). The decrease in the receipts surplus was mainly due to a decline of CHF 8 billion in receipts surplus from direct investment.

Secondary income (current transfers) posted an expenses surplus of CHF 10 billion (2015: expenses surplus of CHF 13 billion). While receipts amounted to CHF 41 billion (2015: CHF 36 billion), expenses amounted to CHF 51 billion (2015: CHF 49 billion). The lower year-on-year expenses surplus was mainly due to insurance companies' premium receipts and claims payments.

Capital account
The capital account was balanced in 2016, with receipts and expenses both standing at CHF 1 billion.

Financial account
In 2016, net acquisition of financial assets amounted to CHF 95 billion (2015: net acquisition of CHF 235 billion). They were acquired by Switzerland mainly in the form of reserve assets and direct investment. Net acquisition of reserve assets came to CHF 77 billion (2015: net acquisition of CHF 94 billion), that of direct investment CHF 40 billion (2015: net acquisition of CHF 126 billion). Most direct investment transactions were accounted for by resident investors in the form of both reinvestment of earnings in their non-resident subsidiaries and intragroup lending. The other investment item recorded a net reduction of CHF 22 billion (2015: net reduction of CHF 26 billion), due to the fact that resident commercial bank claims against non-resident commercial banks were reduced. Portfolio investment recorded net acquisition of CHF 1 billion (2015: net acquisition of CHF 40 billion), with purchases and sales of securities largely balanced.

Net incurrence of liabilities amounted to CHF 18 billion (2015: net incurrence of CHF 139 billion). The other investment item recorded a net incurrence of CHF 56 billion (2015: net incurrence of CHF 60 billion), most of which was accounted for by the other net incurrence of liabilities item. These were transactions which could not be allocated to any other component according to the information available at the time of publication. By contrast, a net reduction in liabilities was recorded in the case of portfolio investment and direct investment. The net reduction for portfolio investment of CHF 21 billion (2015: net reduction of CHF 14 billion) was mainly due to the fact that foreign countries sold equity securities of resident issuers. A net reduction of CHF 17 billion (2015: net acquisition of CHF 94 billion) was recorded for direct investment, primarily as a result of non-resident investors withdrawing their equity capital from their resident finance and holding companies.

With the inclusion of derivatives, the financial account balance came to CHF 83 billion (2015: CHF 93 billion).

Statistical difference
The statistical difference item includes all discrepancies arising from errors and omissions in statistical surveys. In 2016, the statistical difference amounted to CHF 14 billion (2015: CHF 32 billion). This accounts for 1% of all current account transactions.

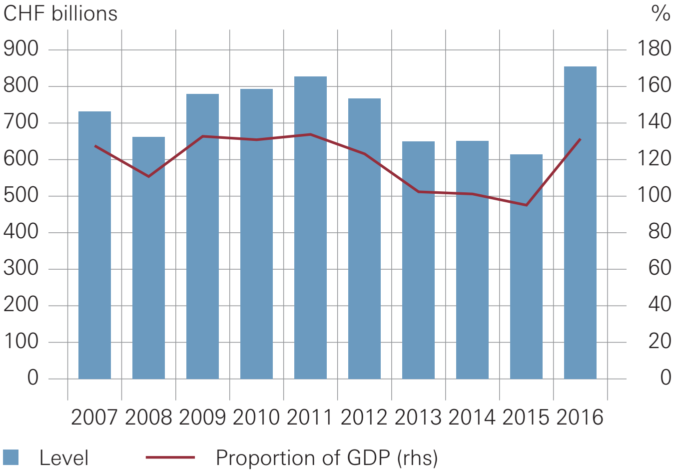
International investment position
In 2016, stocks of foreign assets were up by CHF 205 billion year-on-year, to CHF 4,482 billion. The strongest rise under foreign assets was recorded by reserve assets, primarily driven by an increase in transactions in the financial account of CHF 89 billion to CHF 690 billion. Stocks of portfolio investment climbed by CHF 58 billion to CHF 1,283 billion, and those of direct investment by CHF 57 billion to CHF 1,555 billion. Stocks of the other investment item grew by CHF 3 billion to CHF 838 billion. By contrast, derivative assets declined by CHF 2 billion to CHF 116 billion.

Stocks of foreign liabilities fell by CHF 35 billion to CHF 3,628 billion, although the transactions recorded in the financial account registered a net incurrence of liabilities. The decline affected portfolio investment, in particular, due to falling prices on the Swiss stock exchange. As a result, portfolio investment stocks contracted by CHF 70 billion to CHF 1,062 billion. Stocks of direct investment decreased by CHF 7 billion to CHF 1,238 billion, and stocks of derivatives by CHF 3 billion to CHF 110 billion. Stocks of the other investment item, by contrast, rose by CHF 45 billion to CHF 1,217 billion.

The net international investment position rose in 2016 by CHF 241 billion to CHF 854 billion. This increase was mainly due to the higher balance in portfolio investment (up CHF 128 billion) and the increase in reserve assets (up CHF 89 billion). Thus in the year under review, the net international investment position stood at 131% of Swiss GDP, with reserve assets representing the largest percentage share.

Chart 2

NET INTERNATIONAL INVESTMENT POSITION



Source: SNB

Table 1

SWISS BALANCE OF PAYMENTS – OVERVIEW

In CHF millions

	2012	2013	2014	2015	2016
Current account, net	**65 397**	**73 190**	**56 602**	**74 386**	**69 503**
Receipts	561 572	597 144	588 494	586 488	592 752
Expenses	496 175	523 953	531 891	512 103	523 249
Goods and services, net	**59 148**	**70 093**	**70 170**	**69 521**	**71 200**
Receipts	414 250	452 379	412 405	400 523	425 955
Expenses	355 102	382 285	342 235	331 002	354 755
Goods, net	**37 672**	**49 794**	**50 764**	**51 570**	**52 340**
Receipts	311 952	346 436	301 544	291 739	313 311
Expenses	274 280	296 641	250 780	240 169	260 971
Services, net	**21 476**	**20 299**	**19 406**	**17 951**	**18 860**
Receipts	102 298	105 943	110 860	108 784	112 644
Expenses	80 822	85 644	91 454	90 833	93 784
Primary income, net	**14 431**	**15 062**	**4 135**	**17 643**	**8 081**
Receipts	113 357	110 668	140 049	149 587	126 008
Expenses	98 926	95 606	135 914	131 944	117 927
Labour income, net	**–18 171**	**–19 228**	**–20 233**	**–21 004**	**–22 129**
Receipts	2 265	2 259	2 208	2 456	2 456
Expenses	20 436	21 488	22 441	23 460	24 585
Investment income, net	**32 602**	**34 291**	**24 368**	**38 646**	**30 210**
Receipts	111 091	108 409	137 841	147 130	123 551
Expenses	78 490	74 118	113 473	108 484	93 341
Secondary income, net	**–8 182**	**–11 966**	**–17 702**	**–12 778**	**–9 779**
Receipts	33 965	34 097	36 041	36 378	40 789
Expenses	42 148	46 062	53 743	49 156	50 568
Capital account, net	**–2 177**	**701**	**–10 571**	**–13 674**	**–102**
Receipts	345	1 694	717	4 003	1 162
Expenses	2 522	992	11 288	17 676	1 263
Financial account (excluding derivatives), net	**70 205**	**107 018**	**44 052**	**95 353**	**77 412**
Net acquisition of financial assets	201 382	116 870	23 418	234 706	95 278
Net incurrence of liabilities	131 177	9 852	–20 634	139 353	17 865
Direct investment, net	**13 684**	**34 651**	**–8 808**	**32 184**	**56 646**
Net acquisition of financial assets	50 727	11 705	9 039	126 375	39 513
Net incurrence of liabilities	37 043	–22 947	17 847	94 191	–17 133
Portfolio investment, net	**–16 896**	**15 770**	**8 557**	**54 028**	**22 001**
Net acquisition of financial assets	–4 490	19 337	8 302	39 621	779
Net incurrence of liabilities	12 407	3 567	–254	–14 407	–21 222
Other investment, net	**–101 174**	**43 654**	**10 343**	**–85 293**	**–78 310**
Net acquisition of financial assets	–19 447	72 887	–27 884	–25 724	–22 089
Net incurrence of liabilities	81 727	29 232	–38 227	59 569	56 221
Reserve assets, net	**174 591**	**12 943**	**33 961**	**94 434**	**77 075**
Derivatives, net	**–1 485**	**–779**	**–1 041**	**–2 429**	**5 506**
Statistical difference	**5 501**	**32 348**	**–3 021**	**32 212**	**13 517**

Source: SNB

Table 2

SWITZERLAND'S INTERNATIONAL INVESTMENT POSITION – OVERVIEW

In CHF millions

	2012	2013	2014	2015	2016
Assets	**3 855 686**	**3 888 819**	**4 242 041**	**4 276 482**	**4 481 926**
Direct investment	1 345 456	1 300 380	1 429 989	1 498 114	1 555 172
Portfolio investment	1 123 427	1 158 151	1 240 899	1 224 991	1 282 962
Derivatives	128 297	105 012	149 153	117 224	115 566
Other investment	773 505	847 911	880 800	834 793	837 729
Reserve assets	485 001	477 364	541 201	601 359	690 497
Liabilities	**3 087 743**	**3 239 007**	**3 590 564**	**3 662 767**	**3 627 674**
Direct investment	970 297	965 925	1 161 216	1 245 178	1 238 488
Portfolio investment	869 385	1 026 491	1 142 149	1 132 182	1 061 985
Derivatives	126 088	100 268	146 281	113 206	110 435
Other investment	1 121 973	1 146 323	1 140 918	1 172 200	1 216 767
Net international investment position	**767 944**	**649 812**	**651 477**	**613 715**	**854 252**
Direct investment	375 159	334 455	268 772	252 936	316 683
Portfolio investment	254 042	131 661	98 750	92 809	220 978
Derivatives	2 209	4 744	2 873	4 018	5 131
Other investment	–348 468	–298 412	–260 118	–337 407	–379 037
Reserve assets	485 001	477 364	541 201	601 359	690 497

Source: SNB

2
Balance of payments

CURRENT ACCOUNT

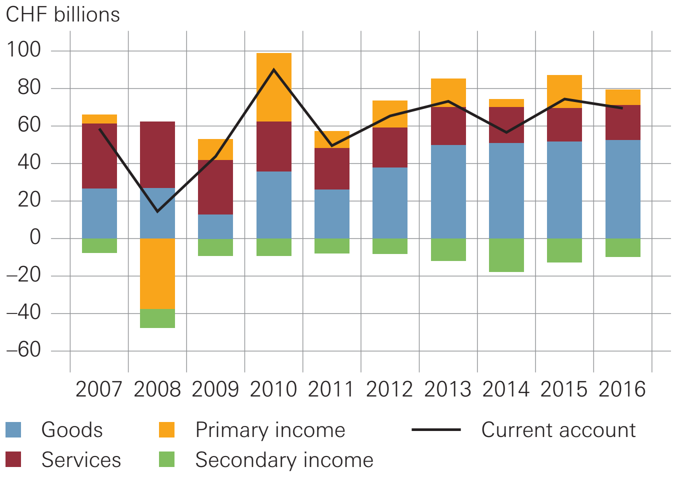
The current account covers trade in goods and services as well as primary and secondary income. Primary income (labour and investment income) is made up of earnings from direct investment, portfolio investment, other investment, reserve assets and labour income. Secondary income comprises current transfers. The components which make up the current account are predominantly influenced by movements in the domestic and global real economies, the corporate earnings situation and conditions on the financial markets.

In 2008, the current account balance registered a low when, as a result of the financial crisis, primary income showed a high expenses surplus instead of the normal receipts surplus. In the years that followed, the current account balance increased again, reaching an interim high in 2010 of CHF 90 billion.

From 2011, in particular, goods trade recorded rising surpluses; these climbed from CHF 26 billion (2011) to CHF 52 billion in 2016. By contrast, the surplus on trade in services has trended downwards since 2008. In that year it attained a maximum level of CHF 35 billion, declining thereafter to CHF 19 billion in 2016. Under secondary income (current transfers), Switzerland traditionally records a surplus of expenses.

Chart 3

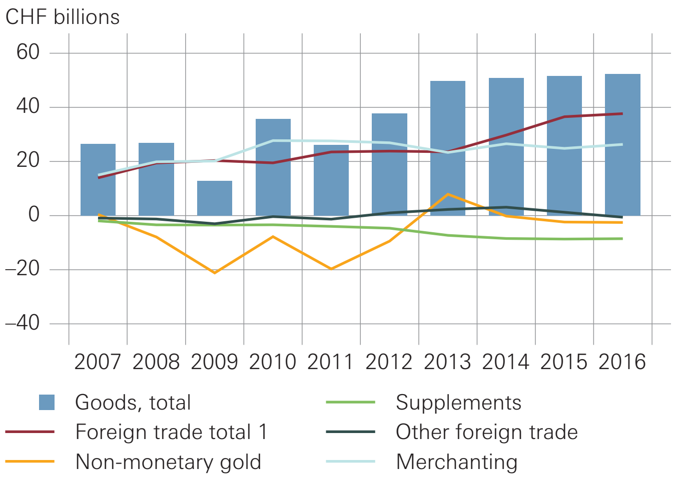
CURRENT ACCOUNT, NET



Source: SNB

Chart 4

GOODS, NET



Sources: FCA, SNB

GOODS

Goods trade in the balance of payments is made up of foreign trade as defined by the Federal Customs Administration (FCA), supplements to foreign trade and merchanting.

Foreign trade as defined by the FCA covers, on the one hand, goods trade in its narrow sense, which is designated 'foreign trade total 1'. This is influenced by general domestic and foreign economic conditions and by movements in exchange rates. On the other hand, it also covers non-monetary gold trading, trade in other precious metals, precious stones and gems, as well as in objets d'art and antiques. Since trade in these groups of goods may be subject to considerable fluctuations in quantity and price, it is excluded from foreign trade total 1.

The FCA's foreign trade statistics do not correspond to the figures for goods trade in the current account. Under supplements to foreign trade, the data are adjusted to ensure that they are in line with the balance of payments methodology (BPM6). Consequently, goods that are imported or exported illegally, small consignments and goods procured in ports are added to the figure for foreign trade as defined by the FCA. By contrast, exports and imports of returned goods are deducted, since, due to the fact that the goods are sent back immediately, no services are received from abroad or provided abroad. Likewise, trade in connection with cross-border processing traffic is deducted.[1] As a result of supplements to foreign trade, the balance on trade in goods is somewhat lower.

Merchanting refers to goods trade in which companies based in Switzerland purchase goods on the world market and resell them abroad, without the goods being imported into or exported from Switzerland. These goods include raw materials (especially energy sources) but also semi-manufactured goods and finished products. In the current account, net earnings from merchanting (receipts minus expenses) are booked as receipts from goods trade.

The balance on trade in goods is determined by foreign trade and by merchanting. The largest component of foreign trade is 'foreign trade total 1'. Over the past decade, this has consistently showed an export surplus, which increased from almost CHF 14 billion (2007) to CHF 38 billion (2016). The surplus has been mainly attributable to chemical and pharmaceutical products. In the past, there have been strong fluctuations in gold trade, and this had a big influence on the balance in goods trade, particularly between 2008 and 2012.

1 Under 'processing traffic', goods are imported or exported, further processed and then returned to their country of origin. The import and export of these goods is deducted from foreign trade as defined by the FCA and the processing is recorded under services.

Table 3

2016 FOREIGN TRADE TOTAL 1 BY ECONOMIC AREA

	Exports In CHF billions	Imports In CHF billions	Exports Year-on-year change in percent	Imports Year-on-year change in percent	Net In CHF billions
EU[1]	113.3	124.4	4.0%	3.2%	–11.1
Of which Germany	39.7	48.6	8.3%	3.3%	–8.9
Of which France	14.0	13.4	0.8%	0.8%	0.6
Of which Italy	12.7	16.7	–0.9%	3.8%	–4.0
United States	31.5	14.2	14.6%	22.3%	17.2
Asia	45.4	27.5	0.4%	2.5%	17.9
Of which China	9.8	12.3	9.9%	–0.6%	–2.4
Latin America	5.9	2.1	–4.8%	–21.9%	3.9
Others	14.6	5.0	–2.8%	3.5%	9.6
Total	**210.7**	**173.2**	**3.8%**	**4.1%**	**37.5**

1 EU28.

Source: FCA

Between 2007 and 2010, net earnings from merchanting rose sharply. Since then, they have fluctuated between CHF 23 billion and CHF 28 billion; in 2016, they amounted to CHF 26 billion. Energy sources accounted for the largest percentage of net earnings from merchanting; however, in the past five years, their share has declined from 72% to 60%. The share of metals and non-metallic minerals rose from 15% in 2012 to 18% in 2016, while that of agricultural and forestry products was up from 4% to 10%.

According to FCA foreign trade statistics, Germany was the most important destination for Swiss goods in 2016, as in previous years. It was followed by the US, France and Italy. On the import side, too, Germany was the most important supplier of goods, followed by Italy and the US. Switzerland has registered an import surplus against both the EU and Germany in recent years, while an export surplus has been recorded with the US and Asia.

SERVICES

In the past ten years, the receipts surplus in services trade has decreased sharply because the increase in services imports has been greater than that in services exports. In 2007, the services surplus still amounted to CHF 35 billion; by 2016, it was only CHF 19 billion.

Between 2007 and 2016, receipts from services exports trended slightly upwards. Following a minor reduction in receipts between 2009 and 2011, they subsequently rose again and amounted to CHF 113 billion in 2016, which was about 10% higher than in 2007. The different categories of services show considerable disparities.

Receipts from financial services declined by more than one-third after their high in 2007, amounting to just below CHF 20 billion in 2016. Their share in exports of services as a whole halved in this period, from 34% to around 17%. Yet, despite the significant decline, financial services remained the most important category within exports of services.

The share of tourism receipts within services exports has remained relatively stable over the past few years, at some 15%. Receipts from trade in licence fees recorded an increase between 2007 and 2013, from 9% to 16%, after which they stagnated. The export of business services (consulting; technical, trade-related and other business services) has also risen, reaching a share of 14% in 2016 (10% in 2007). Receipts from transport have been relatively stable; in 2016, their share in total receipts from services trade declined slightly to 10%.

Chart 5

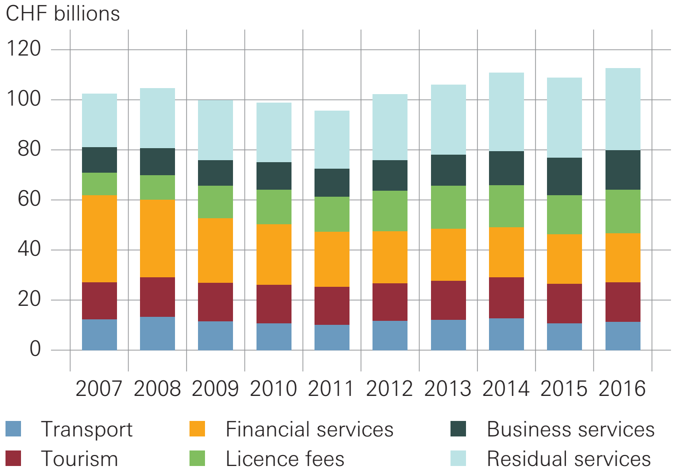
MERCHANTING, SALES PROCEEDS FOR 2016, BY CATEGORY OF GOODS IN PERCENT

- Energy sources **60%**
- Agricultural and forestry products **10%**
- Leather, rubber, plastics, chemicals, pharmaceuticals **3%**
- Machinery, equipment, electronics, vehicles **2%**
- Non-metallic mineral products, metals **18%**
- Other **6%**

Source: SNB

Chart 6

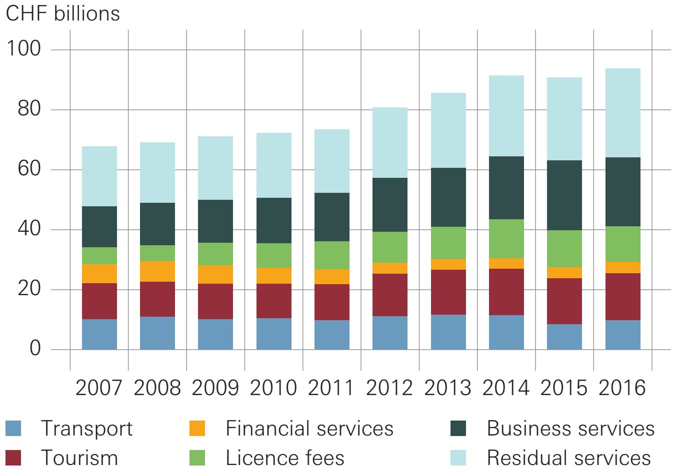
EXPORTS OF SERVICES



Source: SNB

Chart 7

IMPORTS OF SERVICES



Source: SNB

Residual services cover the following: manufacturing services on physical inputs, maintenance and repair services, construction services; insurance and pension services; telecommunications, computer and information services; research and development services; and other services.[2] Within this group, receipts from telecommunications, computer and information services, in particular, recorded significant growth, with their share growing from 7% to 12% between 2007 and 2016. The share of receipts from research and development services also rose in this period, from 1% to 3%. There were no major changes in the other components. The share of insurance and pension services, in particular, has remained stable in the past few years, at around 6%.

From 2007, expenses for services imports trended upwards. They increased in all major categories, especially in business services and licence fees. In 2016, total expenses amounted to CHF 94 billion.

2 For further information, cf. SNB data portal, data.snb.ch, *Notes, International economic affairs.*

Business services accounted for almost one-quarter of all expenses for services imports in 2016. Tourism, at 17%, was slightly higher on the import than on the export side; it has remained relatively stable in recent years. Licence fees trended upwards from 2007 on the import side, too; from 2014 to 2016, however, imports fell back slightly to 13%. In the past, transport imports have been somewhat higher than exports. After 2008, however, the share of imports decreased and by 2016, they were at the same level as exports (10%). Imports of financial services continued to decline, amounting to just under 4% in 2016, after almost 10% in 2008. The remaining components in the residual services category have shown little change in recent years. The share of expenses for the telecommunications, computer and information services category ranged from 13% to 15% during the time period under review, while that for research and development services varied between 8% and 11%.

In 2016, the US was Switzerland's most important trading partner, both for services exports and for services imports (excluding tourism in each case). The second largest trading partner for services was Germany.

Table 4

2016 TRADE IN SERVICES BY ECONOMIC AREA[1]

	Exports In CHF billions	Imports In CHF billions	Exports Year-on-year change in percent	Imports Year-on-year change in percent	Net In CHF billions
EU[2]	43.2	38.0	4.9%	–1.6%	5.2
Of which Germany	10.9	10.2	6.6%	0.8%	0.7
Of which France	4.4	4.4	–7.5%	–14.2%	0.0
Of which Italy	3.5	1.8	2.2%	–1.8%	1.7
United States	20.6	22.1	12.7%	17.0%	–1.5
Asia	13.8	10.1	9.3%	9.0%	3.7
Of which China	2.4	1.5	6.5%	3.6%	0.8
Latin America	3.0	1.2	–0.3%	–3.0%	1.8
Others	16.3	6.6	–8.9%	–10.4%	9.7
Total[1]	**96.9**	**78.0**	**4.2%**	**3.5%**	**18.9**

1 Excluding tourism.
2 EU28.

Source: SNB

PRIMARY INCOME

Labour income

Labour income from abroad (receipts) consists mainly of salary and wage payments to Swiss residents employed by international organisations in Switzerland. International organisations are considered to be extraterritorial entities with non-resident status. Labour income to other countries (expenses) represents the remuneration of non-resident cross-border commuters. Salaries and wages in this category continued to rise in 2016 as a result of higher numbers of non-resident cross-border commuters, and amounted to CHF 25 billion. Receipts from labour income have barely changed in recent years and came to only one-tenth of expenses in 2016.

Investment income

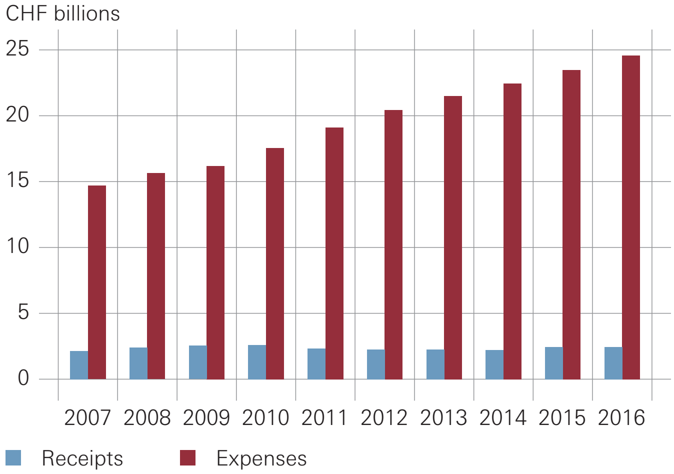
Investment income comprises receipts and expenses from cross-border stocks of financial assets. It is made up of investment income from direct investment, portfolio investment, other investment and reserve assets (the latter only receipts). Movements in this item depend, on the one hand, on the level of capital stocks in the international investment position. On the other, interest rates, corporate earnings and movements in exchange rates also play an important role.

Overall, considerable fluctuations were recorded in receipts from investment abroad (foreign assets) between 2007 and 2016. After reaching a peak of CHF 149 billion in 2007, they dropped to CHF 94 billion a year later. Since then they have been fluctuating within this range. In 2016, receipts amounted to some CHF 124 billion. Expenses on investment in Switzerland (foreign liabilities) have ranged between CHF 69 billion and CHF 131 billion in the period from 2007 to 2016, and amounted to CHF 93 billion in 2016.

As before, movements in investment income between 2007 and 2016 were mainly determined by earnings from direct investment. Since, under direct investment, stocks of foreign assets were considerably higher than those of foreign liabilities, receipts were generally higher than expenses. Moreover, the strong influence of economic developments and corporate earnings on direct investment earnings was evident, giving rise to significant fluctuations in both receipts and expenses. In 2008, for example, losses by banks' non-resident subsidiaries resulted in exceptionally low receipts (CHF 11 billion). In 2016, receipts from direct investment amounted to CHF 74 billion, following CHF 99 billion in the previous year. Expenses came to almost CHF 52 billion in 2016, after having amounted to CHF 73 billion in 2014.

Chart 8

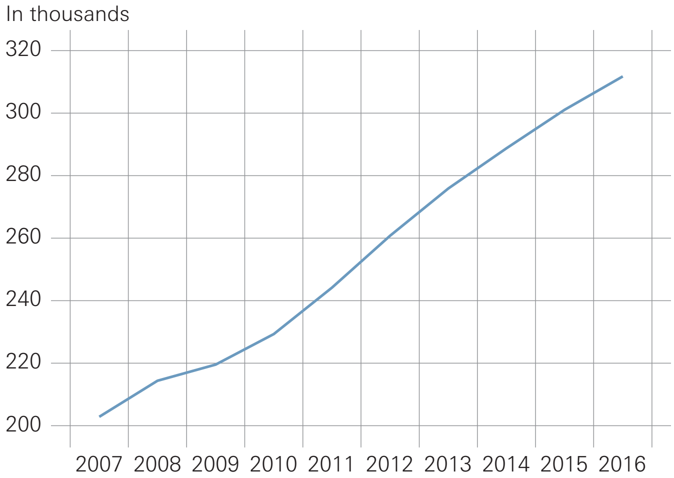
LABOUR INCOME



Source: SNB

Chart 9

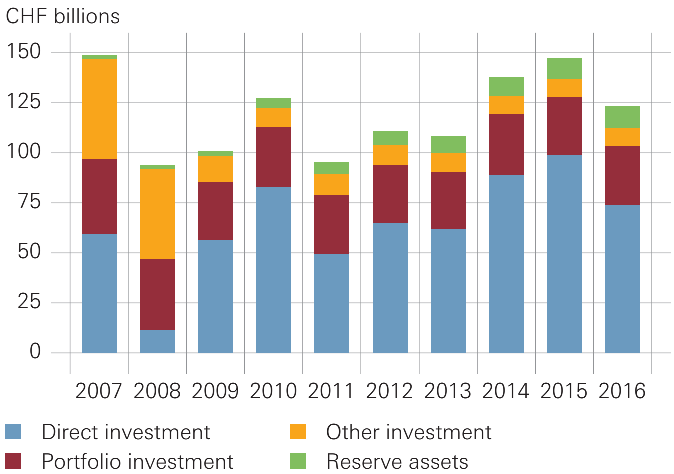
CROSS-BORDER COMMUTERS



Source: Swiss Federal Statistical Office

Chart 10

INVESTMENT INCOME, RECEIPTS



Source: SNB

Receipts from portfolio investment, too, generally exceeded expenses between 2007 and 2016, since capital stocks on the assets side were also significantly higher than on the liabilities side. Between 2009 and 2016, receipts remained almost unchanged, at an average CHF 29 billion; only in 2007 and 2008 were they markedly higher. Following a brief decline in 2009, expenses for portfolio investment rose steadily from CHF 16 billion to CHF 32 billion.

Receipts and expenses for other investment are determined by interest on the claims and liabilities of banks and non-financial companies. In particular, resident banks' claims and liabilities to other countries moved largely in tandem and registered significant fluctuations. Receipts and expenses on these items thus varied substantially. Overall, receipts from other investment decreased from CHF 50 billion to CHF 10 billion between 2007 and 2010, and have remained at about this level since then. Expenses for other investment receded from CHF 52 billion in 2007 to CHF 10 billion in 2016.

Receipts from reserve assets rose continuously between 2007 and 2016. This increase was mainly attributable to the higher stocks of reserve assets. The share of reserve assets in total receipts from primary income amounted to 9% in 2016 (CHF 11 billion); in 2007, the share only amounted to 1% (CHF 2 billion).

SECONDARY INCOME

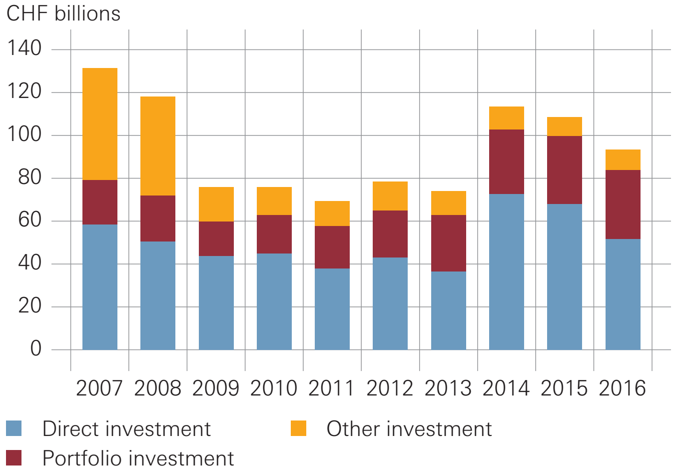
On both the receipts and the expenses side, movements in secondary income (current transfers) are driven by private insurance companies (private transfers). Premium income earned by insurance companies (excluding the service component) is shown under receipts, and claims payments under expenses. A further significant item under expenses for private transfers is transfers by immigrants to their home countries. Under private transfers, receipts rose from CHF 24 billion to CHF 34 billion between 2007 and 2016. Expenses increased within the same period, from CHF 29 billion to CHF 40 billion.

In addition to private transfers, there are also public transfers. These cover contributions to Swiss social security received from non-residents, pension payments to non-residents, and public sector receipts and expenses. The receipts side consists mainly of taxes and fees, while the most important elements on the expenses side are transfers to international organisations. From 2007 to 2016, increases were also recorded for both receipts and expenses under public transfers; their share in total secondary income amounted to 20% on average in both cases.

Overall, receipts from secondary income were up from CHF 29 billion to CHF 41 billion between 2007 and 2016, while expenses climbed from CHF 37 billion to CHF 51 billion.

Chart 11

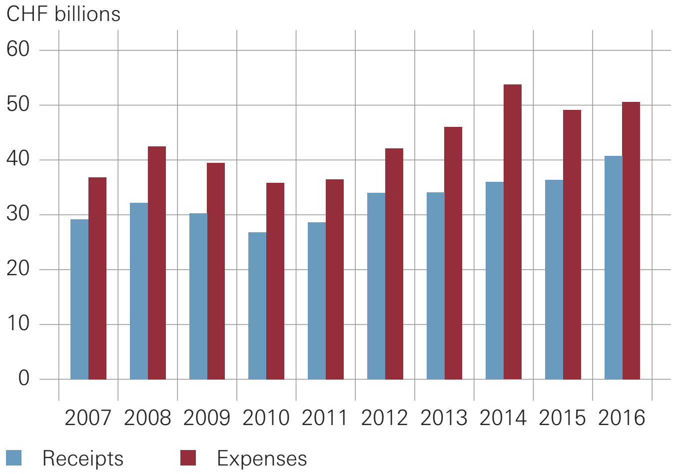
INVESTMENT INCOME, EXPENSES



Source: SNB

Chart 12

SECONDARY INCOME



Source: SNB

CAPITAL ACCOUNT

Capital transfers cover trade in non-produced, non-financial assets, for example purchase and sales of franchises and trademarks, as well as other capital transfers, for example debt forgiveness, payments of compensation, guarantees and inheritances. In recent years, capital transfers have been dominated by expenses for non-produced, non-financial assets. These expenses can be subject to significant fluctuations.

In the past ten years, the balance from trade in non-produced, non-financial assets has varied between CHF –13 billion and CHF 0 billion. Other capital transfers, mainly expenses of the Swiss Confederation for economic development cooperation, are considerably lower.

FINANCIAL ACCOUNT

The financial account shows transactions between residents and non-residents over a specified period of time. Together with valuation changes and other changes, these transactions account for the change in stocks in the international investment position. Like the international investment position, the financial account has an assets and a liabilities side. Transactions are stated at net value, i.e. the net acquisition of financial assets and the net incurrence of liabilities.

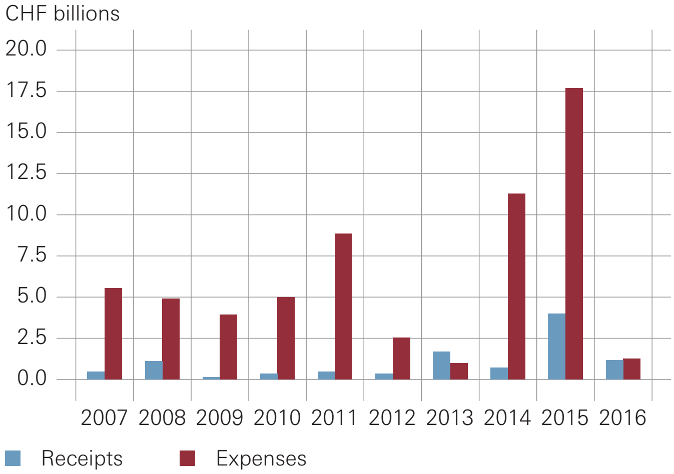
The financial account balance is calculated from all net acquisitions of financial assets minus all net incurrences of liabilities plus the balance from derivatives transactions. A positive financial account balance corresponds to an increase in the net international investment position resulting from cross-border investment, and reflects a positive current account balance (receipts surplus) and a savings surplus in the economy. The Swiss economy traditionally shows a savings surplus of this kind.

Until 2008, the financial account balance was dominated by net acquisitions of financial assets/net incurrences of liabilities in direct investment and portfolio investment. In subsequent years, however, all components of the financial account fluctuated considerably. Until 2008, other investment was dominated mainly by commercial banks' foreign lending and deposit business. From 2008 to 2016, however, the SNB's transactions also played a key role. Until 2008, reserve assets did not influence the financial account to any great extent. This changed between 2009 and 2016, when the SNB purchased large amounts of foreign currency, thereby making a major contribution to the movements in the financial account balance.

In 2016, the financial account balance amounted to CHF 83 billion, with reserve assets (balance: CHF +77 billion), direct investment (balance: CHF +57 billion) and other investment (balance: CHF –78 billion) all playing significant roles.

Chart 13

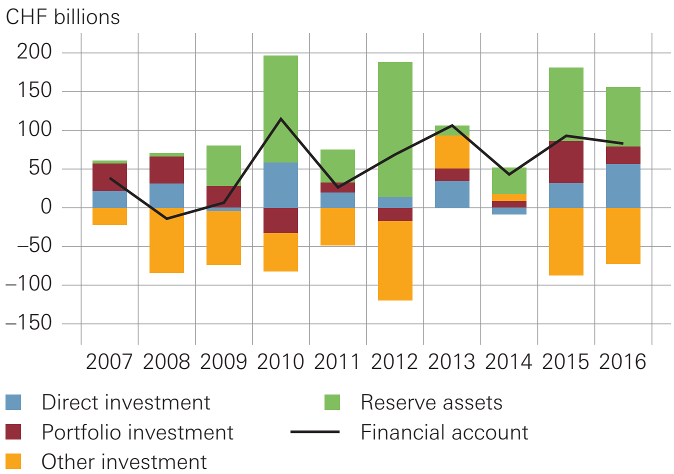
CAPITAL ACCOUNT



Source: SNB

Chart 14

FINANCIAL ACCOUNT, NET



Source: SNB

DIRECT INVESTMENT

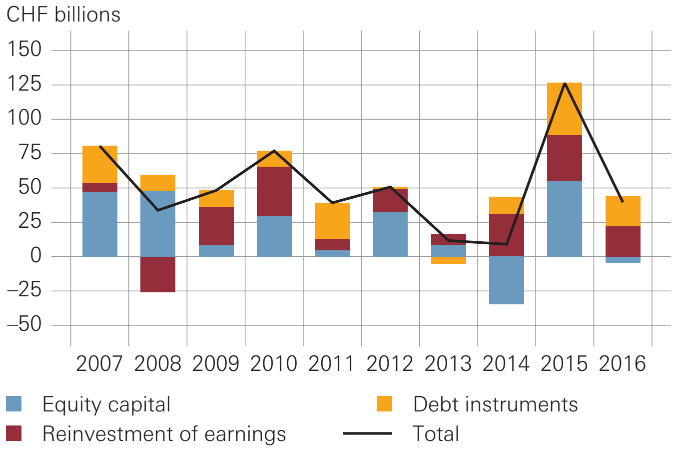
The objective of direct investment is to exert a direct and lasting influence on the operations of a company abroad. A direct investment is categorised as such if an investor (direct investor) owns at least 10% of the voting stock of a company abroad or sets up a subsidiary or branch abroad (direct investment company). As soon as a direct investment relationship has been established, all cross-border intragroup financial linkages generally qualify as direct investment. Chief among the investing company's concerns are its long-term interest in the investment and influencing the business activities of the acquired company. These two criteria distinguish direct investment from portfolio investment.

Between 2007 and 2014, as a result of the financial crisis, investment activity by resident companies was lower than in previous years. This was due to high losses incurred by banks and insurance companies on their direct investment in non-resident subsidiaries. Persistent fluctuations accompanied direct investment. In 2014, net acquisition of financial assets reached a low of CHF 9 billion, before surging to CHF 126 billion just one year later. In 2016, net acquisition of financial assets amounted to CHF 40 billion, with resident companies providing their non-resident subsidiaries with funds in the form of reinvested earnings and intragroup lending. At the same time, these companies reduced assets in the form of equity capital abroad.

Net incurrence of liabilities followed a similar pattern to transactions on the assets side. From 2007 to 2014, in the wake of the financial crisis, liabilities also fell short of the level recorded in previous years. Non-resident parent companies cut back on reinvestment in resident subsidiaries and invested less strongly in subsidiaries' equity capital than previously. This development peaked in 2013. In 2015, resident companies again received significantly more funds from abroad (CHF 94 billion) than in previous years. By contrast, 2016 saw a net reduction in liabilities (CHF 17 billion), primarily as a result of non-resident parent companies withdrawing equity capital from their resident finance and holding companies.

Chart 15

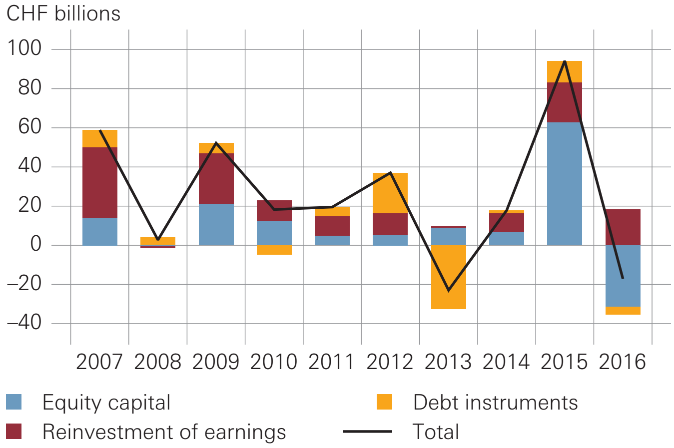
DIRECT INVESTMENT: NET ACQUISITION OF FINANCIAL ASSETS



Source: SNB

Chart 16

DIRECT INVESTMENT: NET INCURRENCE OF LIABILITIES



Source: SNB

PORTFOLIO INVESTMENT

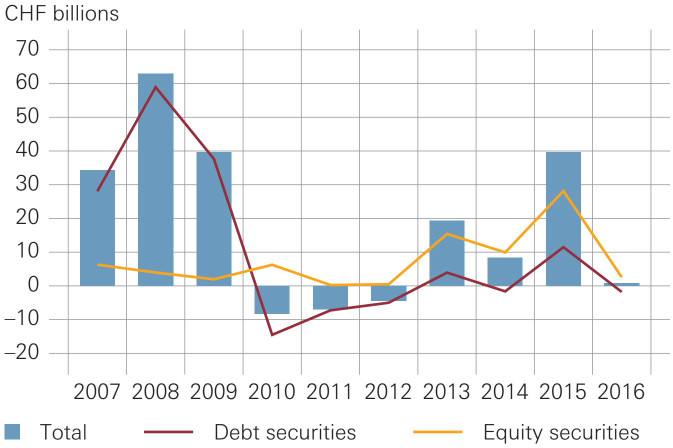
Transactions in portfolio investment comprise cross-border purchases and sales of equity securities (shares and collective investment schemes) and debt securities (bonds and money market instruments) that do not fall under direct investment or reserve assets. Unlike direct investment, the emphasis is on earning income rather than exerting influence on the business activities of a company. For portfolio investment, net acquisition of financial assets (resident investors' purchases minus sales of securities issued by non-residents) is generally considerably greater than net incurrence of liabilities (non-resident investors' purchases minus sales of securities issued by residents). This is related, on the one hand, to the savings surplus in Switzerland, and, on the other, to the relatively low issue volumes on the Swiss capital market.

Until 2009, resident investors mainly purchased debt securities issued by non-residents. In 2010, purchases of debt securities plunged. Since then, resident investors have predominantly acquired equity securities. In 2016, they purchased securities to the value of CHF 1 billion; CHF 3 billion was invested in equity securities, whereas disinvestment in debt securities amounted to CHF 2 billion.

In contrast to resident investors, non-resident investors mainly channelled their funds into Swiss shares. Between 2007 and 2012, the net incurrence of liabilities was subject to strong fluctuations. The high figure for equity securities in 2008 was related to the fact that the Swiss big banks increased their borrowing. Investment by non-residents in equity securities issued by residents declined steadily between 2012 and 2016; the past two years even saw disinvestment, i.e. non-resident investors sold more equity securities issued by residents than they purchased. In 2010 and 2011, developments in debt securities were largely the result of purchases of SNB Bills issued in 2010 that were repaid or repurchased a year later. In subsequent years, debt securities showed a net decrease in liabilities. In 2016, total disinvestment amounted to CHF 21 billion, resulting mainly from equity securities.

Chart 17

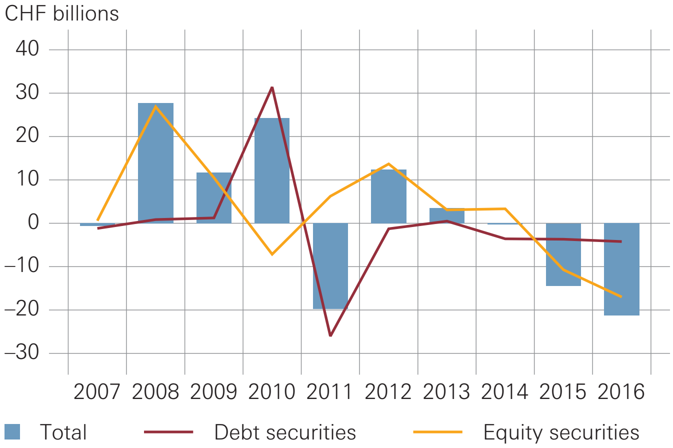
PORTFOLIO INVESTMENT: NET ACQUISITION OF FINANCIAL ASSETS



Source: SNB

Chart 18

PORTFOLIO INVESTMENT: NET INCURRENCE OF LIABILITIES



Source: SNB

OTHER INVESTMENT

Other investment is divided into currency and deposits, loans, and other net acquisition of financial assets/net incurrence of liabilities. Both the currency and deposits and the loans categories are broken down by sector according to the national accounts, i.e. Swiss National Bank, banks, public sector, and other sectors.

With regard to both net acquisition of financial assets (claims) and net incurrence of liabilities, currency and deposits are particularly important. Loans and other net acquisition of financial assets/other net incurrence of liabilities play a minor role.

According to the breakdown by sector, other investment is determined by the banks, on both the assets and liabilities sides. It is used to record banks' transactions with non-resident banks and customers, with interbank business predominant. In 2007, banks expanded their claims (net acquisition of financial assets) and liabilities (net incurrence of liabilities) with respect to non-resident banks considerably. However, in 2008, these were substantially reduced in connection with the financial crisis. This decline continued in the years that followed, with the result that stocks of assets and liabilities under cross-border interbank business in the international investment position have fallen by more than half since 2007.

Between 2008 and 2014, banks' business with non-resident customers led to a high net inflow of customer deposits (net incurrence of liabilities). In 2009, it amounted to over CHF 100 billion. This inflow was partly attributable to a shift from fiduciary investments abroad to bank deposits in Switzerland. Thereafter, this net incurrence was considerably smaller. In 2015 and 2016, a net outflow of customer deposits was recorded (net reduction of liabilities). In 2016, non-resident customers withdrew funds in the amount of CHF 12 billion from Switzerland, following disinvestment of CHF 5 billion the year before.

Other sectors mainly comprise transactions carried out by companies that are not included under direct investment or portfolio investment. Intragroup lending transactions by finance companies (excluding banks) are particularly significant. In 2016, both claims and liabilities of companies showed a relatively high net acquisition/incurrence of CHF 27 billion and CHF 12 billion respectively.

Table 5

OTHER INVESTMENT

In CHF billions

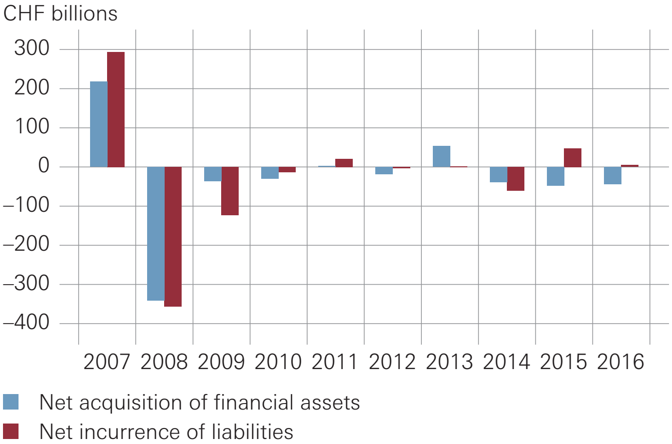
	2012	2013	2014	2015	2016
Net acquisition of financial assets (claims)	**–19.4**	**72.9**	**–27.9**	**–25.7**	**–22.1**
Currency and deposits	–38.8	64.5	–29.6	–36.1	–3.9
Of which banks	–18.9	53.4	–34.4	–52.2	–44.3
Of which other sectors	–9.9	8.1	–1.6	–2.0	22.9
Loans	19.5	8.4	1.7	10.3	–4.2
Of which banks	17.5	15.2	6.4	11.4	–3.5
Of which other sectors	2.0	–6.8	–4.7	–1.1	–0.7
Other net acquisition of financial assets	–0.1	0.0	0.0	0.1	–14.0
Net incurrence of liabilities	**81.7**	**29.2**	**–38.2**	**59.6**	**56.2**
Currency and deposits	81.6	35.6	–27.2	67.3	9.8
Of which banks	55.2	31.7	–46.9	42.6	–7.2
Of which other sectors	0.5	0.1	–1.6	0.2	1.1
Loans	3.0	–2.7	–8.0	–21.1	10.2
Of which banks	–	–	–	–	–
Of which other sectors	3.2	–2.5	–7.9	–21.0	10.2
Other net incurrence of liabilities	–2.8	–3.6	–3.0	13.3	36.2

Source: SNB

The Swiss National Bank sector comprises the SNB's cross-border claims (net acquisition of financial assets) and liabilities (net incurrence of liabilities) in connection with swap and repo transactions, as well as the remaining claims and liabilities with respect to other central banks and non-resident banks that are not included under reserve assets. Furthermore, net incurrence of liabilities also includes banknotes held by non-residents. Until 2007, the extent of the SNB's transactions was minor. From 2008, as a result of the financial crisis, assets and liabilities experienced high net growth, before subsiding again in subsequent years. Between 2013 and 2016, a net acquisition of financial assets and a net incurrence of liabilities were recorded. In 2016, they amounted to CHF 18 billion and CHF 16 billion respectively.

Chart 19

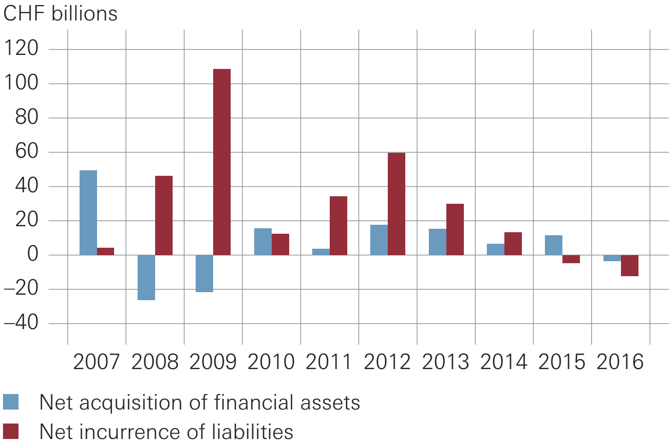
OTHER INVESTMENT: BANKS, CLAIMS AGAINST AND LIABILITIES TOWARDS BANKS



Source: SNB

Chart 20

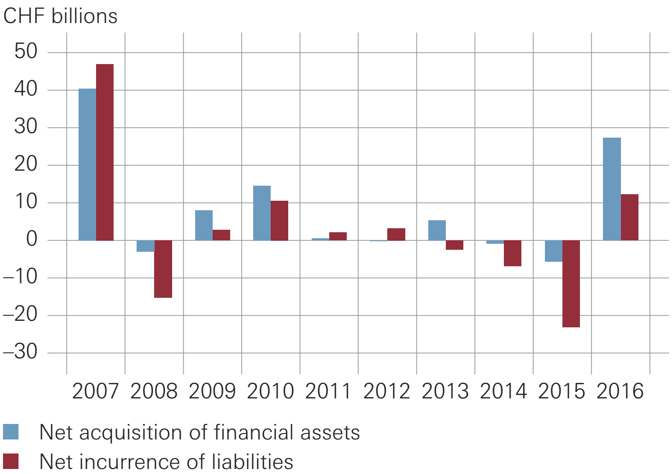
OTHER INVESTMENT: BANKS, CLAIMS AGAINST AND LIABILITIES TOWARDS CUSTOMERS



Source: SNB

Chart 21

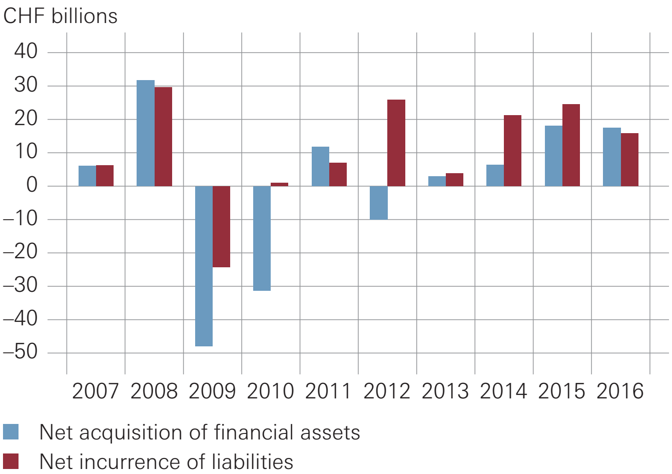
OTHER INVESTMENT: CORPORATES



Source: SNB

Chart 22

OTHER INVESTMENT: SWISS NATIONAL BANK



Source: SNB

RESERVE ASSETS

Reserve assets are central bank assets (e.g. securities) that are available at short notice. They mainly consist of gold and foreign currency investments. Transactions in reserve assets comprise purchases and sales of these financial assets by the central bank.

From 2009 to 2016, as part of the implementation of its monetary policy, the SNB intervened – at times considerably – in the foreign exchange market. As a result, the reserve assets increased substantially. In 2016, net acquisition of financial assets in this category amounted to CHF 77 billion.

DERIVATIVES

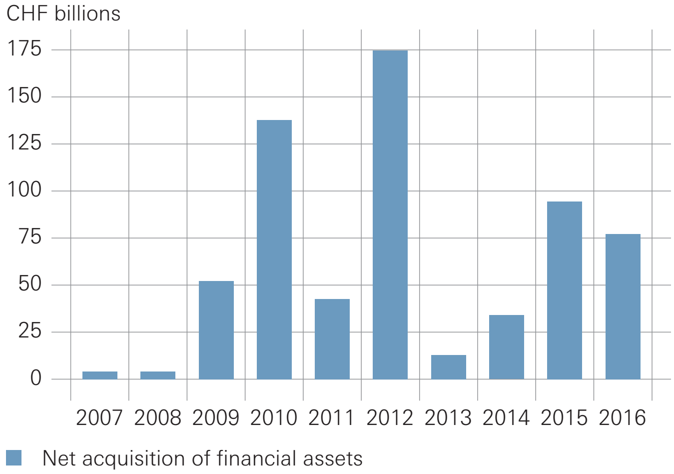
Derivatives are forward transactions whose values depend on one or more underlying financial instruments, indices or goods. One distinctive feature is that when derivatives contracts are taken out, in many cases this is not immediately recorded in the balance of payments, but only later during the term of the contract or at maturity.

The Swiss balance of payments shows only the net figure for derivatives. This is because some transactions cannot be allocated to assets or liabilities, e.g. depending on the performance of the underlying financial instrument, certain derivatives may be an asset item at one time and a passive item at another – and vice versa.

The derivatives item has been recorded in the balance of payments since 2005, during which time its value has fluctuated between a positive net figure of CHF 6 billion and a negative net figure of CHF 4 billion.

Chart 23

RESERVE ASSETS



Source: SNB

STATISTICAL DIFFERENCE

In principle, the balance of payments should be balanced, since it is drawn up according to the system of double-entry bookkeeping. In practice, however, it is not always possible to fully comply with this principle, due to errors and omissions in the collection of statistical data and estimates. A statistical difference arises, which is calculated as the financial account balance minus the sum of the current account balance and the capital account balance.

Between 2010 and 2016, the statistical difference was predominantly positive, amounting to CHF 14 billion in 2016. A positive balance suggests either that current account receipts/net incurrence of liabilities in the financial account have been underestimated or that current account expenses/net acquisition of financial assets in the financial account) have been overestimated.

In order to quantify the statistical difference, it is set in relation to all transactions included in the current account (i.e. the sum of receipts and expenses). In 2016, the statistical difference amounted to 1% of total receipts and expenses recorded in the current account.

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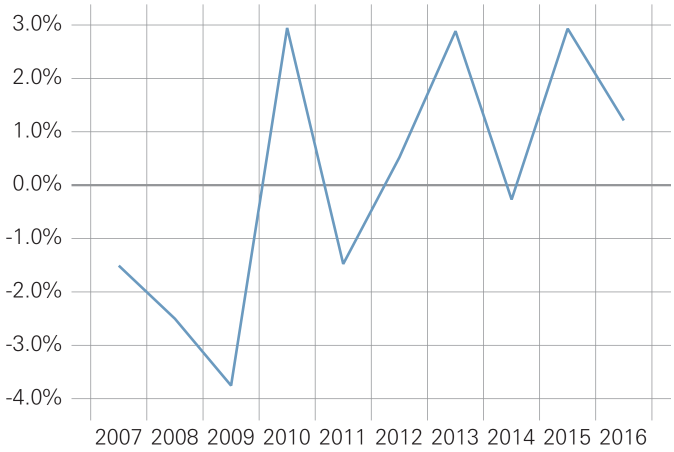
Chart 24

STATISTICAL DIFFERENCE AS PERCENTAGE OF CURRENT ACCOUNT TRANSACTIONS



Source: SNB

3
International investment position

FACTORS INFLUENCING THE INTERNATIONAL INVESTMENT POSITION

As with the financial account, assets and liabilities in the international investment position are broken down into direct investment, portfolio investment, derivatives and other investment. The assets side also contains reserve assets.

Three factors influence movements in the stocks of assets and liabilities in the international investment position:

– Transactions recorded in the financial account (net acquisition of financial assets/net incurrence of liabilities)

– Valuation changes resulting from price and exchange rate movements

– Other changes

With regard to the transactions recorded in the financial account, the accumulation and reduction of financial assets and liabilities are summarised into a net acquisition/incurrence. The net acquisition of assets and the net incurrence of liabilities flow as transactions into the assets and liabilities sides, respectively, of the international investment position. When the net acquisition of assets exceeds the net incurrence of liabilities (i.e. the balance of the financial account is positive), the net international investment position increases, and vice versa.

The second factor influencing the international investment position is the valuation changes resulting from changes in the value of capital stocks. These can be broken down into exchange rate and price effects: The former arise from fluctuations in exchange rates, while the latter are due to movements in the prices of precious metals or securities, particularly shares. In Switzerland, the composition of foreign assets differs significantly from that of foreign liabilities with respect to currencies and components. Consequently, the effect of valuation changes on assets deviates from that on liabilities in the following ways:

– The share of foreign currency positions on the assets and liabilities sides is approximately 90% and 35% respectively. The assets are therefore more strongly affected by exchange rate fluctuations than the liabilities. An appreciation of the Swiss franc thus has a negative, and a depreciation a positive impact on the net international investment position.

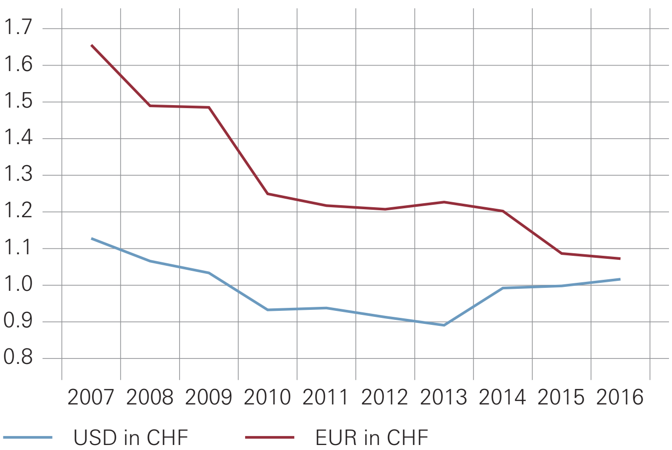
– The stocks of shares held by non-resident investors in Switzerland (foreign liabilities) are more than twice as high as those held by resident investors abroad (foreign assets). Consequently, in absolute terms, a similar movement in share prices in Switzerland and abroad will have a stronger impact on the liabilities side.

The third influencing factor is other changes. These comprise changes in statistical sources, including an expansion in the reporting population (i.e. the number of companies surveyed) as well as the inclusion of items or events not previously covered.

Chart 25

EXCHANGE RATES

End of year

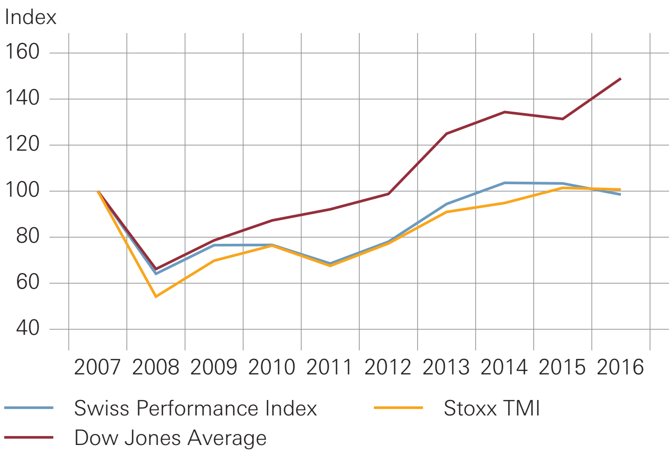


Source: SNB

Chart 26

SHARE PRICES

2007 = 100, end of year



Sources: Bloomberg, Thomson Reuters Datastream

FOREIGN ASSETS – SUMMARY

As in previous years, stocks of foreign assets rose markedly in 2007. However, the onset of the financial crisis caused a sharp decline, with stocks falling by CHF 500 billion year-on-year in 2008. This was mainly attributable to three factors. First, banks reduced their capital stocks abroad, particularly in interbank business. Second, plummeting share prices resulted in a decrease in stocks of portfolio investment abroad. And third, the appreciation of the Swiss franc led to a lower valuation of capital stocks held in foreign currency. Between 2008 and 2016, foreign assets rose again. While the strong recovery in 2012 was mainly due to transactions, the following years were dominated by price and exchange rate movements. In 2016, stocks of assets increased by CHF 205 billion to CHF 4,482 billion, with CHF 95 billion resulting from transactions recorded in the financial account.

In recent years, the structure of the foreign assets has experienced significant shifts both in terms of components and currency breakdown. The shares of direct investment and reserve assets have risen, while other investment and portfolio investment have declined. The share of foreign currencies increased continuously between 2008 and 2016 from 81% to over 90%, with the share of Swiss francs losing ground correspondingly. While the share of euros remained relatively stable (at around 30%), the share of US dollars rose by 10 percentage points to 38% between 2007 and 2016 – the highest level in ten years.

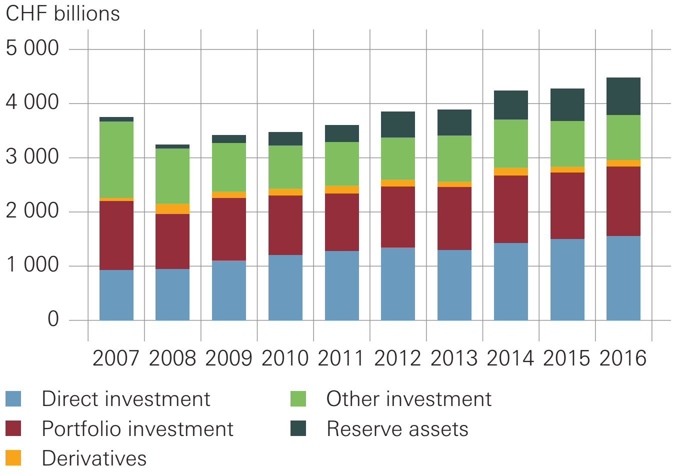
DIRECT INVESTMENT

Direct investment assets record the assets side of intragroup capital relationships of companies in Switzerland with entities abroad. Thus in contrast to portfolio investment, it reflects a long-term investment motive. Direct investment assets are composed of equity in non-resident subsidiaries and branch offices, as well as cross-border intragroup lending, i.e. debt instruments (assets). Unlike most other stocks, direct investment is stated at book rather than market value.

Direct investment abroad has increased by two-thirds in the last ten years. During this period, resident companies acquired participations abroad on a large scale and reinvested the income earned. These investments far exceeded the exchange rate-related valuation losses. Although equity accounted for most direct investment, the relative importance of intragroup lending increased significantly, climbing 10 percentage points to 35% between 2007 and 2016. As stocks of equity capital have remained stable since 2011, the subsequent development of direct investment has been attributable to movements in intragroup lending. Aside from economic developments, the main reason for higher levels of direct investment since 2014 has been the introduction of new surveys on

Chart 27

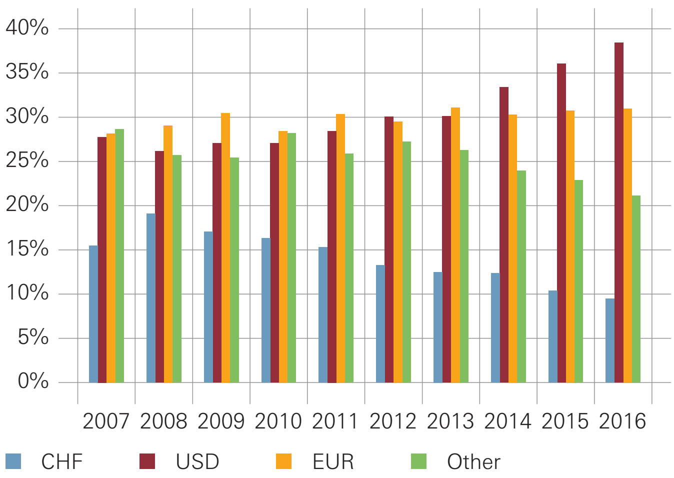
FOREIGN ASSETS, BY COMPONENT



Source: SNB

Chart 28

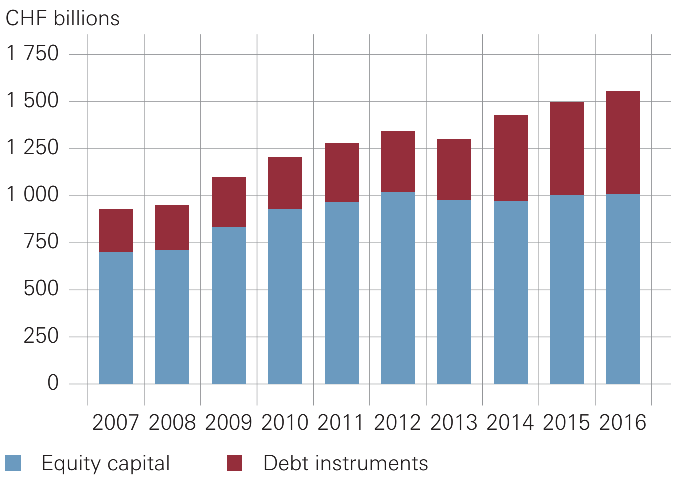
FOREIGN ASSETS, BY CURRENCY



Source: SNB

Chart 29

FOREIGN ASSETS: DIRECT INVESTMENT



Source: SNB

cross-border capital linkages, which have equally affected the assets and liabilities sides.[1]

In 2016, direct investment increased by CHF 57 billion to CHF 1,555 billion, comprising equity and intragroup lending of CHF 1,008 billion and CHF 547 billion respectively.

The share of direct investment in total assets rose from 25% to 35% between 2007 and 2016.

PORTFOLIO INVESTMENT

The assets under portfolio investment in the international investment position report securities issued by non-resident borrowers which are held by resident investors and are not covered by direct investment or reserve assets.

Following a high in 2007, stocks of portfolio investment dipped sharply in 2008, as equity securities devalued substantially during the financial crisis; despite new investment, stocks fell by 20% within the course of the year. The stocks recovered in subsequent years, mainly due to capital gains on the back of stock exchange performance abroad.

Between 2007 and 2016, the composition of portfolio investment changed substantially. In 2008, the share of debt securities increased sharply from 55% to 67%, principally as a result of the price-related slump in equity securities during the financial crisis. Subsequent years saw it decline again, owing to recovering share prices and high levels of transactions in certain years. In 2016, the share of debt securities came to just under 50%, which roughly corresponded to its pre-crisis level.

In 2016, stocks of portfolio investment amounted to CHF 1,283 billion, which was about the same level as prior to the financial crisis. This constituted a year-on-year increase of CHF 58 billion, and was mainly attributable to higher stocks of equity securities.

Between 2007 and 2016, the share of portfolio investment in total foreign assets fell from 34% to 29%.

1 Detailed information on the introduction of the new surveys on cross-border capital linkages is available in the special topic in the 2014 *Direct Investment* report.

Chart 30

FOREIGN ASSETS: PORTFOLIO INVESTMENT

Source: SNB

Table 6

OTHER INVESTMENT: ASSETS

In CHF billions

	2012	2013	2014	2015	2016
Total assets	**773.5**	**847.9**	**880.8**	**834.8**	**837.7**
Currency and deposits	533.3	597.4	652.2	603.2	604.9
Of which banks	325.5	371.1	344.5	278.5	231.3
Of which other sectors	202.8	218.2	292.8	291.0	323.2
Loans	239.2	249.5	213.2	214.3	210.6
Of which banks	162.1	174.1	191.1	199.0	195.6
Of which other sectors	76.0	74.4	21.0	14.3	14.1
Other assets	1.0	1.0	15.4	17.3	22.2

Source: SNB

DERIVATIVES

Derivatives are forward transactions whose values depend on one or more underlying financial instruments, indices or goods. Outstanding derivative financial instruments with non-resident counterparties have been reported at their positive replacement values in the international investment position since 2005, the year of their inclusion.

The increase in stocks of derivatives in 2008 was due principally to an expansion in the reporting population; since then they have generally trended downwards. 2016 saw a decrease of CHF 2 billion to CHF 116 billion.

Between 2008 and 2016, the share of derivatives in total foreign assets declined from 6% to 3%.

OTHER INVESTMENT

As in the balance of payments, other investment is broken down into currency and deposits, loans, and other assets. Within the currency and deposits and the loans categories, resident creditors are differentiated by sector as follows: Swiss National Bank, banks, public sector, and other sectors. Other sectors mainly comprises corporate short-term claims abroad which are not part of direct and portfolio investment.

Other investment assets are principally made up of the currency and deposits category, primarily involving the interbank market, and loans. Stocks of other investment attained a record high of over CHF 1,400 billion in 2007, before declining to CHF 774 billion by 2012. This considerable decrease was attributable to the banks, which very substantially reduced their claims abroad. In subsequent years, other investment has shown a slight upward trend.

In 2016, the other investment category increased by CHF 3 billion to CHF 838 billion, thereby changing little year-on-year.

Between 2007 and 2016, the share of other investment in total foreign assets declined from 38% to 19%.

RESERVE ASSETS

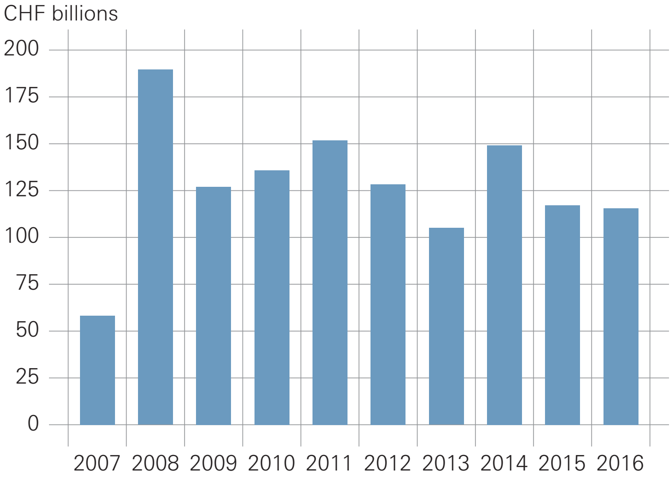
Reserve assets are central bank assets (e.g. securities) that are available at short notice. They mainly consist of gold and foreign currency investments.

The SNB conducted extensive foreign currency purchases between 2009 and 2016, with reserve assets climbing to CHF 690 billion by the end of that period. In 2016, year-on-year growth amounted to CHF 89 billion.

These foreign currency purchases strongly affected the composition of the reserve assets. Between 2007 and 2016, the share of foreign currency investments in the reserve assets increased from 58% to 93%, while the share of gold declined from 41% to 6%. The increased foreign currency purchases also influenced the currency breakdown: Between 2007 and 2016, the share of euros

Chart 31

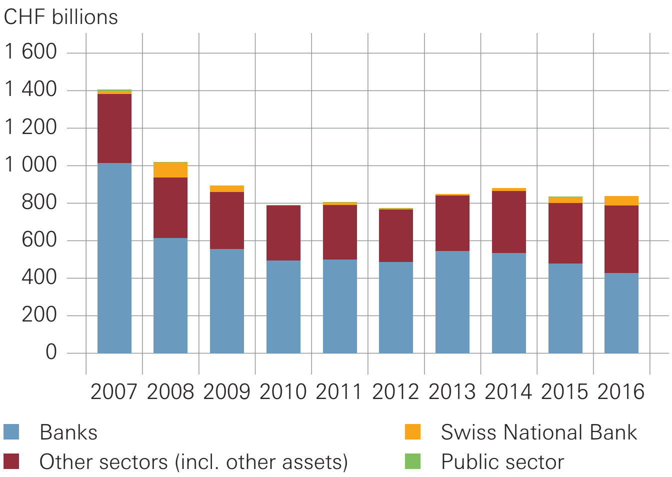
FOREIGN ASSETS: DERIVATIVES



Source: SNB

Chart 32

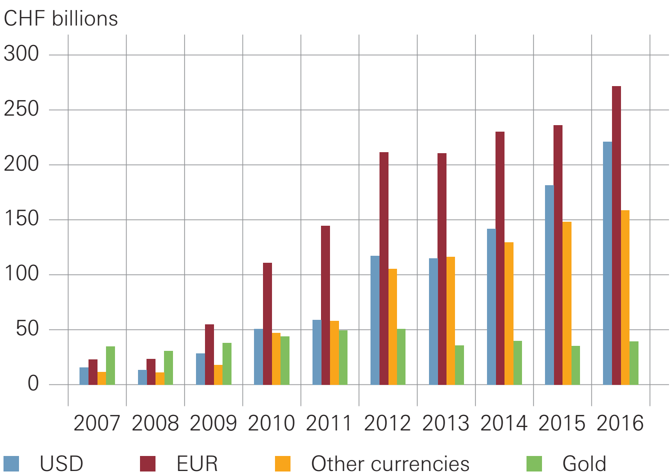
FOREIGN ASSETS: OTHER INVESTMENT, BY SECTOR



Source: SNB

Chart 33

FOREIGN ASSETS: RESERVE ASSETS



Source: SNB

and US dollars each increased by 12 percentage points, to 39% and 32% respectively, and the share of other currencies rose by almost 10 percentage points to 23%. By contrast, the share of gold fell by 35 percentage points to 6% (although absolute gold stocks remained relatively stable).

Between 2007 and 2016, the share of reserve assets in total foreign assets grew from 2% to over 15%.

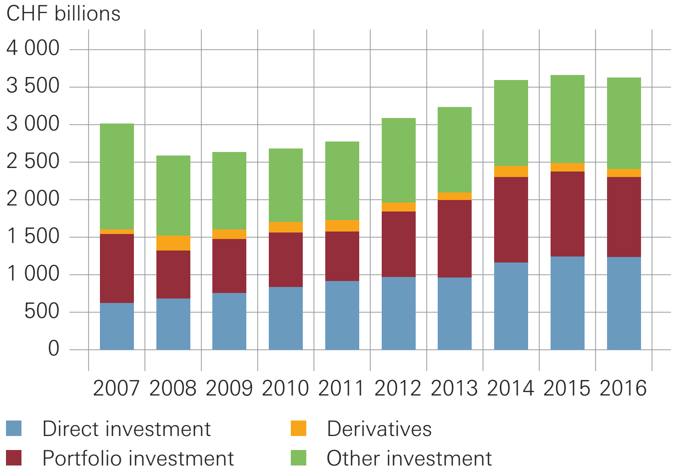
FOREIGN LIABILITIES – SUMMARY

Movements in foreign liabilities – as in foreign assets – have been uneven in recent years. Following strong growth in 2007, stocks fell sharply in 2008 during the financial crisis. Banks, in particular, scaled back their liabilities abroad very substantially, with a corresponding decrease in the liabilities in the other investment category. The lower value of foreign currencies also contributed to a decline in foreign liabilities. Stocks of portfolio investment also decreased significantly, due to the downturn in share prices. By contrast, direct investment stocks continued to increase. In the following years, stocks of foreign liabilities gradually recovered again. Between 2012 and 2014, they rose primarily as a result of higher share prices. In 2016, stocks of liabilities decreased by CHF 35 billion to CHF 3,628 billion. The decline in portfolio investment due to lower share prices was not completely offset by higher stocks of other investment.

Foreign liabilities, like foreign assets, have experienced structural shifts in recent years. Between 2007 and 2016, while the share of direct investment rose steadily from 21% to over one-third, the share of other investment declined from 47% to about 34%. Until the onset of the financial crisis in 2008, the share of portfolio investment was occasionally well over 30%. In 2008 it declined to 25%, before slowly recovering over subsequent years. Broken down by currency, the share of the euro and other currencies has decreased in favour of the Swiss franc, which advanced by 12 percentage points to 63% between 2007 and 2016. The share of US dollars remained relatively stable at an average of 20%.

Chart 34

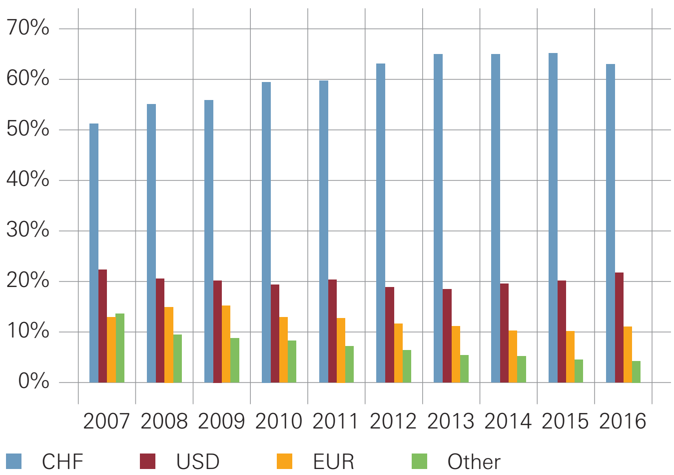
FOREIGN LIABILITIES, BY COMPONENT



Source: SNB

Chart 35

FOREIGN LIABILITIES, BY CURRENCY



Source: SNB

DIRECT INVESTMENT

Direct investment liabilities represent the liabilities side of intragroup capital relationships of companies in Switzerland with entities abroad. Thus in contrast to portfolio investment, they reflect a long-term investment motive. Direct investment liabilities are composed of equity in resident subsidiaries and branch offices owned by non-resident investors, and stocks of cross-border intragroup lending, i.e. debt instruments (liabilities).

Stocks of direct investment liabilities have doubled in the last ten years. A large portion of the increase in capital stocks has been attributable to finance and holding companies. Unlike the assets side, the share of equity capital in direct investment liabilities has remained relatively stable in the last ten years, at an average of 71%. Aside from economic developments, the main reason for higher levels of direct investment from 2014 onwards has been the introduction of new surveys on cross-border capital linkages, which have affected both the assets and liabilities sides.

In 2016, stocks of direct investment edged downwards to CHF 1,238 billion, due to reductions in equity capital.

Between 2007 and 2016, the share of direct investment in total foreign liabilities rose from 21% to more than one-third.

PORTFOLIO INVESTMENT

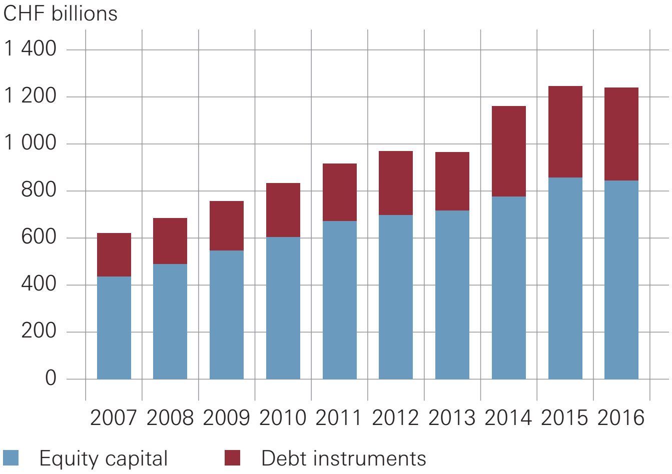
The liabilities of portfolio investment in the international investment position report securities issued by resident borrowers which are held by non-resident investors and are not included in direct investment.

Most of the holdings by non-resident portfolio investors in Switzerland are equity securities. In the last ten years, the share of equity securities in portfolio investment liabilities has averaged 90%. This is why fluctuations in share prices affect the liabilities side particularly strongly.

Following portfolio investment stocks of CHF 921 billion in 2007, one year later, in the wake of collapsing share prices, they had fallen sharply to CHF 637 billion. This loss in value as a result of stock market movements far exceeded portfolio investment transactions in the financial account, even though the latter were high, particularly in the case of banks. In subsequent years, share prices recovered and the losses of 2008 were partly recouped. Since 2012, in particular, share prices have risen substantially and with them the stocks of portfolio investment, which reached a new high of CHF 1,142 billion in 2014. The next two years saw stocks predominantly decline, due to capital losses resulting from price movements on the Swiss stock exchange.

Chart 36

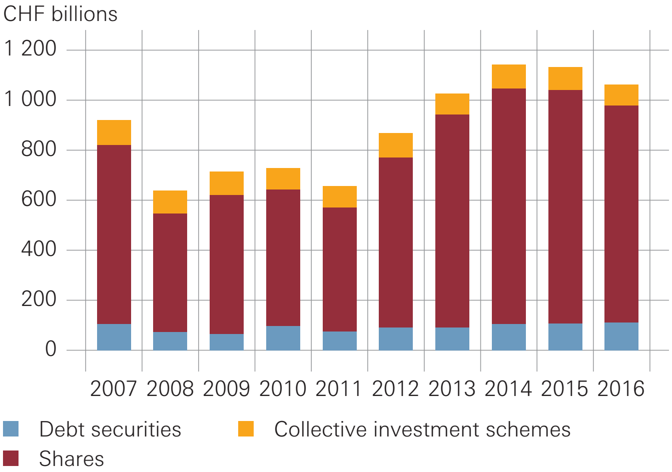
FOREIGN LIABILITIES: DIRECT INVESTMENT



Source: SNB

Chart 37

FOREIGN LIABILITIES: PORTFOLIO INVESTMENT



Source: SNB

In 2016, portfolio investment liabilities were down CHF 70 billion to CHF 1,062 billion, mainly due to lower stocks of shares.

In the last ten years, the share of portfolio investment in foreign liabilities has experienced relatively few fluctuations, averaging approximately 30%.

DERIVATIVES

In the foreign liabilities, outstanding derivative financial instruments with non-resident counterparties are reported at their negative replacement values.

The increase in stocks of derivatives in 2008 was principally due to an expansion in the reporting population; since then – as on the assets side – they have trended downwards. In 2016, stocks decreased by CHF 3 billion to CHF 110 billion.

Between 2008 and 2016, the share of derivatives in total foreign liabilities decreased from 8% to 3%.

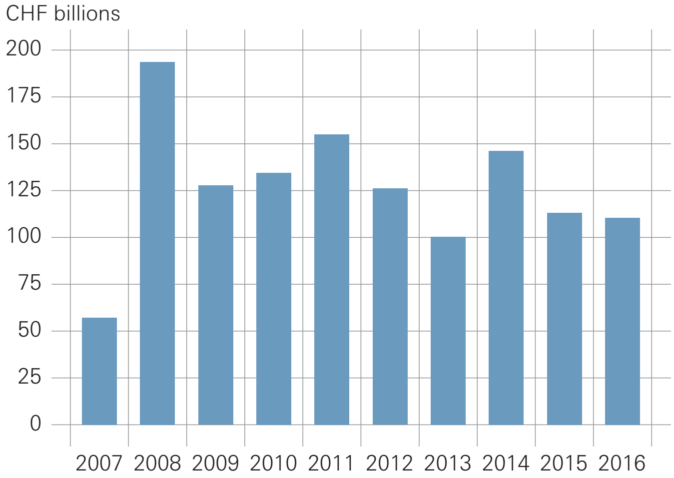
OTHER INVESTMENT

As in the balance of payments, other investment is broken down into currency and deposits, loans, and other liabilities. Within the currency and deposits and the loans categories, resident creditors are differentiated by sector as follows: Swiss National Bank, banks, public sector, and other sectors. Other sectors is made up mainly of corporate short-term and long-term liabilities abroad, which are not included under direct or portfolio investment.

As on the assets side, movements in other investment liabilities were determined by the currency and deposits category. Following a high in 2007 of CHF 1,417 billion, the stocks of liabilities decreased considerably in the following year, and declined to CHF 981 billion by 2010. This rise and subsequent fall were both attributable to banks' activities in the interbank market. The sharp dip in interbank business was mitigated by an increase in bank liabilities towards non-resident customers; between 2007 and 2016, these rose by CHF 121 billion to CHF 364 billion. Overall, other investment in the foreign liabilities category has been edging up since 2011.

Chart 38

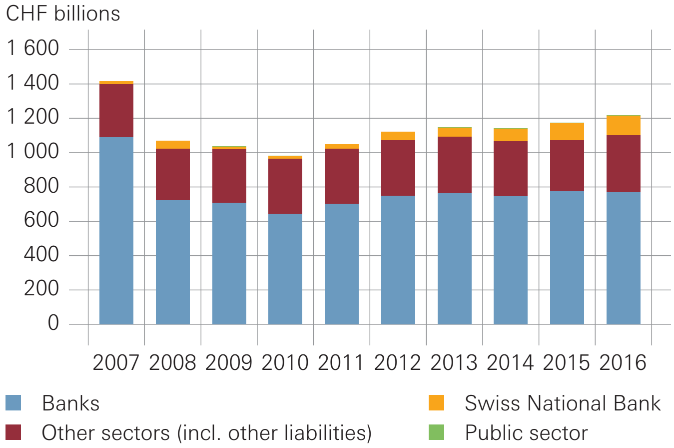
FOREIGN LIABILITIES: DERIVATIVES



Source: SNB

Chart 39

FOREIGN LIABILITIES: OTHER INVESTMENT, BY SECTOR



Source: SNB

Table 7

OTHER INVESTMENT: LIABILITIES

In CHF billions

	2012	2013	2014	2015	2016
Total liabilities	**1 122.0**	**1 146.3**	**1 140.9**	**1 172.2**	**1 216.8**
Currency and deposits	803.1	821.6	823.8	876.0	887.1
Of which banks	748.0	762.6	744.7	773.8	768.5
Of which other sectors	5.7	5.7	4.3	2.4	3.5
Loans	234.1	236.7	215.5	190.5	219.3
Of which banks	–	–	–	–	–
Of which other sectors	233.2	236.0	215.0	190.0	218.7
Other liabilities	84.7	88.1	101.6	105.7	110.4

Source: SNB

In 2016, stocks of other investment on the liabilities side rose by CHF 45 billion to CHF 1,217 billion, which was mainly due to companies' higher liabilities with regard to loans.

Between 2007 and 2016, the share of other investment in total foreign liabilities declined from 47% to 34%.

NET INTERNATIONAL INVESTMENT POSITION

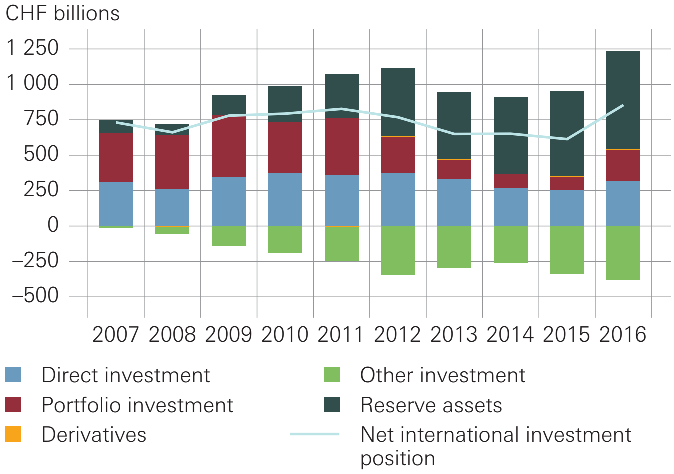
Since statistics on the international investment position were first collected in 1985, Switzerland's foreign assets have been higher than its foreign liabilities; its net international investment position has therefore been positive throughout this period. This reflects the high saving rate as well as the limited investment possibilities in Switzerland. By international standards, Switzerland's net international investment position is very high. Countries with high net international investment positions include the major economies of Japan, China and Germany, as well as smaller ones like Hong Kong, Singapore and Norway (source: IMF, *International Investment Position, Net*).

In the last ten years, the net international investment position has undergone considerable fluctuations. Between 2009 and 2011, it experienced strong growth, latterly amounting to CHF 827 billion. Subsequent years saw a clear downward trend, with CHF 614 billion recorded in 2015. In 2016, however, a record high of CHF 854 billion was registered.

Between 2007 and 2016, the composition of the net international investment position experienced significant changes. Initially, it was mainly influenced by the positive balances of portfolio and direct investment. Over the years, however, the significance of portfolio investment, in particular, receded considerably. By contrast, from 2009 onwards, two components which had previously had no impact began to assume an important role: On the one hand, other investment had an increasingly dampening effect on the net international investment position, and on the other, the SNB expanded its reserve assets very substantially.

Chart 40

NET INTERNATIONAL INVESTMENT POSITION, NET



Source: SNB

4
Special topic: Balance of payments and international investment position – important statistics explained in simple terms

4.1 INTRODUCTION

The Swiss National Bank (SNB) is required to compile the statistics on the balance of payments and the international investment position according to the guidelines of the International Monetary Fund (IMF).[1] These statistics form part of Switzerland's system of national accounts (SNA). This special topic aims to explain the two statistics in simple terms with the aid of individual examples. The focus is on the following three questions:

1. What are the rules governing the preparation of the balance of payments and the international investment position?

2. How are the main accounts within the balance of payments linked and what is their connection with the international investment position?

3. How is the SNA connected to the statistics on the balance of payments and the international investment position?

The special topic is structured as follows: After a general introduction, the method for recording cross-border transactions in the balance of payments is set out. This is followed by an explanation of the international investment position and its connection with the balance of payments. Finally, the statistics on the balance of payments and the international investment position are set within the context of the SNA.

4.2 WHY HAVE A BALANCE OF PAYMENTS AND AN INTERNATIONAL INVESTMENT POSITION?

In a closed economy, everything that is produced within the country's borders is also consumed there. Gross disposable income (GDI) consists of consumer expenditure by private households and the public sector (C) as well as domestic investment (I).

$$\mathrm{GDI} = \mathrm{C} + \mathrm{I} \quad (1)$$

In an open economy, by contrast, international interaction is relevant due to cross-border exchanges including goods and services as well as financial assets.[2] This can be shown by adding a foreign trade component – i.e. the current account balance (CAB) – to the gross disposable income in equation (1).[3]

$$\mathrm{GDI} = \mathrm{C} + \mathrm{I} + \mathrm{CAB} \quad (2)$$

The current account balance comprises the balance from cross-border goods and services trade, the balance from cross-border labour and investment income (primary income) as well as the balance from unrequited cross-border payments (secondary income).

Together, the current account, the capital account and the financial account (the financial account records the exchange of financial assets between a country and the rest of the world) make up a country's balance of payments. These three main accounts within the balance of payments and their relationships are explained in section 4.3.

The foreign trade statistics are rounded off by the international investment position. As a stocks statistic, it complements the financial account, which is as a transactions statistic. The assets side of the international investment position presents the stocks of financial assets held by a country with respect to the rest of the world, while the liabilities side shows the stocks of financial assets held by the rest of the world with respect to the domestic economy at the end of a given period. The international investment position and its relationship with the balance of payments are explained in section 4.4 (cf. table 5 for an overview).

1 The detailed guidelines are contained in the IMF's *Balance of Payments and International Investment Position Manual* (BPM6) from 2009. Most countries compile the balance of payments and the international investment position based on BPM6, thus allowing international comparability of these statistics.

2 Financial assets include cash, book money, shares and loans.
3 With regard to the gross domestic product (GDP) of an open economy, only the balance from cross-border trade in goods and services (NX) is relevant, leading to the following equation: GDP = C + I + NX. This is illustrated in a chart on the SNB's data portal, data.snb.ch, *Notes, International economic affairs.*

4.3 BALANCE OF PAYMENTS

The balance of payments comprises the current account, the capital account and the financial account. The term 'balance of payments' can be misleading as it is not a balance in the classical sense, in which stocks are presented. On the contrary, the balance of payments records cross-border transactions.

The balance of payments captures all transactions between a country and the rest of the world during a given period. A transaction is defined as an interaction between two institutional units (e.g. companies, individuals, states), one of them being resident and the other non-resident. It covers the exchange of economic assets (e.g. money against goods) or a transfer of assets (e.g. unrequited transfer of money). In principle, there are three different kinds of transactions that are relevant for the balance of payments (cf. box 1 for details and examples).[4]

4 For a general introduction to the balance of payments and the international investment position, cf. Krugman et al. (2015).

4.3.1 BASIC ACCOUNTING SYSTEM FOR THE BALANCE OF PAYMENTS

The balance of payments uses a system of double-entry accounting. This system is based on the assumption that the domestic economy has to provide something in return for what it receives from abroad (e.g. goods, services), and vice versa. As a rule, every commercial transaction results in a financial transaction, thus impacting the current account and the financial account. However, it is also possible that a transaction impacts the financial account only. This occurs when financial assets are exchanged (e.g. money against shares).

According to the system of double-entry accounting, the balance of payments always shows two entries for each transaction, a 'debit entry' and a 'credit entry'. Receipts from goods trade correspond to a 'credit entry' in the current account, which require a 'debit entry' in the financial account, e.g. the acquisition of a financial asset. In general, the SNB does not use these technical terms in its publications. In this special topic, however, they are helpful in explaining the fundamental relationships.

Box 1

THE THREE KINDS OF TRANSACTIONS

In principle, three kinds of transactions are differentiated in the balance of payments:

1. Transactions that come about through the exchange of goods and services against financial assets (or vice versa). These are imports to Switzerland or exports from Switzerland.

   For instance, a Swiss import of a car from Germany is entered in the current account as an expense ('debit entry'). The amount recorded is the value of the imported car. At the same time, the German exporter receives a financial asset – a money amount in Swiss francs – equivalent to the value of the imported car. This leads to an increase in liabilities ('credit entry') in the financial account. Vice versa, the export of a machine to Germany leads to Swiss receipts in the current account ('credit entry'). When the machine is paid for by the German customer, Switzerland receives foreign financial assets, which corresponds to an increase in assets ('debit entry') in the financial account.

2. Transactions that come about through the exchange of financial assets against financial assets. These are cross-border purchases or sales of financial assets (e.g. shares or cash).

   For instance, acquisition of shares in a company located in France by a group resident in Switzerland is recorded as an increase in assets ('debit entry') in the financial account. Switzerland acquires financial assets abroad. At the same time, the seller in France receives the value of the shares in Swiss francs. The payment in France leads to an increase in liabilities ('credit entry') in the financial account. Non-residents acquire Swiss financial assets.

3. Transactions that come about without any exchange of goods and services or financial assets are designated as transfers of financial assets and recorded in the capital account. Unlike the transaction types described above, in this case something is being exchanged for nothing, instead of something for something. Examples of transfers of financial assets are debt cancellation, or the purchase/sale of non-produced, non-financial assets (e.g. property rights to natural resources).

   For instance, cancellation of a debt which Switzerland grants to a developing country will result in a decrease in assets in the financial account ('credit entry'). However, to ensure compliance with the double-entry accounting system, a 'debit entry' is also needed. This is carried out in the capital account. Switzerland waives a debt repayment, thereby transferring financial assets to another country without receiving anything in return.

When recording a transaction in the balance of payments, two questions are central:

– **What is the subject of the transaction?** In other words, we need to determine what kind of economic assets are being exchanged. Are they goods and services, income or other economic assets that are covered by the current account? Or are they financial assets in the sense of the financial account? Depending on the answer, the economic asset will be recorded in the current account and/or in the financial account.

– **How is the transaction financed?** Here, we need to establish what type of financial asset is concerned (e.g. securities, loans). The item in the financial account under which a particular transaction is recorded will be determined by the answer to this question.

As all transactions are entered twice, the balance of payments is balanced. It follows that: financial account balance – current account balance – capital account balance = 0 (cf. section 4.3.4 for more details). In order to understand the system as a whole, it is, however, easier to look at each main aggregate separately.

Table 1

CURRENT ACCOUNT

Receipts	Expenses
Receipts from goods and services exports (credit)	Expenses for goods and services imports (debit)
Receipts from labour and investment income (primary income) (credit)	Expenses for labour and investment income (primary income) (debit)
Current transfers from abroad (secondary income) (credit)	Current transfers abroad (secondary income) (debit)
Balance = receipts – expenses (credit – debit)	

The structure of the capital account corresponds to that of the current account (cf. table 5). The capital account covers capital transfers, such as those arising from debt cancellation in favour of a developing country, as well as receipts and expenses from non-produced, non-financial assets. In Switzerland's balance of payments, transactions within the capital account are rare and make up only a small portion of the balance of payments as a whole. Therefore, they are not further discussed here.

4.3.2 ENTRIES IN THE CURRENT ACCOUNT AND THE CAPITAL ACCOUNT

The current account (cf. table 1) assigns transactions to either the receipts or the expenses side. On the receipts side, exports of goods and services, labour and investment income from abroad as well as current transfers from abroad are recorded. On the expenses side, imports of goods and services, labour and investment income paid abroad as well as current transfers abroad are entered.[5] The current account balance is defined as receipts minus expenses. This means that the current account is balanced only if a country's receipts and expenses are equal. If not, this leads to a current account surplus (receipts > expenses) or a current account deficit (receipts < expenses).

According to the balance of payments accounting standard, receipts are recorded as a 'credit entry' in the current account, and expenses as a 'debit entry'. The current account balance is thus calculated as 'credit' minus 'debit'.

4.3.3 ENTRIES IN THE FINANCIAL ACCOUNT

Whereas the current account is divided into a receipts and an expenses side, the financial account has an assets and a liabilities side (cf. table 2). The assets and liabilities sides are each broken down into direct investment, portfolio investment, derivatives, other investment and reserve assets (the final item only on the assets side).

The assets side records the increase and decrease in foreign financial assets owned by resident parties. The result is stated as a net item ('net acquisition of financial assets'). The liabilities side shows the increase and decrease in domestic financial assets owned by non-resident parties. The result is also presented as a net item ('net incurrence of liabilities').

The financial account balance is defined as the net acquisition of financial assets minus the net incurrence of liabilities. If the net acquisition of financial assets equals the net incurrence of liabilities, the financial account is balanced. If not, the balance is either positive or negative. A balanced result in the financial account means that the domestic economy has built up the same level of foreign assets as the rest of the world has with respect to domestic assets.

According to the balance of payments accounting standard, an increase in financial assets is recorded as a 'debit entry' in the financial account, and a decrease as a 'credit entry'. The net acquisition of financial assets therefore corresponds to the balance of 'debit entries' minus 'credit entries' on the assets side. An increase in liabilities is recorded as a 'credit entry', and a decrease as a 'debit entry'. The net incurrence of liabilities corresponds to the

5 The current account components are explained in more detail on the SNB's data portal, data.snb.ch, *Notes, International economic affairs.*

balance of 'credit entries' minus 'debit entries' on the liabilities side.

Table 2

FINANCIAL ACCOUNT

Net acquisition of financial assets	Net incurrence of liabilities
Increase in financial assets (debit) (Residents acquire financial assets of non-residents) Decrease in financial assets (credit) (Residents sell financial assets of non-residents)	Increase in liabilities (credit) (Non-residents acquire financial assets of residents) Decrease in liabilities (debit) (Non-residents sell financial assets of residents)
Net acquisition of financial assets = increase in financial assets (debit) – decrease in financial assets (credit)	**Net incurrence of liabilities =** increase in liabilities (credit) – decrease in liabilities (debit)
Balance = net acquisition of financial assets – net incurrence of liabilities	

4.3.4 BALANCING THE BALANCE OF PAYMENTS

As all items are booked twice in the balance of payments, the current account balance plus the capital account balance corresponds to the financial account balance. The balance of payments as a whole is thus balanced.

This can be illustrated with the following example. As table 1 shows, an export of goods results in a 'credit entry' on the receipts side of the current account. But where is the offsetting entry (the 'debit entry') in the financial account? Assuming Switzerland receives foreign financial assets from the non-resident counterparty for its export of goods, from Switzerland's perspective its foreign financial assets have increased through this transaction. In net terms, Switzerland thus has more foreign financial assets after the transaction. In the financial account, this transaction is therefore booked as an increase in financial assets ('debit entry') on the assets side. This means that the 'credit entry' on the receipts side of the current account is offset by a 'debit entry' in the same amount on the assets side of the financial account. From the definition of accounting balances outlined in sections 4.3.2. and 4.3.3 above, it follows that the current account balance corresponds to the financial account balance.

Alternatively, we can assume that the exports are paid by the non-resident counterparty with domestic rather than foreign financial assets. This case results in a net decrease in liabilities ('debit entry'). The financial account balance, however, remains the same as in the previous example (table 2).

Provided that all transactions in a country's balance of payments are recorded correctly, the following equation is true:

i. Financial account balance – current account balance – capital account balance = 0

In practice, however, deviations from this equation cannot be avoided. They result from errors and omissions in the data which occur inevitably given the many different data sources entering the balance of payments.

In reality, the balance of payments equation is thus as follows:

ii. Financial account balance – current account balance – capital account balance = statistical difference

A statistical difference with a plus sign indicates non-recorded receipts in the current account and/or a non-recorded increase in liabilities/decrease in financial assets in the financial account, while one with a minus sign indicates non-recorded expenses in the current account and/or a non-recorded increase in financial assets/decrease in liabilities in the financial account. If the plus and minus signs change frequently, this may be an indication of data not being recorded in the appropriate period.

4.4 THE INTERNATIONAL INVESTMENT POSITION

By analogy with the financial account, the international investment position presents an assets and a liabilities side of the account. The assets side shows the stocks of foreign financial assets held by resident parties at the end of a given period, while the liabilities side shows the stocks of domestic financial assets held by non-resident parties at the end of this period. The net international investment position is the balance of stocks of assets minus liabilities, in other words, all foreign financial assets held by resident parties minus all domestic financial assets held by non-resident parties. It can be positive or negative.[6]

The breakdown of assets and liabilities in the international investment position corresponds to that of the financial account, i.e. direct investment, portfolio investment, derivatives, other investment, reserve assets (the final item only on the assets side). The difference between the two statistics is that the financial account is a transactions statistic, whereas the international investment position is a statistic which records stocks. If the financial account records an increase in financial assets ('net acquisition') or in liabilities ('net incurrence'), this flows into stocks in the international investment position at the end of the period in question. Due to this difference between

6 The liabilities side of the international investment position should not be confused with external debt. The concept of external debt only covers those foreign liabilities on the liabilities side of the international investment position which require payment of principal and/or interest and thus constitute payment obligations for Switzerland. Cf. IMF (2014) for a detailed definition.

a transaction and a stocks statistic, the economic information provided by the two statistics on the international economic interrelationships of a country also differs. While the financial account provides information on movements in these interrelationships during a certain time period, the international investment position depicts the level of the interrelationships at a given point in time.

Apart from financial account transactions, there are two further variables which give rise to changes in stocks in the international investment position:

– Valuation changes (resulting from price and exchange rate movements)

– Other changes[7]

Depending on the breakdown of the international investment position, these three variables have different effects on the change in stocks. Generally, the assets side of the international investment position is made up largely of foreign currency financial assets, which means that, apart from transactions, exchange rate fluctuations are the most important cause of changes in stocks.[8] However, changes in prices, such as major share fluctuations, can also have a significant impact.

This can be illustrated with the following example. A Swiss pension fund makes a portfolio investment abroad. It buys shares of a US company in US dollars. This leads to a net acquisition of financial assets in the financial account, thereby also increasing the stocks of assets in the international investment position. If the price of the US security now falls, this will reduce the value of stocks on the assets side of the international investment position (price effect). A reduction in value also occurs if the US dollar loses value against the Swiss franc (exchange rate effect).

Table 3

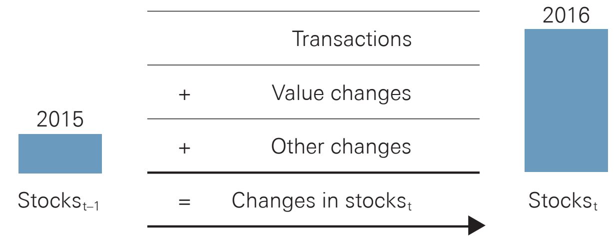
INTERNATIONAL INVESTMENT POSITION

Assets	Liabilities
Stocks of financial assets	Stocks of liabilities
Balance = net international investment position = financial assets – liabilities	

7 Other changes include reclassification or transfer of company domicile.
8 A small portion of financial assets in the international investment position is also held in domestic currency. An example is Swiss franc bonds issued by non-resident companies. Since these bonds are partially held by resident parties, they must be recorded on the assets side of the international investment position.

Chart 1

BREAKDOWN OF CHANGES IN STOCKS IN THE INTERNATIONAL INVESTMENT POSITION



4.5 BALANCE OF PAYMENTS AND INTERNATIONAL INVESTMENT POSITION WITHIN THE SNA

The two previous sections have presented the major elements of the balance of payments and the international investment position as well as the interconnections between the two statistics. This section will recapitulate the most important relationships between these foreign trade statistics and set them within the context of the system of national accounts. The explanations that follow will focus on the current account balance – the foreign trade indicator which attracts most attention in the media and the general public. The current account balance may be positive, negative or zero. We outline a situation of current account surplus, in other words, a positive current account balance. If the balance is negative (current account deficit), the explanations apply inversely.

As set out in section 4.3, a positive current account balance means that a country earns more income ('receipts') through transactions with other countries than the expenditure ('expenses') it incurs. This may be attributable, for instance, to a positive balance in goods and services trade and/or a positive primary income balance (receipts from labour and investment income) and secondary income balance (current transfers).[9]

Section 4.3 also shows that a positive current account balance is accompanied by a positive financial account balance. If, in a given period, a country has more receipts than expenses, this also means that it has received more financial assets from abroad than the financial assets it has transferred to other countries. In other words, in that period, it has created a creditor position with respect to the rest of the world.

Disregarding price and exchange rate effects as well as any other changes in the international investment position, this increase in the creditor position (or decrease in the debtor position) is equivalent to an increase in the net international investment position. If the net international investment position was positive before, the country has been able to strengthen its creditor position with respect to the rest of the world. If the net international investment

9 Cf. table 1 for an overview of receipts and expenses in the current account.

position was negative before, the country has been able to reduce its debtor position with respect to the rest of the world.

With this in mind, some statements on the savings and investment behaviour of an economy can be made. If we take equation (2) from section 4.2 and transpose it, the balance of the current account now corresponds to gross disposable income minus the components for consumer expenditure by private households and the public sector as well as domestic investment.

$$CAB = GDI - C - I \quad (3)$$

Consequently, a current account surplus means that gross disposable income of a country is higher than consumer expenditure by private households and the public sector as well as domestic investment. Aggregate saving of a country (S) is defined as gross disposable income minus consumer expenditure by private households and the public sector.

$$S = GDI - C \quad (4)$$

Based on equation (4), S can be substituted into equation (3) for GDI – C. It follows that the difference between aggregate saving and domestic investment corresponds to the current account balance.

$$CAB = S - I \quad (5)$$

A positive current account balance means that a country saves more than it invests domestically. Table 4 provides a summary of the relationships that apply in the event of a current account surplus.

These relationships hold for Switzerland as a small open economy with a high savings ratio and limited investment possibilities within the country. For decades, Switzerland has been earning current account surpluses and has built up a strong net international investment position due to the accompanying positive financial account balances. As a result, it has a creditor position with respect to the rest of the world. Switzerland's gross disposable income is higher than consumer expenditure by private households and the public sector and domestic investment together. Ultimately, Switzerland saves more than it invests domestically.

Table 4

CURRENT ACCOUNT SURPLUS[1]

Current account	Financial account	Net international investment position	Gross disposable income	Saving – investment
CAB > 0	**FAB[2] > 0**	**ΔNIIP[3] > 0**	**GDI > C + I**	**S – I > 0**
Surplus, positive balance	Surplus, positive balance	Increase (disregarding price and exchange rate effects as well as other changes)	Positive current account balance	Savings surplus

1 Assumption: Capital transfers are negligible. In the event of a current account deficit, inverse relationships apply.
2 Financial account balance (FAB).
3 Change in net international investment position (ΔNIIP).

Table 5

BALANCE OF PAYMENTS AND INTERNATIONAL INVESTMENT POSITION

BALANCE OF PAYMENTS

Current account

Receipts	Expenses
Receipts from goods and services exports (credit)	Expenses for goods and services imports (debit)
Receipts from labour and investment income (primary income) (credit)	Expenses for labour and investment income (primary income) (debit)
Current transfers from abroad (secondary income) (credit)	Current transfers abroad (secondary income) (debit)
Balance = receipts – expenses (credit – debit)	

Capital account

Receipts	Expenses
Transfers of financial assets from abroad (credit)	Transfers of financial assets abroad (debit)
Balance = receipts – expenses (credit – debit)	

Financial account

Net acquisition of financial assets	Net incurrence of liabilities
Increase in financial assets (debit) (Residents acquire financial assets of non-residents)	Increase in liabilities (credit) (Non-residents acquire financial assets of residents)
Decrease in financial assets (credit) (Residents sell financial assets of non-residents)	Decrease in liabilities (debit) (Non-residents sell financial assets of residents)
Net acquisition of financial assets = increase in financial assets (debit) – decrease in financial assets (credit)	**Net incurrence of liabilities =** increase in liabilities (credit) – decrease in liabilities (debit)
Balance = net acquisition of financial assets – net incurrence of liabilities	

Financial account balance
– Current account balance
– Capital account balance
= Statistical difference

INTERNATIONAL INVESTMENT POSITION

Assets	Liabilities
Stocks of financial assets	Stocks of liabilities
Balance = net international investment position = financial assets – liabilities	

Changes in stocks in the international investment position

Net acquisition of financial assets + Val. changes in stocks of financial assets + Other changes in financial assets	Net incurrence of liabilities + Valuation changes in stocks of liabilities + Other changes in liabilities
= Changes in stocks of financial assets	= Changes in stocks of liabilities

Net acquisition of financial assets and net incurrence of liabilities in the financial account determine the change in stocks in the international investment position, alongside two other factors

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