

FOREIGN EXCHANGE RESERVES

Management of the foreign exchange reserves

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REPORT FOR
SECOND 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 Q2

- The market value of Norges Bank's foreign exchange reserves was NOK 643.5bn, an increase of NOK 20.1bn since 2021 Q1.
- The return on the foreign exchange reserves was 1.9% in international currency terms. The return on equity investments was 7.7%, while the return on fixed income investments was 0.2%. In NOK terms, the return on the foreign exchange reserves was 3.0%.
- 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 643.5bn at the end of 2021 Q2. The value increased by NOK 20.1bn from the previous quarter. Return in international currency terms and a weaker krone increased the value by NOK 10.5bn and NOK 6.3bn, respectively. Net transfers amounted to NOK 3.2bn. So far in 2021, the market value of the foreign exchange reserves has increased by NOK 45.1bn.

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

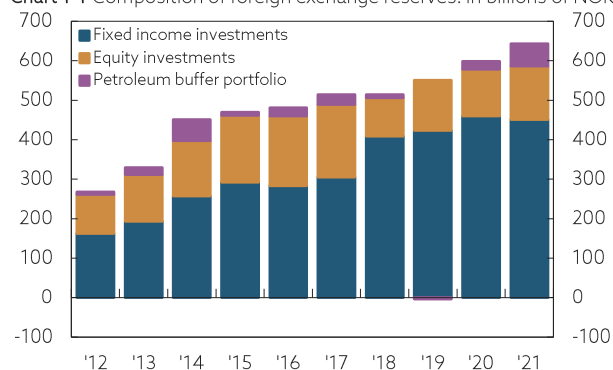


Table 1-1 Market value

	2021 Q2			Foreign exchange reserves	2021			Foreign exchange reserves
	Fixed income investments	Equity investments	Petroleum buffer portfolio		Fixed income investments	Equity investments	Petroleum buffer portfolio	
<i>In billions of NOK</i>								
Market value (opening)	445.6	124.1	53.7	623.4	459.8	118.6	20.0	598.4
Market value (closing)	451.2	135.0	57.3	643.5	451.2	135.0	57.3	643.5
Change in market value	5.6	10.9	3.6	20.1	-8.6	16.4	37.3	45.1
Net transfers	-0.3	0.0	3.5	3.2	0.4	0.0	37.7	38.1
Return in NOK terms	6.0	10.9	0.1	17.0	-8.9	16.4	-0.4	7.0

Table 1-2 Details of fixed income and equity investments

	2021 Q2			Total	2021			Total
	Fixed income investments	Equity investments			Fixed income investments	Equity investments		
<i>In billions of NOK</i>								
Return in NOK terms	6.0	10.9		16.8	-8.9	16.4		7.5
Return in international currency terms		1.0	9.5	10.5	-4.4	17.0		12.6
Movements in the krone exchange rate		5.0	1.4	6.3	-4.6	-0.6		-5.2
<i>In percent</i>								
Return in international currency terms	0.23	7.73		1.86	-0.94	14.50		2.23
Return in NOK terms	1.34	8.76		2.96	-1.94	13.83		1.29
Relative return in NOK terms	-0.02	0.00		-	0.00	0.10		-
Expected relative volatility in NOK terms (annualised)	0.03	0.09		-	0.03	0.09		-

Fixed income investments

The market value of the fixed income investments was NOK 451.2bn, an increase of NOK 5.6bn from the previous quarter. The krone depreciation increased the value by NOK 5.0bn. The return in international currency terms increased the value by NOK 1.0bn, equivalent to 0.2%. Net outflows from the fixed income portfolio amounted to NOK 0.3bn, primarily owing to outflows relating to transactions with the IMF.

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

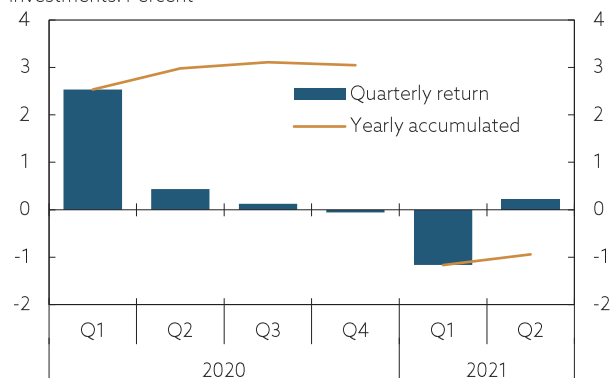


Chart 1-3 Relative return in NOK terms. Fixed income investments. Basis points

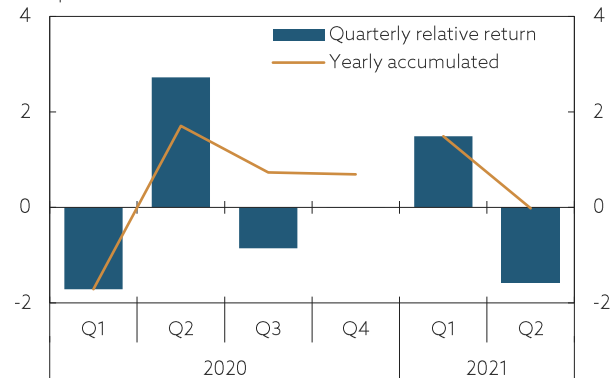
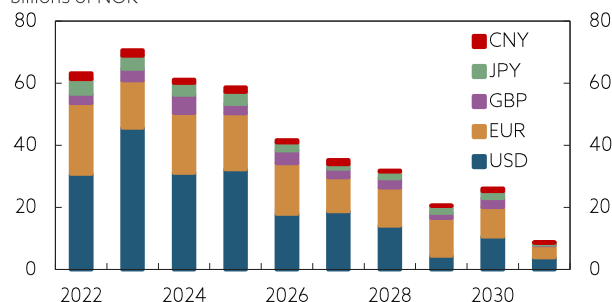


Table 1-3 Fixed income investments by currency at the end of 2021 Q2. Market value in billions of NOK

	Market value	Share	Duration	Yield
Total	451.21	100.00	3.84	0.20
CNY	9.17	2.03	3.35	2.70
EUR	153.37	33.99	4.40	-0.47
GBP	31.57	7.00	4.25	0.31
JPY	31.55	6.99	4.09	-0.11
USD	225.55	49.99	3.40	0.59

Chart 1-4 Principal and coupon due per year at the end of 2021 Q2. In billions of NOK



US The US Treasury yield curve flattened in 2021 Q2. Long-term yields fell by approximately 25 basis points, while yields with shorter maturities rose somewhat. Investments denominated in USD earned a return of 0.5% in Q2. The decline in long-term yields was the main reason for the positive return.

EUROPE European government bond yields rose in 2021 Q2. The rise was most pronounced in the 5 to 10-year segment. Investments denominated in EUR earned a return of -0.3% in Q2. The rise in yields during the quarter is the main reason for the negative return.

UK UK government bond yields fell in 2021 Q2. The decline was most pronounced for long-term

yields and the yield curve flattened somewhat. GBP-denominated investments earned a return of 0.4% in Q2.

JAPAN Japanese yields fell marginally in 2021 Q2. The decline was most pronounced for long-term yields. Investments denominated in JPY earned a return of 0.1% in Q2.

CHINA In China, government bond yields along the entire yield curve fell by just under 10 basis points. The Chinese 10-year government bond yield ended the quarter at just over 3%. Investments denominated in CNY earned a return of 1.1%. Current interest income accounted for more than half of the positive return, while the decline in yields also contributed.

Equity investments

The market value of the equity portfolio was NOK 135.0bn at the end of 2021 Q2, an increase of NOK 10.9bn from the end of Q1. The return in international currency terms increased the market value by NOK 9.5bn and a weaker krone, in isolation, increased the value of the portfolio by a further NOK 1.4bn. North American equities

posted a return of 8.7%, European equities, 7.7% and Asian equities, -0.5%. The technology sector posted the highest return in Q2, 13.0%. In Q2, equities related to utilities and water supply posted the weakest return, -0.1%.

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

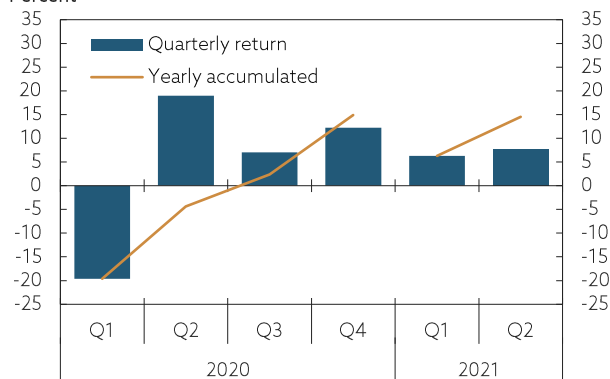


Chart 1-6 Relative return in NOK terms. Equity investments. Basis points

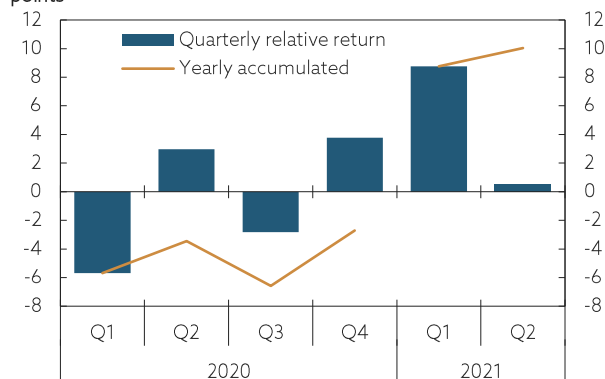


Table 1-4 Equity investments by sector and relative to the benchmark index. At the end of 2021 Q2. In billions of NOK

	Market value	Share
Materials	5	3%
Consumer discretionary	22	16%
Consumer staples	8	6%
Energy	4	3%
Financials	18	13%
Health care	17	13%
Industrials	19	14%
Real estate	4	3%
Technology	31	23%
Telecommunications	5	4%
Utilities	3	2%

Table 1-5 Equity investments by currency and relative to the benchmark index. At the end of 2021 Q2. In billions of NOK

	Market value	Share
AUD	3	2%
CAD	3	3%
CHF	4	3%
DKK	1	1%
EUR	14	11%
GBP	6	4%
JPY	11	8%
SEK	2	1%
USD	91	67%

Petroleum buffer portfolio

The market value of the petroleum buffer portfolio was NOK 57.3bn at the end of 2021 Q2, an increase of NOK 3.6bn since the end of Q1. During Q2, NOK 38.5bn worth of foreign exchange was purchased from the State's Direct Financial Interest (SDFI) and NOK 69bn worth of foreign exchange was transferred from the GPF to the petroleum buffer portfolio. At the same time, Norges Bank sold NOK 104bn worth of foreign exchange in the market.

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 Q2, excluding exchange rate movements, was 20.0% and 1.1%, respectively. This corresponds to an expected annual fluctuation in value of approximately NOK 27.1bn and NOK 4.8bn, respectively. At the same time, expected relative volatility for equity and fixed income investments was 0.09 and 0.03 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 ± 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

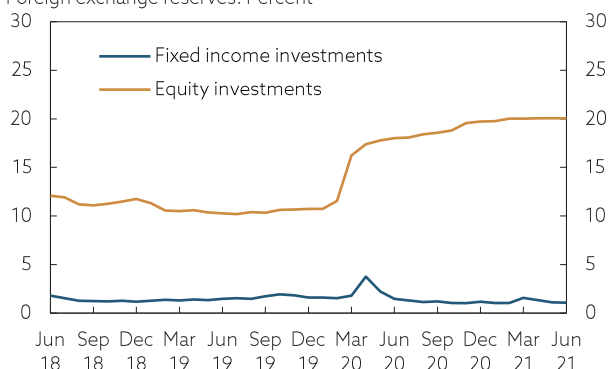
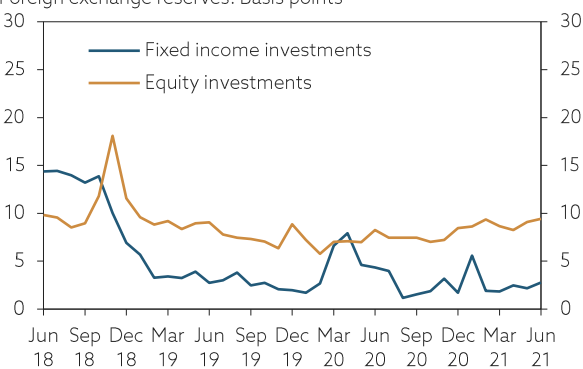


Chart 1-8 Absolute volatility, including exchange rate movements. Foreign exchange reserves. Basis points



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 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 at 30 June 2021. At the end of 2021 Q2, the IMF had drawn SDR 1 399m. The total remaining amount that can be drawn under these arrangements is SDR 9 627m¹. 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 755m². At the end of 2021 Q2, the amount drawn³ totalled SDR 990m, which entails an increase of SDR 30m on Q1 (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 Q2.

Chart 2-1 IMF quota. In billions of SDRs

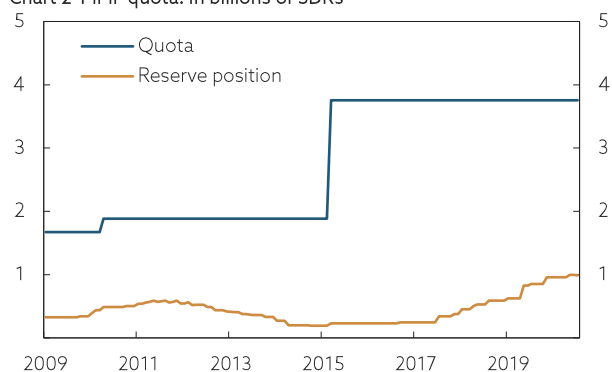
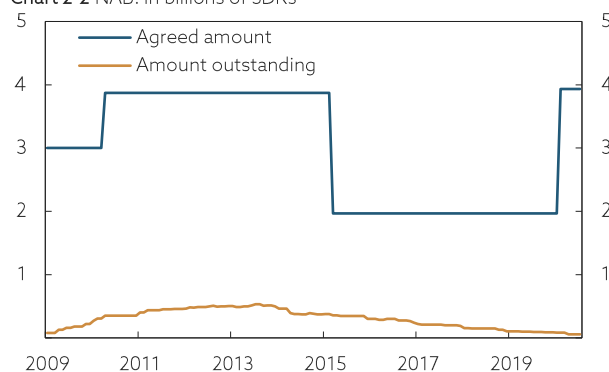


Chart 2-2 NAB. In billions of SDRs



¹ 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.

² 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.

³ 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 Q2, 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 be made (Chart 2-3 and Chart 2-4). Repayments made under the 2010 agreement in 2021 Q2 totalled SDR 11m. 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 Q2, 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

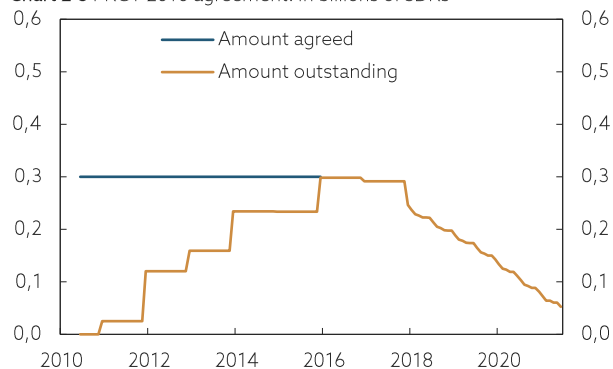
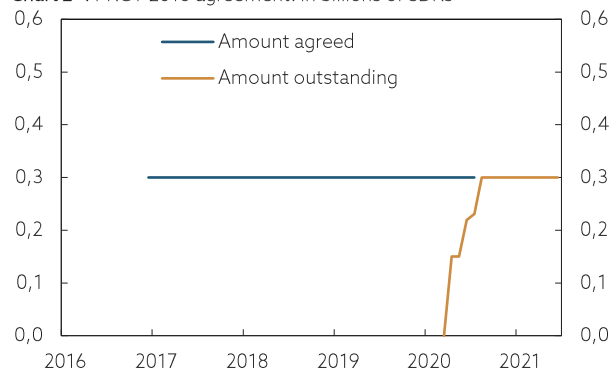
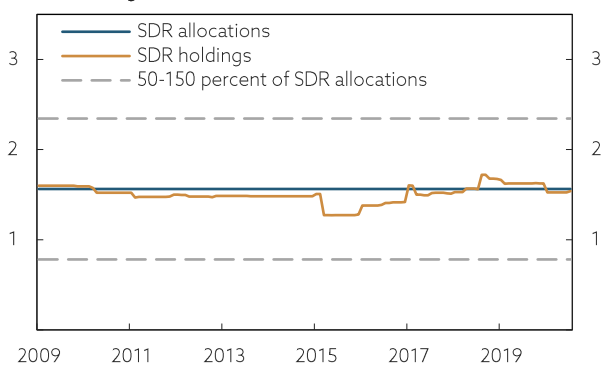


Chart 2-4 PRGT 2016 agreement. In billions of SDRs



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 Q2, SDR holdings were increased by around SDR 14m to SDR 1 540m (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 sharing⁴. 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.

⁴ 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
Return on the fixed income investments	6.81	4.79	5.00	5.35
<i>Fixed income investments</i>				
Return on fixed income investments	-0.88	1.99	0.95	2.17
Return on the benchmark index	-0.87	2.01	0.96	2.15
Relative return	-0.01	-0.02	-0.01	0.02
<i>Equity investments</i>				
Return on fixed income investments	37.54	15.59	15.81	12.63
Return on the benchmark index	37.40	15.56	15.72	12.46
Relative return	0.13	0.02	0.08	0.17

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

	2021 Q2	2021 Q1	2020 Q4	2020 Q3	2020 Q2
Duration	3.84	3.88	3.86	3.86	3.82
CNY	3.35	3.35	3.25	0.00	0.00
EUR	4.40	4.47	4.36	4.39	4.37
GBP	4.25	4.38	4.56	4.20	4.14
JPY	4.09	4.02	3.96	4.08	4.13
USD	3.40	3.41	3.40	3.40	3.35
Yield	0.20	0.19	-0.08	-0.10	-0.08
CNY	2.70	2.81	2.47	0.00	0.00
EUR	-0.47	-0.54	-0.68	-0.61	-0.54
GBP	0.31	0.35	-0.03	-0.01	-0.03
JPY	-0.11	-0.08	-0.10	-0.11	-0.14
USD	0.59	0.59	0.30	0.24	0.24