
Managing Foreign Exchange Reserves – the SNB Experience

ZKB Central Bank Seminar, 5 September 2023

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



Agenda

Historical review: balance sheet & diversification

Management set-up: from LT asset allocation to implementation

Equity investments: benefits and challenges

Summary and outlook

Historical review: balance sheet & diversification

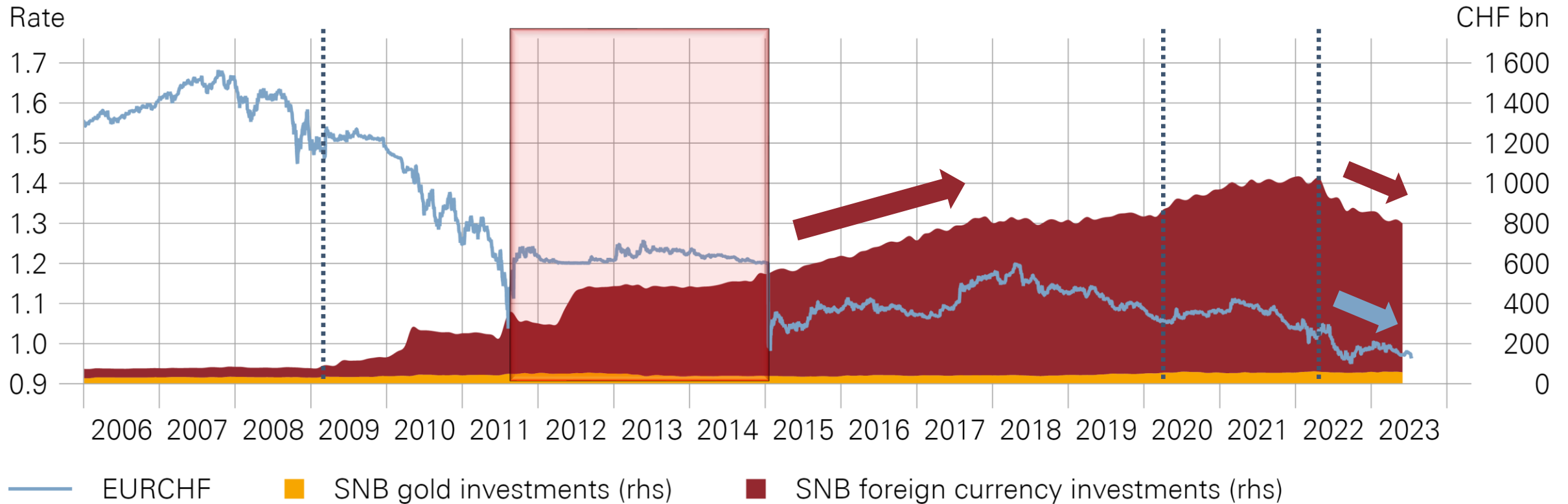
Management set-up: from LT asset allocation to implementation

Equity investments: benefits and challenges

Summary and outlook

FX reserves as a derivative of SNB's monetary policy

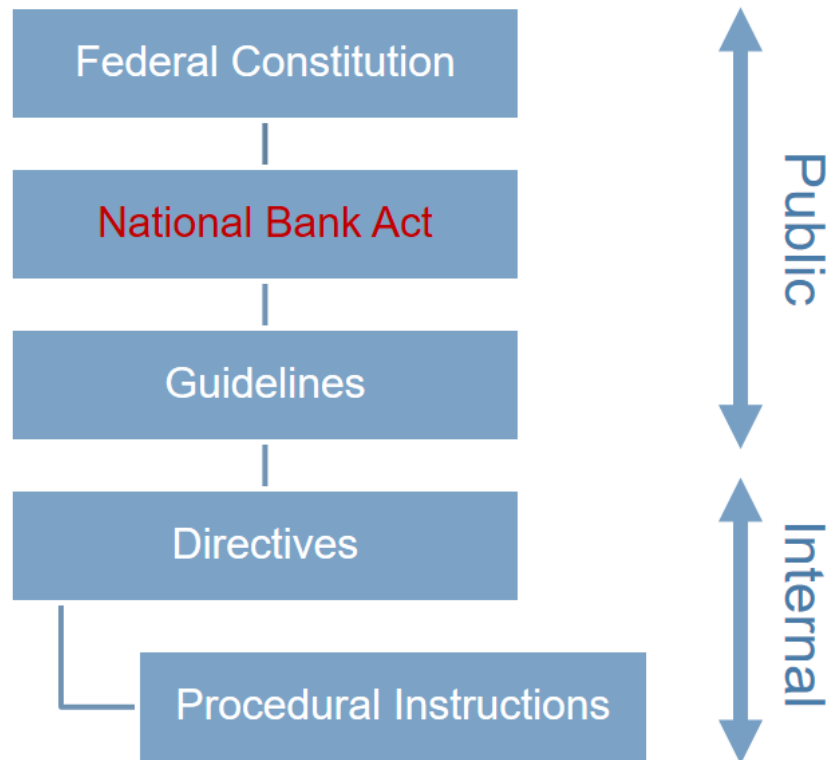
EURCHF VS SNB'S FOREIGN CURRENCY AND GOLD INVESTMENTS



Sources: Bloomberg, SNB

Legal basis for the management of FX reserves

GOVERNANCE STRUCTURE



National Bank Act (since May 5 2014)

- Art. 5, para. 2d.: The **National Bank** ... shall **manage** the currency reserves.
- Art. 42, para. 2a., 2e.: The **Bank Council** ... lay down the internal organization of the National Bank. ... It shall approve the level of provisions. It shall **oversee the investment** of assets and risk management.
- Art. 46, para. 2b., 2c.: The **Governing Board** ... shall **decide on the composition** of the required currency reserves including the proportion of gold. It shall **decide on the investment of assets**.

SNB's investment policy should support monetary policy and contribute to the robustness of its balance sheet

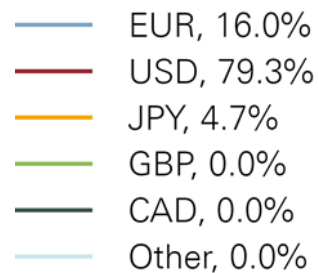
Broad diversification in liquid markets

Criteria	Goals	Implementation
Currencies	Sufficient reserves in most important currencies	EUR, USD, Gold
Liquidity	High liquidity of (a significant part of the) assets	Government bonds in most liquid currencies and markets
Credit risk	High credit quality of issuers	Government bonds in local currency
Concentration risk	Avoidance of high concentrations in single markets or issuers	Diversification over currencies and assets
Opportunity costs	Reduction of opportunity costs of holding reserves	Risk: Diversification Return: Addition of assets with positive risk premium
Conflicts of interest	Avoidance of conflicts of interest and procyclical behaviour	Limited exposure towards financial sector and risky assets

Currency allocation 1997 vs. 2023: history of diversification

FX RESERVES: CURRENCY ALLOCATION

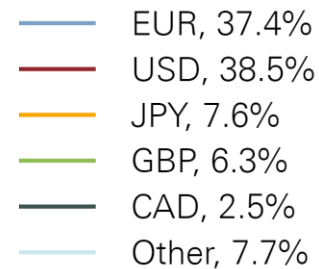
As of 31.03.1997



Source: SNB

FX RESERVES: CURRENCY ALLOCATION

As of 31.03.2023

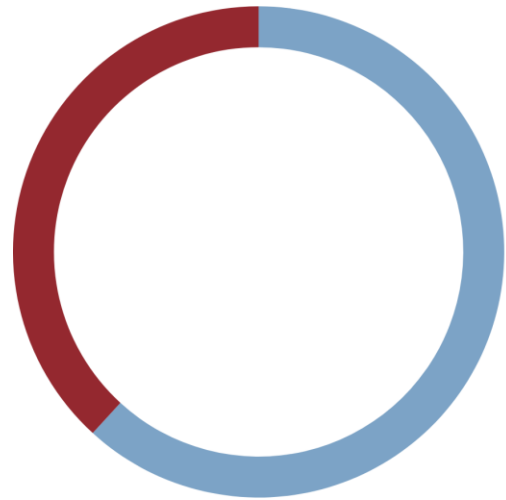


Source: SNB

Investment allocation 1997 vs. 2023: from a traditional central bank to a professional investment manager

FX RESERVES: INVESTMENT CATEGORIES¹

As of 31.03.1997



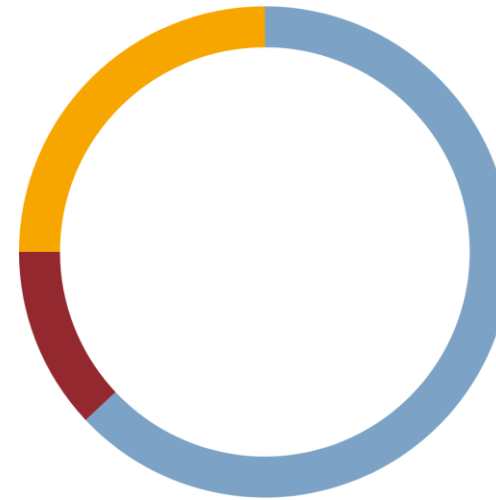
- Government Bonds, 61.8%
- Other, 38.2%
- Equities, 0.0%

¹ including deposits at central banks and BIS

Source: SNB

FX RESERVES: INVESTMENT CATEGORIES¹

As of 31.03.2023



- Government Bonds, 63.0%
- Other, 12.0%
- Equities, 25.0%

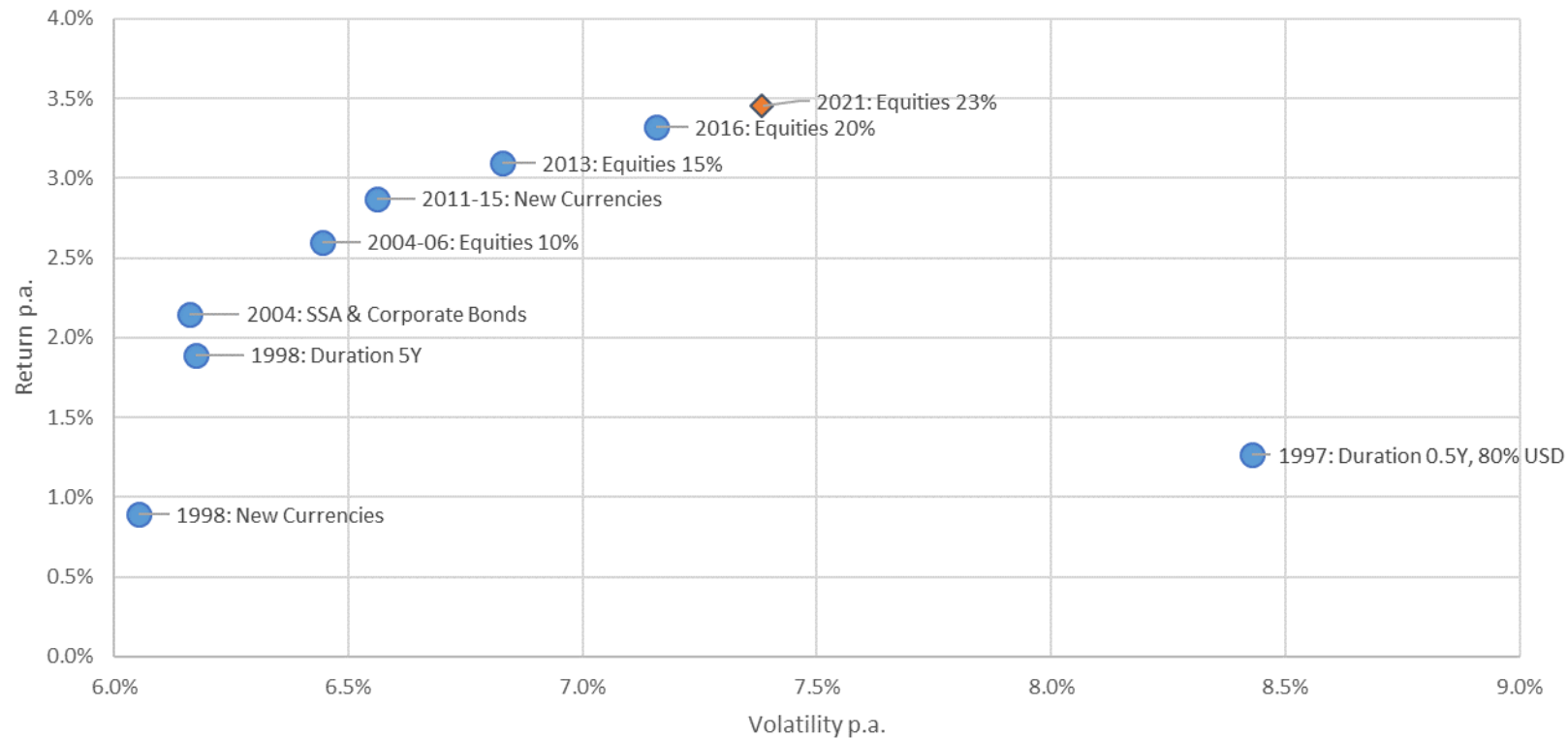
¹ including deposits at central banks and BIS

Source: SNB

The benefits of diversification since 1997 – continuous optimization of risk/return profile

HISTORICAL AVERAGE RETURN AND VOLATILITY

(Monthly data since 1998)



Source: Datastream, SNB

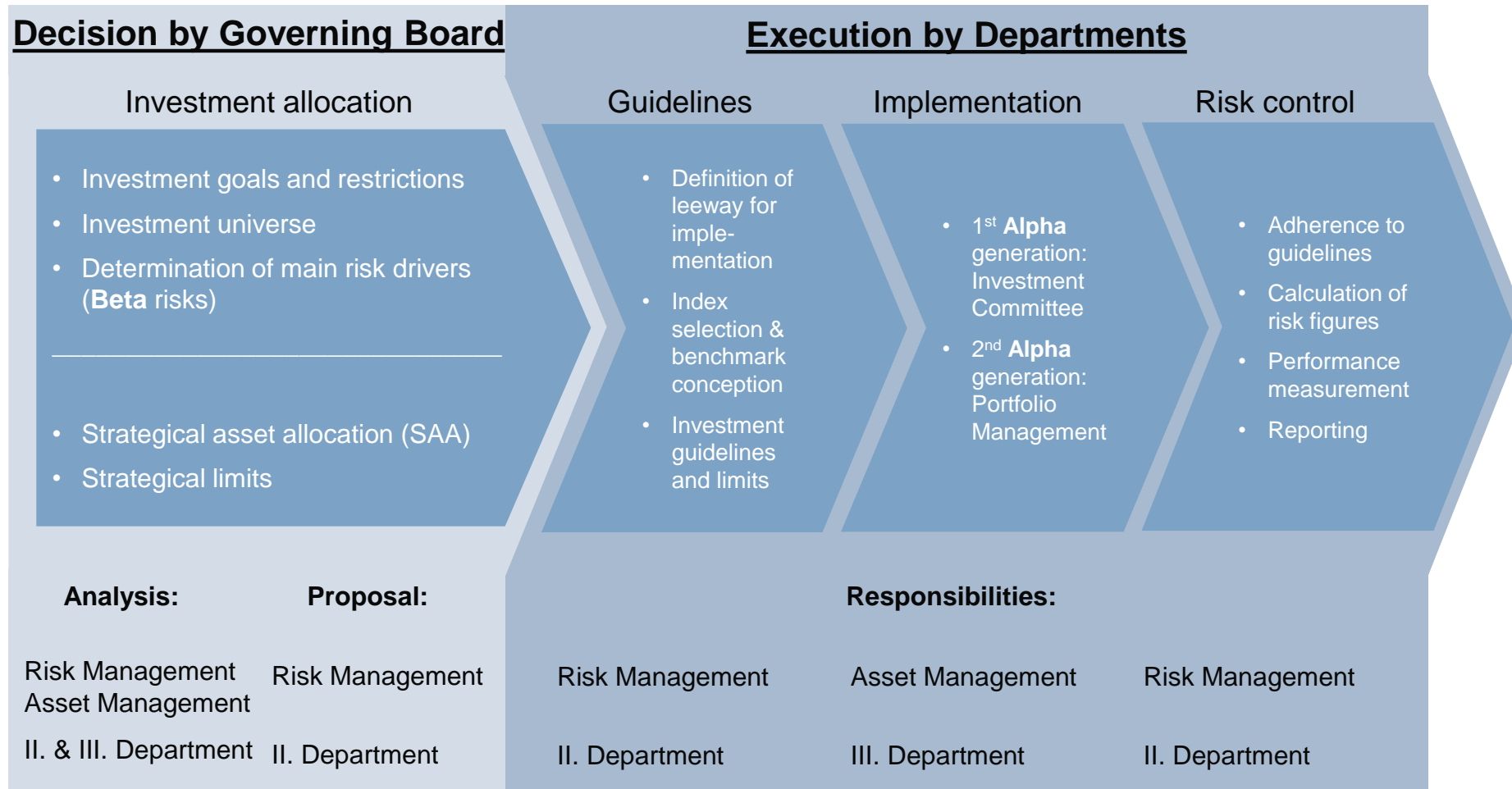
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Management set-up: from LT asset allocation to implementation

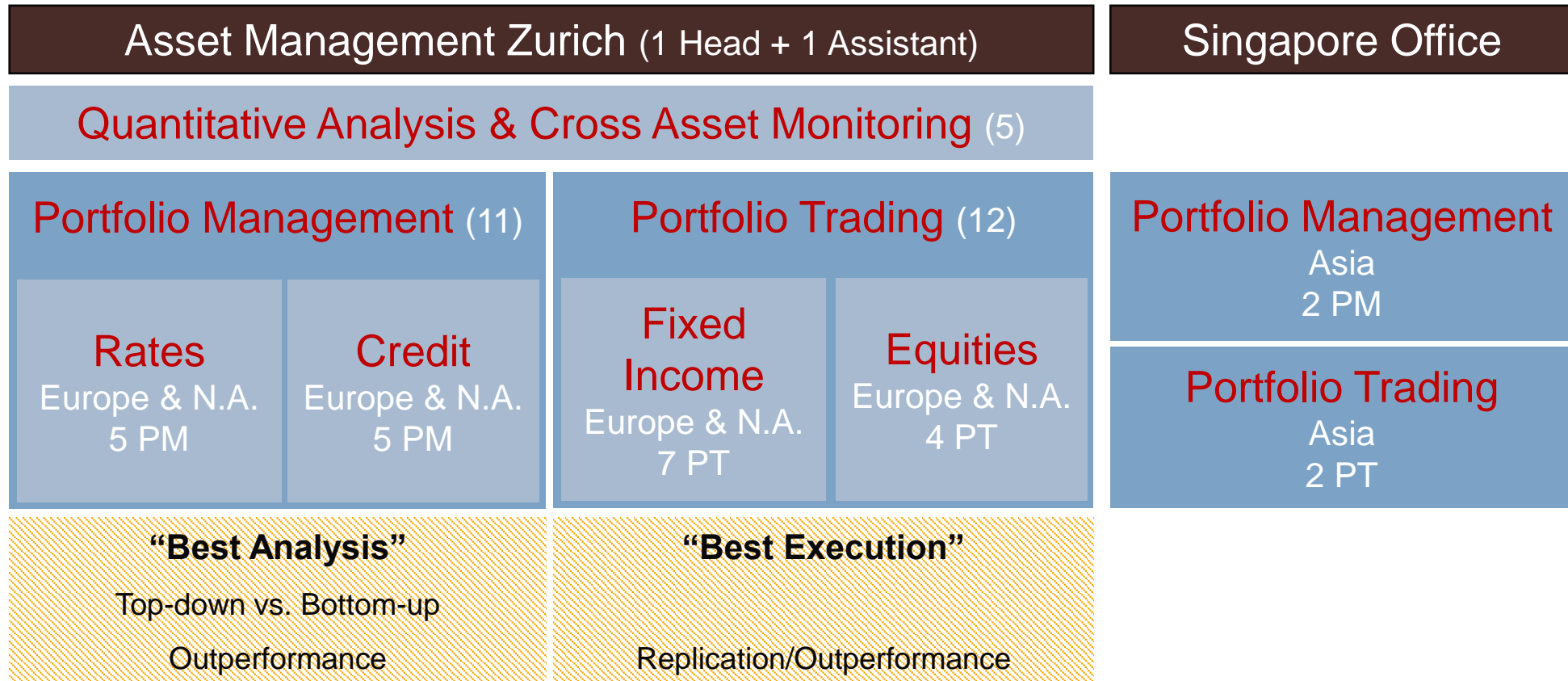
Equity investments: benefits and challenges

Summary and outlook

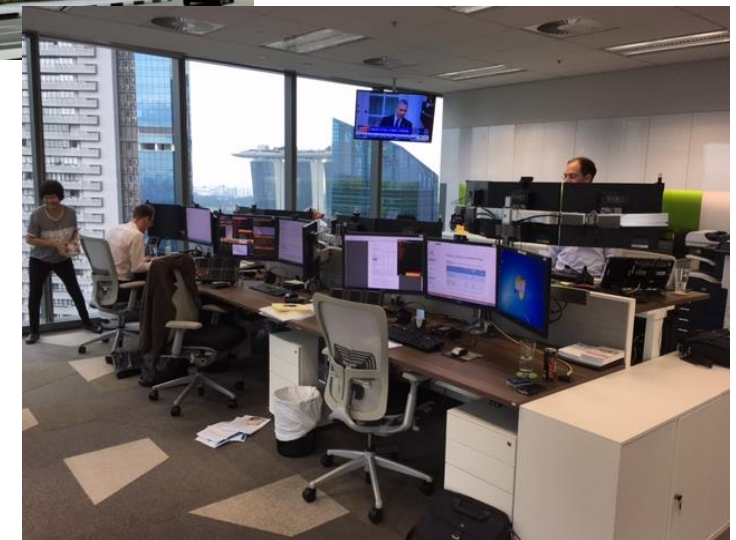
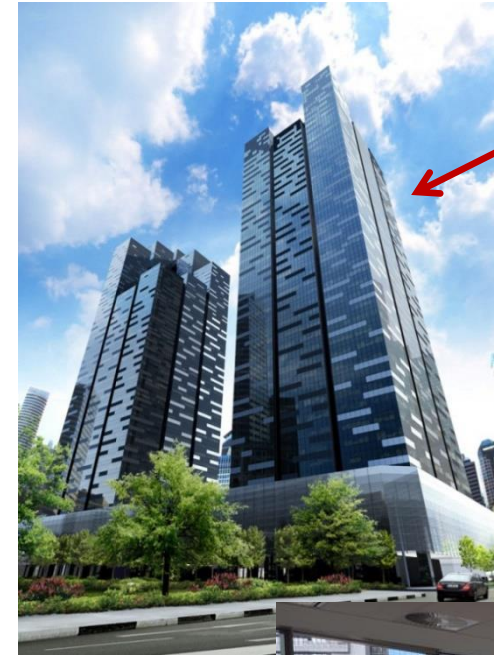
Investment and risk control process – well defined risk budgeting from top down



Asset Management at SNB

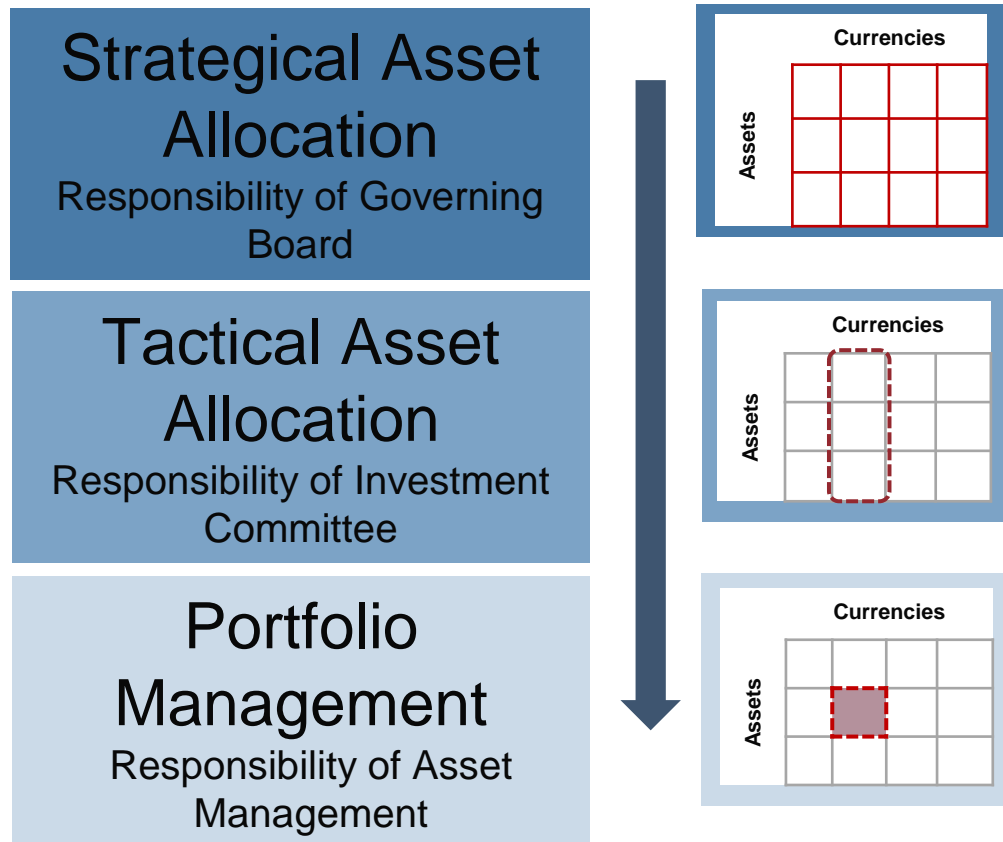


Offices in Zurich & Singapore

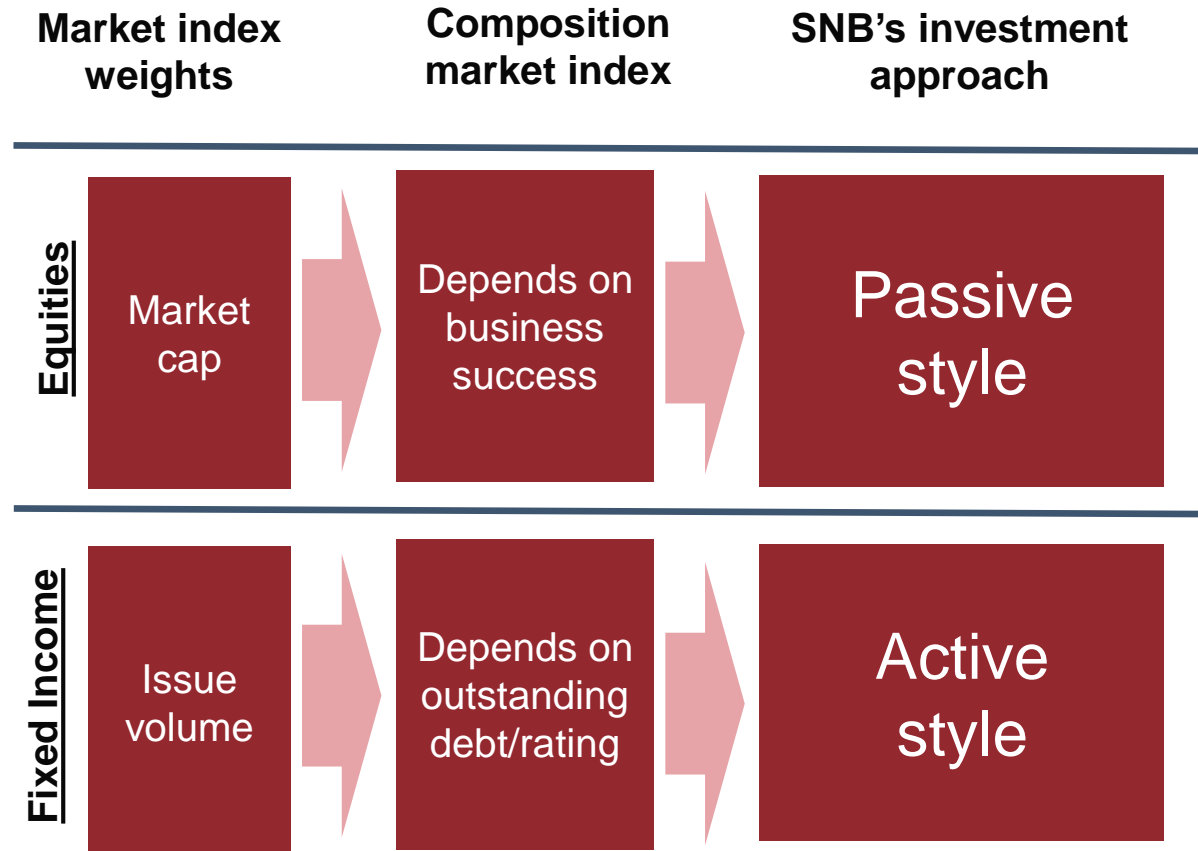


Investments are managed in different portfolios – management style depends on markets

DIFFERENT LAYERS OF ASSET ALLOCATION



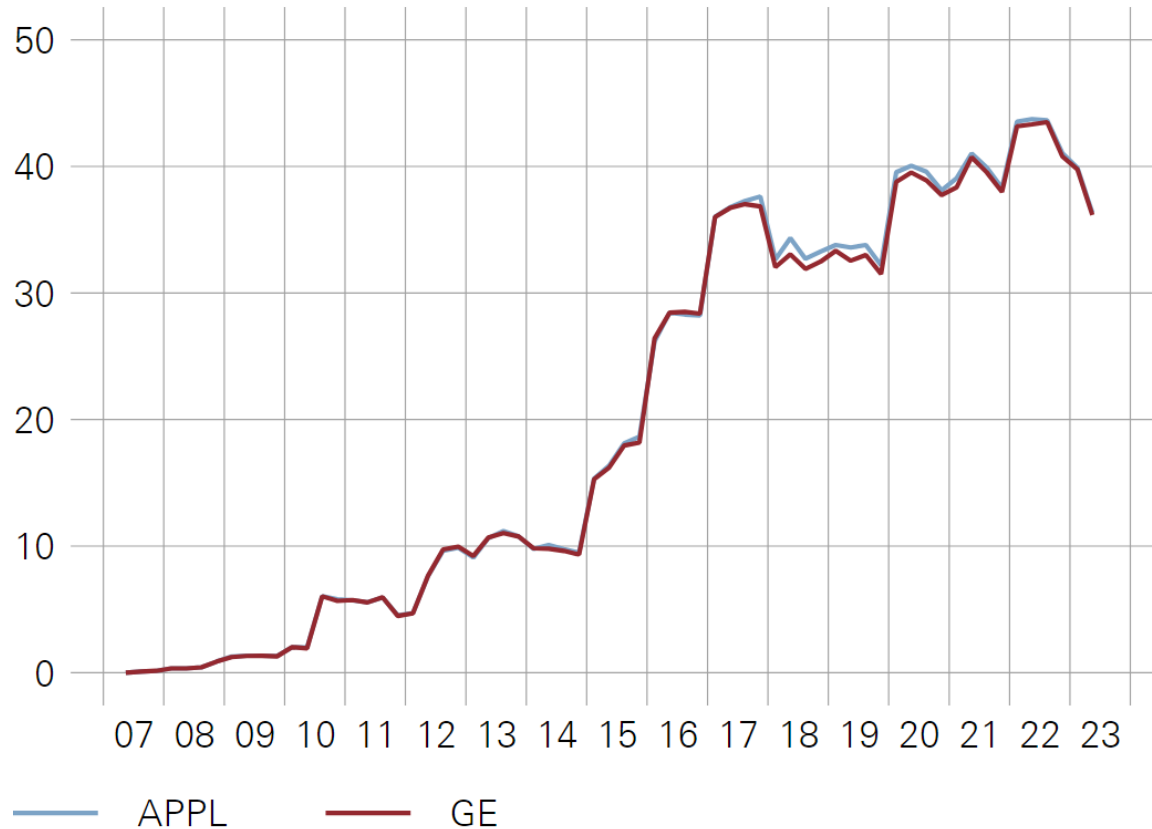
PORTFOLIO MANAGEMENT STYLE



Passive style for equities – economic changes/success become automatically reflected in SNB's portfolios

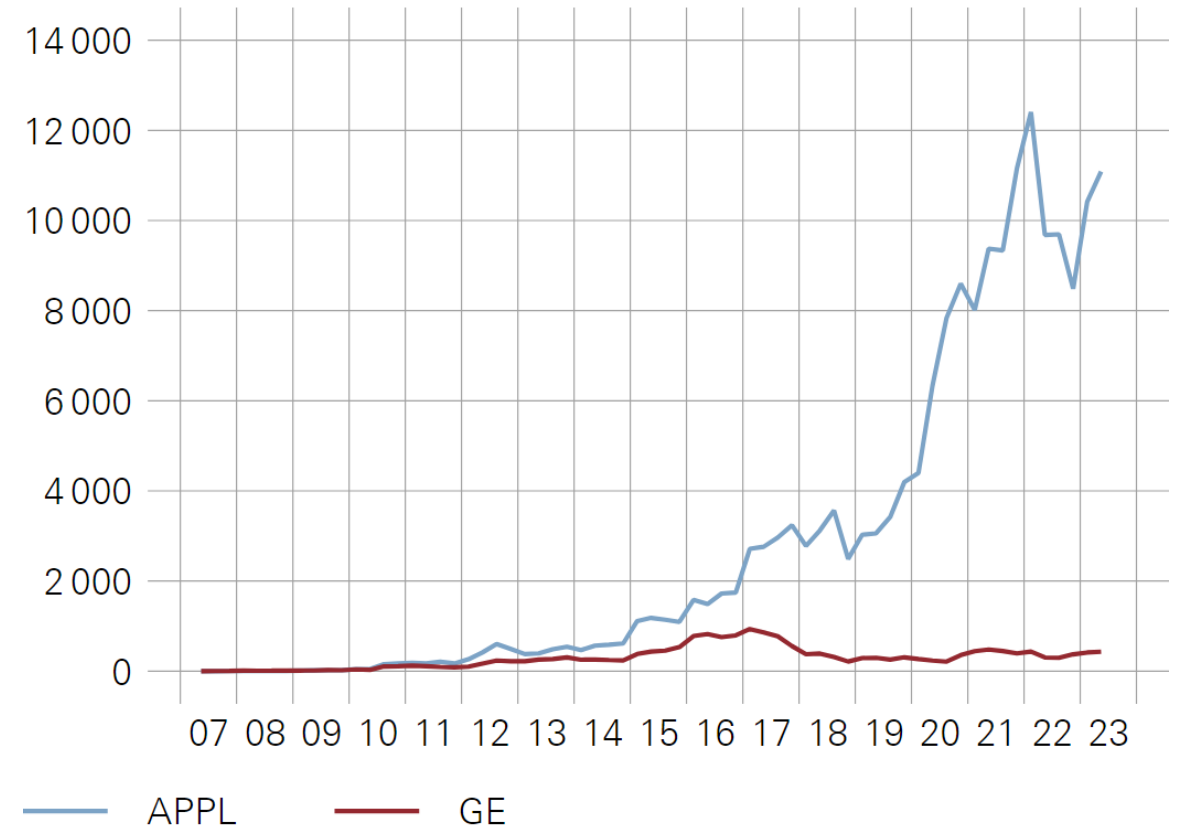
RELATIVE EXPOSURES

in BP of Outstanding Shares



ABSOLUTE EXPOSURES

in mn USD

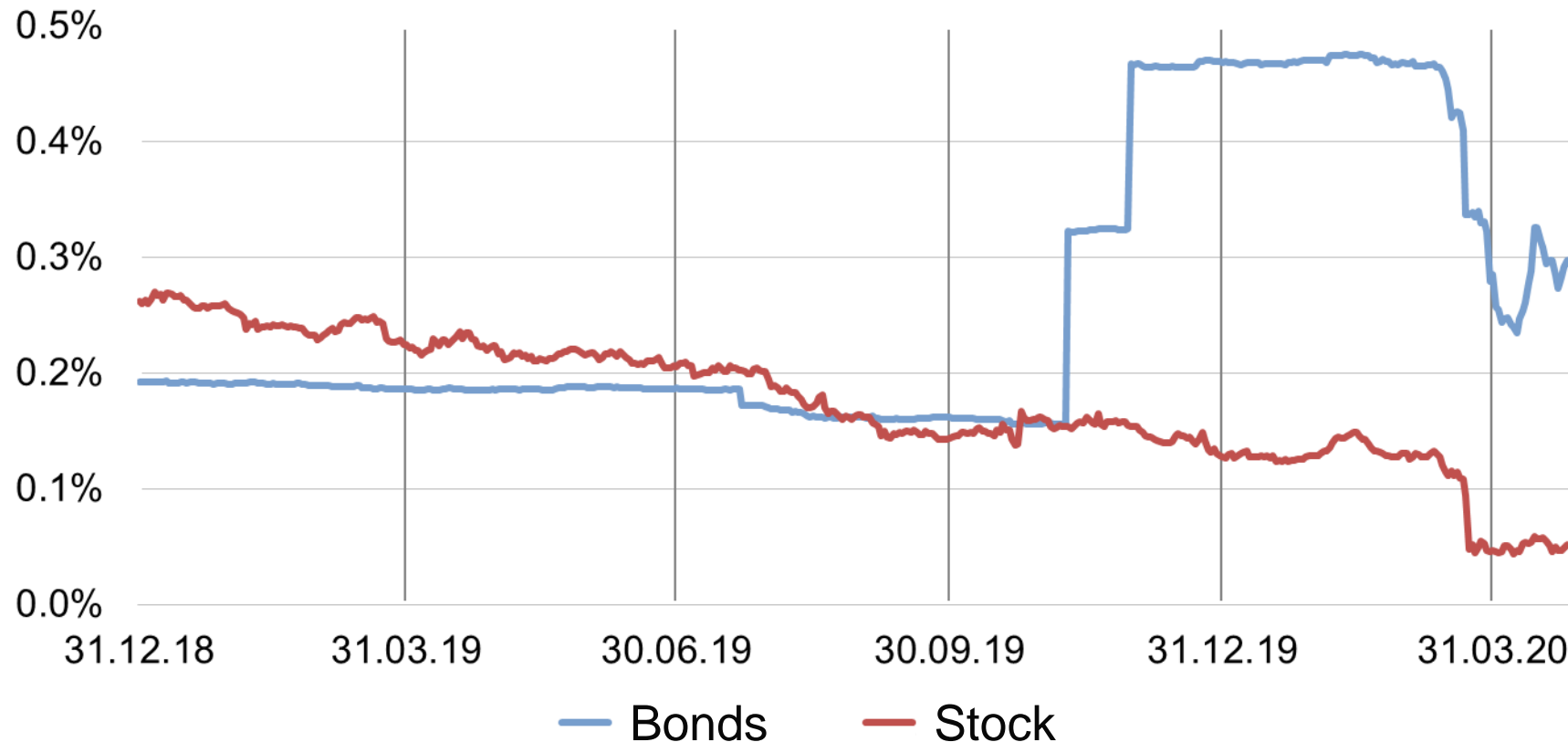


Sources: Bloomberg, 13F Reporting

Active style for fixed income – SNB tries to avoid troubled issuers with increasing index weights

OCCIDENTAL PETROLEUM: INDEX WEIGHT BOND VS. STOCK

Bonds: in % of ICE USD IG Corporate Index, Stock: in % of S&P 500 Index



Source: Bloomberg

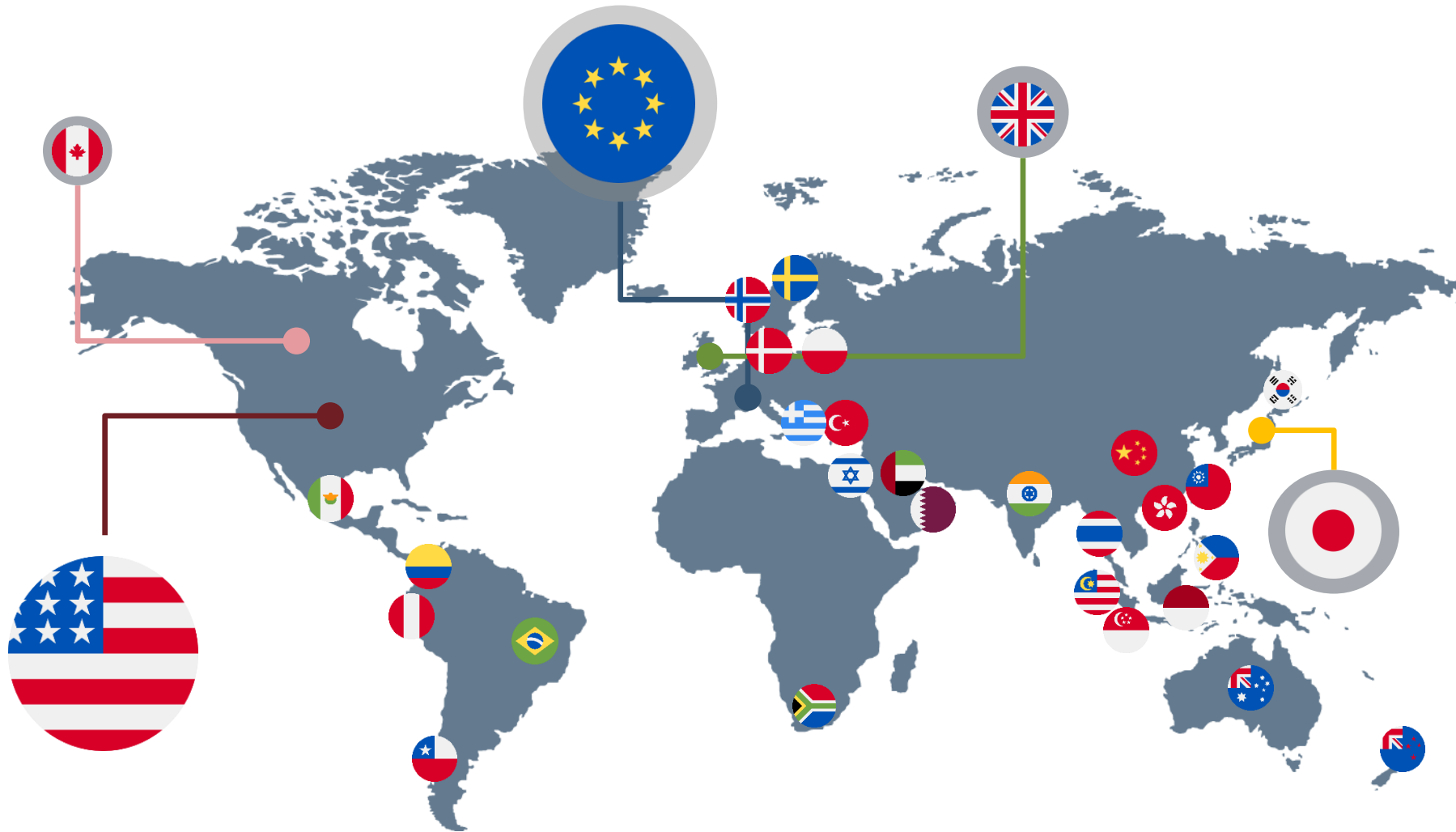
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Since 2005 equity investments have increased as % of FX reserves and market coverage has been broadened

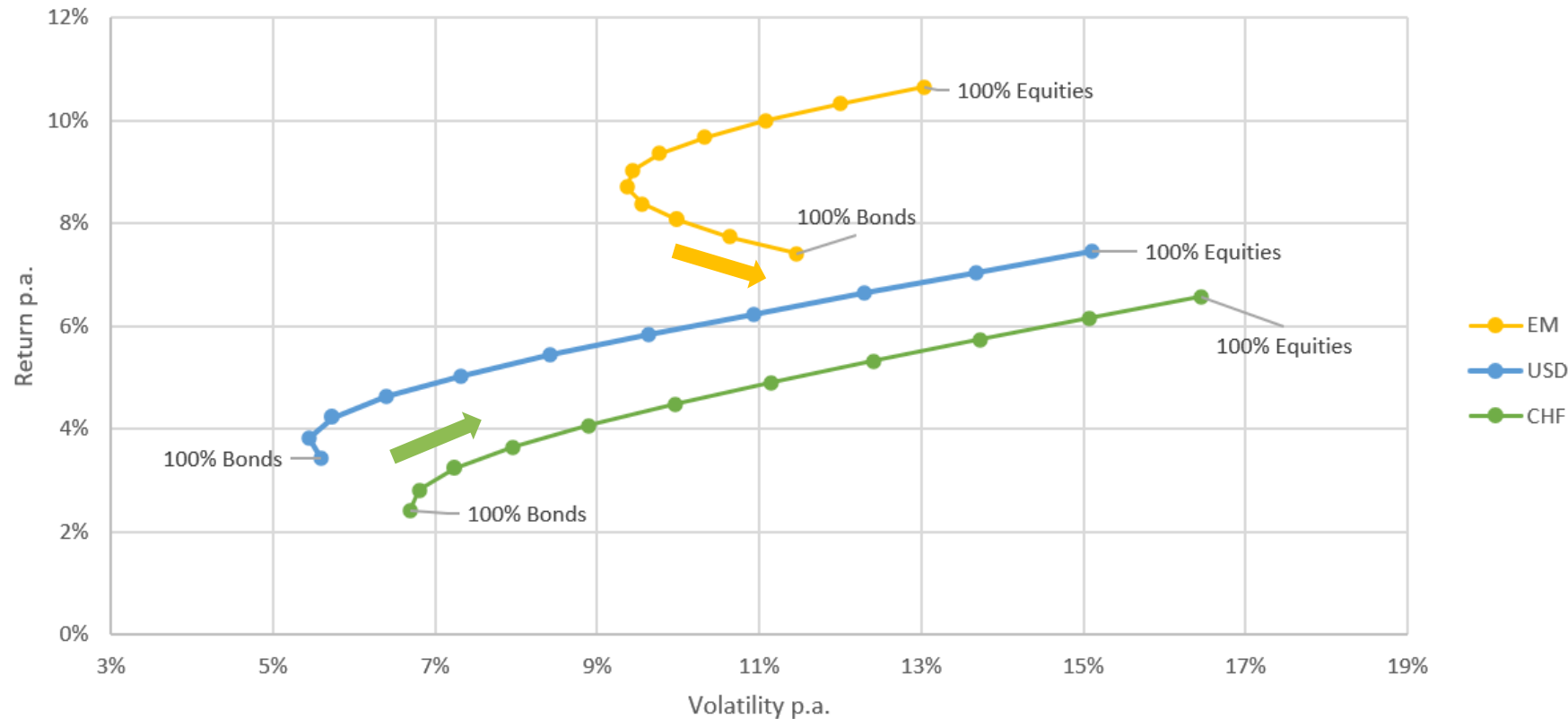


Year	#Stocks
2005	> 1'500
2013	> 5'700
2015	> 6'600

Equity investments offer only limited diversification benefits due to CHF as reporting currency

HISTORICAL AVERAGE RETURN AND VOLATILITY

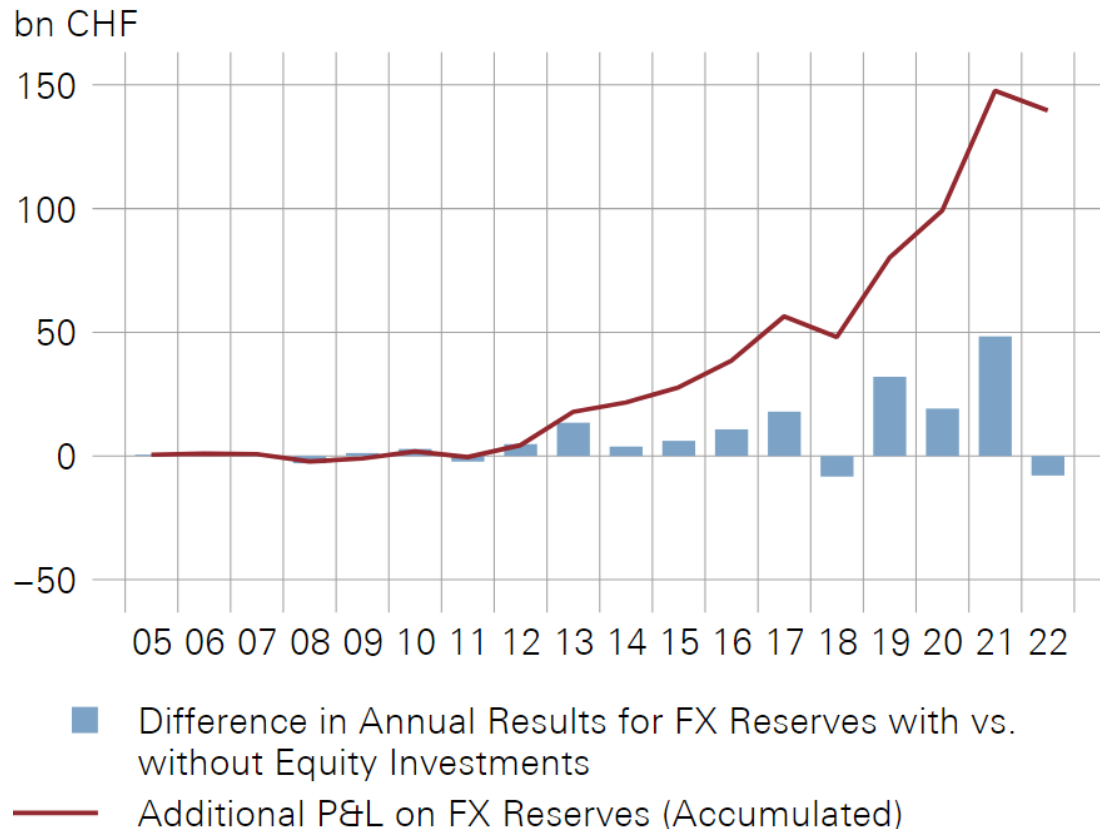
For different equity shares; monthly data since 1998



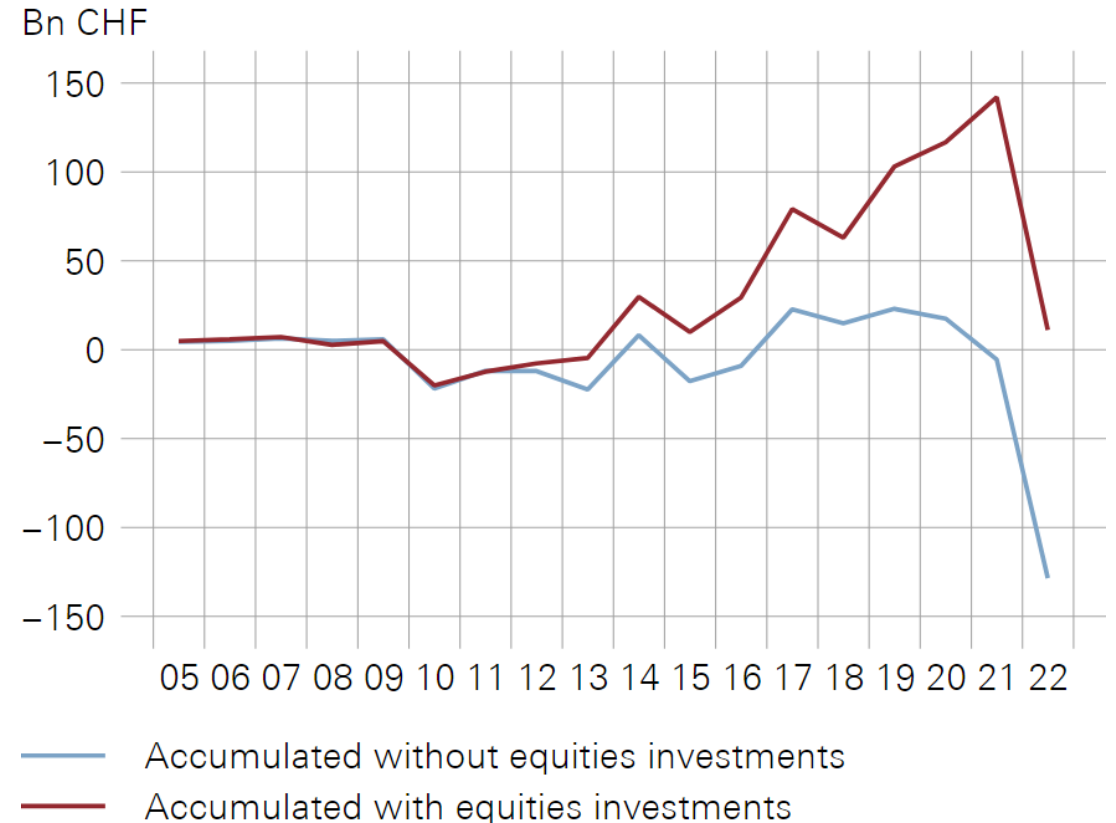
Sources: Datastream, SNB

However, equity investments contribute to the build up of reserves over time

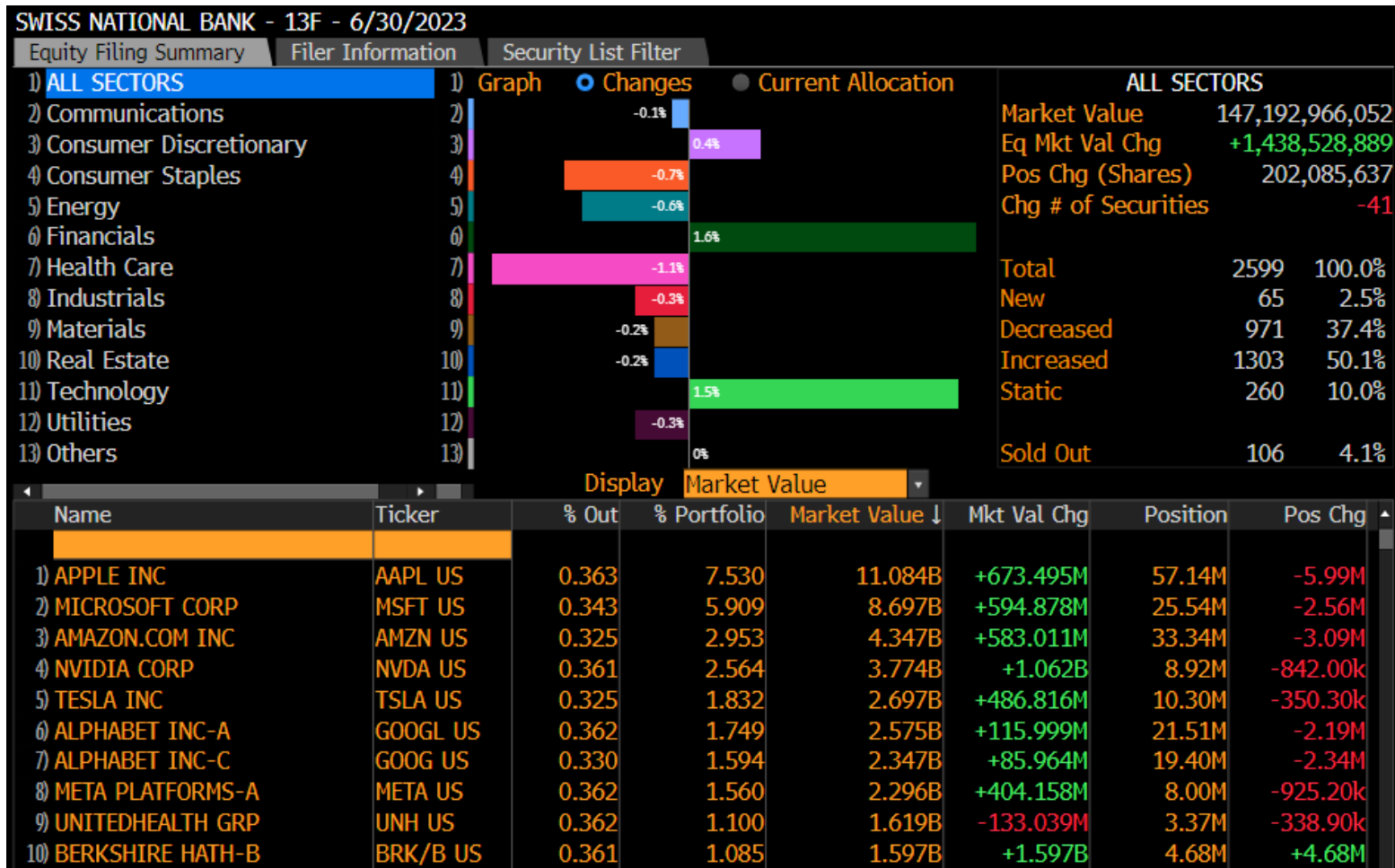
ADDITIONAL P&L ON FX RESERVES THANKS TO EQUITY INVESTMENTS



ACCUMULATED P&L ON FX RESERVES WITH AND WITHOUT EQUITY INVESTMENTS



Despite passive management style public perception is often focused on individual shares/sectors



WOLF STREET

The Stories behind Business, Finance & Money

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THE WOLF STREET REPORT

Imploded Stocks
Brick & Mortar
California
Daydreamin'
Canada
Cars & Trucks
Commercial Property
Companies &
Markets
Consumers
Credit Bubble
Energy

The Swiss National Bank Began Unloading its Biggest US Stock Holdings, incl. Apple, Microsoft, Amazon, Alphabet, Meta

by Wolf Richter • Nov 11, 2022 • 154 Comments

It still bought Tesla though, which is down by 52%. It took massive losses. And it's got a bunch of Imploded Stocks.

By Wolf Richter for WOLF STREET.

The Swiss National Bank has spent years creating Swiss francs, buying dollars, euros, and other currencies with those francs, and then buying assets denominated in those currencies - including a vast portfolio of US stocks.

Verkauft die SNB ihre US-Aktien zum dümmsten Zeitpunkt?

Laut Artikel hat Notenbank in den letzten Monaten ihr Engagement an Wall Street massiv reduziert - und damit horrende Verluste erlitten.

14.11.2022 | Lukas Hässig | 98 Kommentare | 10.006

„It took massive losses“, schreibt Wolf Street, ein US-Finanzblog. „And it's got a bunch of Imploded Stocks“.

Der Artikel wirft ein grelles Licht auf die gigantischen Investments der Schweizerischen Nationalbank (SNB) in US-Aktien.

„The SNB loaded up with these types of stocks that then imploded“, zieht Wolf Street ein Fazit. „It's kind of funny that it helped enable the craziest US stock market bubble ever.“



Gebaut für die Ewigkeit - so der Plan (P)

Non-financial aspects of equity investments

Restrictions for
official institutions

ESG

Voting

Reclaim cash from
settled class-
actions

Exclusion policy: SNB deviates from broad diversification in some well defined cases

TOP-DOWN:

Exclusion policy for equities & fixed income

Norms-based screening

ESG Engagement

Exclusions

ESG Voting

Impact Investing

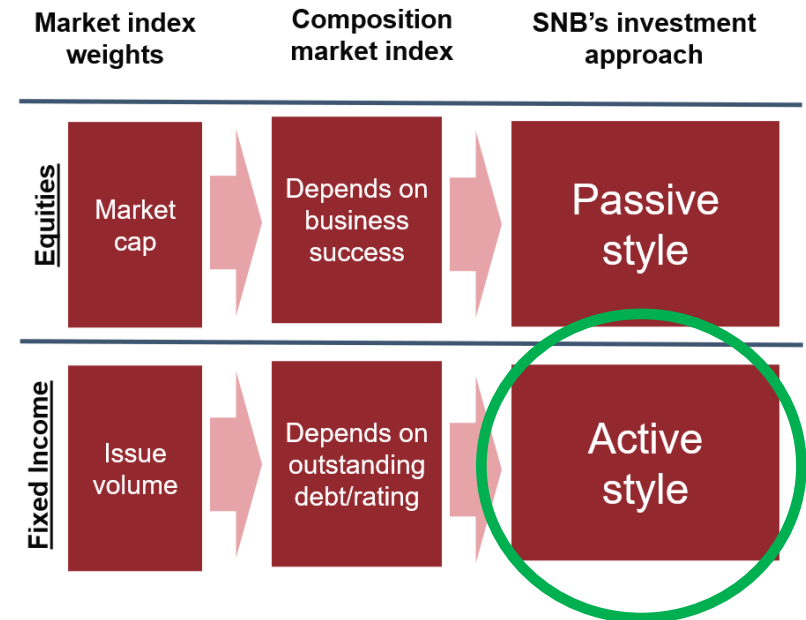
Best-in-Class

ESG Integration

Sustainable Thematic Investments

BOTTOM-UP:

ESG is integral part of active fixed income PM



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Basis situation

- CHF 740 bn of FX reserves; if 5% is invested in new market = CHF 37 bn
- Only a few markets are able to cope with that kind of flows

Equity

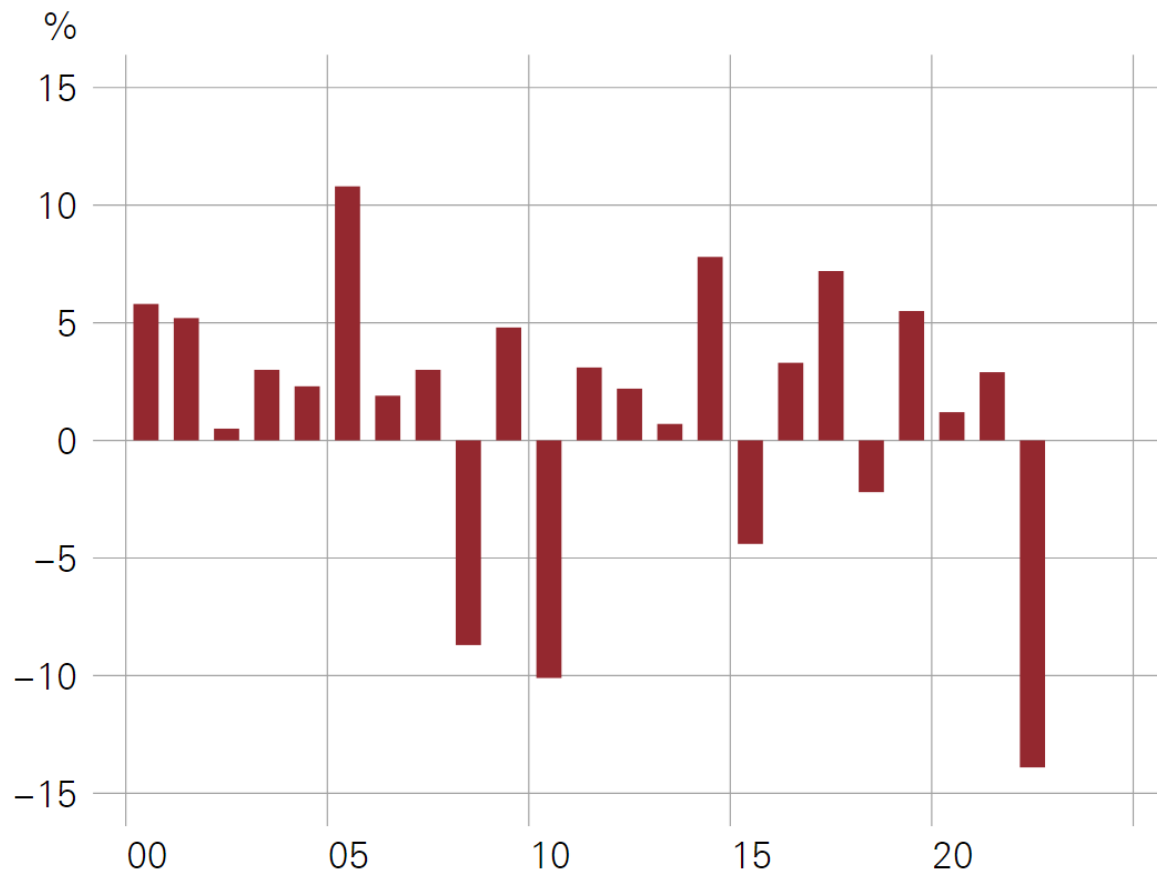
- Invested in all developed markets (large-, mid- and small-cap stocks) as well as in EM large- and mid-cap companies
- 96% of global equity markets
- Non-financial aspects of equity investments

Fixed income

- SNB is an important lender in many countries (GE, CA, DK, SG)
- 76% of global bond markets
- No true alternatives to the G4 government bond markets (yet)

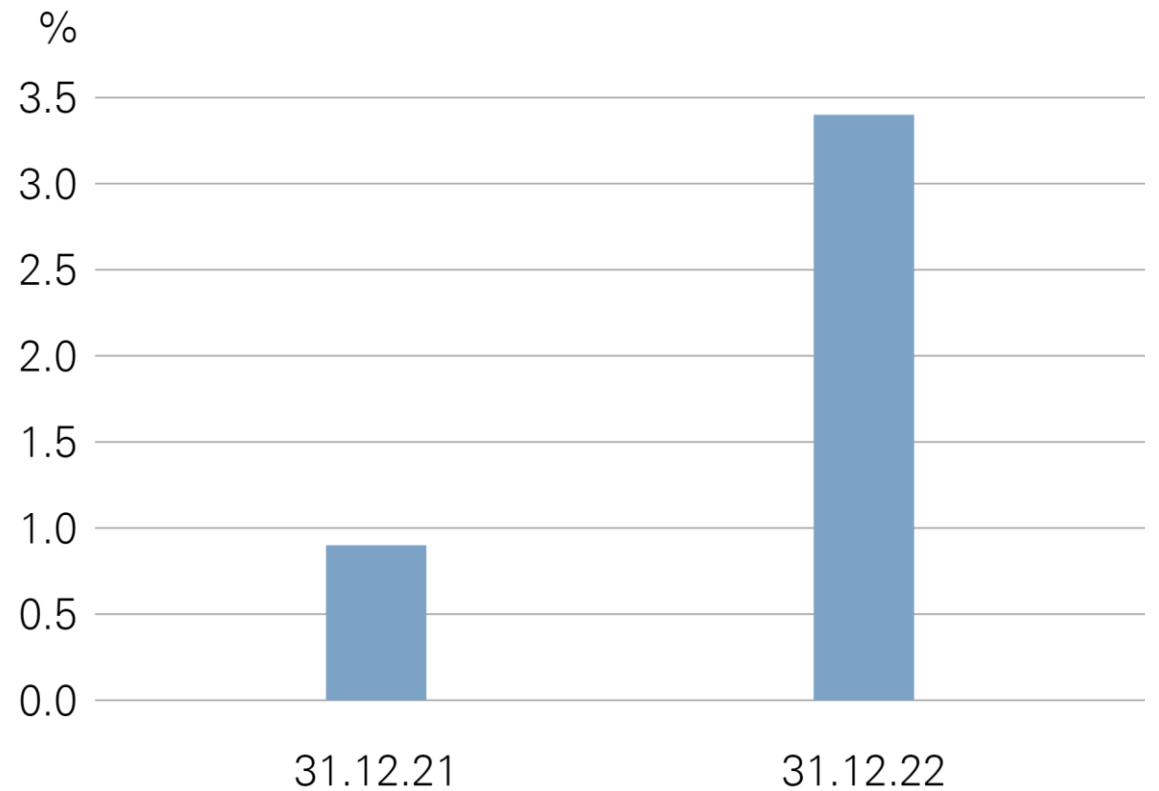
Interest rate rise has led to capital losses on FX reserves, but also to higher future return potential

CHF RETURN OF FX RESERVES



RETURN POTENTIAL ON BONDS

Based on yields



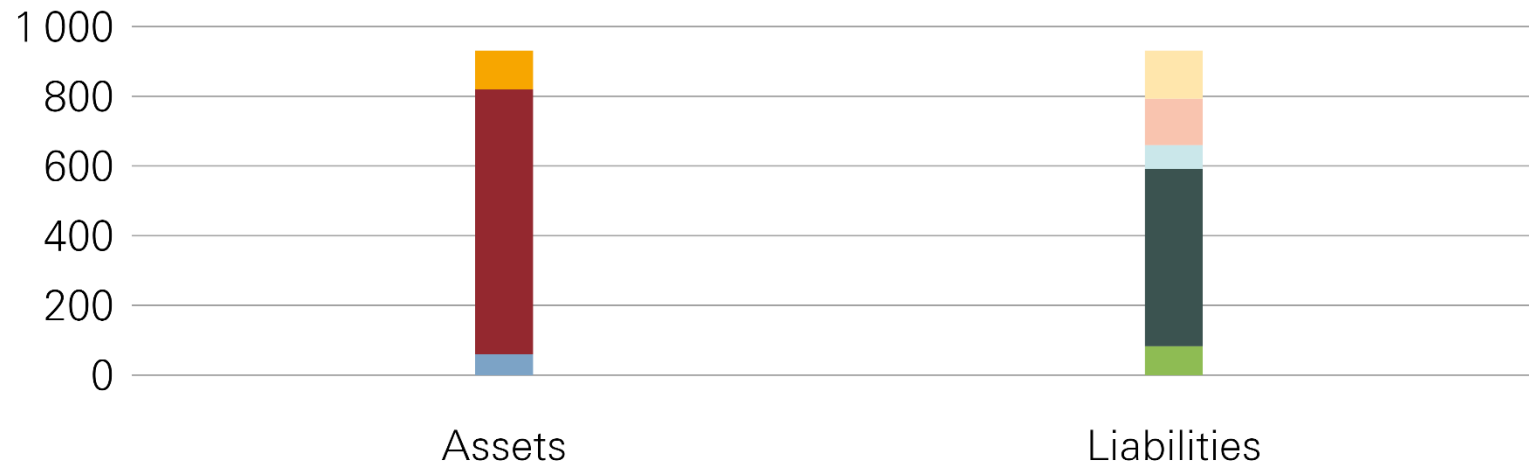
Source: SNB

Return potential limited by higher costs on liabilities

BALANCE SHEET ITEMS OF THE SNB

As of end of May 2023

Bn. CHF



Costs on liabilities:

- Interest on CHF repo transactions and SNB debt certificates
- Interest on sight deposits

Thank you for your attention!

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