

# FOREIGN EXCHANGE RESERVES

Management of the foreign  
exchange reserves

1 | 2021

MAY 2021

REPORT FOR  
FIRST QUARTER  
2021

# 1 MANAGEMENT OF THE FOREIGN EXCHANGE RESERVES

The foreign exchange reserves shall be available for transactions in the foreign exchange market as part of the conduct of monetary policy or with a view to promoting financial stability and to meet Norges Bank's international commitments. The reserves are divided into an equity portfolio, a fixed income portfolio and a petroleum buffer portfolio. The foreign exchange reserves may be invested in cash deposits, Treasury bills and sovereign bonds, and equities listed on a regulated and recognised exchange.

The fixed income portfolio's benchmark index is a market-weighted index of all nominal government bonds with a residual maturity of between one month and 10 years issued by China, France, Germany, Japan, the UK and the US. The equity portfolio's benchmark index is a tax-adjusted global equity index for medium and large-sized companies limited to nine currencies. The strategic equity allocation of the total equity and fixed income portfolio is 20%.

The purpose of the petroleum buffer portfolio is to provide for an appropriate management of the government's need for converting foreign currency and NOK, and to make transfers to and from the Government Pension Fund Global (GPFG). The petroleum buffer portfolio is invested in short-term fixed income instruments. No benchmark index has been set for the petroleum buffer portfolio.

## MAIN POINTS FROM 2021 Q1

- The market value of Norges Bank's foreign exchange reserves was NOK 623.4bn, an increase of NOK 24.9bn since 2020 Q4.
- The return on the foreign exchange reserves was 0.4% in international currency terms. The return on equity investments was 6.3%, while the return on fixed income investments was -1.2%. In NOK terms, the return on the foreign exchange reserves was -1.6%.
- The size and liquidity of the foreign exchange reserves are regarded as sufficient for meeting Norges Bank's commitments.

## INTERNATIONAL CURRENCY

The foreign exchange reserves are held for the purpose of crisis management. Movements in the krone exchange rate will affect Norges Bank's equity, but not the Bank's ability to meet commitments in foreign currency. The petroleum buffer portfolio, which is not held for the purpose of crisis management, is excluded from the measurement of return.

## Foreign exchange reserves

The market value of the foreign exchange reserves was NOK 623.4bn at the end of 2021 Q1. The value increased by NOK 24.9bn from the previous quarter. A stronger krone reduced the value by NOK 11.5bn, while net transfers amounted to NOK 34.9bn. Return in international currency terms increased the value by NOK 2.1bn.

Chart 1-1 Composition of the foreign exchange reserves. In billions of NOK

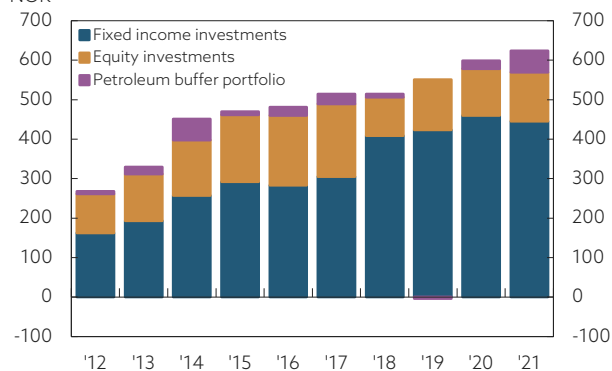


Table 1-1 Market value

	2021 Q1			Foreign exchange reserves
	Fixed income investments	Equity investments	Petroleum buffer portfolio	
<i>In billions of NOK</i>				
Market value (opening)	459.8	118.6	20.0	598.4
Market value (closing)	445.6	124.1	53.7	623.4
<b>Change in market value</b>	<b>-14.2</b>	<b>5.5</b>	<b>33.7</b>	<b>24.9</b>
Net transfers	0.7	0.0	34.3	34.9
Return in NOK terms	-14.9	5.5	-0.6	-10.0

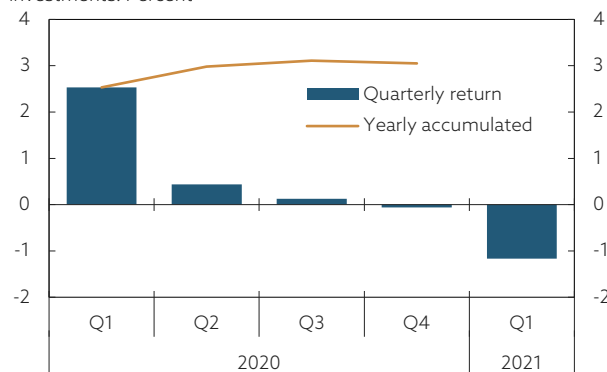
Table 1-2 Details of fixed income and equity investments

	2021 Q1		Total
	Fixed income investments	Equity investments	
<i>In billions of NOK</i>			
<b>Return in NOK terms</b>	<b>-14.9</b>	<b>5.5</b>	<b>-9.4</b>
Return in international currency terms	-5.3	7.5	2.1
Movements in the krone exchange rate	-9.6	-1.9	-11.5
<i>In percent</i>			
Return in international currency terms	-1.17	6.29	0.36
Return in NOK terms	-3.24	4.65	-1.62
Relative return in NOK terms	0.01	0.09	-
Expected relative volatility in NOK terms (annualised)	0.02	0.09	-

## Fixed income investments

The market value of the fixed income investments was NOK 445.6bn, a decline of NOK 14.2bn from the previous quarter. A stronger krone and return in international currency reduced the value by NOK 9.6bn and NOK 5.3bn, respectively. Return in international currency amounted to -1.2%. Net inflows to the fixed income portfolio amounted to NOK 0.7bn.

**Chart 1-2** Return in international currency terms. Fixed income investments. Percent



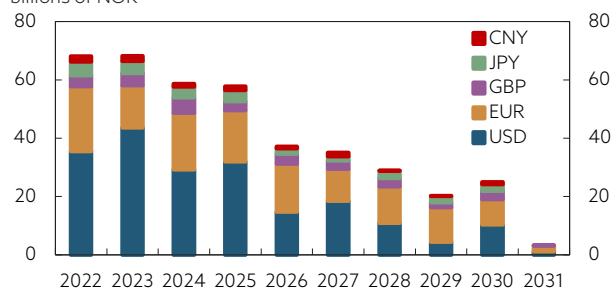
**Chart 1-3** Relative return in NOK terms. Fixed income investments. Basis points



**Table 1-3** Fixed income investments by currency at the end of 2021 Q1. Market value in billions of NOK

	Market value	Share	Duration	Yield
<b>Total</b>	<b>445.56</b>	<b>100.00</b>	<b>3.88</b>	<b>0.19</b>
CNY	8.94	2.01	3.35	2.81
EUR	151.51	34.01	4.47	-0.54
GBP	31.17	7.00	4.38	0.35
JPY	31.33	7.03	4.02	-0.08
USD	222.60	49.96	3.41	0.59

**Chart 1-4** Principal and coupon due per year at the end of 2021 Q1. In billions of NOK



**US** US government bond yields rose markedly in 2020 Q1, with the highest rise in long-term yields. Investments denominated in USD earned a return of -1.5% in USD terms, primarily owing to the rise in long-term yields.

**EUROPE** European yields rose in 2021 Q1, with the highest rise in long-term yields. Investments denominated in EUR earned a return of -0.9% in EUR terms, primarily owing to the rise in long-term yields.

**UK** UK yields rose in 2021 Q1. Long-term yields rose the most and the yield curve steepened. The rise in yields is the main reason why GBP-denominated investments earned a return of approximately -2.1% in GBP terms.

**JAPAN** Japanese yields rose in 2021 Q1, but the rise was less pronounced than in other markets. The return on investments denominated in JPY amounted to -0.1% in JPY terms in the period.

**CHINA** During 2021 Q1, the fixed income portfolio's investments in Chinese government bonds have increased from 0.5 to 2.0%. A corresponding reduction has been made to the UK and Japanese fixed-income portfolio.

## Equity investments

The market value of the equity portfolio was NOK 124.1bn at the end of 2021 Q1, an increase of NOK 5.5bn from the end of 2020. The return in international currency terms increased the market value by NOK 7.5bn, while a stronger krone, in isolation, reduced the value of the portfolio by NOK 1.9bn.

**Chart 1-5** Return in international currency terms. Equity investments. Percent



North American equities posted the highest return, 7.0%. European and Asian equities posted returns of 5.5% and 3.4%, respectively. The energy sector posted the strongest returns in Q1, at 19.8%, while equities related to consumer goods were lowest, at 0.7%.

**Chart 1-6** Relative return in international currency terms. Equity investments. Basis points



**Table 1-4** Equity investments by sector. At the end of 2021 Q1. In billions of NOK

	Market value	Share
Materials	4	3%
Consumer discretionary	20	16%
Consumer staples	7	6%
Energy	4	3%
Financials	17	14%
Health care	16	13%
Industrials	18	14%
Real estate	3	3%
Technology	27	22%
Telecommunications	5	4%
Utilities	3	2%

**Table 1-5** Equity investments by currency. At the end of 2021 Q1. In billions of NOK

	Market value	Share
AUD	3	2%
CAD	3	3%
CHF	4	3%
DKK	1	1%
EUR	13	11%
GBP	6	4%
JPY	11	9%
SEK	2	1%
USD	83	67%

## Petroleum buffer portfolio

The market value of the petroleum buffer portfolio was NOK 53.7bn, an increase of NOK 33.7bn. During 2021 Q1, NOK 38.3bn worth of foreign exchange was purchased from the State's Direct Financial Interest (SDFI). At the same time, Norges Bank sold NOK 87.4bn worth of foreign exchange in the market. A total of NOK 83.3bn was transferred from the GPF to the petroleum buffer portfolio.

## Financial risk

The foreign exchange reserves are invested in foreign currency, while Norges Bank's liabilities are mainly denominated in NOK. This means that movements in the krone exchange rate will have a considerable impact on Norges Bank's earnings in NOK terms. A stronger krone will reduce the krone value of the foreign exchange reserves, while a weaker krone will increase the krone value. For the purpose of crisis management, however, the krone value of the foreign exchange reserves will be of secondary importance. Excluding changes in the krone value, the financial risk associated with the foreign exchange reserves comprises market, credit and counterparty risk.

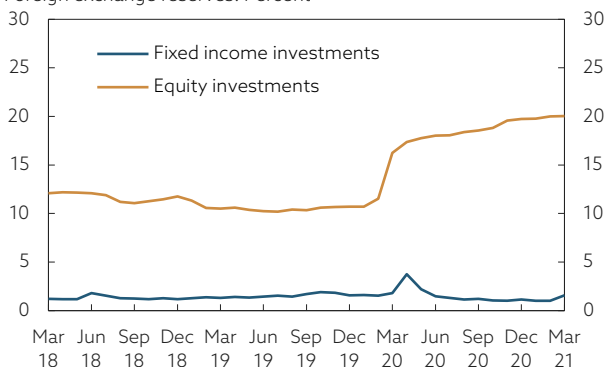
The foreign exchange reserves' market risk is determined by the composition of investments and movements in equity prices, interest rates and credit spreads. For equity and fixed income investments, expected absolute volatility at the end of 2021 Q1 excluding exchange rate movements was 20.0% and 1.6%, respectively. This corresponds to an expected annual fluctuation in value of approximately NOK 24.9bn and NOK 7.0bn, respectively. At the same time, expected relative volatility for equity and fixed income investments was 0.09 and 0.02 percentage point, respectively.

### EXPECTED RELATIVE VOLATILITY

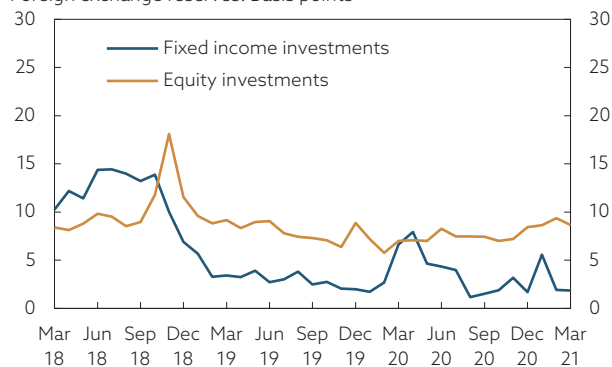
Under the Executive Board's principles for the foreign exchange reserves, maximum expected relative volatility is set at 50 basis points for both fixed income and equity portfolios. This means that the return on the portfolio relative to the benchmark index is expected to be within  $\pm 50$  basis points in two out of three years.

Credit and counterparty risk is defined as the risk of losses if issuers or counterparties default on payment obligations. The credit risk on bond and Treasury bill investments in the foreign exchange reserves is low. The lowest credit ratings from the three largest rating agencies Fitch, Moody's and Standard & Poor's, were equivalent to AAA for the German government, AA+ for the US government, AA for the French government, AA- for the UK government, A+ for the Chinese government and A for the Japanese government.

**Chart 1-7** Absolute volatility, excluding exchange rate movements. Foreign exchange reserves. Percent



**Chart 1-8** Relative volatility, including exchange rate movements. Foreign exchange reserves. Basis points



# 2 COMMITMENTS TO THE IMF

Pursuant to the Central Bank Act, Norges Bank shall meet the commitments ensuing from membership of the International Monetary Fund (IMF). This membership entails a standing commitment to furnish foreign exchange for IMF loans to other member countries.

Loan resource commitments under the quota, the New Arrangements to Borrow (NAB), bilateral agreements and the Poverty Reduction and Growth Trust (PRGT) were SDR 10 673m<sup>1</sup> at 31 March 2021, of which the IMF had drawn SDR 1 380m at the end of 2021 Q1. The total remaining amount that can be drawn under these arrangements is SDR 9 657m<sup>2</sup>. From 1 January 2021, the drawing facility under the NAB was doubled to SDR 3 933m. At the same time, the drawing facility under the bilateral agreements was reduced from SDR 6 000m to SDR 2 585m. In all, Norges Bank's commitments to the IMF were reduced by SDR 1 448m. The size and liquidity of the foreign exchange reserves are assessed to be sufficient to meet Norges Bank's international commitments.

**QUOTA SUBSCRIPTIONS** are the IMF's primary source of funding and reflect the member country's relative size in the global economy. Norway's quota subscription is SDR 3 755m. At the end of 2021 Q1, the amount drawn<sup>3</sup> totalled SDR 960m, which is unchanged on 2020 Q4 (Chart 2-1).

**NAB** (New Arrangements to Borrow) represents the IMF's second line of defence. Under the NAB, a number of member countries and institutions are committed to lending additional resources to the IMF. The IMF Executive Board must specifically decide to activate the NAB to fund new lending by drawing on the NAB. Norges Bank's commitments under the NAB amount to SDR 3 933m (Chart 2-2). Total outstanding drawings were SDR 56m at the end of 2021 Q1. SDR 28m was repaid in Q1.

Chart 2-1 IMF quota. In billions of SDRs

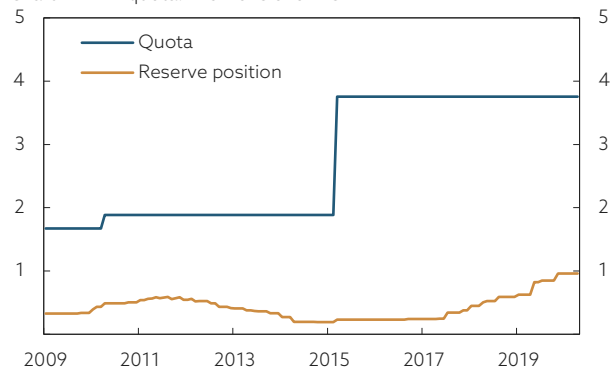
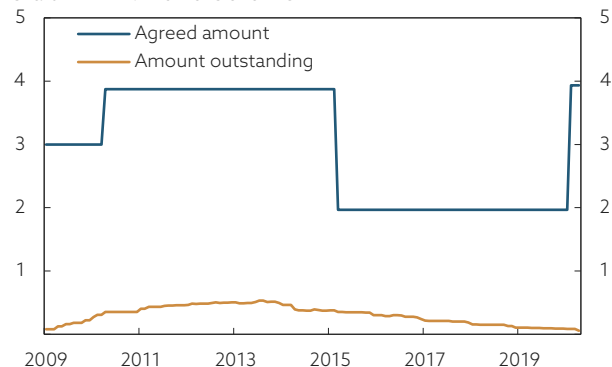


Chart 2-2 NAB. In billions of SDRs



<sup>1</sup> Special Drawing Right (SDR). The SDR is an instrument the IMF can use to allocate international liquidity. The value of the SDR is based on a basket of five currencies: USD, EUR, JPY, GBP and CNY.

<sup>2</sup> The commitments include the 2020 arrangement under PRGT, but not the 2010 and 2016 agreements, as they can no longer be drawn on. The same applies for the total remaining amount that can be drawn. Amount outstanding includes all arrangements.

<sup>3</sup> The amount drawn is equal to Norway's reserve position in the IMF.

**BILATERAL AGREEMENTS** serve as the IMF's third line of defence after quota subscriptions and the NAB. At the end of 2021 Q1, no amounts had been drawn on these agreements. Norges Bank's borrowing agreements with the IMF are subject to the approval of the Ministry of Finance (cf Section 3-10, Sub-section 2, of the Central Bank Act).

**PRGT** The Ministry of Finance has signed loan agreements with the IMF under the PRGT (Poverty Reduction and Growth Trust), which contribute to the IMF's borrowing arrangements for low-income member countries. Norges Bank signed borrowing agreements in both 2010 and 2016, and under each, Norway provided SDR 300m. These facilities for the PRGT are now fully drawn and under the agreements, only repayments will now be made (Chart 2-3 and Chart 2-4). Repayments made under the 2010 agreement in 2021 Q1 totalled SDR 17m. With effect from 1 July 2020, an additional borrowing agreement was entered into (the 2020 agreement) under which Norway will provide the PRGT with SDR 400m. At the end of Q1, this agreement had not been drawn on. Norges Bank is the agent for PRGT loans and administers the commitments.

Chart 2-3 PRGT 2010 agreement. In billions of SDRs

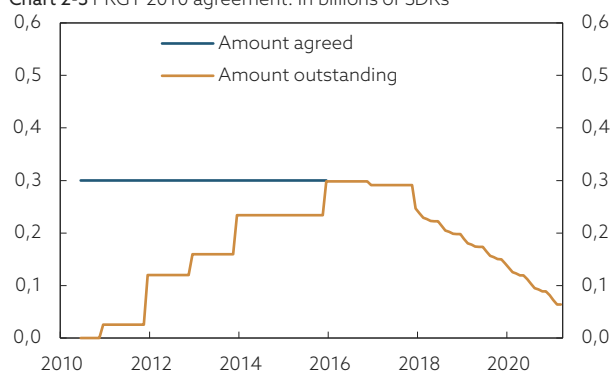
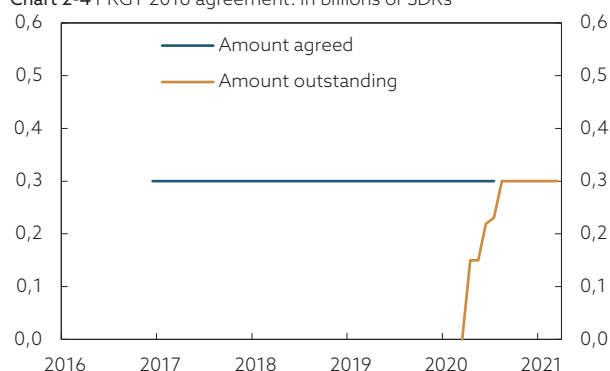
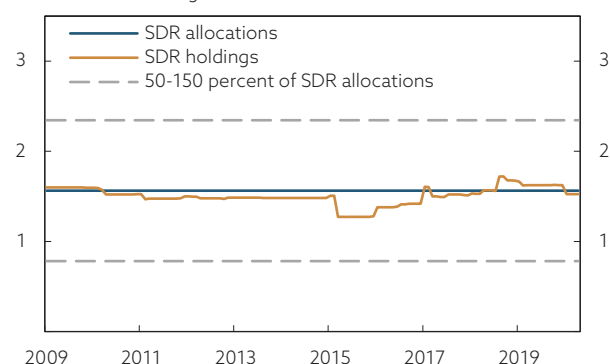


Chart 2-4 PRGT 2016 agreement. In billions of SDRs



**SDR HOLDINGS** are allocated by the IMF to member countries. Member countries may change their SDR holdings by purchasing from or selling to members who have voluntarily agreed to be a counterparty in SDR transactions. In 2009, Norges Bank entered into an agreement with the IMF on the voluntary purchase and sale of SDRs, as long as holdings remain within 50%-150% of SDR allocations. Thus, if other countries wish to sell SDRs, Norges Bank may have to increase holdings of SDRs to SDR 2 345m. Purchases of SDRs are charged to the foreign exchange reserves. The agreement also gives Norges Bank the right to sell SDRs. In 2021 Q1, SDR holdings were increased by around SDR 1m to SDR 1 526m (Chart 2-5).

Chart 2-5 SDR holdings. In billions of SDRs



#### INTEREST RATE ON THE ARRANGEMENTS

Norges Bank receives SDR interest payments on the reserve position, the NAB and SDR holdings, and pays the SDR interest rate on SDR allocations. The SDR interest rate is a weighted average of the yields on three-month government securities in the countries/currency areas included in the SDR basket. The floor for the SDR interest rate is 0.05%. For the reserve position, an interest deduction is applied for any burden sharing<sup>4</sup>. Under the burden sharing mechanism, member debtors and lenders share the cost of settling overdue obligations on outstanding credit to the IMF through an interest rate adjustment.

<sup>4</sup> The basis for the calculation is the reserve position less SDR 60m. The reason for the deduction is that, prior to 1978, only 75% of the quota was included in the calculation.



# KEY FIGURES

**Table I-1** Key figures at quarter-end. Annualised values in international currency terms. Percent

	Past year	Past three years	Past five years	Past 10 years
<b>Return on the fixed income investments</b>	<b>9.06</b>	<b>4.71</b>	<b>4.82</b>	<b>5.26</b>
<i>Fixed income investments</i>				
Return on fixed income investments	-0.67	2.01	1.08	2.33
Return on the benchmark index	-0.70	2.03	1.08	2.31
Relative return	0.04	-0.02	0.00	0.02
<i>Equity investments</i>				
Return on equity investments	51.91	14.22	14.39	11.73
Return on the benchmark index	51.73	14.21	14.31	11.57
Relative return	0.18	0.01	0.08	0.17

**Table I-2** Duration of and yield on fixed income investments. Past five quarters

	2021 Q1	2020 Q4	2020 Q3	2020 Q2	2020 Q1
<b>Duration</b>	<b>3.88</b>	<b>3.86</b>	<b>3.86</b>	<b>3.82</b>	<b>3.64</b>
CNY	3.35	3.25			
EUR	4.47	4.36	4.39	4.37	4.01
GBP	4.38	4.56	4.20	4.14	4.01
JPY	4.02	3.96	4.08	4.13	4.14
USD	3.41	3.40	3.40	3.35	3.27
<b>Yield</b>	<b>0.19</b>	<b>-0.08</b>	<b>-0.10</b>	<b>-0.08</b>	<b>0.02</b>
CNY	2.81	2.47			
EUR	-0.54	-0.68	-0.61	-0.54	-0.48
GBP	0.35	-0.03	-0.01	-0.03	0.16
JPY	-0.08	-0.10	-0.11	-0.14	-0.14
USD	0.59	0.30	0.24	0.24	0.34