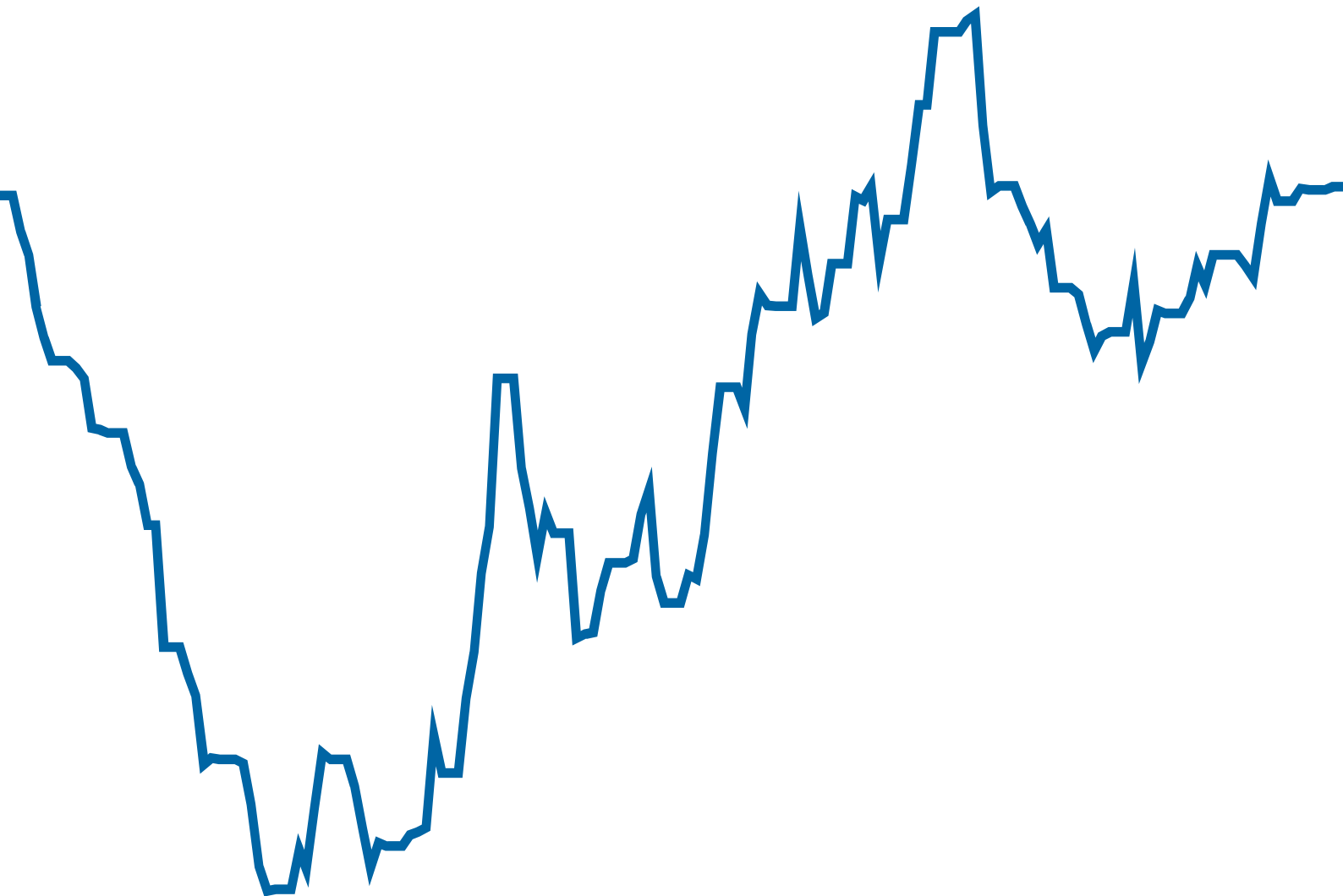


# Federal Treasury

# Activity report 2019



Schweizerische Eidgenossenschaft  
Confédération suisse  
Confederazione Svizzera  
Confederaziun svizra

Swiss Confederation

Federal Department of Finance FDF  
**Federal Finance Administration FFA**

## **Imprint**

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The Federal Treasury activity report explains the strategies and results with respect to the Confederation's debt management, liquidity management and foreign exchange management in 2019. It is tailored primarily to the Federal Council, the Finance Delegation, and the Swiss Federal Audit Office. Once they have acknowledged it, the report will also be made accessible to interested members of the public.

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# 78

billion

in debt is managed by the Federal Treasury. 67 billion of this is market debt  
(money market debt register claims and bonds)

# -0.12

percent

was the interest on the bonds issued in 2019. By issuing long maturities,  
the federal budget will benefit from these low interest rates in the long term.

# 10.7

years

is the average term to maturity of the Confederation's market debt.

# Summary

And yet interest rates headed even further south! At the end of 2018, the Federal Treasury was probably not alone in thinking that interest rates had bottomed out. Many market participants were proved wrong in 2019: Swiss franc interest rates plunged once again in the summer months, and the yield on 10-year Confederation bonds reached a low of -1.1% in August. The yields on all Confederation bonds have been in negative territory since the end of July. Consequently, they will no longer generate returns for investors in the future – this is the case even for the 2064 Confederation bond, which will not mature for another 45 years.

In this interest rate environment, the Federal Treasury adhered to its issuance strategy of locking in interest rates for as long as possible. Overall, bonds worth CHF 2.2 billion with an average maturity of 17.5 years and a market yield of -0.12% were issued. With the redemption of a bond worth CHF 5.8 billion, the outstanding bond volume fell to around CHF 61 billion in nominal terms. The flipside of the coin is that liquidity in Confederation bond trading has been declining for years. Aside from the low interest rate environment, the scarce supply of Confederation bonds has also driven prices higher. As a result, not only has interest in bond auctions been lower, but trading on the secondary market has declined too. The drop in the volume of outstanding Confederation bonds over the past few years poses a certain challenge for market participants in the medium term. Thanks to their high credit rating, Confederation bonds continue to be a stabilizing element in a broadly diversified investment strategy in the event of market turmoil. Furthermore, market participants regularly use them as collateral in the secured money market.

In view of the high level of liquidity, short-term debt (money market debt register claims) was maintained at the previous year's low level of around CHF 6 billion. The Federal Treasury considers this level to be at the lower end of the range required to maintain efficient market access with this key funding instrument for short-term liquidity management. All in all, market debt was lowered by CHF 4 billion to around CHF 67 billion. The longer-term interest rate and refinancing risks decreased further thanks to the issuance strategy pursued and the sustained reduction in market debt. The proportion of debt requiring refinancing within the next 12 months relative to total marketable debt remained

constant at a low level of 16% and was thus well below the upper limit of 30% defined by the issuance strategy. Around 40% of the Confederation bonds outstanding at the end of 2019 will not be due for redemption for 10 years or more. Relative to the previous year, the term to maturity of the debt portfolio rose slightly from 10.6 years to 10.7 years. With this long-term debt and the associated low risks, the Federal Treasury is pursuing a conservative strategy by international standards. This is also confirmed by internal risk analyses conducted using simulation calculations.

Owing to the persistently low interest rates and a lack of investment opportunities, disposable funds are placed exclusively with the Swiss National Bank (SNB). As a result, there is virtually no counterparty or credit risk. The liquidity held by the Federal Treasury reached new highs last year and was well above the long-term average. Furthermore, the inflow of funds to the Confederation remained above average, especially in the case of withholding tax. It is likely that some of these withholding tax receipts are merely "parked" with the Confederation temporarily and will flow out again at a later date. That is why the currently high liquidity buffer of over CHF 20 billion is also justified.

In 2019, the Federal Treasury engaged in forward purchases of euro and USD worth just under CHF 1.3 billion for the 2020 budget year. Since the introduction of currency hedging in 1998, a total of around CHF 25 billion in foreign currencies has been purchased within the framework of budgetary transactions, i.e. an average of CHF 1.1 billion per year. In addition, three new special transactions in euro, NOK and USD were carried out during the year for the equivalent of some CHF 160 million.

The Federal Treasury achieved two important milestones in the year under review. First, the WTO tender for the new treasury management software was successfully completed. With the implementation of the new solutions, considerable efficiency gains should be achievable in transaction processing thanks to more extensive digitalization. Second, the Confederation has had direct access to the secured money market (repo market) since the beginning of 2019. The unsecured market has played virtually no role since the outbreak of the financial crisis. Therefore, direct access to the repo market is crucial for short-term deposits.

78

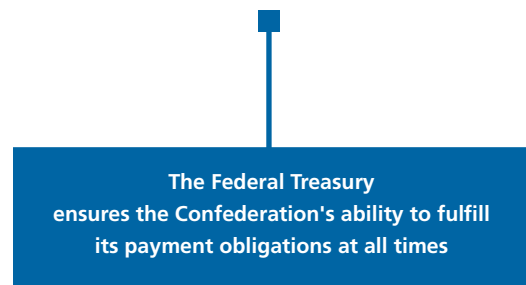
billion

in debt is managed by the Federal Treasury. 67 billion of this is market debt  
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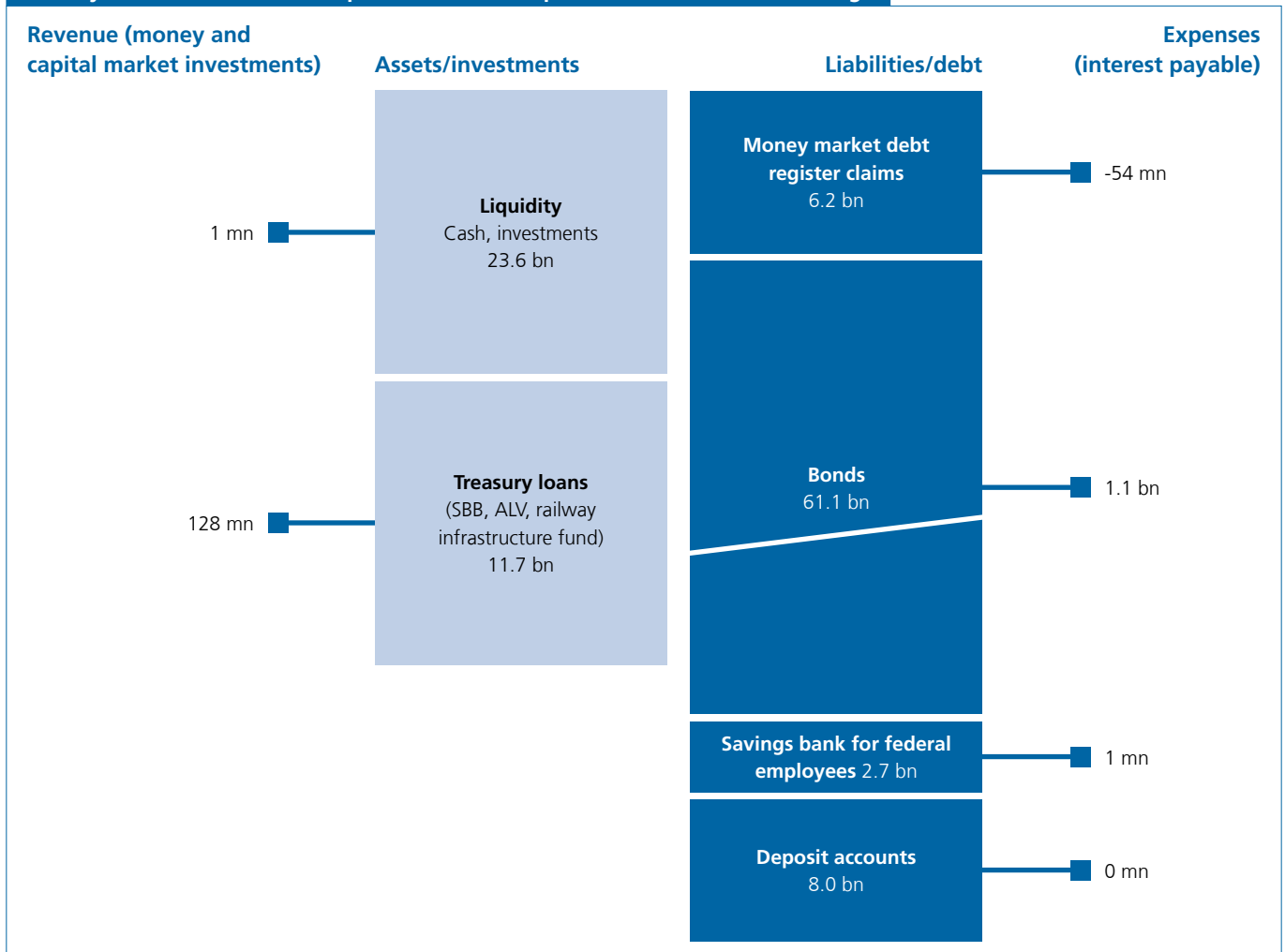
# Guidelines and targets

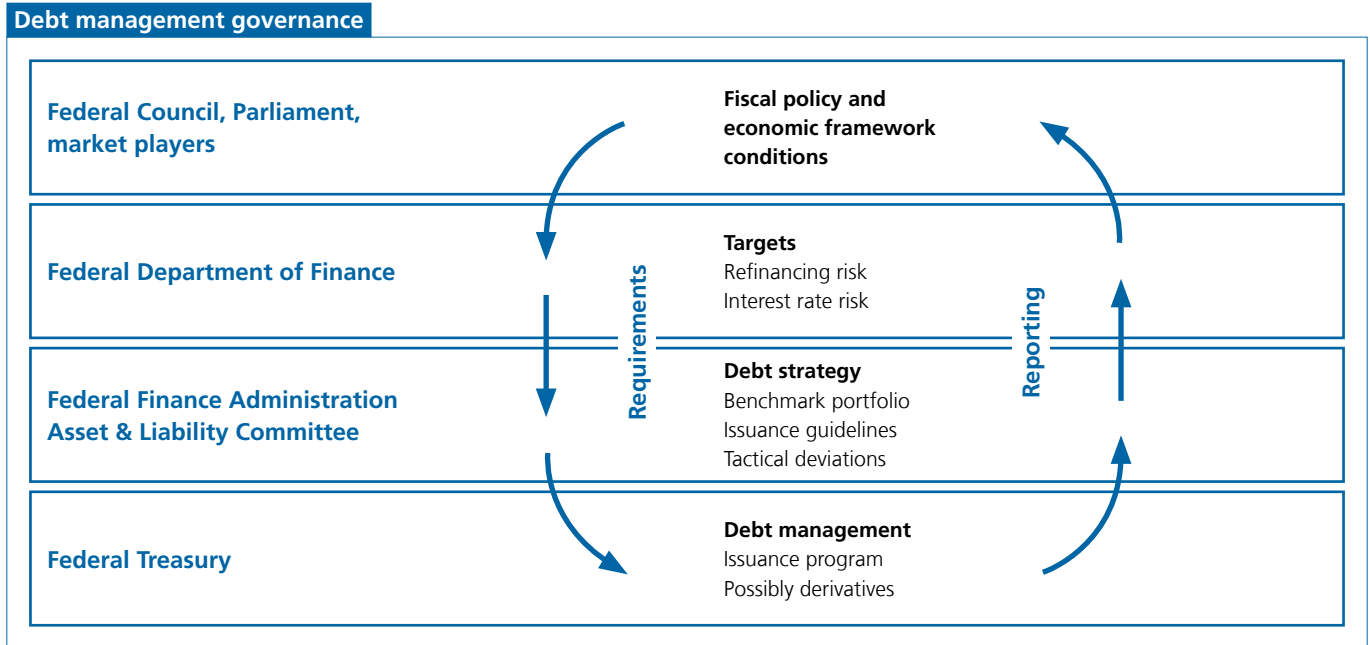
The central Treasury, run by the Federal Finance Administration (FFA), ensures the Confederation's ability to fulfill its payment obligations at all times (Art. 60 para. 1 of the Financial Budget Act). The three main tasks of the Federal Treasury stem from this statutory mandate:

- *Debt management*: coverage of the funding needs by means of funding in the money and capital market at the lowest possible cost and with an acceptable degree of risk
- *Liquidity management*: assurance of an appropriate level of liquidity to even out liquidity fluctuations; low-risk short-term investment of liquidity at usual market interest rates or short-term coverage of liquidity shortfalls
- *Foreign exchange management*: central procurement and management of foreign currencies to ensure planning certainty



## Treasury statement of financial position and its impact on the 2019 federal budget





The Federal Treasury manages a significant proportion of the Confederation’s balance sheet. Its activities involve substantial expenditure and receipts. Since the Confederation is a net borrower, this mostly concerns debt management with interest payable.

The Federal Treasury has little leeway regarding the volume of debt, as the funding requirements depend primarily on the development of the federal budget and thus on fiscal policy. Nevertheless, the Federal Treasury’s debt management has a significant impact on interest payable: since the interest rates for short maturities are generally lower than those for long ones, the Federal Treasury can reduce the average interest burden by issuing more short-term debt instruments. However, this increases the interest rate and refinancing risk, as the debt needs to be renewed more frequently. Conversely, it can reduce these risks by issuing long-dated instruments, but this leads to higher interest expenditure on average.

The interest rate risk is a relevant variable for fiscal policy, as unexpected changes in interest expenditure affect the leeway for budgeting other expenditure. Consequently, the Federal Treasury has a risk limit which it may not exceed for debt management. This risk budget is part of the FFA’s targets in performance management with the new management model for the Federal Administration (NMM). They are agreed with the Department on an annual basis. Within these risk guidelines, the FFA’s Asset and Liability Management Committee (ALCO) specifies a debt strategy which the Federal Treasury has to implement with its issuing activity. Monitoring and reporting are carried out by an independent middle office (Risk Control).

Liquidity and foreign exchange management are also associated with risks, which are controlled by the ALCO and monitored by Risk Control.

## NMM targets

	Limit	Actual 2018	Actual 2019
<b>Refinancing risk:</b> the FFA helps ensure that the Confederation's refinancing risk is bearable.			
Maturity profile of money and capital market debt under 1 year (% , maximum)	30	17	16
Maturity profile of money and capital market debt under 5 years (% , maximum)	60	40	39
Maturity profile of money and capital market debt under 10 years (% , maximum)	85	62	60
<b>Interest rate risk:</b> the FFA helps ensure that the interest rate risk is bearable for the federal budget in the short and medium term.			
Accumulated interest rate risk for following 4-year periods: additional interest expense that will not be exceeded in 9/10 cases (CHF mn)	500	114	67

## Debt management risks

The Confederation is confronted by two inherent risks when managing its debt:

*Interest rate risk:* in the event of a rise in interest rates, debt has to be issued at a higher rate of interest. This leads to higher interest expenditure, i.e. to a burden for the federal budget. The interest rate risk can be quantified using simulation calculations.

*Refinancing risk:* as a result of declining creditworthiness on the part of the Confederation or major financial market turmoil, (re)financing in the market could result in higher/ unfavorable market interest rates, or, in an extreme situation, could even prove impossible. This could jeopardize the objective of ensuring the Confederation's ability to fulfill its payment obligations. The maturity profile of outstanding debt as well as ratings are key indicators for the refinancing risk.

-0.12

percent

was the interest on the bonds issued in 2019. By issuing long maturities, the federal budget will benefit from these low interest rates in the long term.

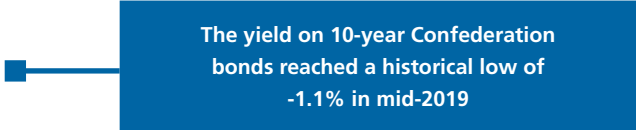
# 2019 Treasury activity

## ■ Developments on the Swiss capital market

In 2019, the Swiss capital market was marked by another sharp drop in interest rates during the summer months. The yields on all Confederation bonds were in negative territory from the end of July. The 10-year benchmark bond reached a new absolute low of -1.1% in August. The escalating trade dispute between the United States and China was the main driver of this development, which pulled down the yields not only of Confederation bonds but also those of other safe bonds. This was exacerbated by the turmoil surrounding the United Kingdom's withdrawal from the EU and other geopolitical tensions. By mid-year, the sum of all bonds with sub-zero yields worldwide amounted to almost CHF 17 trillion, i.e. a third of all investment-grade bonds. In the second half of the year, both the trade dispute and Brexit situation eased, causing Confederation bond yields to rise again by around 50 basis points. The yield on 10-year Confederation bonds was approximately -0.5% at year-end.

The monetary policy of the major central banks additionally contributed to the low and further declining yields. After raising interest rates four times the previous year, the US Federal Reserve (Fed) changed tack with three interest rate cuts in 2019. The European Central Bank (ECB) followed suit in the fall, lowering the deposit rate by 10 basis points to -0.50% and resuming net purchases of assets for a monthly volume of EUR 20 billion, among other things. Both central banks stressed that the barriers to raising key interest rates are high. Since inflation is still very subdued, an interest rate turnaround cannot be expected, at least not in the short term. The SNB left its policy rate unchanged at -0.75% in 2019, but it provided some relief for banks by raising the exemption threshold for sight deposit account balances.

The outstanding volume on the Swiss capital market rose by around CHF 10 billion year on year to just under CHF 520 billion. The increase was attributable to growth in the domestic segment, while the volume in the foreign segment declined further, thereby continuing a trend that has been observed since 2010. At that time, the foreign segment's share was still around 60%, whereas the domestic segment now accounts for almost three quarters of the total capital market. Last year, like in 2018, the Swiss capital market recorded an issue volume of around CHF 60 billion, two thirds of which was attributable to the domestic segment and one third to the foreign segment. The two Pfandbrief institutions are still by far the largest issuers in the domestic



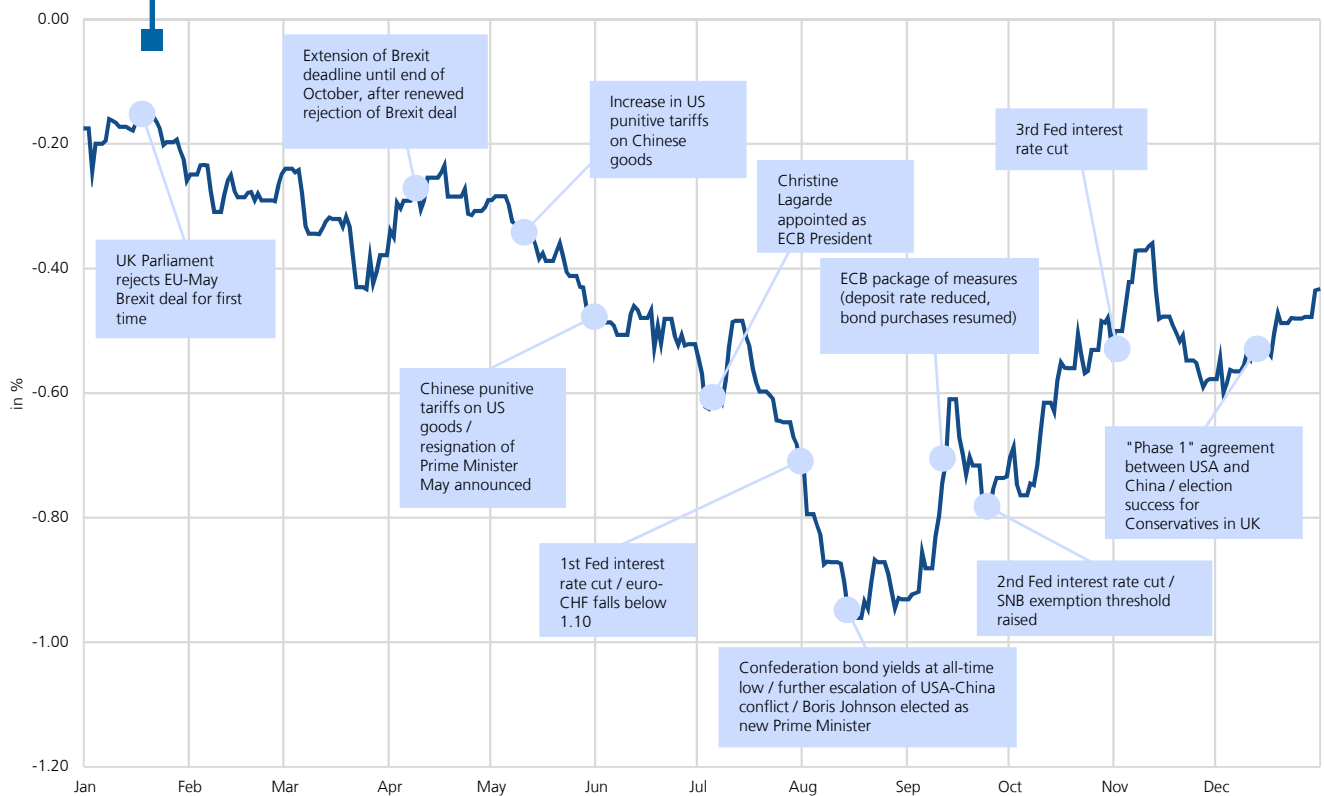
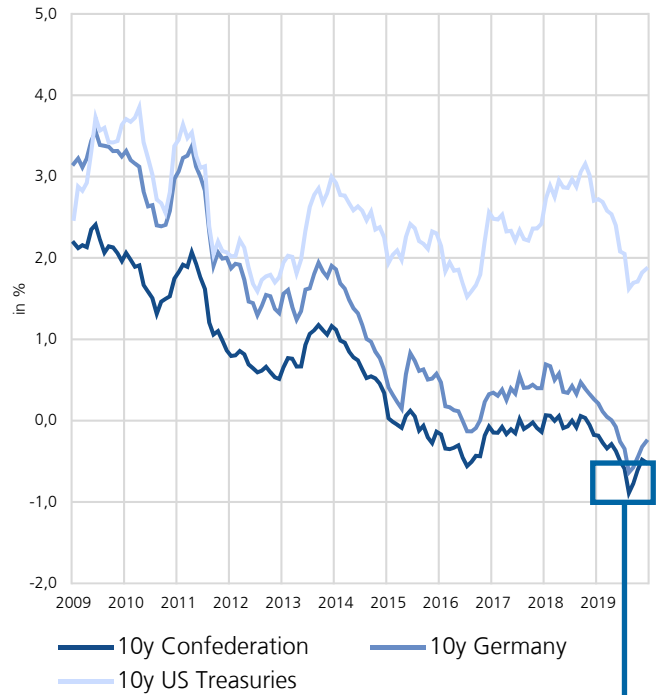
The yield on 10-year Confederation bonds reached a historical low of -1.1% in mid-2019

segment and together recorded an issue volume of around CHF 15 billion. Banks and insurance companies issued just over CHF 11 billion, while the corporate sector was responsible for bonds worth around CHF 5 billion. Like the previous year, the Confederation accounted for some 6% of the domestic segment, which was well below the average of 14% for 2011 to 2017.

Investors were looking for bonds with positive yields in 2019, and were prepared to take risks to obtain them. As the supply of bonds with positive yields diminished, risk premiums (measured by the spread to the swap rate) narrowed by a few basis points, especially in the case of lower-rated issues. Confederation bond spreads remained wide, averaging -36 basis points. Although the safety premium for Confederation bonds thus decreased somewhat relative to the previous year, it remained higher than the long-term average of around -30 basis points.

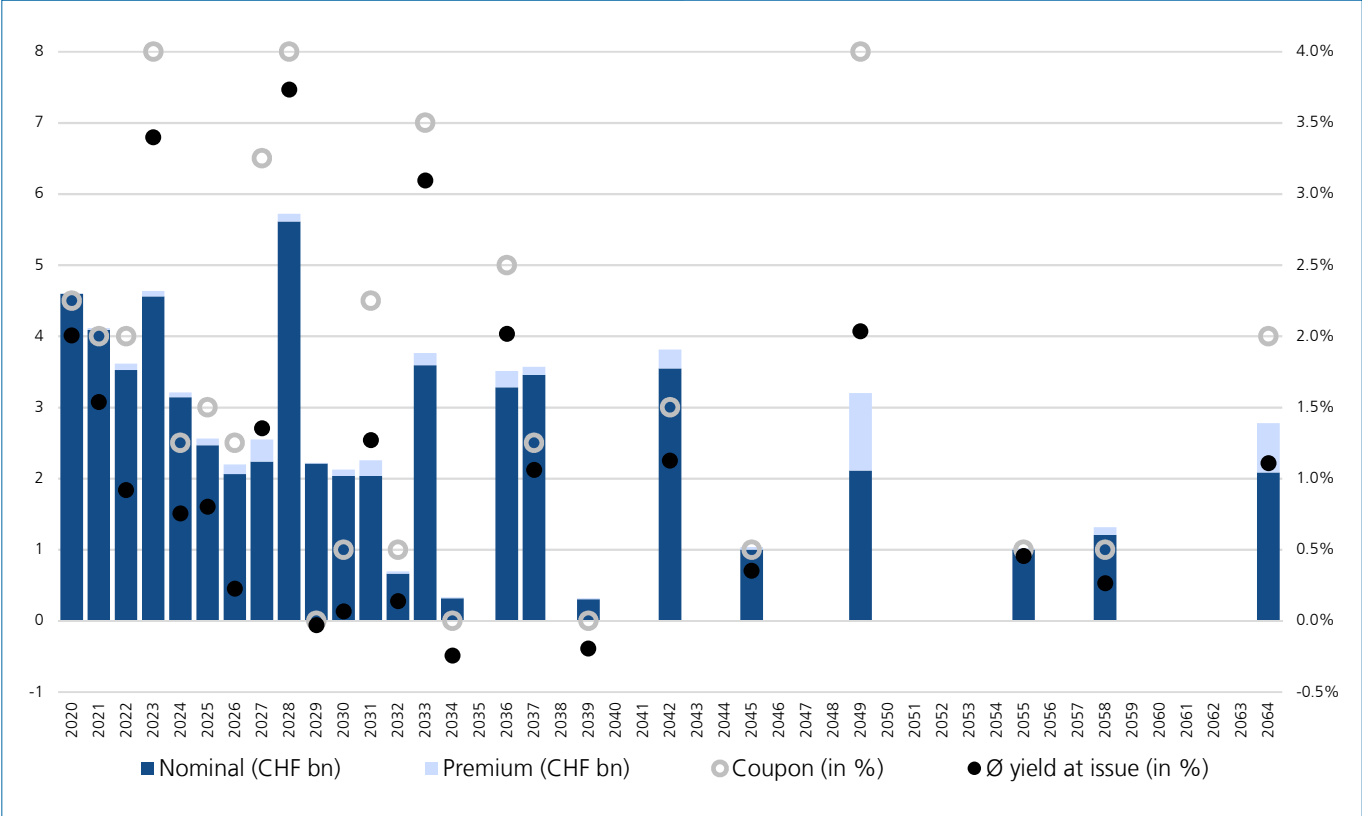
Sustainability issues were of particular importance also on the capital market last year. The volume of outstanding green bonds doubled to CHF 4 billion. The issuers included the cantons of Geneva and Basel Stadt, among others. Green bonds are characterized by the fact that the capital raised may be used exclusively for the (re)financing of projects that have a positive impact on the environment (e.g. promotion of renewable energies, lowering of CO<sub>2</sub> emissions, environmentally friendly buildings, etc.).

Development of government bond interest rates



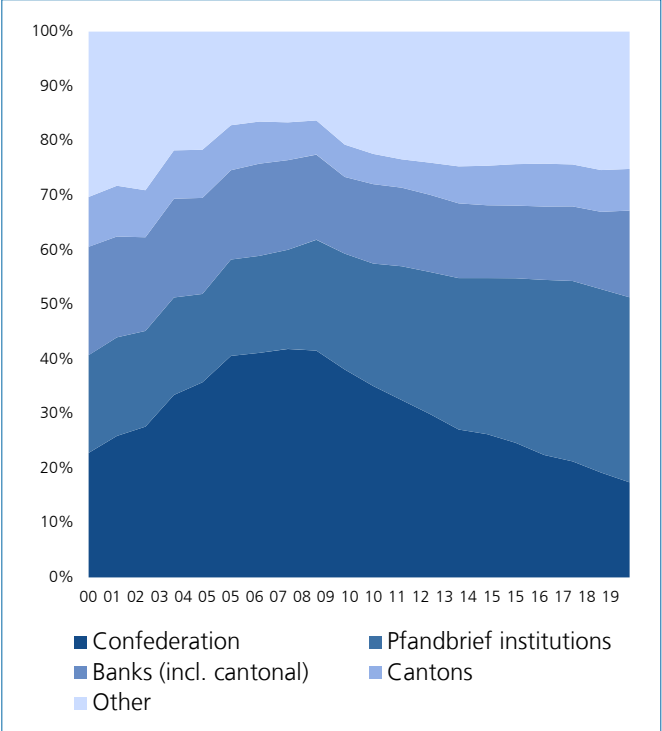
Source: Bloomberg

**Outstanding bonds in nominal terms and at amortized cost**



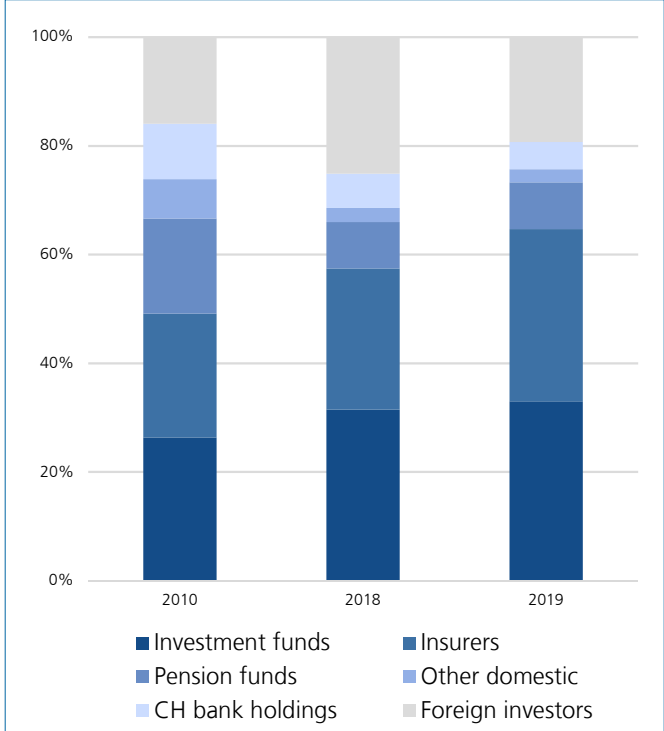
Source: SIX

**Outstanding bonds in CHF domestic segment**



Source: SIX

**Confederation bond investor base**



Source: SNB

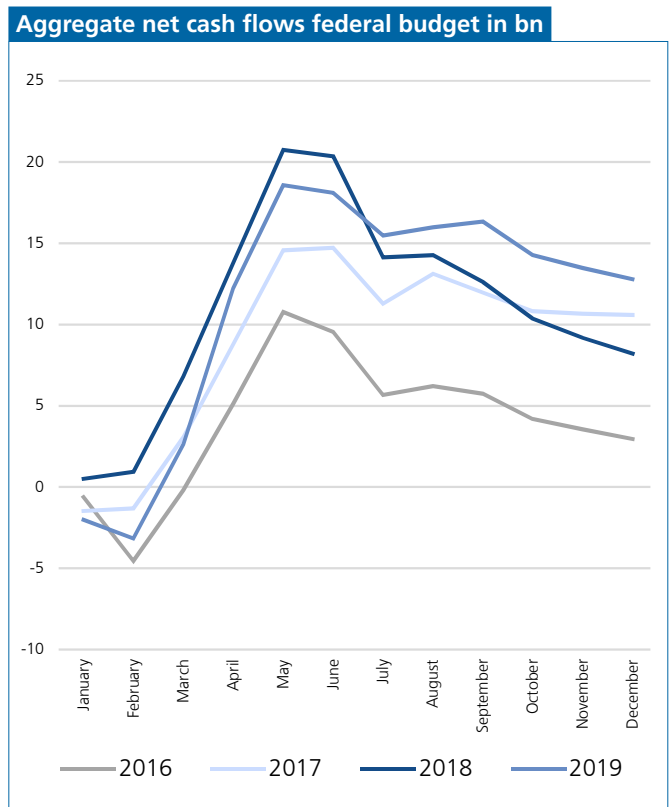
**Funding requirements and liquidity trend**

The Federal Treasury published the 2019 issuance program on December 4, 2018. Despite a rather large bond worth a total of CHF 5.8 billion maturing, the funding requirement was estimated at only CHF 2.5 billion. Furthermore, it was planned to secure funding exclusively by issuing bonds, while maintaining the volume of outstanding money market debt register claims at around CHF 6 billion. According to this plan, liquidity was to remain at the previous year's level.

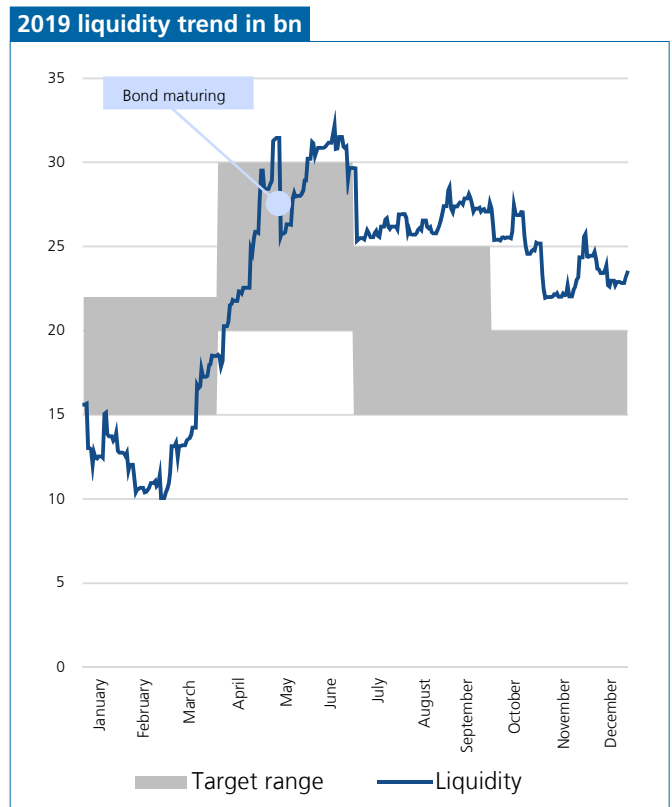
While the inflow of funds from the federal budget was weaker than expected in the first quarter and liquidity was sometimes well below the target range defined by the ALCO, liquidity increased rapidly from the second quarter onward. Consequently, liquidity reached a new high of CHF 32.2 billion in the middle of the year, and thereby exceeded the defined range of CHF 30 billion. In the

second half of the year, liquid funds were then consistently above the liquidity range. Especially in the last quarter, liquidity did not decrease as expected. This was largely attributable to withholding tax: with a balance of CHF 8.3 billion, withholding tax was higher than the budgeted figure of CHF 7.1 billion. Excluding transactions with no financing effect (provisions, deferrals), withholding tax receipts even exceeded refunds by CHF 12 billion.

Unlike in the past, the Federal Treasury was unable to offset the high inflow of funds from the federal budget by means of measures to reduce liquidity without restricting access to the money and capital market. Particularly in the case of money market debt register claims, a minimum volume of CHF 6 billion seems necessary to maintain the existing issuance program with 16 outstanding securities and a weekly auction cycle. At the end of

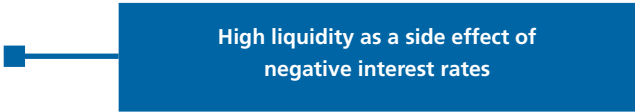


Calculation: daily change in SNB sight deposit account less financing activities



the year, liquidity was accordingly well above the target range at CHF 23.5 billion. Because of the still negative money market interest rates, the Federal Treasury once again placed its liquidity exclusively in the SNB sight deposit account in 2019.

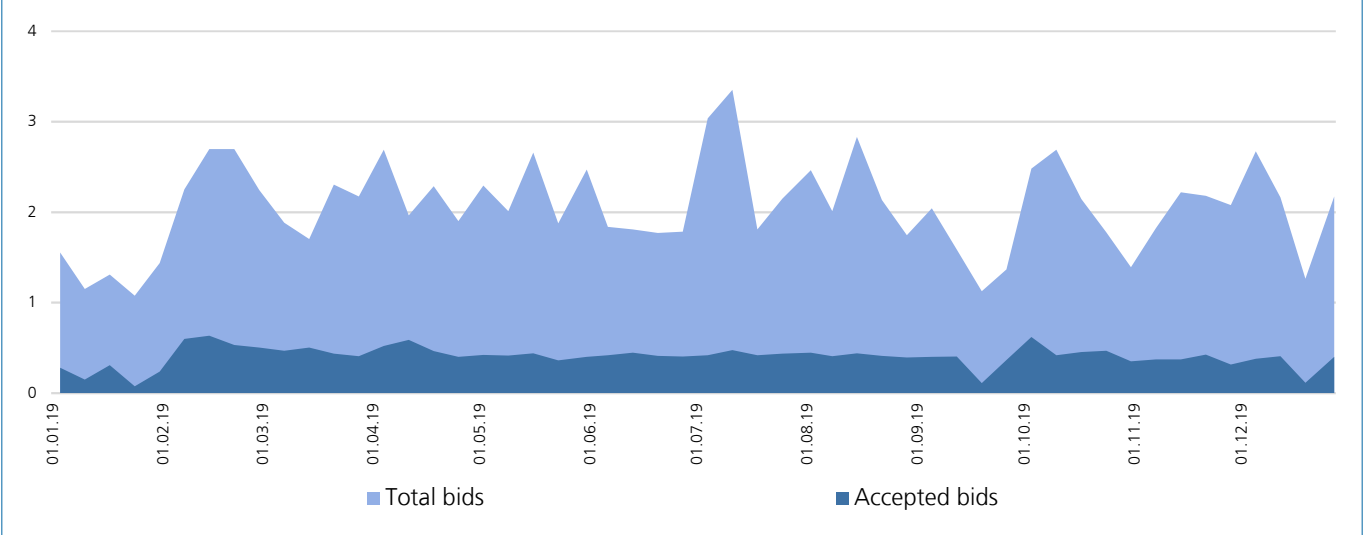
The Confederation's substantial liquidity is not least a side effect of the SNB's expansionary monetary policy. It is also likely to stay high as long as the negative interest rate regime persists. Particularly in the case of withholding tax, many players are likely to delay their refund claims in order to avoid negative interest rates. Conversely, a return to a positive interest rate environment will probably result in substantial outflows of funds for the Confederation.



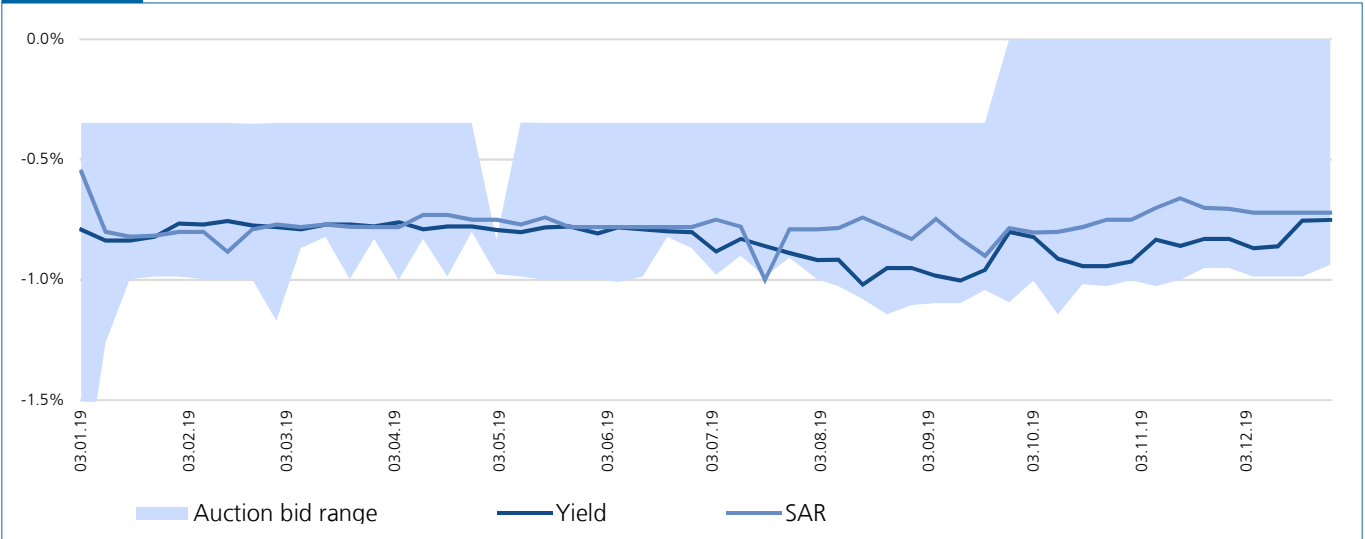
**High liquidity as a side effect of  
negative interest rates**

# Money market debt register claims

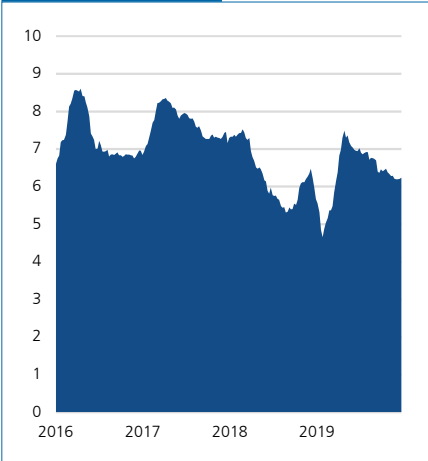
**Auctions in bn**



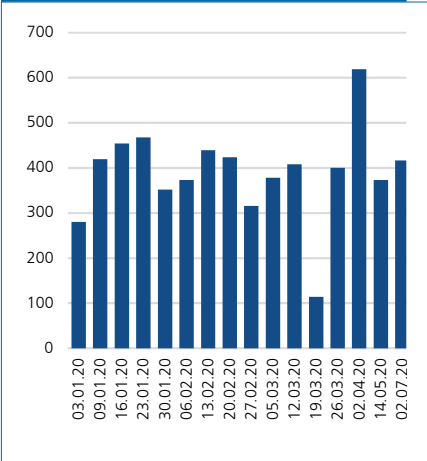
**Yields in %**



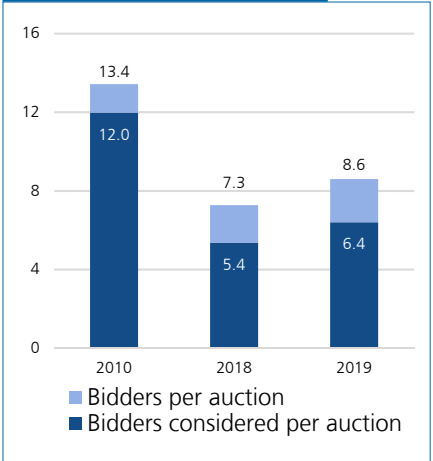
**Outstanding in bn**



**Maturity profile end of 2019 in mn**



**Average number of bidders**



## ■ Funding in the money market

### Money market debt register claims

Due to their short maturities, money market debt register claims are ideal for managing the Confederation's short-term liquidity. Accordingly, in view of the high liquidity and the low funding requirements, the Federal Treasury has allocated restrictively in the weekly auctions of money market debt register claims in recent years, thereby also significantly reducing the outstanding volume of money market debt register claims. The Federal Treasury maintained this approach in 2019, but reached its limits. The high allocation prices, combined with more unfavorable conditions on forex markets for foreign investors, caused demand to plunge at the start of 2019. For example, only CHF 74 million could be allocated at market prices at the January 22 auction.

In order to prevent the risk of domestic investors staying away from the auctions of money market debt register claims altogether, the Federal Treasury cut the allocation prices considerably and thus invested in rebuilding demand. As a result, the yields on money market debt register claims were once again much closer to the SNB policy rate of -0.75%. The volume of money market debt register claims outstanding also rose briefly to over CHF 7 billion. Finally, money market debt register claims of just under CHF 6.2 billion were still outstanding at year-end, which roughly corresponds to the previous year's level and thus to the announcement within the framework of the 2019 issuance program.

The average yield on the money market debt register claims issued last year was -0.84% and thus higher than the corresponding figure for the previous year (-0.88%). Interest receipts of around CHF 54.4 million were generated in 2019. Auction demand picked up again after the decline at the start of the year, with the result that the 2.0 billion bids submitted per auction on average were even higher than the previous year (1.6 bn).

### Money market debt register claims

Money market debt register claims (T-bills) are interest-bearing debt instruments that are issued at a discount by the FFA. These are tradable debt register claims entered in a main register kept by SIX SIS Ltd. Money market debt register claims have maturities of three, six and twelve months. A total of 16 money market debt register claims are always outstanding (11 three-month ones, 3 six-month ones and 2 twelve-month ones). The auctions are held weekly on Tuesdays on the platform of SIX Repo Ltd (rate tender with Dutch or single rate allocation procedure). No nominal interest rate is specified in the case of money market debt register claims; the interest is in the form of a discount at the time of issuance. This means that money market debt register claims are normally issued at a price that is less than 100% of the nominal value. Redemption is then at 100%. However, money market debt register claims are currently being issued at a price of more than 100%, i.e. with a discount surcharge, which means a negative interest rate.

The regular issuance of these money market instruments is an important pillar of the Confederation's refinancing. A liquid market for money market debt register claims that functions well enables the Confederation to raise even larger volumes of borrowed capital at favorable conditions at any time.

**On average,  
the Federal Treasury raised 400 million  
at -0.84% per week**

### Repo market

As part of its liquidity management, the Federal Treasury may in principle borrow on the money market or invest surplus funds as well. However, it has not made use of this possibility since the outbreak of the financial market crisis. Moreover, short-term investing and financing activities have generally shifted to the secured money market, the so-called repo market. The Federal Treasury has been an official participant in the Swiss repo market since the beginning of 2019. Joining the repo market is important particularly in view of the interest rate environment returning to normal. At that time, the Confederation will also need to participate in the secured money market in order to minimize counterparty and refinancing risk, optimize liquidity management and ensure the Confederation's ability to fulfill its payment obligations at all times. In 2019, the Federal Treasury restricted itself to just a few transactions with minimal volumes in order to check the readiness and functionality of systems and processes.

### Repo transactions

Repos (repurchase agreements) are financial transactions in which a lender provides cash to a borrower for a specified period of time in exchange for collateral (e.g. bonds). They essentially consist of two transactions, a spot and a forward transaction. In the first leg, the borrower sells collateral to the lender (spot transaction). At the same time, the parties agree on the repurchase of the collateral at a future date (forward transaction). In a conventional repo transaction, the lender receives interest at the repo rate in addition to the amount lent when the transaction is completed. Repos normally have terms of between one day and 12 months. They are an important component of the interbank market and provide the financial system with liquidity. Moreover, the SNB uses repo trading to implement its monetary policy strategy by keeping the short-term repo rate – the Swiss Average Rate Overnight (SARON) – close to its policy rate. An important feature of repos compared with other financial transactions is the considerable reduction in credit risk achieved through the exchange of collateral. The Federal Treasury joined the repo market at the beginning of 2019.

## ■ Funding in the capital market

The issuance calendar published in December 2018 envisaged funding of CHF 2.5 billion in 2019. This figure was marginally undershot with the actual issues.

### Auction review

In 2019, the Federal Treasury raised long-term funds on the capital market with ten auctions. Two bonds were issued in six auctions and one bond in each of the remaining auctions. Aside from the usual break in August, the optional auction date in October was not maintained. Overall, bonds worth CHF 2.2 billion at market prices were issued (2018: 2.3 bn). The premiums included in this figure – reported on an accrual basis or amortized as part of financing activities since 2018 based on the applicable accounting standards in accordance with the International Public Sector Accounting Standards (IPSAS) 28–30 – were slightly higher than the previous year at CHF 144 million (2018: 76 mn). The low premiums can be explained by the fact that, with one exception, only bonds issued in the low interest rate environment were reopened in 2019. Accordingly, the market interest rate in the 2019 auction was close to the coupon and the premium was low.

Taking account of the bond with a face value of CHF 5.8 billion maturing in 2019 (issue 2004), the volume of outstanding Confederation bonds decreased by CHF 3.7 billion to CHF 61.1 billion in nominal terms. Half of the bonds auctioned last year had a term to maturity (interest commitment) in the segment between 10 and 15 years. The 2032 bond issued in 2019 was also in this category. Most of the remaining bonds were issued with long to very long maturities of between 16 and 36 years, including the second new issue maturing in 2039. In contrast, only one bond with a term to maturity of less than 10 years was reopened. The average term to maturity of the bonds newly issued and reopened in 2019 was 17.5 years (2018: 20.1 years). 11 of the 16 bonds auctioned were issued with negative yields. The weighted average yield was at its lowest ever level at -0.12% (2018: 0.26%). No own tranches were sold in 2019.

The weighted average yield of the issuance program was negative for the first time in 2019 at -0.12%

### Confederation bonds

Confederation bonds are the Confederation's most important instrument for covering its long-term funding requirements. The auctions generally take place on the second Wednesday of every month and are carried out on the platform of SIX Repo Ltd: upon issuance, only the nominal interest rate (coupon) and maturity are defined, while the issue amount and issue price (and thus the yield) are determined on the basis of the bids submitted by the platform participants (banks and insurance companies). Like with money market debt register claims, the Federal Treasury allocates the bonds according to the single rate ("Dutch") procedure, i.e. uniformly at the lowest acceptable price. The SNB is responsible for the technical and administrative processing of the auctions.

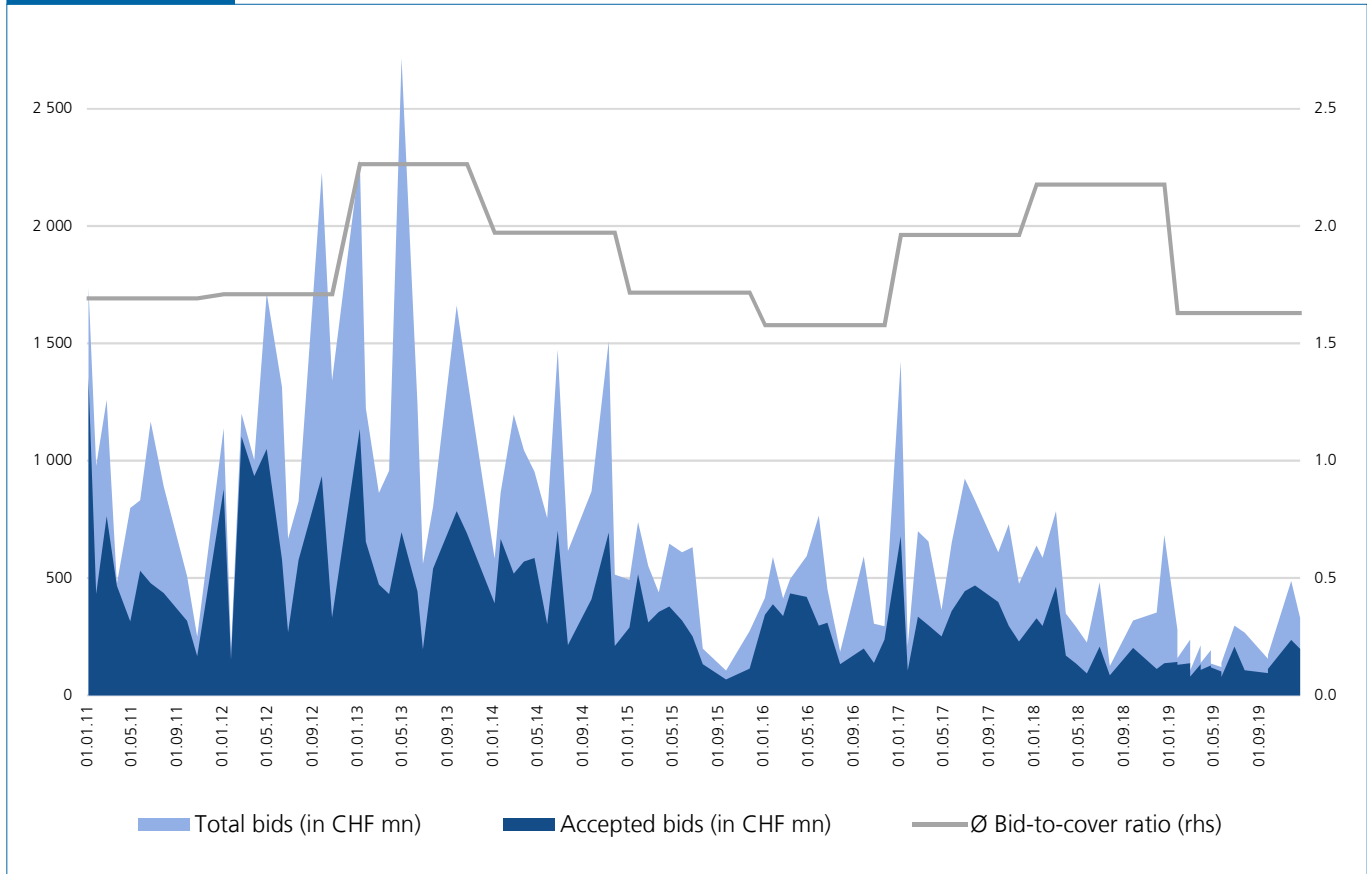
Confederation bonds are listed on the Swiss stock exchange (SIX Swiss Exchange). The Confederation holds a limited volume of securities as proprietary holdings (first time not yet

placed). These so-called own tranches are retained from auctions and if needed can be sold directly on the market between the ordinary auction dates. An overview of the own tranches available can be found on the FFA and SNB websites.

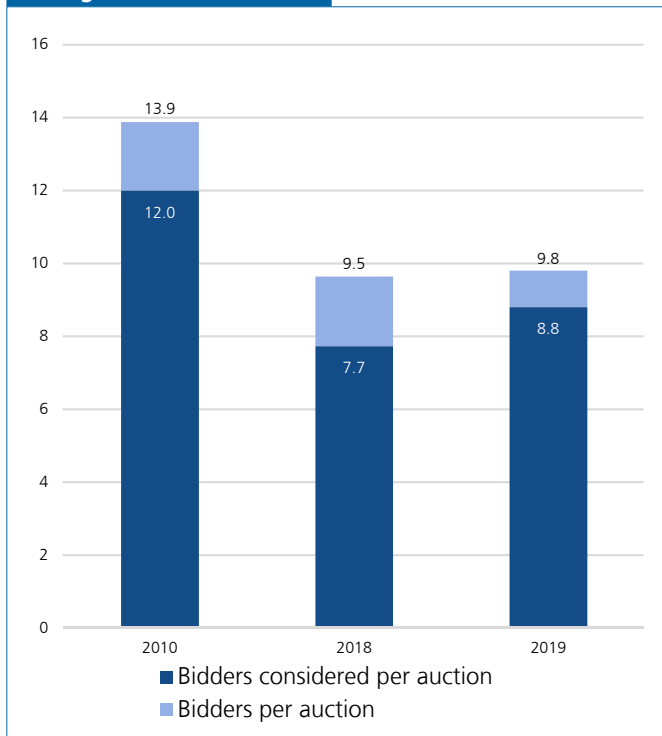
Confederation bonds contain a reopening clause. As a result, a bond can be reopened with several auctions, thereby increasing its liquidity on the secondary market. The outstanding Confederation bonds, with their respective terms to maturity and yields, form the yield curve for government bonds. These yields constitute the risk-free reference interest rates for market participants, which allows for an efficient primary and secondary market not just for bonds, but also for associated interest rate derivatives.

## Development of the primary market for Confederation bonds

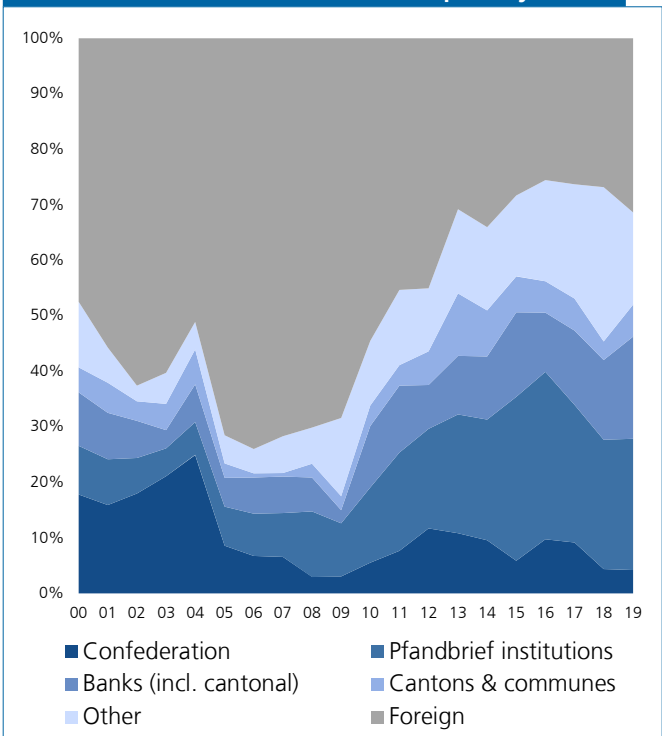
### Bids and allocation



### Average number of bidders



### Share of Confederation bonds on CHF primary market



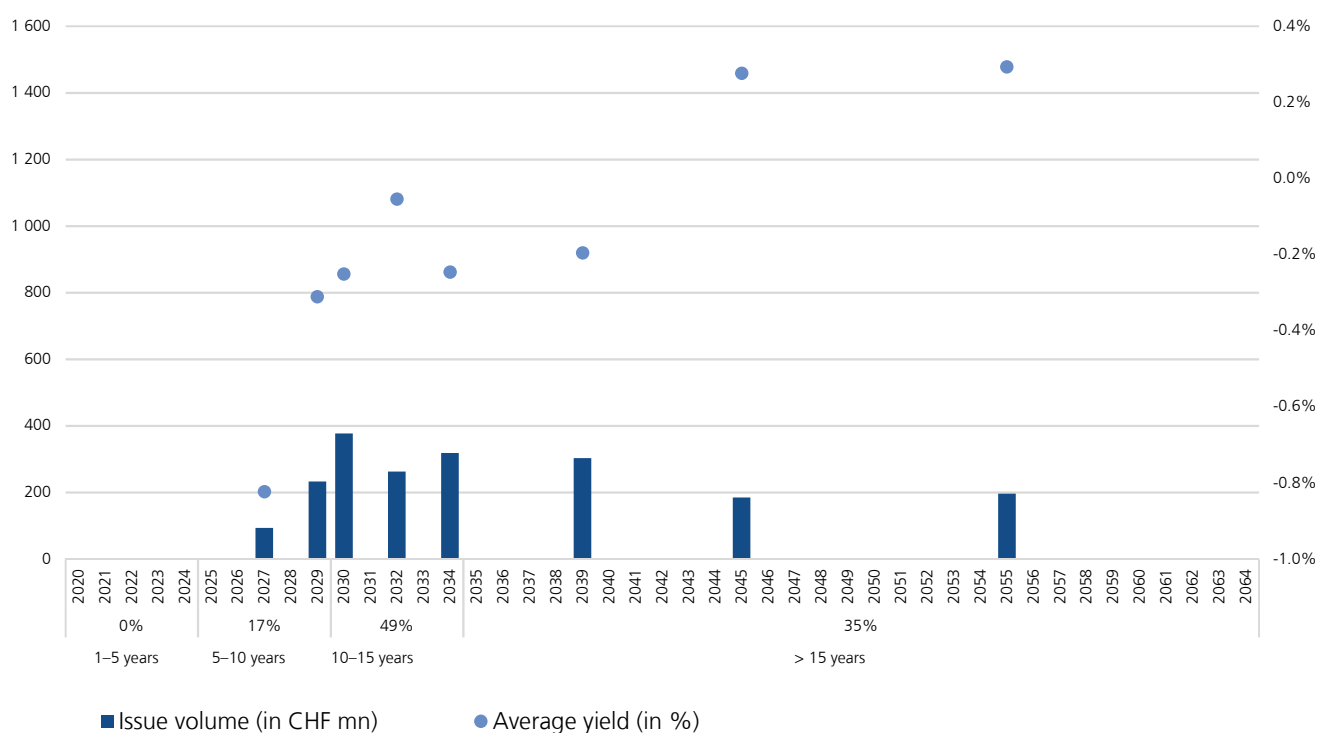
Source: SNB

## 2019 bond auctions

### Auction results

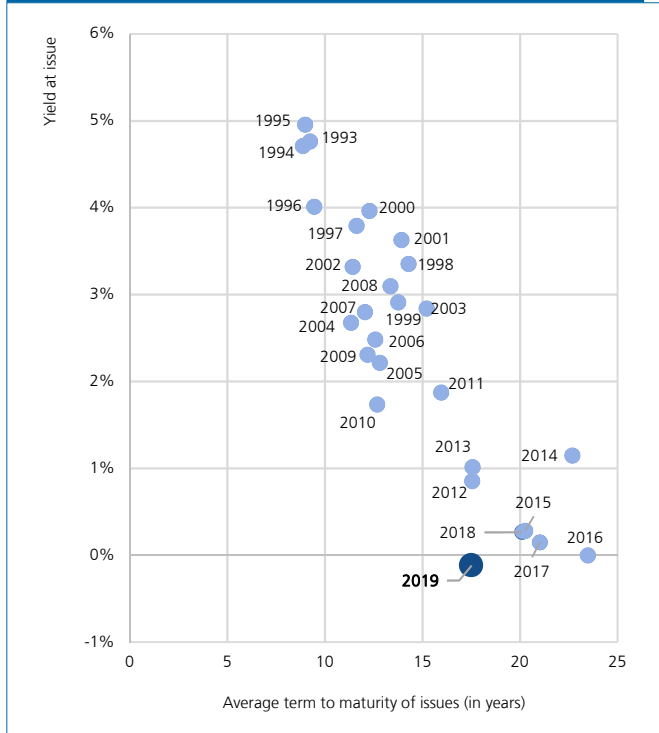
Auction	Issue	Coupon	Maturity	Issue volume (in CHF mn)	Total outstanding (in CHF mn)	Yield	Spread to swap
13.12.2017	Conf.27.05.15/30	0.500%	27.05.2030	193.800	1565.7	-0.016%	-39.6
13.12.2017	Conf.30.05.16/58	0.500%	30.05.2058	134.000	1131.3	0.334%	-41.5
10.01.2018	Conf.27.06.07/27	3.250%	27.06.2027	200.200	2143.6	-0.159%	-37.9
10.01.2018	Conf.28.06.17/45	0.500%	28.06.2045	95.300	482.8	0.337%	-41.9
14.02.2018	Conf.22.06.16/29	0.000%	22.06.2029	248.300	1710.4	0.206%	-41.7
14.02.2018	Conf.24.05.17/55	0.500%	24.05.2055	213.400	712.8	0.699%	-31.9
14.03.2018	Conf.27.05.15/30	0.500%	27.05.2030	91.200	1656.9	0.249%	-38.3
14.03.2018	Conf.30.05.16/58	0.500%	30.05.2058	76.850	1208.1	0.671%	-31.7
10.04.2018	Conf.22.06.16/29	0.000%	22.06.2029	134.350	1844.8	0.077%	-40.0
09.05.2018	Conf.24.05.17/55	0.500%	24.05.2055	91.950	804.8	0.568%	-41.1
13.06.2018	Conf.27.06.18/32	0.500%	27.06.2032	206.200	206.2	0.296%	-46.2
11.07.2018	Conf.27.06.18/32	0.500%	27.06.2032	84.450	290.7	0.215%	-44.9
12.09.2018	Conf.28.06.17/45	0.500%	28.06.2045	201.150	684.0	0.556%	-45.1
14.11.2018	Conf.27.06.18/32	0.500%	27.06.2032	111.200	401.9	0.238%	-48.3
12.12.2018	Conf.22.06.16/29	0.000%	22.06.2029	135.488	1980.3	-0.071%	-49.1
<b>Total</b>				<b>2217.8</b>		<b>0.265%</b>	<b>-41.2</b>

### Maturities and yields

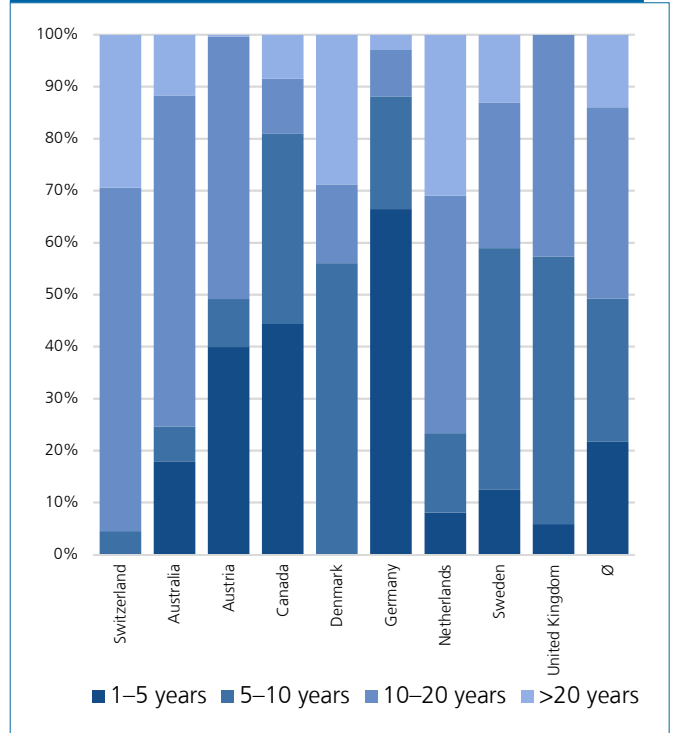


## Interest commitment and term to maturity

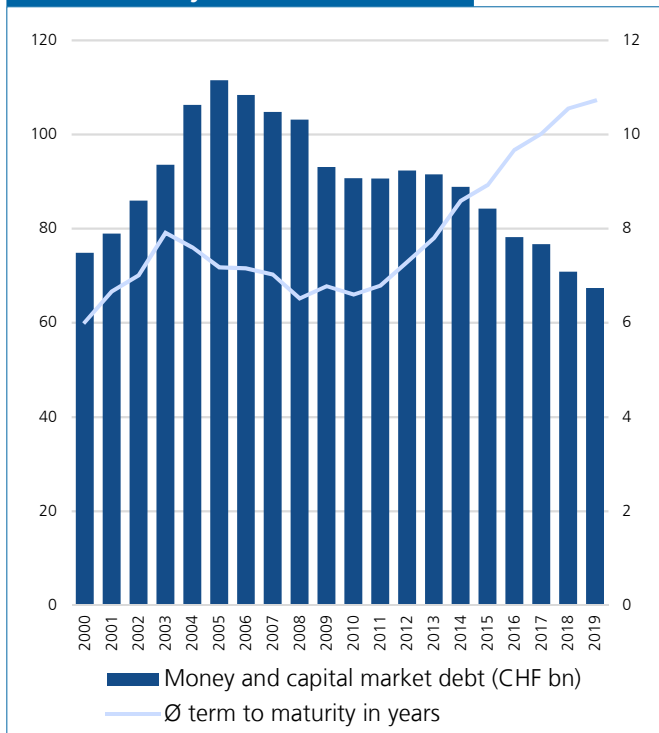
Interest commitment and yield of Confederation bonds



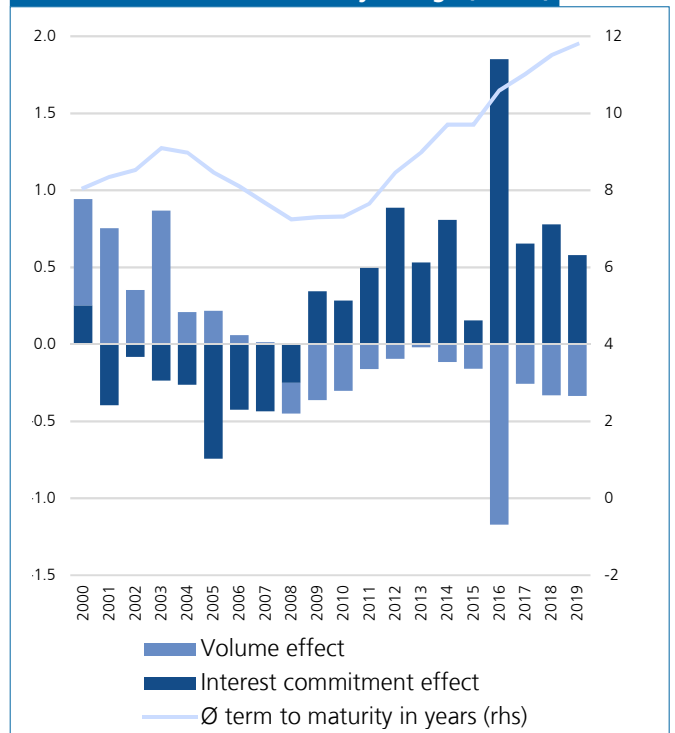
Comparison of government bond interest commitment



Term to maturity of federal market debt

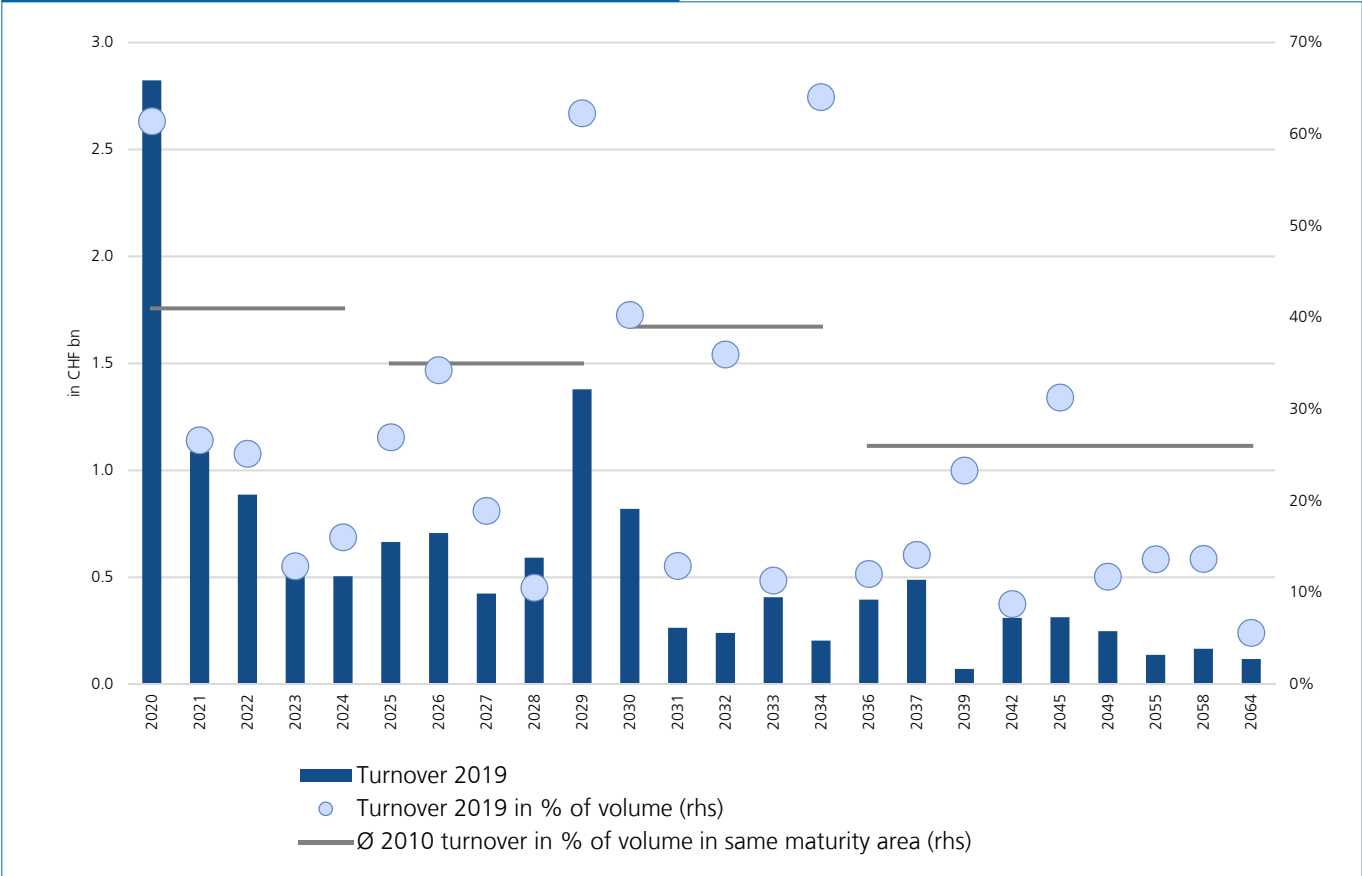


Breakdown of term to maturity change (bonds)

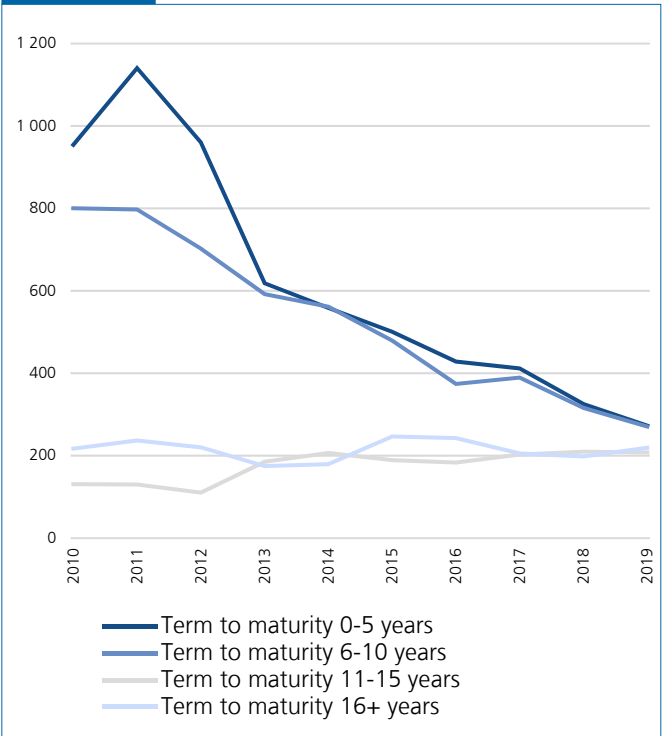


# Development of the primary market for Confederation bonds

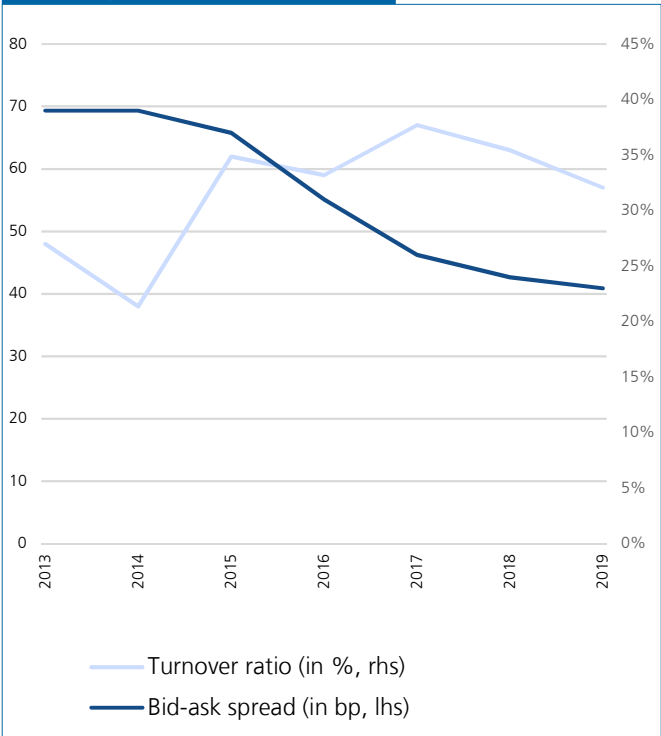
## Confederation bond trading volumes on secondary market



## Transactions



## Bid-ask spread and turnover ratio



Source: SIX

### Issuing principles of the Federal Treasury

1. The Confederation is committed to an efficient Swiss capital market that functions well, thereby ensuring regular and reliable refinancing opportunities. By issuing bonds, it makes sure that the most important maturities of 1 to 13 years are covered with liquid bonds. In the case of extremely long maturities, intermittent anchor points are to be placed on the yield curve with individual bonds.
2. The Confederation's debt portfolio comprises around 20 underlying bonds. There is only one bond per maturity.
3. The issuance program, together with auction dates and the gross and net annual funding requirements, is publicly communicated in December of the previous year.
4. Bond auctions take place on a monthly basis, with a summer break in August. Two dates are optional (usually October and December).
5. A bond with a maximum volume of CHF 4 billion is to mature per year. A minimum volume of CHF 2 billion is sought with the 10-year benchmark bond.
6. If possible, bonds should mature in the months of May to September; new underlying bonds are launched accordingly during this period.
7. Reopenings are possible for all bonds with a term to maturity of more than one year.
8. Pricing at auctions (allocation) is based on the funding requirement, investor demand, absolute interest rates, bid and offer prices, and the swap spread of the underlying bond.
9. Subject to a funding requirement, own tranches can be acquired from the Federal Treasury at any time at market conditions (pricing same as for bond auctions). Maturities that are not (or no longer) covered by auctions in the respective year are preferred.
10. Bonds with a shorter term to maturity can be redeemed within the framework of liquidity management.

With this long interest commitment, the Federal Treasury once again, with the ALCO's approval, deviated significantly from the issuance strategy defined as optimal in order to benefit from the low interest rates in the long term. This will result in lower interest expenditure in the long run. If interest rates were to remain at the current low level in the long term, opportunity costs would arise in the form of lost negative interest rates. However, additional interest expenditure would not be incurred, as the Confederation can currently finance itself free of charge even in the long term. With the lower interest expenditure, relief can be provided for the budget (debt reduction) or else other task areas of the Federal Administration can be strengthened. The Federal Treasury will return to the optimal strategy if there are concrete indications of the interest rate environment returning to normal. With this long average interest commitment and the high proportion of issues with a term to maturity exceeding 15 years, Switzerland clearly stands out in an international comparison. Aside from Switzerland, only Austria and the United Kingdom had an interest commitment of 15 years or more last year.

#### Overview of the demand structure

With an unchanged number of bidders per auction, demand for the bonds auctioned was still somewhat lower than in 2016–2018 in terms of both the average volume bid and the average amount raised, and was thus significantly lower than in the years prior to the SNB's introduction of negative interest rates. The yields on all outstanding Confederation bond were negative from the summer of 2019. Investors thus remained cautious toward them and looked for alternative investments to avoid negative yields, or at least minimize them.

The bid to cover ratio (the ratio of bids to the allocated volume) averaged 1.6 for all auctions settled in 2019. The allocation was thus somewhat less restrictive than in previous years (average for 2011–2018: 2.0), partly due to the lower bids in volume terms.

Around three quarters of the outstanding Confederation bonds are held by domestic investors: most of the debt securities are held by insurance companies, investment funds and pension funds. Foreign investors hold just over a fifth. The share of these investors is around 6 percentage points lower than a year earlier and is thus returning close to the level seen at the start of the decade. Banks' proprietary holdings account for the remaining 5%.

#### Trend of secondary market liquidity

On the one hand, the declining volume of outstanding bonds is affecting the Confederation's position on the Swiss capital market. On the other hand, the tradability of Confederation bonds on the secondary market has likewise declined with the reduction in debt. A liquid market is important for the Federal Treasury for various reasons, which is why it is also committed to an efficient capital market that functions well (see section 1 on issuing principles). First, high levels of secondary market liquidity facilitate the Federal Treasury's smooth access to the primary market (auctions) and have a positive impact on financing costs. Second, insufficient liquidity has the potential to adversely affect the Swiss capital market's efficiency, as Confederation bond yields act as a benchmark for other market participants and Confederation

bonds play a prominent role as a safe investment vehicle. However, they can perform these and other important functions only if their secondary market is sufficiently liquid. In principle, a market can be described as liquid if quite large volumes of a security can be traded quickly, at low cost and without a sustained price effect (i.e. the price moves back toward the equilibrium price after a large transaction has been concluded).

A look at the Confederation bonds traded on the market over the past 10 years shows that secondary market liquidity as measured by various indicators has declined, and the drop is striking in some cases. The monthly volume of Confederation bonds traded has fallen from just under CHF 4 billion at the beginning of the last decade to just over CHF 1 billion in 2019. The picture is similar when the total number of transactions carried out is analyzed: while around 2,000 Confederation bond transactions were observed per month in 2010, the number now stands at just under 1,000 transactions. The development of bid-ask spreads (the difference between the highest bid price and the lowest offer price) since 2012 confirms the diminishing secondary market liquidity. The average bid-ask spread has widened by around a third for all outstanding bonds. This means that Confederation bonds are no longer by far the most liquid bonds on the Swiss capital market, as was still the case in 2010. The bonds issued by the Pfandbrief institutions now have comparable secondary market liquidity. However, Confederation bonds still stand out in that the individual transactions involve significantly higher volumes on average than those of Pfandbrief bonds.

### ■ Foreign exchange management

The Federal Administration's foreign currency requirements have been covered centrally and systematically hedged by the Federal Treasury since 1998. From the FFA's perspective, exchange rate developments essentially cannot be predicted. Accordingly, the Federal Treasury pursues a passive approach and does not apply active strategies involving changing exposure to rising and falling exchange rates. Hedging gives the administrative units planning certainty, and overruns of approved credits due to negative forex fluctuations can be avoided. The Federal Treasury distinguishes between budgetary transactions and special transactions:

#### Budgetary transactions

In the case of budgetary transactions, the administrative units' budgeted euro and USD requirements for the coming year are hedged. Foreign currencies are purchased forward in parallel with the budget process (February to July). The budgeted volumes are purchased on an ongoing basis in batches of 5–10 million. By following this approach, an average exchange rate that corresponds to market developments is achieved, i.e. the budget rate more or less corresponds to the average exchange rate for the first two quarters. The FFA makes the purchased foreign currencies available to the administrative units at the exchange rates fixed in the budget.

A total of 683 million euros and USD 611 million was purchased forward in 2018 for the 2019 budget year. The currencies were procured in the first half of 2018 at average rates of 1.16 for CHF/EUR and 0.94 for CHF/USD, respectively. During the hedging phase, the value of the euro was sometimes just under CHF 1.20. However, the franc appreciated continuously from the second half of the year. The average spot rate in 2019 was 1.11 for CHF/EUR, which was significantly below the purchase rate. In retrospect, hedging resulted in opportunity costs of around CHF 49 million. The story was different for the USD: from the second half of 2018 onward, the USD traded very close to parity with the Swiss franc, with the result that purchasing the required USD forward was cheaper than purchasing it on an ad hoc basis. The corresponding opportunity gains amounted to around CHF 40 million.

In the year under review, a total of 647 million euros and USD 612 million was purchased forward for the 2020 budget year with budget rates of 1.15 for CHF/EUR and 1.00 for CHF/USD.

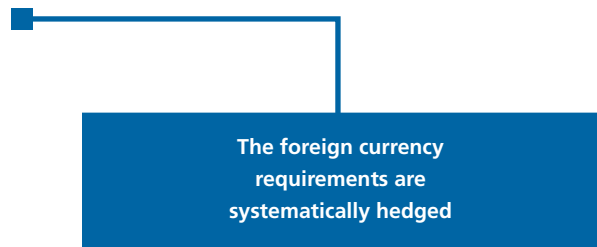
Since the introduction of currency hedging in 1998, euro and USD sums of around CHF 25 billion have been purchased within the framework of budgetary transactions – in other words, the equivalent of 1.1 billion francs' worth of euro and USD on average each year. Hedging over this period resulted in opportunity costs for the Confederation of CHF 71 million, or 0.3% of the hedged volume.

#### Special transactions

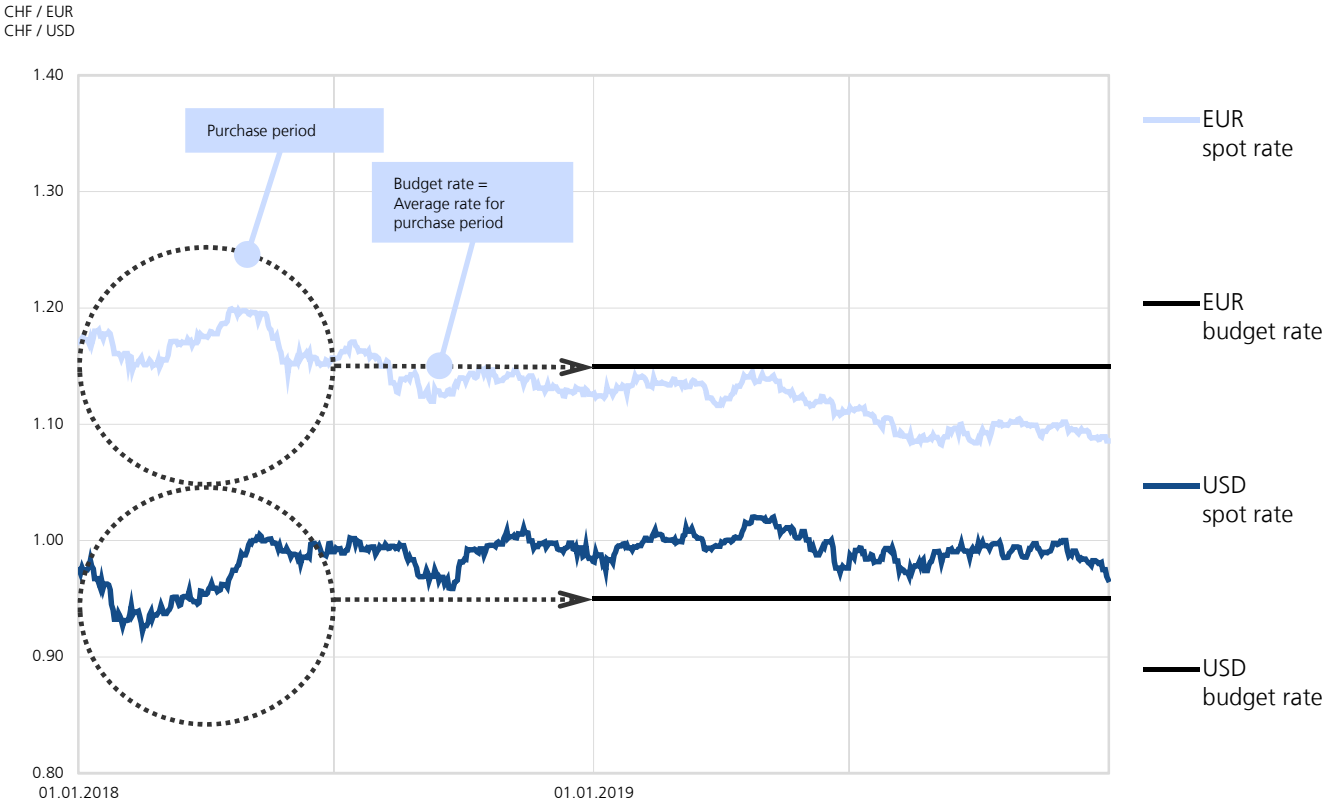
Special transactions are predetermined payments in foreign currencies made over a period of several years within the framework of a credit line. Like the budget requirements, they are fully hedged in a bid not to exceed the CHF amount of the credit line due to negative forex fluctuations and to ensure planning certainty for the administrative units.

During the year, three new special transactions worth approximately CHF 160 million (EUR 47 million, NOK 233 million and USD 90 million) were carried out for the defense task area. As of the end of 2019, a total of 28 special transactions with an aggregate value of CHF 1.6 billion were open (EUR, USD, NOK and SEK).

Relative to a non-hedging strategy, opportunity costs of around CHF 260 million, or 2.4% of the hedged volume, have accrued for all payments arising from special transactions that have become due (2000–2019).



Foreign exchange management



Data: Bloomberg

10.7

years

is the average term to maturity of the Confederation's market debt.

# Presentation and evaluation of the risk situation

The Confederation's general risk policy is defined by the Federal Council. The Confederation is prepared to assume risks in a controlled and deliberate manner, provided that this is unavoidable for the achievement of objectives or the performance of tasks. Risks should be minimized (instructions on the Confederation's risk policy).

Aside from interest rate and refinancing risks, forex and counterparty risks must also be taken into account by the Federal Treasury when performing its main tasks.

## ■ Interest rate risk

The interest rate risk for the Federal Treasury is determined by the existing maturity profile and the planned new transactions. It is managed mainly by means of issuing activity. The debt strategy stipulated by the ALCO determines the issuing activity and thus the maturities of new transactions.

Dynamic simulation analyses are used to analyze the effects of various issuance strategies and different interest rate scenarios. A cost-at-risk approach is used to examine the development of interest payable and its fluctuations. Information is thus obtained to optimize the debt strategy from a cost and risk perspective. Moreover, the degree to which interest payable can fluctuate can be estimated, also with regard to the budget and financial plan.

The interest rate risk is closely linked to the refinancing risk. High short-term maturities entail high interest rate risks, while long maturities dampen the risk of interest rate fluctuations.

An interest expense projection shows the trend of interest payable under various interest rate scenarios with an unchanged issuance strategy. In the process, the development of debt in accordance with the budget and financial plan is factored in. The interest rate paths from the stochastic simulation are based on an interest rate model that was calibrated for a period with rising interest rates. The mean is derived from this, as are the 10% and 90% quantiles for the development of interest payable.

## Analysis of the interest rate risk

The analysis concept pursues both a prospective and a retrospective approach. The prospective approach consists in simulating and analyzing various issuance strategies with different interest rate trends over a period of up to ten years. On the one hand, selected deterministic interest rate scenarios are used. On the other, stochastic interest rate models are also used to generate a large number of interest rate paths. This enables a random distribution of potential interest payable to be calculated for different debt portfolios for a given planning period. This in turn makes it possible to establish average expected interest payable, as well as possible deviations and their probability (cost-at-risk approach). Based on this data, different issuance strategies can be compared with respect to the expected interest payable (cost dimension) and its future fluctuation ranges (risk dimension).

In the retrospective analysis, differently composed debt portfolios are analyzed on the basis of actual interest rate developments and compared with effective interest payable. This means that the issuance strategy followed can be evaluated ex post and measured against other strategies. Moreover, this approach is also suitable for analyzing the different portfolios in typical sub-periods of interest rate development (rise in interest rates, inverted yield curve, etc.) and thereby gaining insights for strategy formulation.

The baseline scenario is derived from macroeconomic assumptions and the corresponding interest rates of the federal government's economic forecasts expert group. A continuation of the very low interest rate environment is expected in the short term, with negative interest rates for short maturities. Interest rates are expected to normalize in the medium term, i.e. it is assumed that they will rise gradually. This scenario with a moderate rise in interest rates serves as a basis and is expanded upon in this analysis. The extreme scenarios include interest rates remaining low (constant interest rates), as well as an exceptionally sharp and rapid rise of 4 percentage points in interest rates (interest rate shock).

Based on the baseline scenario, the Federal Treasury expects interest payable to fall further over the next four years. Only in the event of an interest rate shock would interest payable rise rapidly. This scenario is unlikely at the moment. In such a case, the additional interest receipts from the investment of liquidity would partly offset the increase in interest payable. Accordingly, the interest rate risk is currently low.

Due to the persistently low interest rate environment and the fact that a normalization of interest rates will not occur until the medium term, the ALCO confirmed the deviation from the issuance strategy defined as optimal (with shorter maturities). In the current environment, even long maturities can be financed at relatively low costs or even with negative yields.

### ■ Refinancing risk

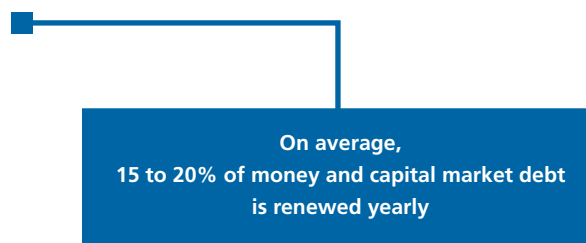
The maturity profile of outstanding market debt and the Confederation's rating are important refinancing risk indicators.

The current maturity profile of money and capital market debt shows a moderate refinancing risk. 16% of market debt is due to mature within a year, and the average term to maturity of the debt portfolio has risen to 10.7 years. Consequently, the targets (or maximum shares) set out in the service level agreement between the FDF and the FFA are clearly undershot. The maturity structure of the debt portfolio could thus be shortened significantly within these specifications.

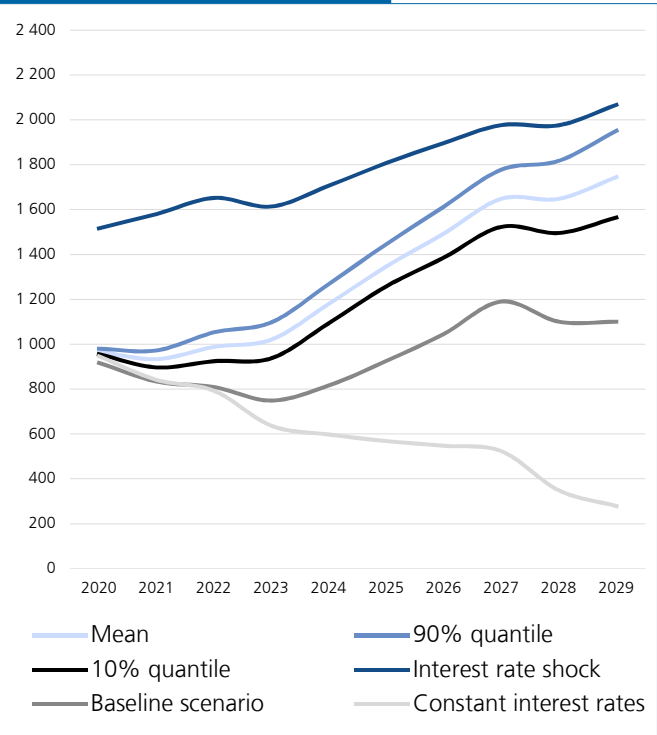
The Confederation's creditworthiness is given the highest rating by all relevant rating agencies. In the wake of the financial crisis, only very few countries maintained this top level of creditworthiness. Even in the case of unfavorable market conditions, the Confederation was able to raise the necessary funds on the money and capital market.

### Highest interest rate risk permissible

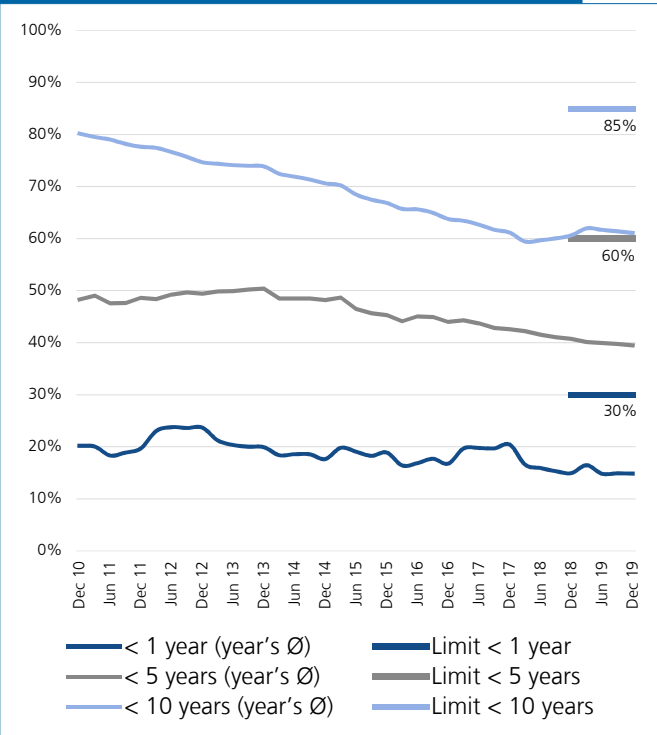
The cumulated risk budget for interest rate risks is CHF 500 million for four years. This takes into account the Confederation's fiscal policy risk capacity and risk tolerance, i.e. the extent to which an increase in interest expenditure can be offset in another way without radical measures. This means that the fluctuations in interest expense forecast for the budget and financial plan time horizon may deviate from the mean by a maximum of CHF 500 million on a cumulative basis (90% quantile less mean). In the worst case, the corresponding risk can also occur within a year. The annual average for this interest rate risk was CHF 67 million in 2019.



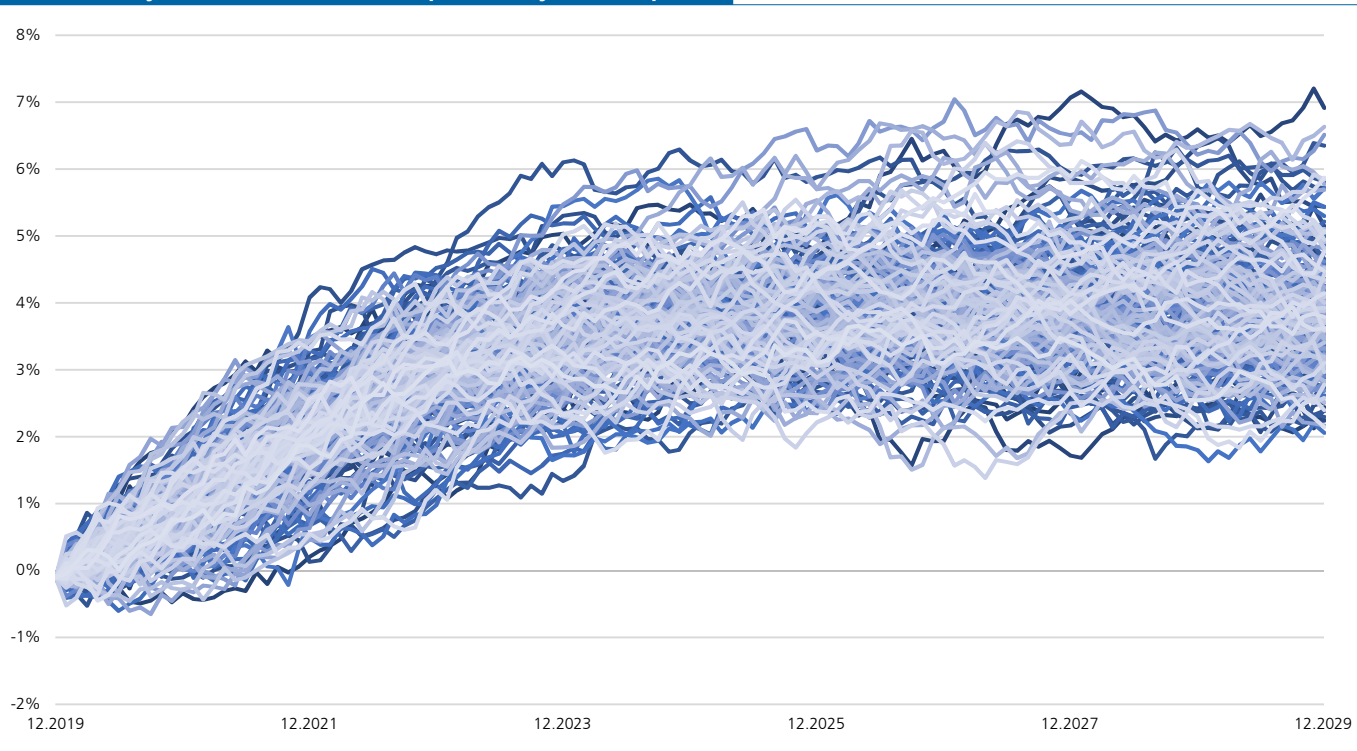
**Interest expense projection in mn**



**Maturity shares of money and capital market debt**



**Stochastically simulated interest rate paths (10 years swap rate)**



### ■ Forex risk

The Federal Treasury purchases foreign currencies for the administrative units. The foreign currency requirements for the budget year for the main currencies of euro and USD and the payment obligations arising from special transactions are hedged. Since the Confederation constantly has certain foreign currency requirements, it is generally exposed to exchange rate developments. The primary objective when managing forex risks is thus to ensure adherence to the budget and planning accuracy for expenditure. Overruns of approved credits due to negative forex fluctuations are to be avoided.

From the FFA's perspective, exchange rate developments essentially cannot be predicted. Accordingly, forex risks are systematically hedged using a passive approach. As a result, the Federal Treasury is not exposed to any substantial forex risks.

### ■ Counterparty risk

Counterparty risks for the Confederation arise primarily as a result of short-term deposits (liquidity) and positive replacement values from outstanding currency and interest rate derivatives. These receivables are exposed to default risk. Treasury loans are granted to institutions affiliated with the Confederation and therefore are not part of the counterparty limit system; the amount of the loans is managed by means of treasury agreements. A credit limit concept forms the basis for avoiding losses and risk concentrations. The credit limits are established on the basis of predefined criteria, namely rating, equity, financial strength (in the case of cantons), diversification and instrument type. Risk Control regularly reviews the set counterparty limits and monitors compliance with the limits on a daily basis. The development of permitted counterparties' credit quality is continually reviewed (e.g. rating changes, interim financial statements and other reports). The limits were complied with at all times in 2019.

Liquidity amounted to CHF 23.5 billion at the end of 2019. It was placed with the SNB (at 0%, including the SNB sight deposit account) and thus carries no risk.

The positive replacement values from outstanding currency and interest rate hedging transactions fell last year, going from CHF 181 million to reach CHF 44 million at the end of December 2019. On the one hand, longer-term derivative positions (e.g. currency and interest rate hedging instruments) are entered into with counterparties that have signed a "Credit Support Annex" with the FFA. On the other, such transactions are also conducted with cantonal banks which have a state guarantee.

#### Forex risk

Due to the uncertainty regarding future exchange rate trends, the procurement costs for covering administrative units' foreign currency requirements are uncertain and subject to risk. The value of existing, unrestricted foreign currency positions can change due to exchange rate fluctuations.

**Hedged forex risks  
lead to greater adherence  
to the budget**

**There are no significant  
counterparty risks for  
the Confederation**

# Outlook

The Federal Treasury published the 2020 issuance program in December 2019: it is planning to raise funds of CHF 2.5 billion on the market. Taking into account a maturing bond of CHF 4.6 billion, the reduction of long-term debt is continuing. In view of the high liquidity, the volume of outstanding money market debt register claims is to be kept at around CHF 6 billion. The weekly auction cycle for money market debt register claim issues and the monthly cycle for bond auctions will be maintained, even though the take-up per auction has dropped significantly. Accordingly, the value of the Confederation's outstanding market debt in nominal terms will be reduced further by just over CHF 2 billion to around CHF 65 billion.

In view of the subdued, albeit positive, economic outlook for Switzerland and Europe, and the upcoming presidential elections in the United States, the ECB and the Fed are likely to maintain their current monetary policy. Neither interest rate hikes nor cuts are expected in 2020. The SNB's hands are thus likely to remain tied: there is a broad consensus among economists that interest rates will remain low in 2020 and that Switzerland will have to endure negative interest rates for even longer. A normalization of monetary policy has been pushed further back along the timeline.

For the Federal Treasury, this means that it will continue to deviate from the optimal issuance strategy from a risk-bearing capacity perspective, will tend to issue longer-dated bonds and will persist in not fully utilizing its available risk budget. The rather weak auction demand for Confederation bonds and short-term money market debt register claims remains challenging. The Confederation's funding requirement will be below average once again in 2020, and liquidity will remain above average. The Federal Treasury will keep a close eye on these developments and look for ways to promote both auction participation and secondary market liquidity.

The implementation of the new treasury management software will keep the Federal Treasury busy in 2020. Processes are to be highly automated and digitalized, and manual controls and activities are to be reduced to a minimum. In this context, it is planned that Confederation bonds will no longer be held in the form of global certificates, but rather as uncertificated securities. This will change nothing for investors, but the use of uncertificated securities will make settlement much easier. The Financial Budget Act will need to be amended to allow this change to be implemented for all bonds at once. A corresponding revision has already been initiated. If everything goes according to plan, the switch to uncertificated securities should take place in the course of 2022.





