BIS

1930
2020 Promoting monetary and financial stability

Annual Report

2019/20

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BIS 1930 2020

Annual Report

2019/20

Promoting global monetary and financial stability

This report is based on information available up to 31 May 2020.

Foreword by the BIS General Manager

I am pleased to present the BIS's *Annual Report 2019/20*. In the pages that follow, we update you on the progress we have made in implementing our Innovation BIS 2025 strategy. We also outline the steps we took to expand our global outreach during the past year, despite the enormous challenges faced by all of us in the central banking community in recent months.

As I write, the spread of coronavirus has thrown the world into disarray. The pandemic is three shocks in one: a public health crisis, a hammer-blow to the real economy and a stress test for the global financial system. During the acute phase of the pandemic, central banks intervened on an unprecedented scale to keep financial markets liquid and to preserve the stability of the financial system. Monetary and fiscal policies had to cushion the economic blow. To lay the foundations for a balanced recovery, governments will need to build on these efforts by carrying out effective fiscal consolidation and growth-oriented structural reforms.

A global shock of this magnitude puts a premium on international cooperation. The BIS's role as a global forum for central banks has never been as crucial. In recent months, we have kept up our roster of international meetings, replacing physical ones with virtual ones, and we have interacted with the central bank and regulatory community even more intensively than before.

Meanwhile, our economic research has focused on current topics of interest for central banks, and more recently on how the pandemic is affecting the global financial system and the real economy. Our new publications are providing a timely analysis of fast-moving developments in financial markets, monetary policymaking and regulation.

Despite the difficult market conditions towards the financial year-end, we have kept up our banking services for central banks and international financial institutions without interruption, while successfully riding out the various episodes of market turbulence. Although the profit for the financial year came in at SDR 166 million, SDR 295 million less than in the previous year, our total comprehensive income more than doubled, to SDR 1.6 billion, boosted by substantial unrealised valuation gains from the rising gold price and a fall in bond yields.

Notwithstanding the crisis environment, we have made good progress in putting our Innovation BIS 2025 strategy into effect. Our newly established Innovation Hub is exploring new technological trends, applying some of them to develop innovative central bank public goods. Now under way in Hong Kong SAR, Singapore and Switzerland, these efforts are complemented by our economic research on how fintech, regtech and suptech will influence the work of central banks, and how it is transforming the financial sector and the wider economy.

On the banking side, we have developed new capabilities to support increased diversification of our investments and have expanded our range of products and services tailored to the needs of central banks. These developments, together with the extension of trading hours thanks to the opening of a new dealing room in our Representative Office for the Americas, will position the Bank to better serve its customers around the globe.

Significant investments in IT to support the creation of a more flexible digital workplace have proved invaluable for our crisis response to the pandemic. We will be building further on this to provide a future-ready and resilient work environment. These efforts include a continued commitment to enhancing our cyber resilience. Given the strong focus on cyber-related issues within the central bank community, our Cyber Resilience Coordination Centre provides a valuable forum for knowledge-sharing and skill-building, including practical training exercises. In a similar fashion, our Financial Stability Institute is helping supervisory authorities address the challenges and opportunities of fintech and suptech, among others.

Underpinning these various initiatives, work has begun on modernising HR practices and streamlining some of our business processes. These are key elements in meeting our goals of creating a more agile organisation with a culture that supports innovation and continuous improvement.

Some adjustments are inevitable in the face of this pandemic. Our planned exhibition to mark the Bank’s 90th anniversary has been postponed. Even so, we are prompted to reflect on how our role has evolved over the past years, while staying true to our mandate to promote the cooperation of central banks. We will keep this purpose in the forefront of our minds as we step up our response to current challenges.

Finally, I want to acknowledge the extraordinary efforts made by all our staff members worldwide. Our services and support for our member institutions, and for the broader community of central banks, have depended in full measure on their resourcefulness, flexibility and engagement over the past year.

Agustín Carstens

The year in numbers

FINANCIALS

140 clients
with placements at the BIS

Customer asset management holdings (SDR, market value)
20.2 billion

Total deposits (SDR)
250.2 billion in currency
15.2 billion in gold

Net profit (SDR)
165.5 million

Total comprehensive income (SDR)
1,602.8 million

Operating expense (SDR)
340.8 million

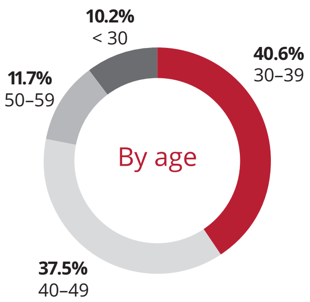
Bank capital (SDR)
21.6 billion

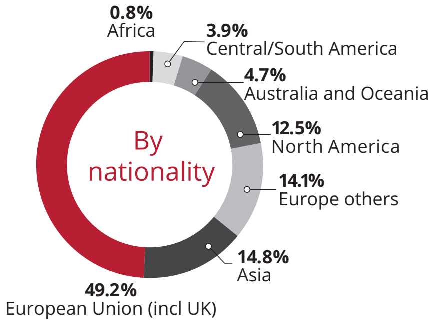
Balance sheet (SDR)
308.5 billion

ANNUAL RECRUITMENT

128 staff members (internal and external)
13 Graduate Programme
34 secondees and fellows

45% female
55% male





HIGH-LEVEL HOSTED MEETINGS

148 in Basel
6,920 participants

69 hosted globally
2,692 participants

RESEARCH

Research seminars and meetings

126 speakers
31 internal, 95 external

Flagship publications

Annual Report
20,000 downloads

Annual Economic Report **31,000** downloads

Quarterly Review **46,000** downloads

Visiting economic researchers

17 Technical Advisers
11 BIS Research Fellows
16 Central Bank Research Fellows

1 Lamfalussy Fellow
4 Graduate Programme
6 PhD Fellowship Programme

BIS GLOBAL PRESENCE 2019/20

3 dealing rooms
Mexico City, Basel and Hong Kong SAR

3 Innovation Hub Centres
Switzerland, Singapore and Hong Kong SAR

2 Representative Offices
Mexico City and Hong Kong SAR

Contents

1

Looking forward and back

In 2019/20, we continued to shape the Bank for the future with our Innovation BIS 2025 strategy while remembering our origins as we prepared to commemorate our 90th anniversary in 2020. This has given us an opportunity to reflect on our role and how it has evolved over the years, while staying true to our mission to serve central banks in their pursuit of monetary and financial stability, and being ready to adapt to new challenges in a dynamic and changing external environment.

Looking forward
Shaping the Bank for tomorrow

Innovation BIS 2025 is our medium-term strategy. Launched in early 2019, it comprises a set of initiatives that position the Bank for the challenges ahead. It aims to build a stronger BIS that embraces continuous innovation on both the analytical and business fronts, at the same time as it considers best practices at the organisation-wide level.

The Innovation BIS 2025 strategy reflects how innovation and technology are reshaping the financial landscape and the way we work, to help us meet the challenges of the digital age. Under the strategy, we are investing in next-generation technology to build a resilient and future-ready digital workplace across the Bank.

Innovation BIS 2025 consists of a set of initiatives anchored by our mission: to serve central banks in their pursuit of monetary and financial stability, to foster international cooperation in those areas, and to act as a bank for central banks.

Highlights of key outcomes

In 2019/20, some of the planned initiatives were delivered and others started to come to fruition. We are pleased to highlight here the key outcomes achieved to date.

We broadened our **economic analysis and research** to include new themes. We made particular progress in our work on the impact of technological innovation and monetary policy frameworks, reflected in BIS and external publications and statistics. We also enhanced our other analytical output, especially that related to the impact of Covid-19 on the economy. There was also a full programme of conferences and research network events (see pages 17–27).

Innovation BIS2025
Shaping the Bank for tomorrow

Our Financial Stability Institute enhanced its work in **capacity-building and knowledge-sharing** to help supervisory authorities address ongoing and new supervisory challenges. The new offerings in the past year included enhanced online courses on banking and insurance supervision, preparations for regional crisis simulation exercises and publications on fintech, suptech and crisis management (see pages 45–7).

We established the **BIS Innovation Hub** – with operational presence in Hong Kong SAR, Singapore and Switzerland – to engage with central banks in the innovation space and to explore the practical implications of new technological trends (see pages 29–33).

We developed a **people strategy** to align our human resources management policies and practices with the evolving needs of the Bank (see page 117).

We opened a new **dealing room** in our Americas Office. This extends customer outreach and allows us to comprehensively serve our client central banks across all time zones (see page 43).

We updated our **financial risk management framework** to give us more flexibility to employ capital efficiently, while maintaining a prudent investment approach (see page 103).

We have deepened our engagement with **BIS committees and hosted organisations** in the context of the Basel Process (see pages 60–80).

We developed new capacities to diversify our **investments** and launched a number of new **customer products**, including additional reserve management instruments denominated in both on- and offshore renminbi and the new green bond fund (see pages 35–42).

As a new channel of knowledge-sharing among central banks in cyber security practices, our **Cyber Resilience Coordination Centre** conducted further cyber range exercises for central banks and developed a cyber resilience assessment framework (see page 81).

Looking back
The BIS turns 90

In 2020, the BIS commemorates its 90th anniversary. The Bank's role has continued to evolve to the present day to respond to the changing needs of its member central banks. For more on the BIS's history from 1930 to 2020, see www.bis.org/about/chronology.htm.

Creation of the BIS

Ninety years ago, on 30 January 1930, the BIS was created by an international treaty (the Hague Conference). The Bank opened its doors for business in Basel, Switzerland, on 17 May 1930.

From 1930 until 1977, the BIS was located in the former Savoy Hôtel Univers, across from the main railway station in Basel.

Promoting cooperation among central banks through time

With reparations cancelled (1932), "promoting global monetary and financial stability through international cooperation" became the Bank's unique mission. It does so in a variety of ways: by organising regular meetings of central bank and supervisory authority officials from across the globe; by conducting research related to monetary and financial stability issues and acting as a hub for banking and financial statistics; and by providing banking and financial services to central banks.

1930

BIS Annual General Meeting, Basel, June 1959.

An international organisation owned by central banks

The BIS was set up as an international financial organisation, with central banks being the only shareholders entitled to vote at the Bank's general meeting.

The objectives of the BIS were to administer the reparations imposed on Germany after the First World War, and to promote the cooperation of central banks.

From European to transatlantic

While the Bank's focus and membership were initially predominantly European, this changed from the 1960s onward.

In the context of the Bretton Woods system of fixed exchange rates, monetary cooperation became transatlantic through the Group of Ten (G10) of advanced economies from Europe, the US and Japan.

BIS Board of Directors, September 1994.

The Tower

In 1977, the BIS moved into the Tower, an iconic 18-storey building designed by Basel architect Martin Burckhardt.

Press conference announcing the endorsement of the Basel III framework by the Group of Central Bank Governors and Heads of Supervision, December 2017.

New challenges in the 21st century

The most recent period in the Bank's history has further underlined the importance of effective central bank cooperation. In the aftermath of the Great Financial Crisis (2007–09), central banks and supervisory authorities have helped reform the international financial system, specifically through the adoption of the Basel III regulatory framework for banks. The BIS hosts the secretariats of key international bodies, such as the Basel Committee on Banking Supervision and the G20 Financial Stability Board, which have been at the centre of the post-crisis reform efforts.

Through its Innovation BIS 2025 strategy, the BIS promotes close cooperation among central banks to meet the challenges posed by financial innovation. Innovation holds the promise of making our financial system more transparent, more efficient and more inclusive. Promoting cooperation in this field is entirely in keeping with the role the BIS has been playing for 90 years now.

2020

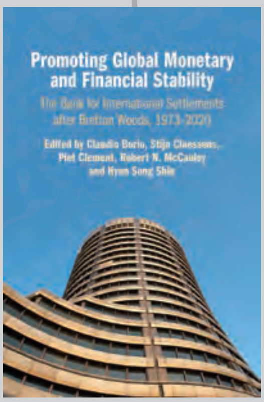
Truly global

During the last quarter of the 20th century, the strong growth of the emerging market economies led to a shift in the global financial and economic power balance. The transition to a system of floating exchange rates and the rapid advances in financial deregulation and globalisation created new challenges. Financial stability became a global concern calling for global responses.

The BIS transformed into a truly global organisation, expanding its membership from 33 shareholding central banks in 1993 to 62 as of end-May 2020, and adapting the composition of its Board of Directors to include the central banks of major emerging market economies.

Signing ceremony creating the BIS Representative Office for Asia and the Pacific in Hong Kong SAR, July 1998.

Celebrating 90 years



The BIS's 90th anniversary is an occasion to look back at the history of international monetary and financial cooperation – its achievements and setbacks. It is an occasion to reflect on the opportunities and challenges that lie ahead.

To mark the anniversary, the BIS commissioned an academic study reviewing the role and contributions of the BIS during the past 50 years. The book *Promoting global monetary and financial stability: the Bank for International Settlements after Bretton Woods, 1973–2020*, was published by Cambridge University Press in May 2020. It follows on from the volume *Central bank cooperation at the Bank for International Settlements, 1930–1973* by Gianni Toniolo, published in 2005.

2

Promoting global monetary and financial stability

On both the analytical and business fronts, the BIS embraces continuous innovation. Through research and analysis, exploration of financial technology, capacity-building and knowledge-sharing, it supports cooperation and provides an independent voice to sound policymaking to help central banks face emerging challenges.

Economic research, analysis and statistics

Research at the BIS supports central banks in their pursuit of monetary and financial stability. The BIS draws on its unique position at the intersection of research and policy. Research and analysis are the basis for the background notes that the BIS produces for regular meetings of senior central bank officials (see pages 60–2) and for its support for the Basel-based groups (see pages 62–3). BIS research responds to pressing short-term issues while proactively exploring themes that are of more strategic and lasting importance.

Highlights in 2019/20

The BIS's response to the Covid-19 pandemic is a good illustration of the institution's research philosophy at work. Covid-19 is three crises in one: a health, economic and financial crisis. As the pandemic began to exert its full impact on the global economy, the BIS supported the policy response of central banks and the supervisory community by providing near real-time analysis of unfolding events and by facilitating fruitful discussions between central banks. This was at a time when central banks' own analytical capacities were stretched due to their crisis response. The BIS launched a new publication series, the *BIS Bulletin* – short, timely pieces of analysis to help understand the unfolding events and inform policy (see page 23).

Recent events have underscored how rigorous analysis, enriched by the variety of international experiences, can help central banks have better informed exchanges of views and learn from each other's experience. This is particularly true of two longer-standing focal points of BIS research, whose importance became obvious during the economic storm unleashed by the pandemic: monetary policy frameworks and technological innovation.

Monetary policy frameworks

The pandemic has highlighted the challenges monetary policy frameworks face in both advanced and emerging market economies (EMEs). In advanced economies, central banks reacted swiftly and forcefully to stabilise the financial system. Despite a substantially narrower policy space compared with the pre-Great Financial Crisis era, they once again took unprecedented and determined measures, further stretching the boundaries of central banking. The financial shock for EMEs was also very severe, in the form of record capital outflows, large exchange rate fluctuations and steeply rising bond premia. EME central banks' response was equally swift and forceful, as they extended the arsenal of measures developed over the years with some new tools. In fact, the shock represents a real-life stress test of central banks' monetary policy frameworks.

Capital flows, exchange rates and monetary policy frameworks in EMEs

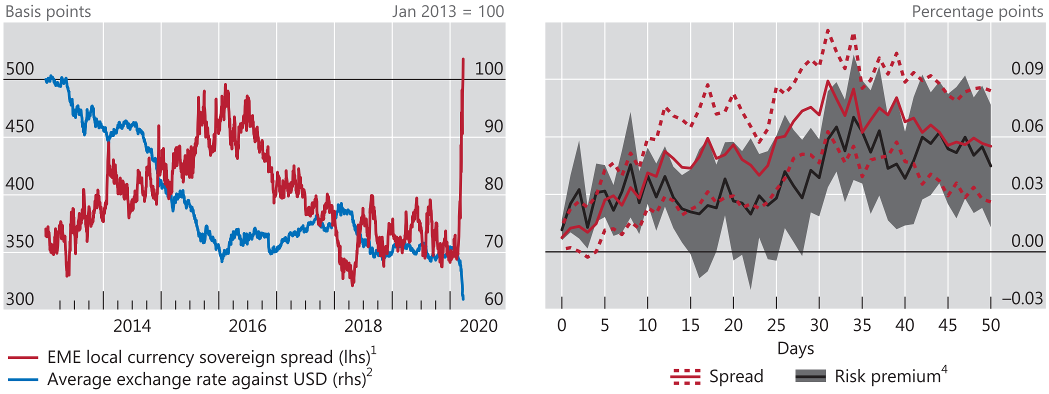
In EMEs, unfolding events largely conformed to the patterns of interaction between currency fluctuations and financial market dislocations identified in previous research. A chapter of the 2019 Annual Economic Report on EME monetary policy frameworks zeroes in on the challenges faced by EME central banks from large capital flow and exchange rate swings. An important transmission channel that gives rise to particularly tricky trade-offs for monetary policy is the disruptive exchange rate impact on the balance sheets of currency-mismatched borrowers and lenders and its broader repercussions on financial conditions. Through this channel, a depreciation of the exchange rate brings about a tightening of financial conditions (see graph below), counteracting the traditional trade channel operating through international price competitiveness.

In order to meet the challenges posed by large swings in capital flows and exchange rates, over the past two decades many EMEs have adopted policy frameworks that combine inflation targeting with macroprudential tools and more active intervention in FX markets. These frameworks have served EMEs well, and should help them weather the pandemic fallout.

Better anchored inflation expectations mitigate the impact of exchange rate depreciation on inflation. Macroprudential measures enhance the resilience of the financial system. FX reserves can buffer shocks and alleviate financial stress. Through FX intervention, central banks can also lean against currency

Exchange rates co-move with bond yields in EMEs

Exchange rates and sovereign spreads | Impact of exchange rate depreciation[3]



[1] JPMorgan GBI-EM Broad Diversified index spread over the 10-year US Treasury yield. [2] Weighted average using the country weights (excluding the Dominican Republic, Romania and Uruguay) of the JPMorgan GBI-EM Broad Diversified index as of 28 February 2020. [3] Impact of a 1% depreciation shock to the bilateral USD exchange rate (log exchange rate changes on days of US and euro area monetary policy news). [4] Spread between the five-year local currency government bond yield and a synthetic local currency five-year yield given by the sum of the five-year US Treasury yield and the five-year cross-currency swap rate.

Sources: B Hofmann, I Shim and H S Shin, "Bond risk premia and the exchange rate", *BIS Working Papers*, no 775, March 2019; Bloomberg; Datastream; JPMorgan Chase; BIS calculations.

depreciation and capital outflows. Moreover, intervention in FX derivatives markets can provide insurance for the private sector against FX losses in times of extreme stress.

Despite these improvements, in order to meet the challenge of global investors' large portfolio adjustments in their domestic currency bond markets, EME central banks have expanded their toolkit. They have directly intervened in these markets, thus taking on the role of a dealer or buyer of last resort, already familiar to their advanced economy peers. This represents a significant enhancement of their monetary policy frameworks.

Providing monetary stimulus and support in a low rate environment

Advanced economy central banks, too, have taken unprecedented measures to stabilise the financial system and the economy. Some of these are similar to those adopted during the Great Financial Crisis, such as large-scale bond purchases; others are more novel, including purchases of non-investment grade paper. Lessons from the effects of the measures adopted in response to the Great Financial Crisis can help calibrate central bank responses today and anticipate their effects. In this vein, a BIS research paper explores the impact of different types of unconventional monetary policies (forward guidance, negative rates, lending to financial institutions, targeted and large-scale asset purchases) on retail interest rates. Another BIS study finds that monetary policy has significant expansionary effects on output and inflation also when interest rates are at their effective lower bound, casting doubt on the existence of the liquidity trap.

From a longer-term perspective, a key question is why central banks have lost so much policy space over the years. How could interest rates in so many countries sink so long, sometimes below zero, in the pre-pandemic period? Part of the decline may reflect an increase in risk perceptions or risk aversion by some important global investors. But one working paper argues that monetary policy regimes may explain more of the decline in real interest rates than either ageing-related excess of saving over investment or shifts in the preferences of investors. In such a framework, low rates may beget lower rates to the extent that the monetary policy regime does not lean hard enough against the build-up of financial imbalances. These questions could regain prominence in the post-mortem of the pandemic.

Impact of technological innovation

The future of central banking is inextricably bound up with innovation. The technological sea change that is transforming the financial sector and the wider economy affects all aspects of central banks' work, from payments to monetary policy to financial regulation. By their very nature, central banks have to be at the forefront of the debates concerning the nature of money in a digital world and the new players' potential to reshape the financial services landscape and the financial system more broadly. This debate is bound to intensify further in the wake of the pandemic, which is likely to accelerate many behavioural and technological trends that were already in train before.

In addition to its work in the new BIS Innovation Hub (see pages 29–33), the Bank continued to expand its analysis of digital innovation. After a special chapter on cryptocurrencies in the 2018 Annual Economic Report, the 2019 report featured a special chapter on big techs in finance. A number of management speeches and research papers analysed a large range of relevant topics in the area, including central bank digital currencies (CBDCs), stablecoins, financial inclusion and cyber risk. Moreover, the BIS hosted two major research events on the issue in the

"The monetary and financial architecture needs solid foundations. And it is the central bank's role to establish these foundations."

Agustín Carstens
BIS General Manager

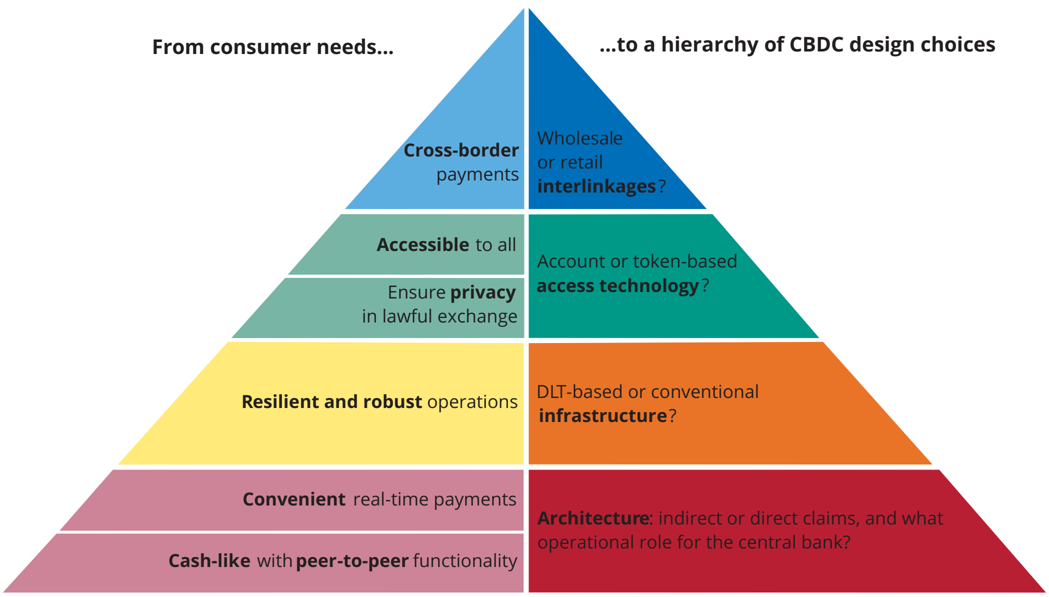
past year, the Annual Conference on "The digital economy and financial innovation" and the Ninth BIS Research Network meeting (co-organised with the Asian Bureau of Finance and Economic Research and the Centre for Economic Policy Research) on "Fintech and digital currencies".

Shaping the future of money and payment systems

The Covid-19 pandemic is likely to change people's payment behaviour and possibly encourage a shift away from cash (see Annual Economic Report, Chapter III). But regardless of the choice of technology, the stability of money and payment systems will continue to rest on the firm foundations central banks provide. In a lecture at Princeton University, BIS General Manager Agustín Carstens argued that central banks pave the way for innovation by underpinning the public's trust in money. "Central bank public goods" – tasks such as maintaining the unit of account, guaranteeing the finality of payments, providing liquidity and conducting oversight – are essential to maintaining trust in a currency and giving the private sector greater scope for innovation.

Central banks also face the challenge of how to react to the increasing digitisation of money. A number of central banks are actively exploring the desirability and feasibility of establishing their own payment systems through CBDCs. Some are moving from conceptual research to practical development of wholesale and retail CBDCs. If a central bank were to decide to issue its own CBDC to general users, it would face several crucial technological design choices (see graph below).

The CBDC pyramid: from consumer needs to design choices



Source: www.bis.org/publ/qtrpdf/r_qt2003j.htm.

Big tech in finance and the new nexus between data privacy and competition

In banking, incumbents are under pressure from both fintech startups and technology giants. The entry of new players could bring efficiency gains and increase access to financial services, but could also introduce new risks and costs. Important insights can be gained from the experience of EMEs, in particular China.

The entry into financial services of big technology firms with access to vast amounts of data holds the promise of efficiency gains and can enhance financial inclusion. BIS research finds that big tech firms lend more in countries with less competitive banking systems and less stringent regulation. Using non-traditional data, for example from applications on mobile phones or e-commerce platforms, can help to more accurately price credit risk, including for small and medium-sized enterprises. At the same time, the entry of big techs introduces new risks associated with market power and violations of data privacy. The balance between efficiency and privacy will depend on societal preferences and will vary across jurisdictions. These factors highlight the need to coordinate policies at both domestic and international levels.

Technological advances for regulation and cyber risks in the financial sector

As the digital economy and financial innovation expand beyond regulatory perimeters and geographical borders, policymakers need institutional mechanisms to help them work and learn together. Coordination among authorities – national and international – is crucial to sharpen and expand their regulatory tools. As supervisors and regulators, central banks and other financial authorities need to be creative, nimble and tech-savvy in order to cope with a rapidly shifting financial landscape. Their daily vocabulary now includes suptech and regtech, the intersection between technology and supervision or regulation.

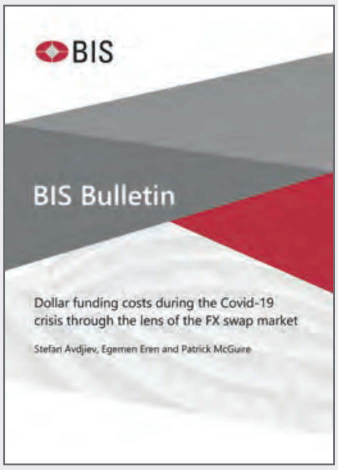
Lamfalussy Fellows

Calendar year 2020

Robert M Townsend, Elizabeth & James Killian Professor of Economics at the Massachusetts Institute of Technology

Fernando E Alvarez, inaugural Saieh Family Professor at the Department of Economics, University of Chicago

The BIS Bulletin



At the end of financial year 2019/20, the Covid-19 crisis shook the global economy and the financial system. Faced with this unprecedented situation, the BIS strived to support central banks by providing a global and considered perspective on the financial system and the course of actions available to them.

The Bank launched a new publication series, the *BIS Bulletin*. Bulletins are short, topical notes written by BIS economists. The Bulletins published so far provide insights on the impact of Covid-19 on banking, markets and the larger economy. Early issues looked at dollar funding through the lens of the FX swap market, leverage and margin spirals in fixed income markets, and cash and the future of payments, all in the light of Covid-19.

In future, Bulletins will also delve into other topics in a timely and focused way. You can sign up to receive an email alert when new Bulletins are published on the BIS website at www.bis.org/emailalerts.htm.

Distributed ledger technology (DLT), allowing financial assets to be converted into tokens, opens up new ways of supervising financial risks. One study makes the case for embedded supervision, or a framework that allows compliance with regulatory goals to be automatically monitored by reading the market's ledger. This could reduce the need for firms to actively collect, verify and deliver data to authorities. Another study discusses operational and cyber risks in the financial sector, the potential costs of cyber incidents and their drivers. It assesses the link between cyber risks and financial stability in order to evaluate possible policy responses.

Research and policy collaboration

Collaboration with central bank and academic researchers around the world stimulates a broad dialogue on key policy questions. During the past year, the BIS welcomed 55 academics and central bank researchers under its various visitor programmes to conduct collaborative research on policy-related issues of relevance to the BIS. The programmes range from visits of a few days or weeks to longer stays by resident scholars. These included the Alexandre Lamfalussy Senior Research Fellowships, which were awarded in 2020 to Fernando E Alvarez and Robert M Townsend. In addition, the BIS expanded its Graduate Fellowship Programme, which allows PhD- and master's-level students in economics, finance or related fields to acquire practical experience in policy research and analysis in monetary and financial stability issues at an institution with a unique international perspective.

The 2019 Triennial Survey of Foreign Exchange and Over-the-counter Derivatives Markets

The BIS Triennial Central Bank Survey is the most comprehensive source of information on the size and structure of global FX and over-the-counter (OTC) derivatives markets. The Triennial Survey is coordinated by the BIS under the auspices of the Markets Committee and the Committee on the Global Financial System, and is supported through the Data Gaps Initiative endorsed by the G20.

The April 2019 survey involved central banks and other authorities in 53 reporting jurisdictions. They collected data from close to 1,300 banks and other dealers in their jurisdictions and reported national aggregates to the BIS, which then calculated global aggregates.

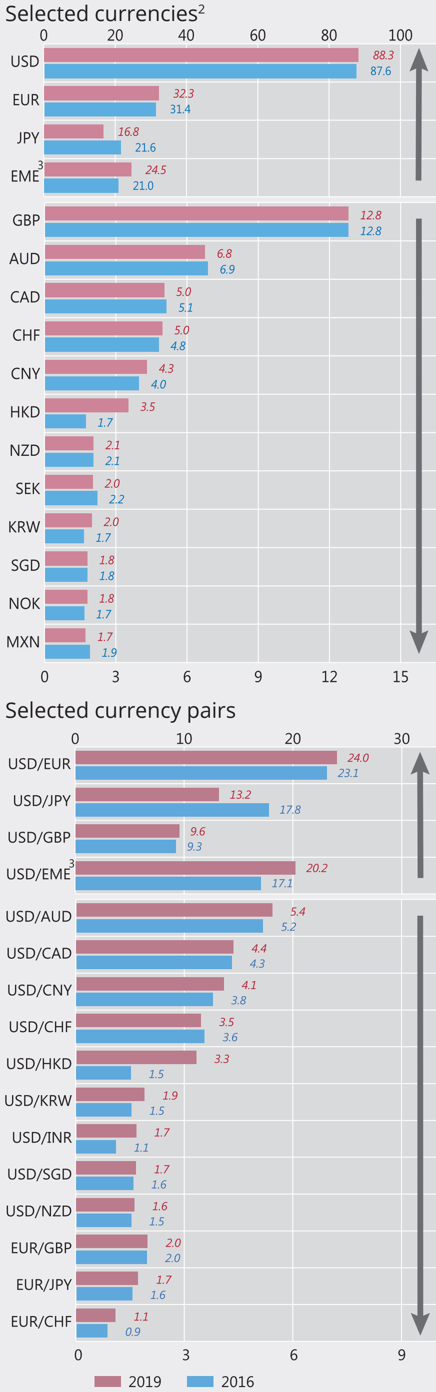
The results showed trading in FX markets reached $6.6 trillion per day, up from $5.1 trillion three years earlier. Growth of FX derivatives trading, especially in FX swaps, outpaced that of spot trading. The US dollar retained its dominant currency status, being on one side of 88% of all trades. As in previous surveys, EME currencies again gained market share, reaching 25% of overall global turnover.

Five economies – the United Kingdom, the United States, Hong Kong SAR, Singapore and Japan – accounted for 79% of all foreign exchange trading. Mainland China recorded a significant rise in activity, making it the eighth largest FX trading centre (up from 13th in April 2016).

The survey also provided new insights into the boost that electronification gave to trading, and the role of compression and clearing in containing the growth of outstanding derivatives. Lastly, the BIS statistics have provided a useful background for analysing the evolving demand for US dollar funding through swap markets as the pandemic unfolded.

Foreign exchange market turnover by currency and currency pair[1]

Net-net basis, daily averages in April, in per cent



[1] Adjusted for local and cross-border inter-dealer double-counting, ie "net-net" basis. [2] As two currencies are involved in each transaction, the sum of shares in individual currencies will total 200%. [3] EME currencies.

Conferences and workshops are organised frequently to bring together participants from policymaking, academia and business. The 18th BIS Annual Conference focused on the digital economy and financial innovation. The semiannual meetings of the BIS Research Network provide another opportunity to discuss current macroeconomic and financial topics.

An important part of the BIS's analysis and research activities is carried out at the two Representative Offices in Hong Kong SAR and Mexico City (see pages 49–57). Both offices have active research programmes alongside secondment and exchange schemes to collaborate with member central banks in their respective regions. They also oversee conferences and collaborative research networks.

The BIS also collaborates closely with international research bodies, such as the International Banking Research Network. Working with international banking and financial statistics, the BIS conducts global analyses to complement this and the respective country-specific studies of other network members, and helps to improve the comparability of country-level results.

BIS research is published mainly as *BIS Working Papers*, the *BIS Quarterly Review*, the *BIS Bulletin* and *BIS Papers*, as well as in the publications of hosted committees. It also informs the analysis of policy challenges reviewed in the Annual Economic Report. To gain further feedback and academic recognition, BIS economists present research at international conferences and publish in professional journals and other external publications.

More about BIS research at www.bis.org/forum/research.htm.

Research collaboration at the BIS
April 2019–March 2020

55
Visiting economic researchers

11 BIS Research Fellows
16 Central Bank Research Fellows
17 Technical Advisers
1 Lamfalussy Fellow
4 MED Graduate Programme (Associates)
6 MED PhD Fellowship Programme (Senior Associates)

126
Research seminars and meetings

31 internal speakers
95 external speakers

73
BIS Working Papers

45 internal authors
101 external authors

Expanded statistical initiatives

The BIS international banking and financial statistics, compiled in cooperation with central banks and other national authorities as well as international organisations, inform and support analysis of financial stability, international monetary spillovers and global liquidity. BIS research also makes use of the BIS Data Bank of key economic indicators shared online among member central banks. This unique source of information is used to compile global data sets published by the BIS, for instance on credit, exchange and policy rates, and property prices.

Much of the BIS's statistics work reflects and supports the reforms agreed in the aftermath of the previous financial crisis. In this endeavour, the BIS cooperates closely with other international financial organisations as a member of the Inter-Agency Group on Economic and Financial Statistics (IAG),[1] which has been tasked with coordinating and monitoring the implementation of the recommendations of the Data Gaps Initiative (DGI) endorsed by the G20. Together with other IAG members, the BIS also sponsors the Statistical Data and Metadata eXchange (SDMX) standard.

1 The IAG comprises the BIS, the ECB, Eurostat, the International Monetary Fund, the Organisation for Economic Co-operation and Development, the United Nations and the World Bank Group.

These international efforts have already greatly helped to fill known blind spots in data collection. This has also proved helpful in monitoring the consequences of the current pandemic. For instance, the BIS credit indicators allow the evolution of aggregated debt levels across both the main jurisdictions and the major economic sectors to be monitored. At a more disaggregated level, the BIS now regularly collects a wide range of institution-level data to inform the work of central banks and supervisory authorities, including through its support of the Quantitative Impact Studies undertaken by Basel-based groups, principally the Basel Committee on Banking Supervision. It also hosts the International Data Hub, where balance sheet information about systemically important banks is stored and analysed on behalf of participating supervisory authorities.

Work is under way on the implementation of recommendations from the 2017 BIS Study Group for the BIS international banking statistics. These will introduce more detail for certain instruments, including the separate reporting of repo positions and derivatives on banks' balance sheets. They will also bring the methodology closer to prudential supervisory concepts, for example by aligning banks' consolidation perimeter with national prudential rules, and adopting Basel Committee standards in the reporting of risk transfers across countries.

More about BIS statistics at www.bis.org/statistics.

BIS Innovation Hub

The BIS Innovation Hub is a new initiative launched by the Bank in June 2019 as part of the Innovation BIS 2025 strategy. Its mission is to foster international collaboration on innovative financial technology within the central banking community. It has been given a threefold mandate:

- Structured and systematic identification of critical trends in technology affecting central banking in different locations, and development of in-depth insights into these technologies that can be shared with the central banking community.
- Development of public goods in the technology space geared towards improving the functioning of the global financial system.
- Service as the focal point for a network of central bank experts on innovation, with regular events to promote exchange of views and knowledge-sharing.

The Innovation Hub is grounded in the principles of international cooperation and collaboration. Its work will help ensure that innovation will promote financial stability and inclusion.

Establishment

The Innovation Hub is based in Basel with three regional Hub Centres in Hong Kong SAR, Singapore and Switzerland, each established with the cooperation of the host central bank in that jurisdiction (the Hong Kong Monetary Authority, the Monetary Authority of Singapore and the Swiss National Bank, respectively). It is led by the Head of the Hub, who is supported by a secretariat based in Basel. Each Hub Centre features multidisciplinary teams which collaborate on projects related to technological innovation in the financial sector. Staff are drawn primarily from the BIS, the host central bank and other central banks.

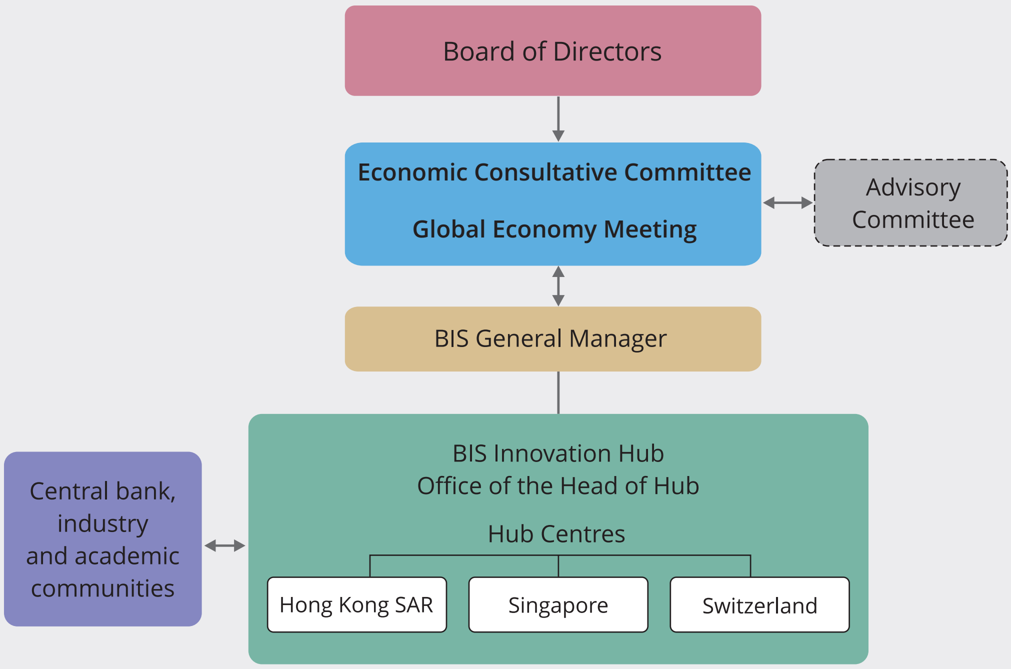
The Innovation Hub will collaborate with a broad range of stakeholders. Working closely with BIS departments and committees, standard-setting bodies and the Financial Stability Board, over time it will build a network of central banks and central bank experts who will work with the Innovation Hub on individual projects and initiatives. Its activities will also involve other international organisations,

"We must make the best use of innovation to support financial stability and promote financial inclusion."

Benoît Cœuré
Head of the BIS Innovation Hub

Governance framework

The BIS Innovation Hub's governance structure ensures that the highest levels of BIS leadership are involved in decision-making. The Economic Consultative Committee and the Board of Directors play important roles in setting strategy and allocating resources, respectively. A key component of the governance framework is the Advisory Committee of the BIS Innovation Hub. Established in January 2020, the Advisory Committee is composed of key stakeholders in the BIS and is responsible for advising the General Manager and the Head of the Hub on all aspects of the Innovation Hub's activities. The Advisory Committee held its first meeting virtually in June 2020.



private sector firms, non-governmental organisations and academia. Each Hub Centre will engage actively with stakeholders in its region, including in the private sector.

Important steps have been taken to bring the Innovation Hub into operation. The Hub Centres in Hong Kong SAR, Switzerland and Singapore were all launched in 2019. In March 2020, the Board of Directors approved plans for the addition of up to three new Hub Centres to be located in different parts of the world. The BIS has initiated a process for the selection of these centres that will be completed in financial year 2020/21.

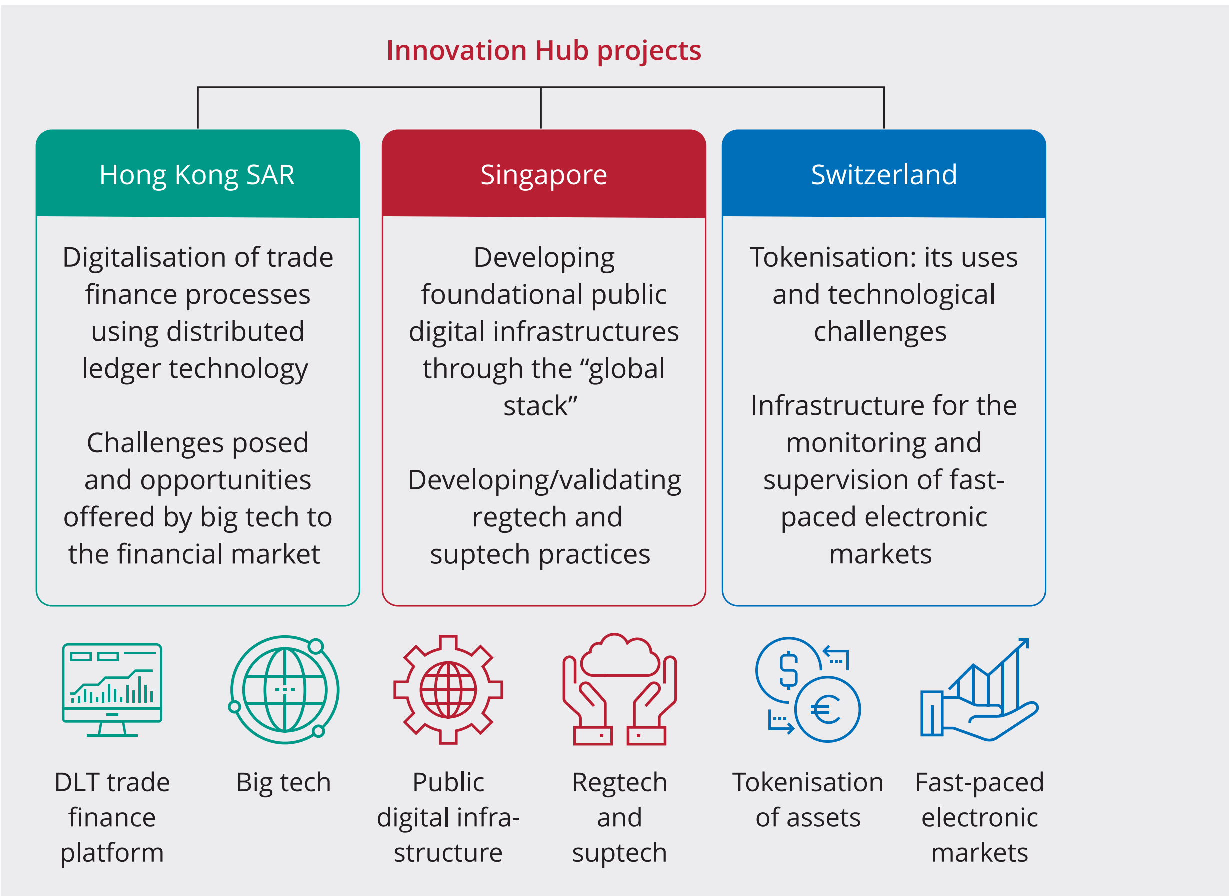
Projects and activities

The activities of the Innovation Hub will take different forms:

- Research and publication on critical trends in technology-driven innovation in financial services.
- Identification and development of new technological applications as global public goods that will help resolve problems with the global financial system.
- Development of a network of central bank experts in different subject areas.
- Organisation of outreach activities, seminars, training events and workshops.

Initial portfolio of projects

The Innovation Hub has begun operations with an ambitious set of projects touching on a broad range of themes. These projects draw on innovation work already under way in the three host central banks with a view to scaling up these efforts on a global stage. Over time, the Innovation Hub will develop a "home-grown" agenda of topics built around key themes of strategic importance to the BIS and its membership.



TechSprint initiative

The BIS Innovation Hub launched the TechSprint initiative in April 2020 in collaboration with the Saudi G20 Presidency, and with the support of the Monetary Authority of Singapore, the Financial Stability Board, the ASEAN Innovation Financial Network's API Exchange (APIX) and the RegTech for Regulators Accelerator (R^2A). Its purpose is to showcase the potential for new innovative technologies to resolve operational problems in the areas of regulatory compliance (regtech) and supervision (suptech).

As part of TechSprint, the Innovation Hub published selected problem statements and invited private firms to develop technological solutions to these problems. The statements identify challenges in regulatory reporting, dynamic information-sharing, and monitoring and supervision of cryptoassets, and were developed from submissions received from FSB member jurisdictions.

Shortlisted applicants will have the opportunity to discuss their solutions in July 2020 in a TechSprint Touchpoint workshop for national authorities and private firms. These firms will then be invited to develop their solutions on the APIX platform, a cloud-based open architecture API platform for experimentation.

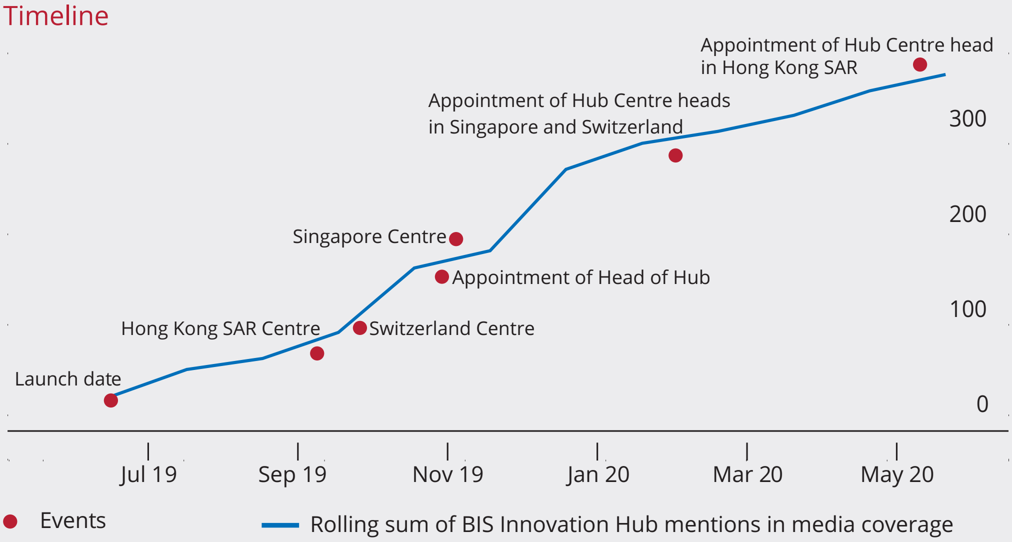
The Saudi G20 Presidency has convened an independent international expert panel to choose the most promising solutions to be announced in October 2020, which will then be showcased at the Singapore FinTech Festival in November 2020.

In September, the BIS and the Hong Kong Monetary Authority signed an operational agreement on the BIS Innovation Hub Centre in Hong Kong SAR.

The Innovation Hub is adjusting its operations in the light of the coronavirus pandemic. While the precise impact of the pandemic on the Hub is yet to be determined, it is possible that the plans and timelines for the implementation of Hub projects and recruitment of Hub staff may have to be adjusted.

Innovation Hub in the media

Timeline



Source: Factiva.

Banking activities

The BIS provides a full range of banking services to central banks and other official sector customers. Its banking activities include deposit-taking, mostly in the form of money market and tradable instruments, the provision of gold and foreign exchange trading services, and the management of pooled fixed income products and investment mandates.

BIS banking services are designed to meet the reserve management needs of central bank customers and to respond to their demands in terms of safety and liquidity. This requires reliable execution and continuation of service across the whole product range, as well as competitive pricing. Just like the Bank itself, BIS banking activities thus need to continuously evolve to keep pace with the central bank community's adaptation to the changing macroeconomic, political and technological environment.

On this basis, Banking staff were able to face the challenges arising from the volatile and rapidly changing market environment caused by the Covid-19 crisis starting in early 2020. In this period of turbulence, the Banking Department navigated a strained financial environment and continued to offer a full range of services, while operating in a business continuity context. This required a swift and nimble response (see pages 112–13).

As a result, at the end of March 2020 total assets stood at 308.5 billion Special Drawing Rights (SDR, a basket of currencies defined by the IMF which serves as the Bank's unit of account), up from SDR 291.1 billion the previous year, with net profits at SDR 165.5 million and total comprehensive income at SDR 1.6 billion (see page 89).

The Bank's business is supported by a strong capital position and a conservative risk management framework (see page 103). The BIS is committed to ensuring that its activities and those of its staff are conducted in accordance with all relevant principles and industry standards, such as the FX Global Code and the SWIFT Customer Security Programme, as well as with best market practices and the highest ethical standards.

Highlights in 2019/20

Covid-19 response

The Bank's profit and loss (P&L) depends on a number of key financial market drivers, many of which came under pressure during the Covid-19 crisis which began towards the end of the financial year. Market turbulence created unusual levels of P&L volatility due to unrealised valuation losses. Foreign exchange (FX) swap bases, for example, widened significantly as a result of US dollar funding pressures around the globe, and credit spreads rose sharply, reversing accrued profit from interest rate income generated earlier during the financial year, and necessitating a continuous rebalancing of the Bank's assets and pricing in the context of rapidly changing market conditions.

As a result, net profit as of end-March 2020 fell substantially below the SDR 461 million level recorded in 2018/19, to SDR 165.5 million, even as unrealised gains from gold holdings and other positions pushed total comprehensive income to SDR 1.6 billion, up from SDR 725 million in 2018/19. Much of the negative impact on the Bank's financial results proved temporary, however, when market stresses abated in April and May. With spreads narrowing and many of the outstanding money market positions maturing, valuations recovered, recouping most of the losses recorded during March and highlighting the resilience of the BIS balance sheet.

Innovation BIS 2025 implementation

The measures taken under the Innovation BIS 2025 strategy are the Bank's response to fast-paced technological change and an increasingly challenging business environment, which is now being additionally affected by the Covid-19 pandemic.

Implementation has proceeded in a prudent manner, aimed at a moderate increase in the Bank's risk-return profile and a broadening of its drivers of return. For example, over financial year 2019/20 the Bank selectively increased the duration of its own funds portfolio and added diversifying assets such as US agency mortgage-backed securities (MBS), which on net supported own funds performance during the recent turmoil. The Bank also continued to expand the range of products and services offered to its global client base (eg by adding additional renminbi-denominated products) and extended customer outreach by increasing its hours of operation into the later US trading session and by enhancing its cooperative activities with central banks.

Furthermore, as part of the Bank's overall IT strategy, the Bank has conducted a full strategic review of its Banking IT systems, laying the ground for significant upgrades of its trading and reporting systems. As the initiatives launched on this basis continue to proceed, they will help support quicker product release to market, improved electronic trading and enhanced customer services.

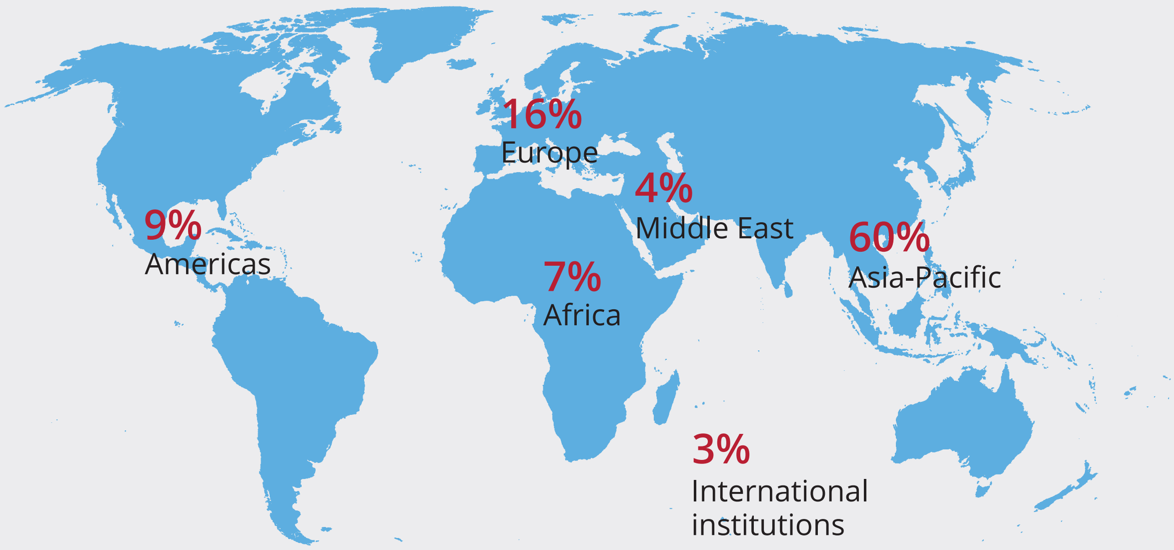
Scope of banking services

The BIS offers financial services to a broad client base comprising some 140 central banks, monetary authorities and international organisations. To provide these services, the Banking Department operates from three linked dealing rooms, located in Basel, Hong Kong SAR and Mexico City, and maintains close contact with reserve managers and other counterparties across the globe.

Reflecting the Bank's expanding product range and competitive pricing, average customer deposits over the financial year increased to SDR 220 billion, from

Geographical distribution of currency deposits

Based on balance sheet values in SDR, excluding gold; end-financial year



about SDR 200 billion in 2018/19. As of 31 March 2020, total deposits at the BIS stood at SDR 265 billion, of which about 94% was denominated in currencies (SDR 250.2 billion) and the remainder in gold (see bars in graph on next page). Some 60% of the former came from the Asia-Pacific region, with Europe contributing another 16%, and much of the remainder shared by Africa, the Americas and the Middle East (see map above).

Financial products and services

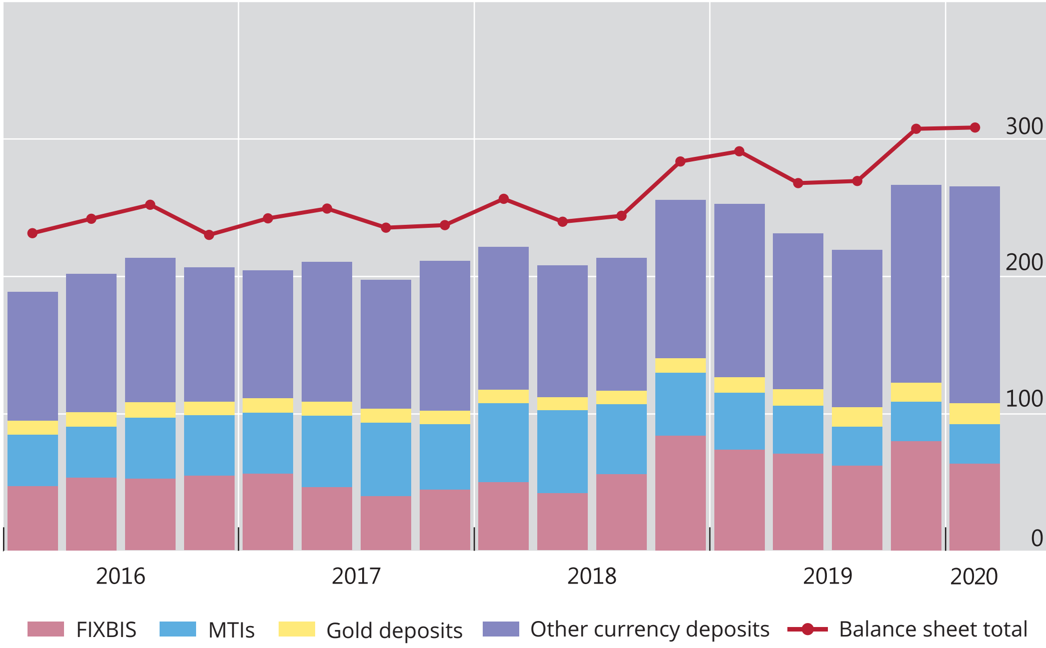
Money market and tradable instruments

The BIS offers money market placements, such as sight/notice accounts and fixed-term deposits, and tradable instruments in maturities ranging from one week to five years. These take the form of Fixed-Rate Investments at the BIS (so-called FIXBIS), Medium-Term Instruments (MTIs) and products with embedded optionality (callable MTIs). All these products are designed and priced to offer competitive returns over and above comparable sovereign debt instruments, while providing the credit quality and liquidity demanded by reserve managers.

Over the past year, leveraging the expertise of the Asian Office, additional instruments in on- (CNY) and offshore (CNH) renminbi, such as CNY repos as well as new CNY and CNH FIXBIS for maturities out to one year, have been added to the product range (see pages 51–2). Further additions, such as new Treasury instruments referencing the new benchmark interest rates being phased in as part of Libor reform, are under development.

Balance sheet total and deposits by product

End-quarter figures, in billions of SDR



The sum of the bars indicates total deposits.

Foreign exchange and gold services

Foreign exchange (FX) is another integral part of the BIS's banking services. The Bank conducts FX transactions on behalf of its central bank customers, providing access to a large and diversified liquidity pool. BIS FX services encompass spot transactions, swaps, outright forwards, options and dual currency deposits (DCDs).

Over the past few years, advanced electronic FX trading capabilities have been developed to provide BIS customers with enhanced liquidity and transparency for their spot transactions. The Bank's own e-FX platform, in particular, offers automated trade execution capabilities to help customers navigate the increasingly fragmented FX marketplace and implement even large-sized trades at competitive rates.

In the context of Covid-19, the overall volume of FX-related activities increased on the back of rising client demand, particularly towards the end of the financial year in March, owing to the full range of intermediation services continuing to be available, despite the difficult market environment.

The Bank also provides gold services that include buying and selling on a spot basis and through outright forwards, swaps and options. Other gold services comprise sight accounts, fixed-term deposits (as well as DCDs), quality upgrading, refining, safekeeping and location exchanges. The latter have now been expanded to other precious metals, such as palladium, platinum and silver.

Asset management services

BIS Asset Management offers two types of products: dedicated portfolio management mandates tailored to each central bank customer's individual preferences, and BIS Investment Pools (BISIPs) – open-ended fund structures allowing various BIS customers to invest in a common pool of assets. Client assets across both types of products, which are not included in the BIS balance sheet, amounted to $27.6 billion at 31 March 2020.

The BISIP structure, initially designed for US dollar- and euro-denominated sovereign bond portfolios, is now actively used to also accommodate growing central bank demand for investments in other fixed income assets. The product range includes US inflation-protected government securities, sovereign bonds denominated in CNY and KRW, and corporate bonds meeting environmental, social and governance (ESG) standards.

To help meet central banks' growing demand for climate-friendly investments, in September 2019 the BIS launched a new BISIP dedicated to US dollar-denominated green bonds from sovereign and quasi-sovereign issuers (see box on page 41). The fund is part of the BIS's broader environmental sustainability agenda (see pages 106–7) and, after two investment rounds, has reached a market value of more than $1 billion, with further subscriptions expected for financial year 2020/21. A companion fund, for investment in euro-denominated green bonds, is currently under development, in cooperation with a group of client central banks.

Other financial services

The BIS offers a range of additional financial services, including short-term liquidity facilities and credit extension to central banks, typically on a collateralised basis. The BIS may also act as trustee and collateral agent in connection with international financial operations. Moreover, it provides ancillary reserve management services, such as supporting central banks in reviewing and assessing their reserve management practices, and providing them with customised quantitative studies on asset allocation topics.

Management of own capital

The equity capital of the BIS stems from the paid-in capital of its shareholders and the retained earnings from its banking activities. The bank's capital was SDR 21.6 billion as of 31 March 2020, up from 19.9 billion the previous year, of which SDR 3.9 billion was held in gold (102 tonnes). The remainder of the Bank's equity is invested primarily in high-quality, highly liquid fixed income instruments.

The strategic benchmark for the Bank's fixed income investments is set by BIS Management within parameters established by the Board of Directors. It comprises

SDR-weighted sovereign bond indices and currently has an average duration of about 3.25 years. The Banking Department manages these investments.

In line with the Bank's strategic objective to broaden the drivers of return of the Bank's own funds, diversifying exposures to assets such as US agency MBS, highly rated investment grade corporate bonds and unhedged local currency bonds issued by select EME sovereigns were added in financial year 2019/20. Implementation proceeded in a prudent fashion, and was temporarily halted in the context of Covid-19-related market volatility in the first quarter of 2020. Further diversification steps are planned for financial year 2020/21, subject to market conditions.

Customer outreach

Under the Innovation BIS 2025 strategy, more emphasis is being placed on the Banking Department's various outreach efforts and the improved delivery of services in the various client regions.

New dealing room

As part of these efforts, to expand the Bank's regional scope and better serve its customers, the BIS has recently established a dealing room at its Representative Office for the Americas in Mexico City. Combined with the facilities in Basel and Hong Kong, this will allow the Bank to comprehensively serve its client central banks across all time zones, including during the later US trading hours (see box on page 43).

Knowledge-sharing activities

The Bank's knowledge-sharing activities facilitate the exchange of information among reserve managers and promote the development of investment and risk management capabilities at central banks and international organisations. They also strengthen feedback mechanisms between the BIS and its banking customers, informing product development and service delivery. To that end, the BIS hosts a variety of events both in Switzerland and elsewhere to bring together senior reserve and risk managers, as well as other central bank officials.

In 2019/20, these knowledge-sharing activities featured an enhanced regional focus, with high-level events on key reserve management topics, such as renminbi internationalisation, taking place in Beijing and Cape Town. In total, 240 participants were present from 97 institutions (see graph on page 42). Further activities included another high-level meeting in Vienna as well as two seminars on broad reserve management topics, such as investment strategy, asset allocation and risk management, at different locations in Switzerland.

Green bond initiative

Central banks are playing an increasingly active role in promoting the move towards a sustainable global economy. Results from a recent BIS survey suggest that most central banks do not currently include sustainability considerations in the pursuit of their own policy objectives. Yet over half of the institutions in the sample consider that there is scope to include sustainability as a fourth reserve management objective – in addition to the traditional objectives of liquidity, safety and return (see graph below).

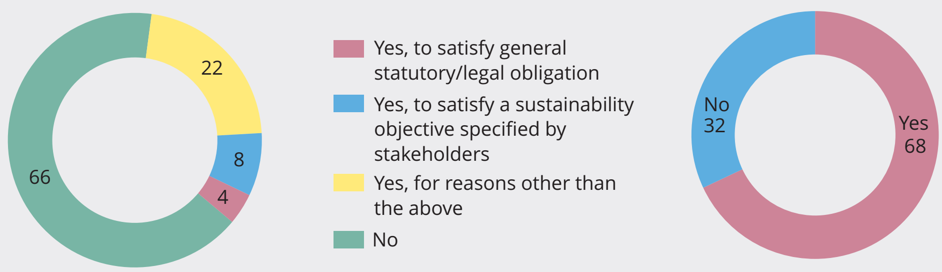
Indeed, BIS research finds that green bonds – fixed income securities whose proceeds are used to finance eligible green projects – can help integrate sustainability objectives into reserve management frameworks without forgoing safety and return. That is, even as their accessibility and liquidity may still pose some constraints, adding both green and conventional bonds can help generate diversification benefits and, hence, improve the risk-adjusted returns of reserve portfolios. This points to green bonds becoming an increasingly popular asset choice among reserve managers.

Sustainability and central bank policy objectives

Percentage of respondents[1]

Does your central bank include sustainability considerations in the pursuit of its policy objectives?

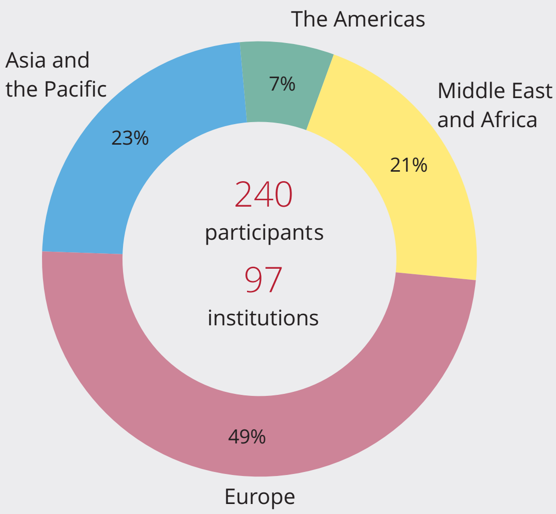
Do you think there is scope to include sustainability as a reserve management objective?



[1] Number of respondents: 102.
Source: BIS.

To help meet this demand, in 2019 the BIS launched its green bond initiative. Building on the Bank's successful corporate bond BISIP (which screens investments according to environmental, social and governance (ESG) principles), the initiative seeks to: (i) promote green finance through sizeable climate-friendly investments; (ii) support standardisation and the adoption of best practice principles in the market; and (iii) help establish safeguards against "greenwashing" (ie the possible overstatement of environmental benefits from green bonds). Working closely with an advisory committee comprising a global group of 26 central banks, a US dollar-denominated green BISIP is now actively marketed to BIS customers. A companion BISIP, denominated in euros, is under development.

Knowledge-sharing events in 2019/20: attendee profile



Two workshops, focusing on portfolio analytics and strategic asset allocation, as well as the Bank's Asset Management Associate Programme (AMAP), provided additional training at a more technical level, even as a number of planned activities had to be held virtually or postponed to later in 2020 due to the Covid-19 pandemic. BIS staff members also contributed to similar events organised at various partner institutions, such as the XIII CEMLA meeting on international reserve management in Peru, and continued their cooperative work on quantitative investment approaches, based on the BIS Asset Allocation Module (BAAM).

Opening of a new dealing room

Financial markets are increasingly global, and reserve managers' demand for liquidity remains among the key objectives in managing central bank reserve portfolios. This puts a premium on the ability of service providers to deliver near 24-hour coverage of markets as well as local expertise across a broad range of trading venues.

Adding to its existing locations in Basel and Hong Kong SAR, as part of the Innovation BIS 2025 strategy the Bank thus moved to establish a third dealing room covering American time zones. Located at the premises of the Bank's Representative Office for the Americas in Mexico City, this new operation will deliver better coverage of the US trading session for all BIS customers as well as improved, locally provided services and hands-on market expertise for our clients in the region.

Following extensive testing of the dealing room and support systems earlier in 2020, live banking operations commenced in May 2020. Services are being rolled out in two phases. During phase 1, operations will focus on the local provision of relationship management services through staff based in Mexico, offering the same types of Treasury and asset management products available from Basel and Hong Kong. Trading activities, in turn, will be focused on the ability to price and trade Treasury products, such as fixed-term deposits, FIXBIS and MTIs as well as FX swaps. Locally provided outright FX operations and gold trading capabilities would initially be offered only on a limited basis, with additional capabilities and local back office operations to be added as part of phase 2, based on a review of the phase 1 activities.


Financial Stability Institute
BIS
Cross-sectoral policy implementation meeting on
climate risk assessment in the financial sector –
turning up the heat, 20–21 February 2020
UNEP SIF
Washington State
Board of Governors of the
Federal Reserve System

Financial Stability Institute

The Financial Stability Institute (FSI) assists central banks and financial regulatory and supervisory authorities worldwide in strengthening their financial systems by supporting the implementation of global regulatory standards and sound supervisory practices.

In 2019/20, FSI work focused on three main areas as part of the Innovation BIS 2025 strategy. These were: (i) enhancing its capacity-building activities while maintaining its global footprint; (ii) knowledge-sharing in financial technology-related regulatory developments; and (iii) supporting authorities' efforts to enhance their tools for financial crisis management.

Capacity-building and outreach

The FSI constantly refreshes its library of FSI Connect e-learning material with new and updated tutorials. Tutorial development in 2019/20 focused on completing coverage of Basel III standards and introducing new tutorials on topical regulatory and supervisory issues such as cyber risk, climate risk, anti-money laundering and financial inclusion.

The FSI leveraged these materials by combining them with practical case studies and webinars to come up with online courses (the figure below outlines their main features). On the banking side, together with the IMF, the FSI launched the Supervisory and Regulatory Online Course (SROC) for banking supervisors. The SROC provided about 400 participants from 100 countries with a comprehensive overview of key aspects of banking regulation and supervision. On the insurance side, the FSI-IAIS (International Association of Insurance Supervisors) Regulatory and Supervisory Training Online New Entrants (FIRST-ONE) programme was held for the sixth year. This year, 194 participants from 49 countries participated in the programme to learn about fundamental insurance supervision topics.

FSI online courses

Self-study online content: FSI Connect tutorials and IMF case studies (in the case of SROC)

Live webinars: interaction with expert speakers

Different topics over several months

Single, integrated online platform (soon to be introduced for FIRST-ONE)

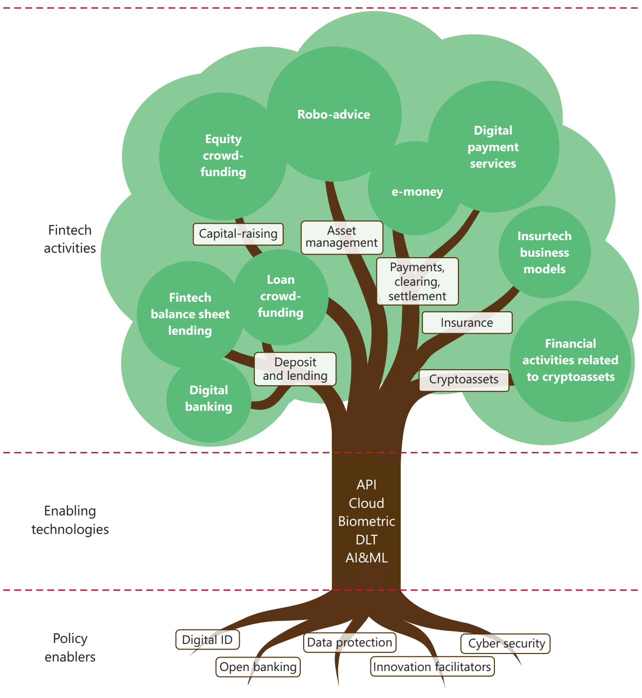
In addition to its e-learning materials and online courses, the FSI pursued its regional outreach activities. These activities are in the form of high-level meetings, policy implementation meetings, conferences and seminars. In 2019/20, three events were held in Africa, six in Asia, three in Europe (outside Basel), nine in Latin America and two in the Middle East. Including events in Basel, the FSI held 32 events in total, in which 1,417 participants from central bank and financial authorities from around the world took part. The events covered a mixture of core and topical issues in financial sector regulation and supervision, such as implementation of Basel III and other post-Great Financial Crisis regulatory reforms, fintech, cyber security, climate risk, crisis management and resolution.

Financial technology

Innovation BIS 2025 calls on the FSI to help supervisors adjust their policies and practices in the light of new technological developments in financial services. This would include the active integration of technology into the regulatory and supervisory processes. In this regard, the FSI issued financial technology-related papers covering the following topics:

- Suptech applications used or developed by anti-money laundering authorities
- An examination of the "generations" of technology that financial authorities use, including the emergence and development of suptech strategies and use cases
- A comparison of cyber red teaming frameworks in different jurisdictions
- An overview of policy responses to fintech developments, including a "fintech tree" (see below) that provides the conceptual framework for analysing the policy responses

The FSI also continues to provide an information-sharing platform to suptech specialists in financial authorities around the world through the Informal Suptech Network (ISN). The network has more than 80 members from 43 authorities in 35 jurisdictions. It meets annually, and its members have periodic webinars and share suptech-related materials through a web platform.



Crisis management

Under the Bank's new strategy, the FSI is tasked to work on practical tools or approaches for financial crisis management. This work will build on past FSI work concerning crisis management and resolution. In this regard, the FSI issued crisis management-related papers covering the following topics:

- The role of deposit insurance in bank failure management
- An overview of the experience of home and host authorities with regard to cross-border resolution cooperation and information-sharing
- The experience in the Icelandic banking crisis

The FSI also conducted the dry run for a multi-jurisdictional crisis simulation exercise (CSE) in Latin America. The CSE is based on a scenario of a failing fictional regional bank (albeit modelled broadly on a regional banking group). It covers the trajectory of official responses to a failing bank and aims to identify and inform any necessary enhancements to domestic procedures of the participating countries and possible improvements to cross-border cooperation arrangements. The actual CSE, however, has been moved to financial year 2020/21 due to Covid-19 developments.

Other topics

The FSI also issued papers on: post-Great Financial Crisis reform implementation issues such as the application of the proportionality principle in Pillar 2 of the Basel Framework; causes of fragmentation in prudential regulation of banks; post-Great Financial Crisis regulatory approaches to strengthen board oversight of banks; and climate risk assessment in the insurance sector.

The FSI's response to Covid-19

In April 2020, the FSI launched the series *FSI Briefs* to highlight the regulatory and supervisory responses to ensure the resilience of financial institutions during the Covid-19 crisis. Each Brief covers specific regulatory areas relevant to the current situation, such as operational resilience, expected loss provisioning, capital buffers and dividend distribution. The Briefs provide information on the various measures taken as well as the issues and implications that were considered by regulatory and supervisory authorities.

Due to Covid-19 developments, some of the events in the first quarter of 2020 had to be held virtually or postponed to later in the year. In addition, the FSI invited both FSI Connect subscribing and non-subscribing central banks and authorities to request free FSI Connect licences. The aim is to support efforts in sustaining their training activities given cancellation or postponement of many physical training events. To date, 99 authorities from 84 jurisdictions have requested 3,371 free licenses.

Representative Offices

The BIS has two representative offices: one for Asia and the Pacific (the Asian Office), located in Hong Kong SAR, and one for the Americas (the Americas Office), located in Mexico City. They serve as centres for BIS activities in those regions, strengthening relationships and promoting cooperation between the BIS and regional central banks and supervisory authorities.

Representative Office for Asia and the Pacific

The Asian Office is a key vehicle for deepening the BIS's engagement with Asia and the Pacific – a region that is rapidly increasing its weight in the global economy. With over 30 staff, the Asian Office undertakes economic research and analysis and, through its dealing room, provides central bank customers with a full suite of banking services (see pages 35–43). It organises regional high-level meetings and hosts the Financial Stability Institute's programme of meetings and seminars in the region.

Despite the challenges posed by the spread of Covid-19, BIS banking operations in Asia continued to operate in a business-as-usual capacity through a combination of remote working and split operations, continuing to provide the full range of services to the BIS's central bank customers. On the analytical side, the Asian Office played a significant role in new thematic groups covering various aspects of the Covid-19 crisis. Asian Office economists have stepped up their monitoring of regional economies and related policy actions, and their analysis of the impact of the outbreak and measures to contain it.

The Asian Office combines its strong analytical capabilities and significant banking presence in an integrated operation, to realise synergies that enhance its roles as a financial service provider and thought leader (see box on page 53).

The Asian Consultative Council

The overall objective of the Asian Office is to bring more of the BIS to Asia, and more of Asia to the BIS. This objective is achieved through a variety of channels, most notably through the Asian Consultative Council (ACC), which comprises the Governors of the 12 BIS member central banks in the Asia-Pacific region. Ravi Menon, Managing Director of the Monetary Authority of Singapore, currently chairs the ACC, and Siddharth Tiwari, Chief Representative of the Asian Office, serves as its Secretary.

The General Manager and other senior staff have intensively engaged with the ACC Governors over the past year on how the BIS can contribute to financial innovation as well as monetary and financial stability in the region. This has led to a more active role for the ACC Governors in the meetings, drawing on what is unique to the ACC and the BIS: a membership that spans from India to New Zealand, a permanent secretariat and the availability of economic and banking operations to draw upon under the same institution.

At the March 2020 ACC meeting, the ACC agreed that as Asia's importance in the global economy continues to rise, the focus of ACC discussions should be on forward-looking strategic priorities for the region, not only to find common areas of interest to pursue, but to convey Asia's experiences and interests to the wider BIS membership in a timely fashion. The Governors agreed that the Asian Office's new strategic priorities should be the following:

- **Integrated policy frameworks**. A working group on "Capital flows, exchange rates and policy frameworks in emerging Asia", launched in June 2019, has been sharing experiences on deploying monetary policy, macroprudential policy, capital flow management measures and FX intervention to deal with challenges from capital flows and volatile exchange rates. Its stocktake report is due for delivery at the September 2020 ACC meeting, and the ACC plans to build on this output to develop a coherent perspective on the policy frameworks as currently practiced by emerging Asian economies. Such a view could serve as an input to global discussions and be helpful to operationalise the frameworks.

- **Increasing use of local currencies**. The ACC recommended that the Asian Office engage with the Executives' Meeting of East Asia-Pacific Central Banks (EMEAP), ASEAN+3 and other regional groups to discuss how the BIS can help them move initiatives forward without duplicating other work. Further, it was noted that since the SDR basket contains currencies from the Asia-Pacific region, this also has the potential to be a regional priority. More active use of regional currencies would also enable better management of volatility in the region.

- **Cross-border payments**. The BIS agreed to support regional discussions on fast national payment systems as well as nascent fast bilateral payment corridors to develop a more comprehensive approach to improving cross-border connectivity in the Asia-Pacific region through the BIS Innovation Hub Centres in Asia.

The ACC has repeatedly emphasised the need for agility within the Asian Office to address important issues as they arise. Thus, over the past year the Asian Office contributed to the establishment of two of the first three BIS Innovation Hub Centres – those in Hong Kong SAR and Singapore – helping design the framework, governance and operating arrangements for the centres (see pages 29–33).

Analytical work

In line with priorities identified by the ACC in early 2019, Asian Office economists conducted research and policy analysis on topics of importance to Asia-Pacific Governors and of interest to other Governors. The topics ranged from financial technology to emerging market issues such as the design of digital financial infrastructure, the impact of portfolio bond flows on domestic financial conditions in Asia and the Pacific, cross-border real estate investment within the Asia-Pacific region and the effectiveness of macroprudential policies in Asia-Pacific economies. Further, Asian Office economists completed research on inflation dynamics in the region – a theme that had been endorsed in early 2018 by the ACC. The highlights of the research findings were presented at a conference jointly hosted with the Bangko Sentral ng Pilipinas in Manila in August 2019, and published as a *BIS Papers* volume in March 2020.

As part of its efforts to deepen engagement with central banks in the region, the Asian Office hosted a number of secondees from ACC central banks, who conducted research or policy analysis with BIS economists on topics such as the neutral interest rate in China, foreign exchange market dynamics in Thailand, and monetary policy frameworks in EMEs.

High-level regional meetings

During 2019/20, the Asian Office organised seven high-level policy meetings held jointly with regional central banks or associations of regional central banks such as EMEAP or the South East Asian Central Banks (SEACEN). These included a workshop (held in Sydney) of the BIS Asian Research Network, an annual recurring conference, and a biannual EMEAP-BIS Forum on Financial Markets, where senior ACC financial market representatives plus selected major global central banks such as the ECB and the Federal Reserve meet to discuss conjunctural trends in financial markets as well as special topics.

Banking operations

Regional central banks can access the BIS's financial services through the Regional Treasury in the Asian Office. Benefiting from direct access to regional local currency markets, the Regional Treasury is well placed to manage and execute reserve managers' regional investment activities. This has supported a high volume of operations, with placements from Asian central banks accounting for about 60% of total customer deposits (see map on page 37).

Volume increased even further over the past year as interest in Asian financial markets continued to rise, with more central banks outside Asia dealing with the Hong Kong-based dealing room in local currency products. For example, the size of the BIS's BISIP denominated in CNY has grown significantly. Regional central banks have also shown considerable interest in other parts of the BIS's expanding range of products, not least the green bond fund launched last September (see page 41).

In its capacity as fund administrator of the Asian Bond Fund 2 (ABF2) initiative of EMEAP, the BIS helps foster the development of local currency bond markets in the region. At end-March 2020, the overall size of the fund reached $7.7 billion, up from $7.2 billion at end-March 2019. The annualised return on the Pan-Asia Bond Index Fund (PAIF) from its inception on 7 July 2005 to end-March 2020 was 4.06%, which compared favourably with the 3.78% return on a US Treasury index of similar duration.

As part of Innovation BIS 2025, the Asian Office will work more closely with ACC central banks to broaden further the BIS's involvement in regional financial markets including asset management. In particular, the BIS intends to expand the range of products offered to clients through new money market and tradable instruments denominated in Asian currencies, diversify the investment of its own funds and align the range and focus of its knowledge-sharing activities with evolving customer needs.

Resilience

In addition to these activities, the Asian Office faced a number of unexpected challenges during the year, including political disturbances in Hong Kong that placed a premium on business continuity planning and the ability to work remotely. Such stresses played no small role in the office's readiness for the challenge presented in early 2020 by the spread of the coronavirus and efforts to contain it (see pages 112–13). The experience also helped to inform the business continuity measures for other BIS offices.

While a number of regional meetings were postponed or cancelled, increasing consideration was given to holding meetings virtually. The ACC meeting of March 2020 was held in a virtual format, as was a series of crisis-related meetings with regional central banks.

BIS-People's Bank of China renminbi symposium

A good example of how the Asian Office can use its unique convening power to utilise synergies in banking and analytics to focus on a regional priority was a meeting in Beijing in September 2019. Working jointly across the Asian and Basel offices, the BIS co-hosted with the People's Bank of China a symposium of private sector investors and central bank reserve managers, with the aim of encouraging participants to share their views on the outlook for further renminbi (RMB) internationalisation and the scope for increased RMB allocations in reserve portfolios.

Two sessions focused on the analytics of measuring RMB internationalisation and the modalities of RMB investing, respectively, and were chaired by BIS General Manager Agustín Carstens and Thierry de Longuemar of the Asian Infrastructure Investment Bank, respectively. An official sector-only discussion on how the RMB's attractiveness as a reserve asset might be further increased was chaired by Governor Yi Gang of the People's Bank of China. Participation included eight representatives of private sector banks, and 26 reserve managers from central banks and monetary authorities.

Representative Office for the Americas

The Americas Office strengthens the relationship of the BIS with central banks and other relevant institutions in the region, and promotes cooperation among them. It provides central bank officials with a forum for discussing topical issues, coordinates working groups and research networks, and conducts research on key topics. In May 2020, it also began to provide banking services directly from its premises in Mexico City.

In the year under review, the Bank took several steps to strengthen the presence of the Americas Office in the region, in line with the Innovation BIS 2025 strategy. This included establishing a new dealing room to allow the BIS to provide banking services around the clock (see page 43), and creating the Consultative Group on Innovation and the Digital Economy with the aim of promoting joint projects to improve payment systems and the digital infrastructure of BIS member countries. The Office is also revamping its analytical agenda to better serve the specific needs of the BIS member central banks in the region and is expanding its outreach activities to non-members.

Consultative Council for the Americas

The Americas Office conducts its activities under the guidance of the Consultative Council for the Americas (CCA), which comprises the Governors of the eight BIS member central banks in the region. John Williams, President of the Federal Reserve Bank of New York, is the current Chair, and Alexandre Tombini, the Chief Representative for the Americas, acts as its Secretary. Besides reviewing the Office's activities, the CCA regularly meets to discuss economic and financial developments in the region. In the year under review, the CCA met twice in Basel and held two virtual meetings in March and May.

In 2019/20, the General Manager and BIS senior officials intensified their engagement with CCA Governors to ensure that the Office's priorities are better aligned with the evolving challenges faced by CCA central banks. In practice, CCA Governors have taken a more proactive role in discussing the strategic priorities of the Office and initiatives of common interest. Two important initiatives, in particular, were agreed in CCA meetings:

- **Consultative Group on Innovation and the Digital Economy (CGIDE).** The CGIDE was established in February 2020 to help CCA central banks improve the efficiency of their payment systems and increase access to the financial system. Its purpose is to enable central banks to pool resources and exploit economies of scale in delivering technological solutions that contribute to these goals. The group will collaborate closely with the BIS Innovation Hub, which is currently in its early stages and has no presence yet in the Americas. Although not a standard-setting body, the group will also work closely with the Committee on Payments and

Market Infrastructures, of which not all CCA central banks are members. It will also have ties with MED economists conducting research on the digital economy.

- **Monetary Policy Frameworks and Communication.** A network of central bank researchers was launched in April 2019. The research produced by this network will provide valuable insights on how monetary policy frameworks and communication should be designed to ensure the resilience of emerging market and small open economies in the face of volatile exchange rates and capital flows. Its preliminary findings were presented at a workshop held in February 2020 in Mexico City. The final conference of the network is expected to take place in September 2020.

In addition to the newly created CGIDE, the various cooperative activities of the Americas Office are overseen by the following functional groups that report to the CCA:

- The **Scientific Committee**, comprised of CCA Heads of Research, guides research activities in macroeconomics and monetary policy. It is also a useful forum where central banks share information about ongoing research projects and priorities.

- The **Consultative Group of Directors of Financial Stability (CGDFS)** oversees initiatives in the area of financial stability. It also meets – once a year or more frequently if needed –

to exchange views on financial stability risks and policies to mitigate them.

- The **Consultative Group of Directors of Operations (CGDO)** holds regular virtual meetings to exchange views on financial market developments and central bank operations.

As the Covid-19 pandemic spread to the Americas in early 2020, the Americas Office intensified its efforts to ensure that senior officials of the BIS member central banks in the region continue to have an effective forum for exchanging information and views on the rapidly evolving economic and financial conditions in the continent. In addition to the virtual meetings of the CCA in March and May, the Office convened more frequent exchanges among the CGDO and the CGDFS.

Research and analysis

In line with the Innovation BIS 2025 strategy and to better meet the challenges faced by central banks in the region, the Americas Office economic analysis and research agenda is placing more emphasis on payment systems, monetary policy frameworks and communication, the monetary transmission mechanism and the impact of policy and trade uncertainty. In examining these and other research topics, the use of micro data is playing an ever greater role both at the Office and at CCA central banks. The use of micro data to explore macroeconomic questions was the theme of the CCA annual research conference, hosted by the Central Bank of Argentina in Buenos Aires in May 2019.

In pursuing the analytical agenda of the Office, economists based in Mexico City work closely with their colleagues in Basel and Hong Kong, exploiting synergies with research projects and analysis under way there. Economists often join forces with those in the head office in preparing background notes for meetings, bringing the unique perspective of the Americas region in the analysis that is disseminated among the entire central bank community.

In response to the Covid-19 crisis, economists scaled up their efforts to monitor and brief BIS senior management on the rapidly evolving economic and financial situation of Latin American countries.

Banking services

As part of Innovation BIS 2025, the Bank has established a new dealing room in the Americas Office to expand the time zone coverage of BIS banking operations to 24 hours. This complements the dealing rooms in Basel and Hong Kong and will allow the BIS to provide improved services and hands-on market expertise for the BIS clients in the region (see page 43).

Regional visits, high-level meetings and outreach events

Consistent with the objective of strengthening its presence in the Americas and extending its reach beyond BIS member central banks, the Americas Office undertook new initiatives. It teamed up with the Western Hemisphere Department of the IMF to organise a meeting of Governors of the Americas, from both CCA and non-CCA countries, to discuss topical issues such as monetary policy and the digital economy. The meeting, which was to take place in April 2020 in Mexico City, was postponed due to the Covid-19 outbreak to later in the year. This meeting will become a regular occurrence in the future.

The Americas Office also closely cooperated with regional organisations and academia. In June 2019, jointly with the Center for Latin American Monetary Studies (CEMLA) and the Central Bank of Colombia, it organised a roundtable on foreign exchange intervention and reserve management in Cartagena. It also contributed to events organised by the Association of Supervisors of Banks of the Americas (ASBA), the Financial Stability Board and the FSI. The Americas Office also sponsored and arranged two sessions at the annual meeting of the Latin American and Caribbean Economic Association (LACEA).

As long as the coronavirus emergency continues, the BIS will adapt its outreach events in Latin America to deliver them on a virtual basis. These commenced in 2020 with meetings organised jointly with ASBA for the benefit of the bank supervisors of BIS member and non-member countries of Latin America and the Caribbean.

3

Promoting international cooperation

The BIS acts as a forum for discussion and a platform for cooperation among policymakers, to foster monetary and financial stability. In this role, it contributes its expertise in economic research and analysis, its practical experience in banking and its approach to regulatory and supervisory issues to add value to the discussions and cooperative efforts.

The Basel Process

The BIS is a forum for discussion and a platform for cooperation among central banks and other financial authorities in the pursuit of monetary and financial stability. This international cooperation is known as the Basel Process.

The Basel Process revolves around two main axes: regular high-level meetings of senior monetary and financial officials, and the BIS's support for and collaboration with international groups pursuing financial stability. The outcomes of this process are visible to the public in the form of committee reports analysing specific topics and internationally agreed standards produced by the standard-setting committees. The BIS also supports the implementation of these standards through its Financial Stability Institute (see pages 45–7), including its contribution to capacity-building of financial authorities worldwide.

Governors' meetings

Governors and other senior officials of BIS member central banks meet in principle every two months to discuss current developments and the outlook for the world economy and financial markets. They also exchange views and experiences on issues of particular interest to central banks. In the light of the Covid-19 pandemic, the March and May meetings were held in a virtual format, and the BIS Annual General Meeting was also held virtually.

Global Economy Meeting

The Global Economy Meeting (GEM) brings together the Governors of 30 BIS member central banks in major advanced and emerging market economies (EMEs) that account for about four fifths of global GDP. The Governors of another 21 central banks attend the GEM as observers. The GEM is currently chaired by Jerome Powell, Chair of the Board of Governors of the Federal Reserve System. Mr Powell's appointment took effect on 1 February 2020 for a three year-term. He succeeded Mark Carney, former Governor of the Bank of England, who had chaired the GEM since December 2017.

Jerome Powell, Chair of the Global Economy Meeting and the Economic Consultative Committee

The GEM has two main roles:

- monitoring and assessing developments in the world economy and the global financial system; and

- providing guidance to three BIS-based central bank committees: the Committee on the Global Financial System (CGFS), the Committee on Payments and Market Infrastructures (CPMI) and the Markets Committee (MC).

In January 2020, the GEM agreed to expand the membership of the CGFS and the MC (see pages 72 and 74).

The GEM's economic discussions focus on current macroeconomic and financial developments in major advanced and emerging market economies. Topics discussed by the GEM in 2019/20 included: financial and real risk-taking; inflation, what policy can do when the expansion ends, and how resilient growth is; corporate sector vulnerabilities and the real economy; macro-financial risks in Asia-Pacific; capital flows and spillovers; and the impact of Covid-19 on economic activity.

Economic Consultative Committee

The Economic Consultative Committee (ECC) is a 19-member group that supports the work of the GEM. Also led by the GEM Chairman and comprising all Governors participating in the BIS Board meeting and the BIS General Manager, the ECC conducts analyses and prepares proposals for the GEM's consideration. In addition, the ECC Chairman makes recommendations to the GEM on the appointment of Chairs and the composition and organisation of the CGFS, CPMI and MC.

All Governors' Meeting

The All Governors' Meeting comprises the Governors of the BIS member central banks and is chaired by the Chairman of the BIS Board, currently Jens Weidmann, President of the Deutsche Bundesbank.

Jens Weidmann, Chairman of the Board and Chair of the All Governors' Meeting

It convenes to discuss selected topics of general interest to its members. Topics discussed during 2019/20 included: macroeconomic implications of weak bank profitability; digital financial infrastructure: economics and design; people strategies and financial inclusion; and public policy on the use of personal data in finance.

By agreement with the GEM and the BIS Board, the All Governors' Meeting oversees the work of two other groups that have a broader network or membership than the GEM. These are the Central Bank Governance Group (see page 76) and the Irving Fisher Committee on Central Bank Statistics (see page 77).

Other regular gatherings

The Group of Central Bank Governors and Heads of Supervision (GHOS) meets periodically to decide on global banking regulations and oversee the work of the Basel Committee on Banking Supervision. It is a high-level forum responsible for international collaboration on banking regulation and supervision.

In November 2019, the GHOS selected as its new Chair François Villeroy de Galhau, Governor of the Bank of France, for a three-year term. He succeeded Mario Draghi, President of the ECB until 31 October 2019, who had chaired the GHOS since July 2013.

François Villeroy de Galhau,
Chair of the Group of Central Bank Governors and Heads of Supervision

The central bank Governors of major EMEs typically meet during the January, May and September bimonthly meetings to discuss issues of importance to their economies. Topics discussed in 2019/20 included: the evolving structure of FX markets (September); monetary policy frameworks in EMEs: building on progress (May); and big tech in EMEs (January). In June 2019, the BIS held a roundtable of Governors from African central banks on "Foreign exchange reserve adequacy and management in Africa".

The BIS also holds regular meetings for the Governors of central banks from small open economies (SOEs). Discussion themes during the past year included: the global decline in the natural interest rate; the synchronised dovish turn in global monetary policy; what it means to be an SOE; the growth outlook, resilience and policy space in SOEs; the calibration of macroprudential instruments in SOEs; and institutional investors in an environment of low interest rates (recent shifts in global capital flows and implications for SOEs).

In addition, various meetings bring together senior central bank officials and, occasionally, representatives from other financial authorities, the private financial sector and the academic community to discuss topics of shared interest.

International groups at the BIS

A number of committees and associations engaged in the pursuit of financial stability are located at the BIS. Each group is supported by a secretariat that prepares the group's meetings, background papers and reports and publishes its work.

The BIS supports their work by contributing its expertise in economic research and statistics, its practical experience in banking and its knowledge in regulatory and supervisory issues. In addition, its close relationships with policymakers and stakeholders allow the Bank to enrich the debate and to add value to the work of these groups. The BIS also finances, or makes a financial contribution to the costs associated with, the secretariats of these international committees and associations, and supports them in terms of facilities and corporate services.

Co-location at the BIS's premises facilitates communication and collaboration among these groups, as well as their interaction with policymakers in the context of the BIS's regular meetings programme. This exchange of information also makes it easier to coordinate efforts and prevents overlaps and gaps in the various work programmes.

BIS committees

- The **Basel Committee on Banking Supervision** develops global regulatory standards for banks and seeks to strengthen micro- and macroprudential supervision.
- The **Committee on Payments and Market Infrastructures** establishes and promotes global regulatory/oversight standards for payment, clearing, settlement and other market infrastructures, and monitors and analyses developments in these areas.
- The **Committee on the Global Financial System** monitors and analyses issues relating to financial systems.
- The **Markets Committee** monitors developments in financial markets and their implications for central bank operations.
- The **Central Bank Governance Group** examines issues related to the design and operation of central banks.
- The **Irving Fisher Committee on Central Bank Statistics** addresses statistical issues relating to economic, monetary and financial stability.

The following associations have secretariats at the BIS, but have their own separate legal identity and governance structure.

- The **Financial Stability Board** coordinates the work of national authorities and international standard setters in developing and promoting the implementation of effective regulatory, supervisory and other financial sector policies in the interest of global financial stability.
- The **International Association of Deposit Insurers** sets global standards for deposit insurance systems and promotes cooperation on deposit insurance and bank resolution arrangements.
- The **International Association of Insurance Supervisors** sets global standards for the insurance sector to promote effective and globally consistent supervision for the benefit and protection of policyholders and to contribute to global financial stability.

The BIS is a member of the FSB and the IAIS.

Basel Committee on Banking Supervision

Pablo Hernández de Cos
Chair of the Basel Committee on Banking Supervision

The Basel Committee on Banking Supervision (BCBS) is the primary global standard setter for the prudential regulation of banks and provides a forum for regulatory cooperation on banking supervisory matters. Its 45 members comprise central banks and bank supervisors from 28 jurisdictions. The BCBS consists of senior representatives of banking supervisory authorities and central banks responsible for banking supervision or financial stability in their respective jurisdictions. Since March 2019, the Basel Committee has been chaired by Pablo Hernández de Cos, Governor of the Bank of Spain.

The work of the Basel Committee is overseen by the Group of Central Bank Governors and Heads of Supervision (GHOS), chaired by François Villeroy de Galhau, Governor of the Bank of France, and comprising central bank Governors and non-central bank heads of supervision from BCBS member jurisdictions. The GHOS directs the Committee's work, approves its work programme and provides operational guidance.

Regulatory and supervisory response to Covid-19

The BCBS coordinated a range of regulatory and supervisory measures to alleviate the financial stability impact of Covid-19. These measures targeted the provision of lending and financial services by banks to the real economy while maintaining banks' capacity to absorb losses in an orderly manner. In particular, the Committee:

- encouraged the use of capital and liquidity buffers, which are designed to be used by banks in periods of stress;
- reiterated that expected credit loss accounting frameworks provide banks, by design, with the necessary flexibility to take account of the mitigating effect of the extraordinary support measures related to Covid-19;
- provided its member jurisdictions with additional flexibility to consider whether and how to phase in the impact from expected credit losses on regulatory capital; and
- provided clarity on the recognition of the risk-reducing effects of various extraordinary support measures in the risk-based capital requirements.

In addition, the BCBS acted to free up operational capacity at banks and member supervisors to respond to Covid-19. The GHOS endorsed the Committee's proposal to defer the final Basel III standards to 2023, and the BCBS postponed the entry into force of the revised methodology to identify global systemically important banks (G-SIBs). Furthermore, in conjunction with the International Organization of Securities Commissions, the BCBS extended by one year the final implementation phases for margin requirements for non-centrally cleared derivatives.

"The work on evaluating post-crisis reforms is agnostic to the outcome. Our sole requirement is that any inputs to the evaluation be based on rigorous empirical analyses."

Pablo Hernández de Cos
Chair of the BCBS

Implementation

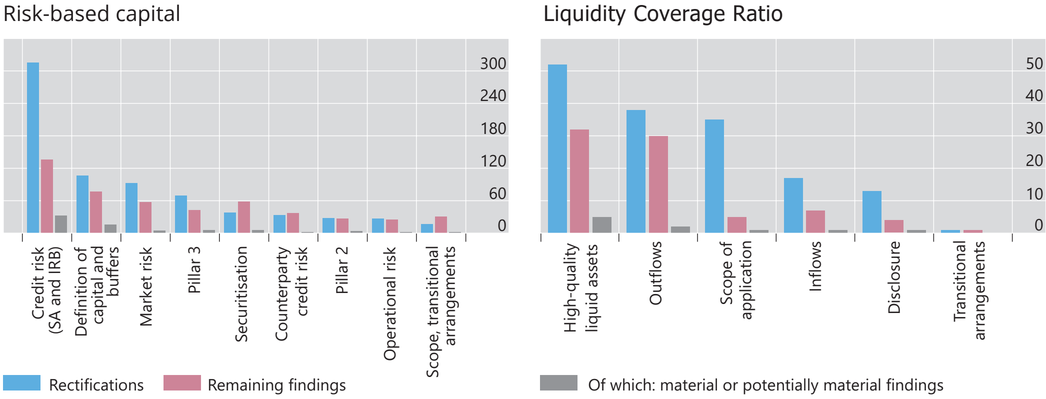
The Basel Committee continues to make significant progress in its assessments of the implementation of the post-Great Financial Crisis reforms via its Regulatory Consistency Assessment Programme (RCAP). In 2019/20, it published implementation assessments of the Net Stable Funding Ratio (NSFR) and the framework for measuring and controlling large exposures in the following jurisdictions: Argentina, Australia, Canada, China, Hong Kong SAR, India, Indonesia and Singapore. The review of the implementation of these standards for all member jurisdictions is expected to be completed in 2022.

The RCAP assessments continue to play a significant role in encouraging implementation. The results show that all BCBS member jurisdictions have implemented the initial (2010) Basel III capital standards and the Liquidity Coverage Ratio (LCR), and most have implemented the leverage ratio framework as well. Nineteen jurisdictions participate in the RCAP, and the conclusions of the assessments thus far are as follows:

- *Capital framework:* Fifteen jurisdictions have been assessed as compliant, three were largely compliant and one was materially non-compliant.
- *LCR:* Sixteen jurisdictions have been assessed as compliant, and three were largely compliant.
- *G-SIB framework:* All jurisdictions in which G-SIBs are headquartered were assessed as compliant.
- *NSFR and large exposures:* These assessments are ongoing, but thus far all 10 jurisdictions assessed were found to be compliant.

An important benefit of the RCAP assessments is that many jurisdictions have taken steps to rectify observed deviations from BCBS standards by amending their domestic regulations. The assessments of the capital framework, LCR and G-SIB framework identified a total of 1,450 deviations, of which around 60% were rectified during the assessment (see graph on next page). Of the remaining deviations, 85% have been assessed as not material, ie not expected to give rise to concerns related to financial stability or an international level playing field. The benefit of improved implementation consistency continues to be seen in the assessments of the NSFR and large exposure standards conducted over the

Risk-based capital and Liquidity Coverage Ratio assessments: rectifications and remaining findings



SA = standardised approach; IRB = internal ratings-based approach.

Source: BCBS Secretariat.

course of the year, where there were 80 deviations identified initially, of which around 67.5% were rectified during the assessment (see graph on next page).

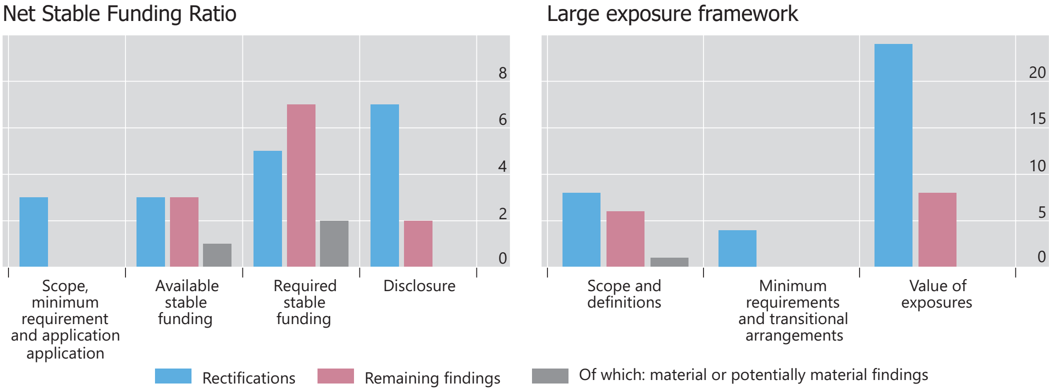
Evaluation

The Basel Committee's work programme for evaluating its post-Great Financial Crisis reforms is under way. This is a long-term project that will undertake an evidence-based post-implementation assessment of the reforms. It covers the following three areas:

Objectives	The Committee is examining whether individual reforms have achieved their intended objectives, such as improving the resilience of banks to shocks and enhancing the risk sensitivity or reducing excessive variability in banks' risk-weighted assets.
Interactions	The interaction and coherence of the reforms is being examined. This strand of work investigates whether the various individual measures of the post-Great Financial Crisis reforms are mutually reinforcing or conflicting and whether different measures treat similar risks in a similar way.
Broader impacts	The BCBS is also analysing the broader impact of its reforms. For example, it is considering whether there are any structural impacts arising from the reforms, and the extent to which these are desirable or undesirable.

Consistent with the post-implementation approach to the evaluation work, the initial focus has been on the 2010 Basel III reforms to the definition of capital and the LCR framework.

Net Stable Funding Ratio and large exposure framework assessments: rectifications and remaining findings



Data as of end-March 2020.

Source: BCBS Secretariat.

Emerging risks and supervisory issues

Although the Basel Committee's post-Great Financial Crisis policy development work is complete, it continues to share views on interpretive issues. The BCBS has published various updates, such as its newsletters on the usability of regulatory capital buffers and the role of proportionality in the application of the framework, and responses to frequently asked questions on the operational risk framework. However, there has been a shift of focus to dedicate more resources to monitoring emerging risks and other banking sector developments that require supervisory attention. For example:

- The Committee monitors the risks and vulnerabilities stemming from Covid-19 to banks and banking systems. This ongoing monitoring will indicate whether any further policy and/or supervisory measures are needed.
- In February 2020, the BCBS published a newsletter that sets out some key banking and supervisory implications of the reform to benchmark rates (including the anticipated discontinuation of Libor). It highlights the critical importance of banks considering the effects of benchmark rate reform on their businesses and making the necessary preparations for the transition to the alternative rates.
- In November 2019, the BCBS published a report on open banking and application programming interfaces (APIs). It looks at the evolving trend of open banking in member jurisdictions and discusses the implications of these developments on banks and banking supervision. It builds upon the February 2018 BCBS paper on the implications of fintech developments for banks and bank supervisors.

More information about the Basel Committee at www.bis.org/bcbs.

Committee on Payments and Market Infrastructures

Sir Jon Cunliffe
Chair of the Committee on Payments and Market Infrastructures

The Committee on Payments and Market Infrastructures (CPMI) is a global standard-setting body that promotes the safety and efficiency of payment, clearing, settlement and reporting systems and other financial market infrastructures (FMIs). The CPMI also serves as a forum for central banks to monitor and analyse developments and cooperate in related oversight, policy and operational matters, including the provision of central bank services.

The CPMI comprises senior officials from 28 central banks. Its chairpersonship was handed over in January 2020 from Benoît Cœuré, a former member of the ECB's Executive Board and the current Head of the BIS Innovation Hub, to Sir Jon Cunliffe, Deputy Governor of the Bank of England.

CPMI work in response to Covid-19

In response to Covid-19, the CPMI facilitated information exchanges among members regarding the business continuity, operational resilience and credit and liquidity risk management of FMIs in member jurisdictions. In close coordination with relevant standard-setting bodies, the CPMI reprioritised its work programme to maximise the usefulness of its work and to use members' resources effectively.

Digital innovations and the future of payments

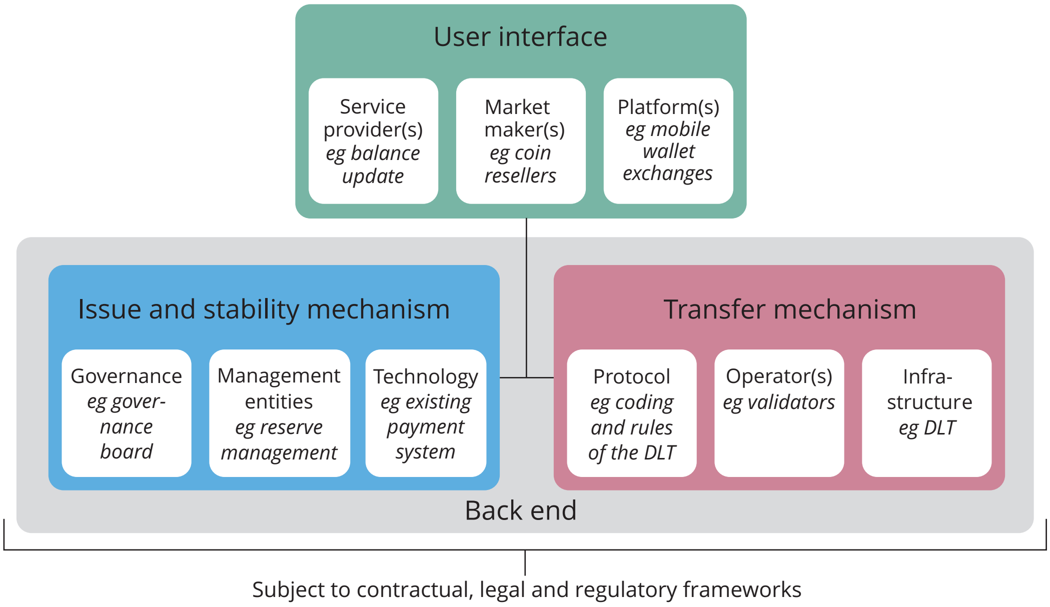
In the year under review, the CPMI followed and analysed digital innovations in payments.

Private sector digital tokens and stablecoins

Private sector initiatives involving distributed ledger technology (DLT) or digital tokens are entering advanced stages. Against this background, in December 2019 the CPMI published a report on wholesale digital tokens, which sets out a list of criteria for developers and market participants to consider when designing digital tokens for use in wholesale transactions. The CPMI collaborated with the Group of Seven, the FSB, the IMF and other relevant international bodies in investigating the impact of stablecoins and forming a robust and coherent approach to global stablecoins (see figure on next page).

A functional view of the stablecoin ecosystem

With selected examples



Italics represent selected examples for illustration only. The specific configuration of entities or technology to perform roles within each function will vary across stablecoins. The design of the interface functions can range from basic (and only accessible for advanced users) to user-friendly (which simplifies access to the stablecoin and provides additional services).

Cross-border payments and financial inclusion

Private sector initiatives also shed light on two major shortcomings: cross-border payments and access to transaction accounts for financial inclusion. Together with relevant international bodies, the CPMI played a leading part in identifying the challenges and the way forward to improve cross-border payments. It collaborated with the World Bank to further facilitate the industry's efforts towards financial inclusion.

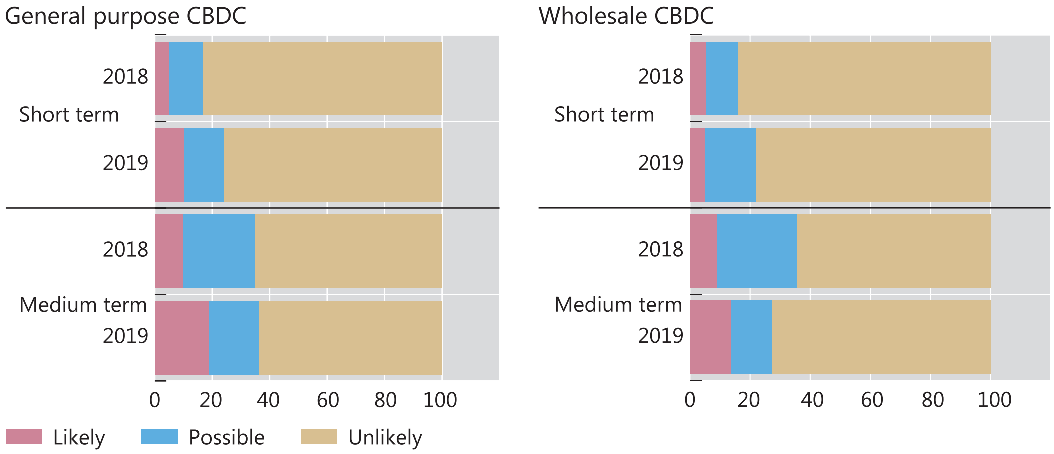
Central bank digital currencies

A survey conducted in late 2019 showed that central banks are undertaking extensive work on central bank digital currencies (CBDCs) and that EMEs are moving from conceptual research to intensive practical development, driven by stronger motivations than those of advanced economy central banks (see graph on next page).

As many central banks are modernising their real-time gross settlement (RTGS) systems, the CPMI exchanged information and views regarding these recent and planned developments. More and more, expanding RTGS systems' access to non-bank payment service providers and addressing needs arising from 24/7 fast retail payments are under consideration.

The likelihood of issuing a CBDC is increasing

Share of respondents



Short term = 1–3 years; medium term = 1–6 years. "Likely" combines "very likely" and "somewhat likely". "Unlikely" combines "very unlikely" and "somewhat unlikely".
Source: Central bank survey on CBDCs.

Strengthening wholesale payments security and cyber resilience

The CPMI continued to engage with the global central bank community and the financial services industry to strengthen wholesale payments security and cyber resilience. Operational resilience of FMIs is especially important in the light of the heightened cyber and endpoint security risks resulting from Covid-19.

Wholesale payments security

The threat of cyber attacks and wholesale payment fraud continues to grow. Given the great interconnectedness of FMIs, industry-wide cooperation is needed and global coordination required. Against this backdrop, the CPMI is promoting the operationalisation of its strategy to reduce the risk of wholesale payments fraud related to endpoint security in member jurisdictions and supporting non-member central banks globally. As part of these efforts, the CPMI published a "toolkit" for operationalisation, including background materials, the strategy's intended outcomes and examples of emerging practices that can help meet these outcomes, and a progress monitoring template.

Cyber resilience of financial market infra-structures

The joint CPMI and International Organization of Securities Commissions (IOSCO) working group on cyber resilience has been monitoring and encouraging the implementation of the *Guidance on cyber resilience for financial market infrastructures* (Cyber Guidance). Together with the industry, the CPMI and IOSCO identified three areas where the challenges require us to work closely together to find solutions: (i) data integrity; (ii) information-sharing; and (iii) third-party service providers. The industry is discussing these issues in three international working groups. The CPMI and IOSCO act as catalysts for these groups.

Enhancing the resilience and recovery of central counterparties and accelerating the implementation of international standards

The default of a member at a Swedish central counterparty (CCP) in September 2018 and the Covid-19 market turmoil in March 2020 underscored the importance of sound financial and operational risk management of CCPs and the implementation of the 2012 CPMI-IOSCO Principles for FMIs (PFMI) and the subsequent guidance to enhance resilience and recovery of CCPs. Recognising the systemic importance of CCPs, the CPMI and IOSCO jointly published a discussion paper on central counterparty default management auctions in June 2019 and continued engaging with the industry.

Against a backdrop of increasingly globalised markets and growing central clearing, in December 2019 the CPMI and IOSCO published a report on Responsibility E of the PFMI specifying that central banks, market regulators and other relevant authorities should cooperate to ensure FMI safety and efficiency. The report shares authorities' experiences and the lessons learned from this cooperation.

The CPMI and IOSCO continued to monitor the implementation of the PFMI, and published updates on Level 1 assessment in March 2019 and April 2020, and a Level 2 assessment report on systemically important payment systems, central security depositories and securities settlement systems in the United States (May 2019). Two online tools (a Level 1 tracker and Level 2 database) allow user-friendly access to the PFMI implementation monitoring findings.

Data collection, research and analysis on payments, clearing and settlement

The CPMI acts as a forum for central banks to collect, research and analyse data on payment, clearing and settlement systems.

In November, the CPMI published the Red Book statistics with 2018 data. The latest edition highlights that, driven by innovation and shifts in consumer preferences, new systems, new methods and new players are shaping the future of payments.

More information about the Committee on Payments and Market Infrastructures at www.bis.org/cpmi.

Committee on the Global Financial System

Philip Lowe
Chair of the Committee on the Global Financial System

The Committee on the Global Financial System (CGFS) monitors financial sector developments for the Governors of the BIS Global Economy Meeting and analyses the implications for financial stability and central bank policy. It is chaired by Philip Lowe, Governor of the Reserve Bank of Australia. The central banks of Argentina, Russia, Saudi Arabia, South Africa and Thailand have accepted the GEM invitation to join the Committee as of mid-2020, increasing the membership to 28.

Global financial vulnerabilities

The Covid-19 outbreak refocused the CGFS's monitoring efforts on the issues of immediate concern to central banks. The Committee held a series of conference calls where members shared their perspectives on the problems with domestic and international funding markets and the capacity of financial intermediaries to respond to the real economy's surging needs for financing. They also compared notes on the contours of policy interventions implemented to deal with the extraordinary challenges brought about by the pandemic in different jurisdictions.

The discussions during the period of intense economic stress brought into sharp focus some of the themes discussed earlier in the year. One was the work on the structure, characteristics and functioning of US dollar funding markets, which came under stress in the first quarter of 2020. Two other themes the CGFS had discussed earlier acquired new relevance in the light of the coronavirus crisis: the risks linked to high levels of debt and the implications of a longer period of low interest rates. Members had shared their concerns about the level of public and private sector indebtedness, especially when it relates to borrowing in foreign currency. They made a distinction between economies that had been through a period of deleveraging in the aftermath of the Great Financial Crisis and those where the financial cycle had showed signs of turning. Low rate policies were seen as helpful and supportive of real activity but also as possibly putting pressure on financial sector firms and encouraging rich valuations of risky assets that may prove unsustainable and prone to abrupt correction.

The CGFS also discussed structural issues relating to the growing importance for financial market functioning of asset managers following systematic investment strategies, and the potential implications of a wider acceptance of stablecoins as a means of payment and store of value.

Monitoring OTC derivatives markets

The CGFS discussed the OTC interest rate derivatives part of the results from the 2019 Triennial Central Bank Survey, which is conducted under its auspices (see page 24). It focused in particular on the structural and conjunctural drivers of the surge in the daily turnover in single-currency interest rate derivatives compared with the previous survey in 2016.

Unconventional monetary policy tools: a cross-country analysis

The central bank responses to Covid-19 brought to the fore many of the policy messages from the report the CGFS published in October 2019, which discussed the unconventional monetary policy tools (UMPTs) that central banks introduced in response to the unprecedented challenges brought about by the Great Financial Crisis and its aftermath.

The report summarises central banks' shared understanding of these tools' efficacy across countries, as well as the way they were sequenced and coordinated. It concludes that, on balance, UMPTs helped the central banks that used them to address the circumstances presented by the crisis and the ensuing economic downturn. It identifies side effects, such as disincentives to private sector deleveraging and spillovers to other countries, but does not consider them sufficiently strong to reverse the benefits of UMPTs. Central banks report that the tools have earned a place in the monetary policy toolbox, but also highlight that they should be accompanied by measures that mitigate their potential side effects. They also emphasise that in circumstances when the tools can be helpful, they need to be used decisively but in a context that includes a wider set of policies so as to avoid overburdening the central bank.

Property price dynamics: domestic and international drivers

Central banks keep a close eye on property markets both because of their significance for economic activity and because booms and busts have been at the heart of many crises. A CGFS report documents the rise of property prices in many countries where they appear high in comparison with simple rule-of-thumb valuation ratios, although in others price levels appear reasonable when judged against interest rates or incomes.

The report also discusses the growing role of international investors in many markets, where their activity affects local real estate prices, especially for commercial property. However, despite the fact that residential and commercial real estate prices are increasingly moving in sync, the report concludes that it is too soon to talk about a global real estate market.

More information about the Committee on the Global Financial System at www.bis.org/cgfs.

Markets Committee

Jacqueline Loh
Chair of the Markets Committee

The Markets Committee is a forum where senior central bank officials discuss current market conditions, market functioning and monetary operations. It is chaired by Jacqueline Loh, Deputy Managing Director at the Monetary Authority of Singapore. The central banks of Indonesia, Malaysia, Russia, South Africa and Turkey accepted the GEM invitation to join the Committee as of end-April 2020, increasing the membership to 27.

Monitoring financial markets and monetary policy implementation

A key area of focus in Markets Committee discussions over the year was the shift in monetary policy in major advanced economies and the associated impact on global financial markets, including EMEs. The dynamics and frictions in money markets, shifts in banks' demand for reserve balances and implications for central banks' policy operations also featured prominently in members' discussions.

The Markets Committee also continued its discussions on reference rate reform, with a focus on the practical impact on core central bank activities (eg collateral frameworks in central bank operations, reserve management).

Large balance sheets and market functioning

A large part of the Markets Committee's analytical focus in 2019/20 was devoted to studying how large central bank balance sheets affect the functioning of money and bond markets. Central banks expanded their balance sheets on an unprecedented scale in response to the Great Financial Crisis and its aftermath. The scale of these programmes naturally gave rise to concerns about their impact on market functioning, prompting central banks to take steps to mitigate any potential adverse consequences.

The Markets Committee report reviews the accumulated experience and associated policy implications. It investigates how the design and execution of balance sheet expansion affected market functioning and, in particular, to what extent it affected how market participants could adjust their positions efficiently, and whether asset prices responded to information promptly and reliably. The report complements a parallel study by the CGFS, which reviews more broadly the effectiveness of unconventional monetary policy tools and the lessons central banks have drawn from their use.

The Markets Committee report notes that some balance sheet-expanding policies were specifically aimed at improving market functioning, and that they delivered on this front. The potential for adverse side effects arose most clearly at a later stage,

Markets Committee Chair Jacqueline Loh and Committee members at the May 2019 Committee meeting

when asset purchase programmes were introduced to provide monetary stimulus at the effective lower bound for interest rates. But side effects rarely tightened financial conditions in markets to a point that would have undermined policy effectiveness. The report distils a set of lessons and best practices from the experiences it analyses. These can help central bankers minimise negative impacts on market functioning should there ever be a future need to pursue large-scale balance sheet expansion.

Monitoring FX markets

The Markets Committee discussed changes in the structure of global FX markets and market activity by drawing on the 2019 BIS Triennial Central Bank Survey of Foreign Exchange and Over-the-counter (OTC) Derivatives Markets (conducted under its auspices; see page 24).

Insights gleaned from the Triennial Survey, together with other information, also served as input into the Markets Committee's assessment of the effectiveness of the FX Global Code and the direction the Global Foreign Exchange Committee (GFXC) should take in its review of the Code in 2020.

Outreach activities and workshops

Members participated in the Working Party on Markets in Latin America (co-chaired by Markets Committee Chair Jacqueline Loh and Consultative Group of Directors of Operations (CGDO) Chair Bruno Serra). Moreover, following established practice to invite non-Markets Committee central banks on an ad hoc basis, a representative of the Central Bank of the Republic of Turkey participated in the March 2019 meeting and shared information on local market developments during the conjunctural discussion.

A workshop on market intelligence-gathering at central banks was held at the Bank of Japan in May 2019. Another workshop was held together with industry participants in January 2020 to discuss the implications of the rise in execution algorithms of the functioning of global foreign exchange markets.

In response to the Covid-19 pandemic, the Markets Committee shifted its meetings to a virtual format towards the end of the financial year, so that members could quickly exchange information on monetary policy operations and the functioning of markets. This approach also helps members to share information on business continuity and operational readiness in an agile way.

More information about the Markets Committee at www.bis.org/markets.

Central Bank Governance Group

Veerathai Santiprabhob
Chair of the Central Bank Governance Group

The BIS supports central banks in thinking about their institutional design. It facilitates meetings of Governors focused on that subject, curated by the Central Bank Governance Group (CBGG), of which nine Governors are standing members while others join their meetings when the topic is of particular relevance. The Group prepares background analyses for these meetings. It also acts as a clearing house for information on the institutional designs of BIS central banks, making that information available to its shareholders on a confidential basis. It is chaired by Veerathai Santiprabhob, Governor of the Bank of Thailand.

To that end, a wide range of topics is covered. Recently, the CBGG discussed matters as diverse as tensions around the functional independence of central banks with increasingly complex mandates; their strategies for managing staff and research; the operation of their codes of conduct; and ways of avoiding groupthink when considering their options. It has adopted an agenda that covers questions that will, by virtue of the Covid-19 pandemic, be crucial going forward, including:

- how best to keep policy frameworks fresh;
- possible mechanisms for connecting up monetary and fiscal policies without harming the integrity of either; and
- the challenges of clear communications amid unclear economic prospects.

"Central banks face an unceasing challenge to justify their autonomy from electoral politics. That requires the highest quality in every aspect of the operation."

Veerathai Santiprabhob
Chair, Central Bank Governance Group

More information about the Central Bank Governance Group at www.bis.org/cbgov.

Irving Fisher Committee on Central Bank Statistics

Rashad Cassim
Chair of the Irving Fisher Committee on
Central Bank Statistics

The Irving Fisher Committee on Central Bank Statistics (IFC) is a forum where central bank economists and statisticians address statistical topics related to monetary and financial stability. It also provides a useful network for discussing the statistical implications of global shocks, such as the Covid-19 pandemic. Governed by the BIS member central banks, it is hosted by the BIS and associated with the International Statistical Institute (ISI).

The IFC has 92 institutional members, including almost all BIS member central banks. Its chairpersonship was handed over in September 2019 from Claudia Buch, Vice-President of the Deutsche Bundesbank, to Rashad Cassim, Deputy Governor of the South African Reserve Bank.

Seminars and publications

The IFC organised several activities with the support of its member central banks and a number of international organisations. A key event was the International Statistical Institute's 62nd World Statistics Congress in Kuala Lumpur in August 2019, which gave central bank statisticians and their counterparts in national statistical offices, international organisations, academia and the private sector the opportunity to present their work and exchange views on a variety of topics. The IFC also organised events on data governance, external sector statistics and micro-macro data integration. It also issued a number of publications, including on big data analytics and artificial intelligence, the use of financial accounts and the exploitation of mirror data to track developments in the global financial system. In addition, it conducted a survey on the use of business intelligence systems by central banks.

Addressing new data needs

The IFC continued to support global statistical initiatives in the year under review, especially in relation to the implementation of the second phase of the G20-endorsed Data Gaps Initiative to enhance economic and financial statistics. In particular, and following the setup of a dedicated working group to analyse the statistical issues raised by the impact of digital innovation on the provision of financial services, the IFC published a survey on central banks and fintech data. This survey takes stock of user needs, refers to ongoing statistical activities and sheds light on initiatives that could be developed to address fintech-related data gaps. A future area of attention will relate to the potential consequences of the Covid-19 pandemic for official statistics, including a shift in focus to better respond to authorities' needs.

More information about the Irving Fisher Committee at www.bis.org/ifc.

International associations at the BIS

The following associations have secretariats at the BIS, but have their own separate legal identity and governance structures. The BIS is a member of the FSB and the IAIS.

FSB FINANCIAL STABILITY BOARD

Financial Stability Board

The Financial Stability Board (FSB) promotes international financial stability by coordinating the work of national financial authorities and international standard-setting bodies as they develop regulatory, supervisory and other policies. It fosters a level playing field by encouraging coherent implementation of these policies across sectors and jurisdictions. The FSB is chaired by Randal K Quarles, Vice Chair of the US Federal Reserve; its Vice Chair is Klaas Knot, President of the Netherlands Bank.

Through the FSB, the official sector community provided a rapid and coordinated response to Covid-19 to support the real economy, maintain financial stability and minimise the risk of market fragmentation. The FSB regularly shares information on evolving financial stability threats and on the policy measures that financial authorities take; assesses financial risks and vulnerabilities in the current environment; and coordinates policy responses to maintain global financial stability, keep markets open and functioning, and preserve the financial system's capacity to finance growth.

During the year under review, the FSB continued work to identify and assess vulnerabilities in the financial system, in particular considering developments related to big tech/fintech, cyber and operational resilience of financial institutions, the financial stability implications of cryptoassets and risks from non-bank financial intermediation. It also assessed vulnerabilities associated with leveraged loans and collateralised loan obligations.

The FSB's policy work focused on finalising and operationalising the remaining elements of the post-Global Financial Crisis reform agenda, including work to deliver resilient, recoverable and resolvable central counterparties, implementation of measures to address risks from asset management activities, the reform of major interest rate benchmarks, and work by the IAIS to deliver a new framework for addressing systemic risks in the insurance sector. The FSB agreed actions to address market fragmentation, and started work, in coordination with the CPMI, to develop for the G20 a roadmap to enhance global cross-border payments.

The FSB continued to monitor and report on implementation of agreed post-Global Financial Crisis reforms and undertook work to evaluate the effects of the reforms. It completed an evaluation on the effects of financial regulatory reforms on small and medium-sized enterprise financing. The FSB started an evaluation to assess whether the implemented reforms are reducing the systemic and moral hazard risks associated with systemically important banks.

More information about the FSB at www.fsb.org.

International Association of Deposit Insurers

The International Association of Deposit Insurers (IADI) is the global standard-setting body for deposit insurance systems. It contributes to the stability of financial systems by advancing standards and guidance for effective deposit insurance systems and promoting international cooperation among deposit insurers, bank resolution authorities and other safety net organisations. The President and Chair of IADI's Executive Council is Katsunori Mikuniya, Governor of the Deposit Insurance Corporation of Japan. IADI includes 90 deposit insurers as Members, nine central banks and bank supervisors as Associates and 14 institutional Partners.

IADI has developed a comprehensive database on deposit insurance and produces research and guidance on deposit insurance issues. IADI also conducts numerous international conferences and training and technical assistance activities around the world. It works closely with the FSB and the FSI in conducting conferences and meetings on deposit insurance and bank resolution issues.

In 2019/20, IADI Members approved a new strategy which includes providing additional staff dedicated to training and capacity-building to enable IADI to develop and implement a core curriculum for deposit insurance. In addition, the implementation of Phase II of the IADI Strategic Objectives will increase IADI's capability to monitor and conduct compliance assessments for the Core Principles and commission more external research.

IADI is closely monitoring developments around the Covid-19 outbreak and its impact on financial stability and deposit insurance. In March, it conducted surveys among IADI Members on the impact of Covid-19 in their jurisdictions in order to understand the different deposit insurance and related measures that have been put in place or are under consideration.

More information about IADI at www.iadi.org.

International Association of Insurance Supervisors

The International Association of Insurance Supervisors (IAIS) is the global standard-setting body for insurance supervision. Its mission is to promote effective and globally consistent supervision of the insurance industry in order to develop and maintain fair, safe and stable insurance markets for the benefit and protection of policyholders and to contribute to global financial stability. The IAIS Executive Committee is chaired by Victoria Saporta, Executive Director of the Prudential Regulation Authority at the Bank of England.

During the period under review, the IAIS reached agreement on a comprehensive set of reforms. This includes:

- finalisation of a comprehensive review and update of the IAIS Insurance Core Principles (ICPs), which are applicable to the supervision of all insurers

- adoption of the Common Framework for the Supervision of Internationally Active Insurance Groups (IAIGs), known as ComFrame, which provides the first global framework for effective and globally consistent supervision of IAIGs

- agreement on the Insurance Capital Standard (ICS) Version 2.0, the quantitative element of ComFrame, for a five-year monitoring period

- adoption of the Holistic Framework for the assessment and mitigation of systemic risk in the insurance sector, developed in cooperation with the FSB

The IAIS also approved a new five-year strategic plan, pivoting to a greater focus on emerging and accelerating risks and trends (eg fintech, climate risk, cyber risk) and the assessment of implementation of agreed standards.

In response to the Covid-19 pandemic, the IAIS adjusted its work programme to provide operational relief to supervisors, insurers and other stakeholders; supported information exchange between supervisors; launched a forward-looking risk assessment of the impact of Covid-19 on the global insurance sector; and actively coordinated with the FSB and other standard-setting bodies on cross-cutting financial system issues.

More information about the IAIS at www.iaisweb.org.

International cooperation to enhance cyber resilience

As part of Innovation BIS 2025, the BIS has set up the Cyber Resilience Coordination Centre (CRCC) to offer the central bank community cyber security services, including seminars and training with hands-on cyber range exercises. In 2019/20, the following events can be highlighted.

Second cyber range exercise

In October 2019, the BIS held its second five-day cyber range exercise simulating sophisticated attacks against payment systems. The exercise, with 30 participants from 20 central banks, ran on a dedicated virtual infrastructure with more than 400 servers simulating a network of five different central banks. The BIS Banking Department and the CPMI briefed participants on payment system operations. For three days, participants defended their assigned central bank servers against live attacks from expert hackers. Participants gave positive feedback about the depth of the exercise and its relevance to central banks.

Customised cyber resilience framework for central banks

The CRCC has been working with Carnegie Mellon University's Software Engineering Institute (SEI) to develop a framework to assess cyber security / operational resilience customised for the central bank community, based on the Cyber Resilience Assessment (CRA) framework. The CRA measures organisations' cyber resilience by assessing the completeness and maturity of 20 different security domains.

The CRCC's goal is to promote the use of the framework to help central banks to self-assess their cyber security posture and undertake common benchmarking to inform both current and future cyber security investments. To this end, two webinars took place on 18 and 20 February 2020, with 52 participants from 16 central banks. The webinar gave an overview of the CRA and how it is designed to measure existing organisational resilience and provide a gap analysis for improvement based on recognised best practices.

Cyber resilience for a distributed workforce

The Covid-19 crisis requires business continuity at scale and speed. Working hours have changed due to remote working, with profound implications for organisations that still need to adequately monitor, enforce restrictions and deal with any unforeseen impacts on systems and processes that have been designed to work within typical business hours. One critical component of this is ensuring that cyber resilience and business continuity best practices are in place.

On 16 April 2020, the CRCC hosted a webinar designed to promote knowledge-sharing and collaboration among central banks. The webinar brought together 139 participants from 31 central banks and the security industry to share best practices and discuss organisations' increase in risk exposure due to the prolonged remote work and suggestions for mitigating them. Presentations covered financial infrastructure resilience, the cyber threat landscape and how threat actors capitalise on the Covid-19 situation, the financial sector response to the pandemic and key cyber resilience areas to monitor in a prolonged working from home scenario.

Other areas of international cooperation

The BIS also participates in international forums such as the G20 and collaborates with key international financial institutions such as the International Monetary Fund, the World Bank Group and the International Organization of Securities Commissions. It also contributes to the activities of central banks and regional central bank organisations by participating in their events as well as hosting joint events.

During the past year, the Bank co-organised events or collaborated with the following regional organisations:

Arab Monetary Fund (AMF)
ASEAN Insurance Training and Research Institute (AITRI)
Asian Bureau of Finance and Economic Research (ABFER)
Asian Forum of Insurance Regulators (AFIR)
Association of Insurance Supervisors of Latin America (ASSAL)
Association of Southeast Asian Nations (ASEAN)

Association of Supervisors of Banks of the Americas (ASBA)
Caribbean Group of Banking Supervisors (CGBS)
Center for Latin American Monetary Studies (CEMLA)
Central Banks and Supervisors Network for Greening the Financial System (NGFS)
Centre for Economic Policy Research (CEPR)
European Banking Authority (EBA)
European Stability Mechanism (ESM)
European Supervisor Education Initiative (ESE)
Executives' Meeting of East Asia-Pacific Central Banks (EMEAP)
Group of Banking Supervisors from Central and Eastern Europe (BSCEE)
Joint Vienna Institute (JVI)
Latin American and Caribbean Economic Association (LACEA)
Macroeconomic and Financial Management Institute of Eastern and Southern Africa (MEFMI)
South East Asian Central Banks (SEACEN)

4

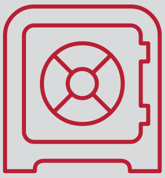
Financial results and profit allocation

The BIS provides financial services, including taking deposits in currency and gold, as well as asset management, foreign exchange and gold services. Its customers comprise central banks, monetary authorities and international organisations. These banking activities are the main determinants of the Bank's balance sheet and its financial results.

Portfolio organisation

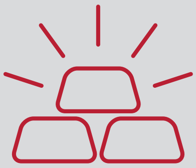
The Bank's portfolios are organised into simple layers, which helps with portfolio management and supports the analysis of profit and risk. The structure of the main portfolios is as follows:

Own funds



The Bank invests most of its shareholders' equity in fixed income portfolios.

Own gold



The remainder of the Bank's shareholders' equity is invested in gold and gold loans.

Borrowed funds

The BIS takes currency and gold deposits from central banks and invests the proceeds, earning a margin.

The own funds and the overall own gold position relate to the investment of the Bank's shareholders' equity. They are primarily accounted for as fair value through other comprehensive income assets. This means that they are presented in the balance sheet at fair value, while their contribution to the profit reflects the accrual of interest along with realised gains/losses on sales. The Bank's total comprehensive income includes their total change in fair value, including unrealised valuation movements.

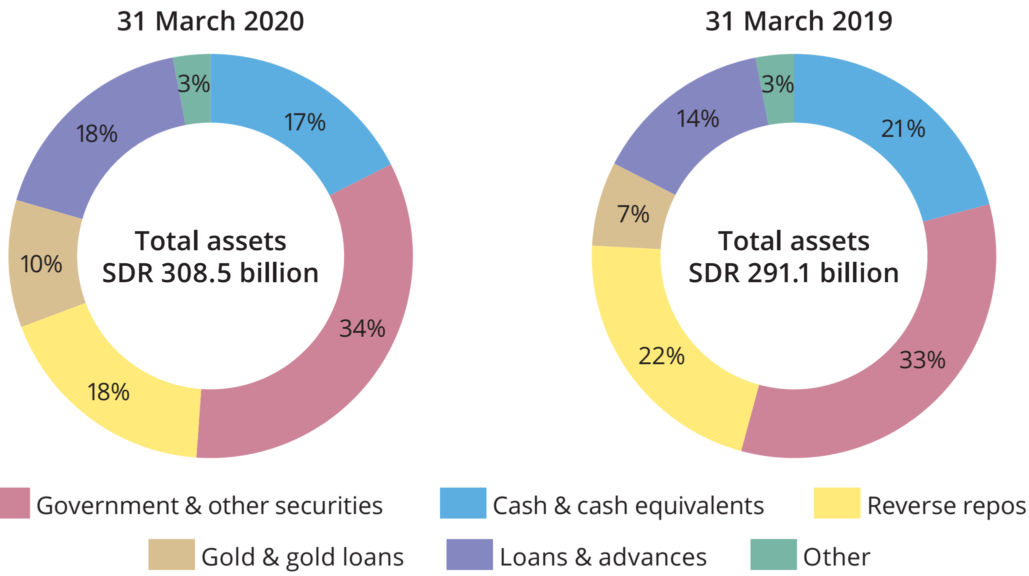
The borrowed funds represent deposits from central banks and other official sector customers in currency and gold, and the investment of the proceeds and associated hedging through derivative financial instruments. These portfolios are managed on an overall fair value basis. They are primarily accounted for as fair value through profit and loss. This means that they are presented in the balance sheet at fair value and their contribution to the Bank's profit reflects the total change in value, including interest accruals and realised and unrealised valuation movements.

There are also other portfolios associated with the Bank's operating expenses, and with the provision of asset management services and foreign exchange and gold services.

Balance sheet

The BIS's balance sheet total as of 31 March 2020 was SDR 308.5 billion, representing an increase of SDR 17.4 billion over the year. The composition of the Bank's assets is shown in the graph below.

Balance sheet asset composition



The expansion of the balance sheet primarily reflected the investment of the proceeds from an SDR 12.5 billion increase in currency and gold deposits in the borrowed funds, along with total comprehensive income of SDR 1.6 billion. The changes in currency and gold deposits are illustrated in the following table.

Currency deposits	Gold deposits	Total deposits
SDR 250.2 billion 31 March 2020	SDR 15.2 billion 31 March 2020	SDR 265.4 billion 31 March 2020
SDR 241.6 billion 31 March 2019	SDR 11.3 billion 31 March 2019	SDR 252.9 billion 31 March 2019
+SDR 8.6 billion	+SDR 3.9 billion	+SDR 12.5 billion

Financial performance

Net profit

The net profit for 2019/20 was SDR 166 million, comprising:

Borrowed funds total income		Own funds total income		Income on other business		Operating expense
SDR 128 million	+	SDR 360 million	+	SDR 18 million	–	SDR 341 million
reflecting a margin of 6 basis points on an average currency deposit volume of SDR 221 billion		reflecting a return through profit of 2.0%.		including asset management services, and foreign exchange and gold services		

The net profit for 2019/20 was SDR 296 million lower than in 2018/19 (SDR 461 million). This change was driven by two main factors:

Borrowed funds total income
↓ SDR 449 million

Income on the borrowed funds fell due to the impact of market turbulence caused by the Covid-19 pandemic. In February and March 2020, money market and credit bond spreads widened, leading to unrealised valuation losses of around SDR 490 million in the borrowed funds. These unrealised valuation losses from changes in spreads were partly offset by the effect of a higher level of deposits. Assuming that the global economy gradually recovers, most of these unrealised valuation losses are expected to be recouped over the next two financial years.

Own funds total income
↑ SDR 191 million

Income on the own funds was higher for two main reasons. First, the gains on sales were SDR 120 million higher in 2019/20. The balance on the securities revaluation account in other equity has risen in recent years due to the fall in bond yields. This balance is realised in net profit when bonds are sold, for example as portfolios are rebalanced to their benchmarks. Second, the net interest and valuation income on the own funds was SDR 71 million higher, reflecting mainly a higher accrual yield and the investment in three externally managed portfolios of US mortgage-backed securities.

The development of net profit over the year is illustrated in the graph on the next page. The 2019/20 net profit is shown with a red line, while the 2018/19 profit is shown with a blue line.

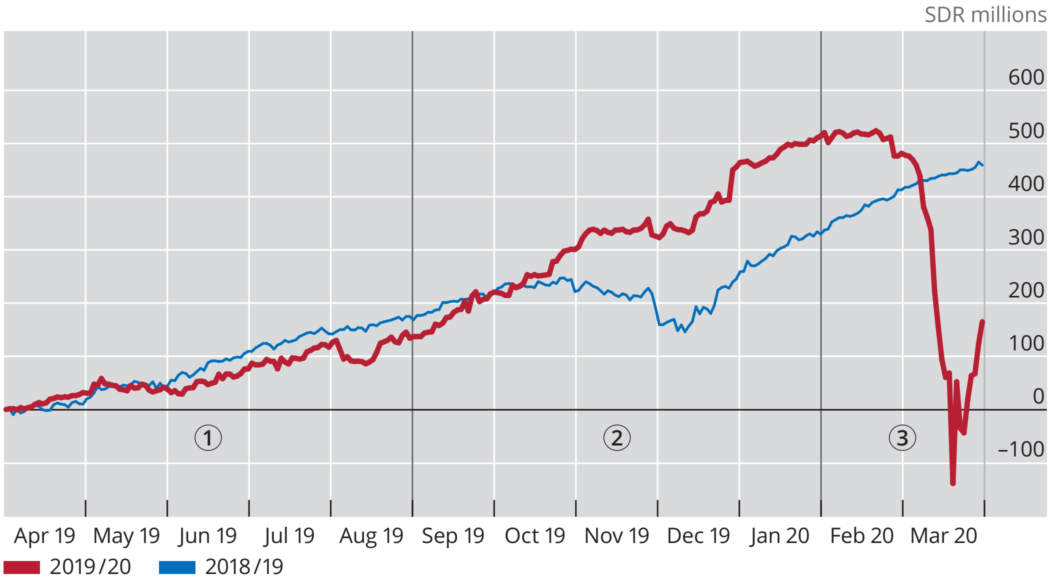
The graph distinguishes three time periods for the development of net profit.

Period 1 runs from the start of the financial year to the end of August 2019. Profit in 2019/20 was slightly lower than 2018/19 profit during this period, due primarily to unrealised valuation losses in the borrowed funds, arising from wider spreads on credit bonds and FX swaps.

Period 2 covers September 2019 to the end of January 2020, when profit was higher than in the corresponding 2018/19 period. The unrealised valuation losses from earlier in the year were recovered, and the borrowed funds margin averaged 27 basis points. Profit was also boosted by realised gains in the own funds fixed income portfolios, which arose when securities were sold in order to implement changes under the Innovation BIS 2025 banking strategy. At the end of January 2020, net profit was SDR 184 million higher than in the previous year.

Period 3 spans the remainder of the financial year until end-March 2020. The Bank incurred substantial unrealised valuation losses during this period as markets reacted to the ongoing pandemic. Wider credit bond spreads contributed losses of about SDR 290 million, while wider money market spreads (in particular, FX swap spreads) contributed losses of about SDR 200 million. The unrealised valuation losses from changes in spreads are expected to be recouped over the residual maturity of the financial instruments by the "pull-to-par" effect (higher carry following unrealised valuation losses). On this basis, valuation losses from money market spreads are expected to be recouped during 2020/21, while most valuation losses from changes in credit bond spreads are expected to be recouped over the next two financial years (assuming the pandemic comes under control and the global economy gradually recovers).

Year-to-date net profit



Total comprehensive income

The decline in profit was more than offset by substantial unrealised valuation gains on own gold holdings (reflecting a 26% increase in the gold price), and on the own funds fixed income portfolio (reflecting a significant drop in the yields of SDR bonds). The Bank undertook a comprehensive review of its actuarial assumptions and methodologies used to measure post-employment benefits, which also led to significant gains. As a result, shareholders' equity was boosted by the total comprehensive income for the year of SDR 1,603 million, which was more than double the level of 2018/19.

Allocation and distribution of profit

Proposed dividend

The dividend policy of the BIS has three fundamental principles:

- the Bank should maintain an exceptionally strong capital position;
- the dividend should be predictable, stable and sustainable; and
- the dividend should be an annual decision reflecting prevailing financial circumstances.

The policy incorporates a normal dividend, which usually increases by SDR 10 per share per annum as long as the payout ratio remains between 20 and 50% in most years. The dividend policy also allows for the possibility of a supplementary dividend in years when profits are high and the Bank's financial circumstances allow.

With regard to the 2019/20 dividend, the originally targeted dividend for the financial year (SDR 255 per share) would represent a payout of 86% of net profit, well outside the standard policy range. While it would be possible to pay a reduced dividend, the Board recommends to not pay a BIS dividend for 2019/20. This recommendation takes into account the actions central banks are taking as prudential policymakers, strongly urging private sector banks not to pay dividends in order to preserve capital.

Retaining all profit this year would help the Bank meet the potential demands on the BIS balance sheet over the coming months, while preserving its financial strength, in particular if the economic and financial damage wrought by the pandemic is worse than expected. While this would be the first time that the BIS has not paid a dividend since 1950, it is a response to the highly unusual circumstances.

Provided that the pandemic comes under control and the global economy stabilises, the Bank's net profit can be expected to be high in 2020/21 and would probably support paying a supplementary dividend, in effect representing a postponement of the 2019/20 dividend to 2020/21.

Proposed allocation of net profit

The Board therefore recommends that the entire profit of 2019/20 be allocated to reserves.

In accordance with Article 51 of the BIS Statutes, the Board of Directors recommends that the General Meeting allocate the 2019/20 net profit of SDR 165.5 million in the following manner:

SDR 8.3 million to be transferred to the general reserve fund	SDR 157.2 million to be transferred to the free reserve fund

Independent auditor

Report of the auditor

The BIS financial statements for the year ended 31 March 2020 have been audited by PricewaterhouseCoopers, which confirmed that they give a true and fair view of the Bank's financial position and of its financial performance and its cash flows for the year then ended. The audit report can be found on pages 200–1.

Auditor rotation

In accordance with Article 46 of the BIS Statutes, the Annual General Meeting is invited to elect an independent auditor for the ensuing year and to fix the auditor's remuneration. The Board policy is to rotate the auditor on a regular basis. The financial year ended 31 March 2020 was the first year of PricewaterhouseCoopers' term as auditor.

5

Governance and organisation

The BIS is governed at three levels: the General Meetings of member central banks, the Board of Directors and BIS Management. Each of these levels participates in the governance and decision-making related to BIS activities in the areas of international cooperation, policy analysis, banking operations and resource management.

BIS member central banks

Sixty-two central banks and monetary authorities are currently members of the BIS, each having rights of voting and representation at General Meetings. In January 2020, the Board of Directors invited the central banks of Kuwait, Morocco and Vietnam to become members of the BIS. The central banks of Kuwait and Morocco joined in February 2020.

Bank of Algeria	Algeria
Central Bank of Argentina	Argentina
Reserve Bank of Australia	Australia
Central Bank of the Republic of Austria	Austria
National Bank of Belgium	Belgium
Central Bank of Bosnia and Herzegovina	Bosnia and Herzegovina
Central Bank of Brazil	Brazil
Bulgarian National Bank	Bulgaria
Bank of Canada	Canada
Central Bank of Chile	Chile
People's Bank of China	China
Central Bank of Colombia	Colombia
Croatian National Bank	Croatia
Czech National Bank	Czech Republic
Danmarks Nationalbank	Denmark
Bank of Estonia	Estonia
European Central Bank	Euro area
Bank of Finland	Finland
Bank of France	France
Deutsche Bundesbank	Germany
Bank of Greece	Greece
Hong Kong Monetary Authority	Hong Kong SAR
Magyar Nemzeti Bank	Hungary
Central Bank of Iceland	Iceland
Reserve Bank of India	India
Bank Indonesia	Indonesia
Central Bank of Ireland	Ireland
Bank of Israel	Israel
Bank of Italy	Italy
Bank of Japan	Japan
Bank of Korea	Korea
Central Bank of Kuwait	Kuwait

General Meetings

The BIS Annual General Meeting (AGM) is held within four months of the end of the financial year on 31 March. The AGM approves the Annual Report and the accounts of the Bank, decides on the distribution of a dividend and elects the Bank's auditor. Each of the BIS member central banks has rights of voting and representation at General Meetings.

Bank of Latvia	Latvia
Bank of Lithuania	Lithuania
Central Bank of Luxembourg	Luxembourg
Central Bank of Malaysia	Malaysia
Bank of Mexico	Mexico
Bank Al-Maghrib (Central Bank of Morocco)	Morocco
Netherlands Bank	Netherlands
Reserve Bank of New Zealand	New Zealand
National Bank of the Republic of North Macedonia	North Macedonia
Central Bank of Norway	Norway
Central Reserve Bank of Peru	Peru
Bangko Sentral ng Pilipinas	Philippines
Narodowy Bank Polski	Poland
Banco de Portugal	Portugal
National Bank of Romania	Romania
Central Bank of the Russian Federation	Russia
Saudi Arabian Monetary Authority	Saudi Arabia
National Bank of Serbia	Serbia
Monetary Authority of Singapore	Singapore
National Bank of Slovakia	Slovakia
Bank of Slovenia	Slovenia
South African Reserve Bank	South Africa
Bank of Spain	Spain
Sveriges Riksbank	Sweden
Swiss National Bank	Switzerland
Bank of Thailand	Thailand
Central Bank of the Republic of Turkey	Turkey
Central Bank of the United Arab Emirates	United Arab Emirates
Bank of England	United Kingdom
Board of Governors of the Federal Reserve System	United States

Board of Directors

The Board determines the Bank's strategic and policy direction, supervises BIS Management and fulfils specific tasks as set out in the Bank's Statutes. It meets at least six times a year. The Board elects a Chairman from among its members for a three-year term and may elect a Vice-Chairman. The current Chairman is Jens Weidmann, President of the Deutsche Bundesbank, who was re-elected on 31 October 2018 for a second three-year term with effect 1 November 2018.

Jens Weidmann
Chairman; Deutsche Bundesbank, Frankfurt am Main

Andrew Bailey
Bank of England, London

Roberto Campos Neto
Central Bank of Brazil, Brasília

Shaktikanta Das
Reserve Bank of India, Mumbai

Alejandro Díaz de León
Bank of Mexico, Mexico City

Stefan Ingves
Sveriges Riksbank, Stockholm

Thomas Jordan
Swiss National Bank, Zurich

Klaas Knot
Netherlands Bank, Amsterdam

Haruhiko Kuroda
Bank of Japan, Tokyo

In line with Article 27 of the BIS Statutes, the Board may have up to 18 Directors. These include six ex officio Directors (the central bank Governors of Belgium, France, Germany, Italy, the United Kingdom and the United States), who may jointly appoint one other Director of the nationality of one of their central banks. In addition, 11 Governors of other member central banks may be elected to the Board.

Christine Lagarde
European Central Bank,
Frankfurt am Main

Juyeol Lee
Bank of Korea, Seoul

Stephen S Poloz
Bank of Canada, Ottawa

Jerome H Powell
Board of Governors of the Federal
Reserve System, Washington DC

François Villeroy de Galhau
Bank of France, Paris

Ignazio Visco
Bank of Italy, Rome

John C Williams
Federal Reserve Bank of New York,
New York

Pierre Wunsch
National Bank of Belgium, Brussels

Yi Gang
People's Bank of China, Beijing

Advisory committees

Four advisory committees assist the Board:

Administrative Committee: reviews key areas of the Bank's administration, such as budget and expenditures, human resources policies and information technology. Chaired by Haruhiko Kuroda.

Audit Committee: examines matters related to the Bank's internal control systems and financial reporting. Chaired by Pierre Wunsch.

Banking and Risk Management Committee: reviews and assesses the Bank's financial objectives, its business model for banking operations and its risk management frameworks. Chaired by Stefan Ingves.

Nomination Committee: deals with the appointment of members of the BIS Executive Committee. Chaired by Jens Weidmann.

Board remuneration

The AGM approves the remuneration of members of the Board of Directors, with adjustments taking place at regular intervals. The total fixed annual remuneration paid to the Board was CHF 1,038,068 as of 1 April 2020. Board members also receive an attendance fee for each Board meeting in which they participate.

Assuming that the full Board is represented in all Board meetings, the annual total of these attendance fees amounts to CHF 983,448.

Changes in the Board

On 31 October 2019, Mario Draghi retired from his position as President of the ECB, and therefore also from the BIS Board. With effect 10 November 2019, the Board elected Christine Lagarde, new President of the ECB, as a Board member for a period of three years.

Mark Carney's term as Governor of the Bank of England ended on 15 March 2020, and he thereby also left the BIS Board. Andrew Bailey, his successor at the Bank of England, took up his ex officio seat on the BIS Board on 16 March 2020. In addition, Stephen S Poloz stepped down as Governor of the Bank of Canada at the end of his term on 3 June 2020.

BIS Management

The management of the Bank is directed by the General Manager, who is responsible to the Board of Directors for the conduct of the Bank. The General Manager is assisted by the Deputy General Manager and advised by the Executive Committee.

The Executive Committee is chaired by the General Manager and includes the Deputy General Manager, the Heads of the four BIS departments (the Banking Department, the General Secretariat, the Innovation Hub and the Monetary and Economic Department), the Economic Adviser and Head of Research, and the General Counsel.

Other BIS senior officials are the Deputy Heads of the departments, the Chair of the Financial Stability Institute, the Head of Risk Management, the Head of the BIS Representative Office for Asia and the Pacific and the Head of the BIS Representative Office for the Americas.

Agustín Carstens
General Manager

Luiz Awazu Pereira da Silva
Deputy General Manager

Monica Ellis
Secretary General

Peter Zöllner
Head of Banking Department

Claudio Borio
Head of Monetary and Economic Department

Hyun Song Shin
Economic Adviser and Head of Research

Benoît Cœuré
Head of BIS Innovation Hub

Diego Devos
General Counsel

Changes in Management

On 1 September 2019, Alexandre Tombini became Chief Representative of the BIS Office for the Americas, and thereby a member of the senior management team of the BIS. On 15 January 2020, Benoît Cœuré became Head of the BIS Innovation Hub and, as head of the newly established department, also a member of the senior management team.

Senior management remuneration

The salaries of senior officials are regularly benchmarked against compensation in comparable institutions and market segments. As of 1 July 2019, their annual remuneration, before expatriation and other applicable allowances, is based on the salary structure of CHF 678,698 for the General Manager, CHF 574,283 for the Deputy General Manager and CHF 522,076 for Heads of Department. In addition, the General Manager enjoys enhanced pension rights.


Jean-François Rigaudy
Deputy Head of Banking Department


Bertrand Legros
Deputy Secretary General


Stijn Claessens
Deputy Head of Monetary and Economic Department


Fernando Restoy
Chairman of Financial Stability Institute


Jens Ulrich
Head of Risk Management


Alexandre Tombini
Chief Representative for the Americas


Siddharth Tiwari
Chief Representative for Asia and the Pacific

Accountability

The BIS is an international organisation established by the Hague Convention in 1930. Like other international financial institutions and international organisations, the BIS has immunities from legal process to pursue its public interest mandate, in particular by providing financial services to central banks. The reasons for this are: to preserve the BIS's independence from any political, administrative or judicial interference in its operations and activities; and to preserve the continuity of BIS financial transactions and settlements on behalf of the central bank community.

BIS staff members, like those of other international organisations, have certain privileges and immunities which enable them to independently execute their functions. These include functional immunity, ie immunity from jurisdiction for acts accomplished in the discharge of their official duties. Oversight of the BIS is the responsibility of its Board of Directors (see pages 96–7).

Control functions

The BIS has four fully independent control functions: Risk Management, Internal Audit, Compliance and the Legal Service. Their role is to ensure that the Bank meets its business objectives with the highest ethical standards and within the applicable legal and internal rules. To ensure independence, their reporting lines are to the top of the organisation.

Risk management

The management of the Bank's financial and operational risks is conducted by an independent, integrated Risk Management function. The Head of Risk Management is part of the Management of the BIS and reports directly to the Deputy General Manager and acts as his deputy in matters related to risk management.

The BIS manages its financial risks within a financial risk management (FRM) framework established by the Board. The implementation of the FRM framework is monitored by the Board's Banking and Risk Management Committee. Within this framework, BIS Management has established risk management policies designed to ensure that the Bank's financial risk exposures – credit, market and liquidity risks – are identified, appropriately measured and controlled, and monitored and reported. The unit develops policies and proposals while monitoring adherence to defined rules and limits. It continuously assesses the Bank's capital adequacy, considering both balance sheet leverage and economic capital utilisation.

The FRM framework was updated to support the implementation of the Innovation BIS 2025 medium-term strategy for the BIS's banking services. The revised framework became effective as of April 2019 and was designed to increase flexibility and allow the BIS to make better use of its strong capital position, while continuing to maintain a prudent risk profile, by:

- maintaining an exceptionally strong capital position;
- ensuring a high level of liquidity;
- carefully managing its market risk exposures, which include strategic positions such as the Bank's gold holdings;
- investing its assets predominantly in high credit quality financial instruments; and seeking to diversify its assets across a range of sectors.

Key revisions to the FRM framework included adopting Common Equity Tier 1 (CET1) as the main measure of the Bank's loss absorption capacity and creating the conditions for further diversification of the Bank's investment universe (see pages 35–43).

Similarly, the Bank manages its operational risks within an operational risk management (ORM) framework established by its Board of Directors. The implementation of the ORM framework is monitored by the Board's Audit Committee. The methodologies and tools used for ORM include regular risk and control self-assessments, identifying and monitoring relevant key risk indicators, scenario analysis and incident reporting. The Bank also operates an internal control framework over external financial reporting and sets aside economic capital for operational risks as part of its capital adequacy assessment approach.

Audit

The Internal Audit unit helps the BIS to accomplish its mission by evaluating and improving the effectiveness of risk management, control and governance systems and processes. It aims to promote effective controls at reasonable cost.

To ensure independence, the Head of Internal Audit reports to the General Manager and the Deputy General Manager and to the Board's Audit Committee. To maintain objectivity, Internal Audit does not have operational responsibility for or authority over any of the activities audited. Every activity and entity of the Bank, including outsourced activities, falls within the overall scope of Internal Audit.

During financial year 2019/20, Internal Audit proposed enhancements to further improve the implementation of the three lines of defence for operational risk management at the Bank. These recommendations included developing clearer definitions of the first and second line of defence functions and of their respective responsibilities, and a revised definition of the key risk categories, allowing for an effective mapping to the different lines of defence. Based on these proposals, BIS Management developed an implementation plan that was endorsed by the Audit Committee in March 2020.

In addition, the BIS engages an independent external auditor to confirm that its annual financial statements give a true and fair view of the Bank's financial position, financial performance and cash flows. For the year ended 31 March 2020, PricewaterhouseCoopers was the auditing firm chosen to audit the Bank's financial statements, which can be found starting on page 124.

Ethics and compliance

The Bank's Management and its Board of Directors attach the highest importance to ethics and compliance. The Bank's independent Compliance function provides assurance that the activities of the Bank and its staff are conducted in accordance with the highest ethical standards and the relevant rules. The Chief Compliance Officer reports to the General Manager and the Deputy General Manager and also has a direct reporting line to the Board's Audit Committee.

The BIS Code of Conduct requires that all BIS staff members: maintain the highest standards of conduct both at and outside the Bank; devote their working activities to the service of the Bank; avoid possible conflicts of interest; not accept other functions or employment unless explicitly authorised to do so by the Bank; and maintain the utmost discretion with regard to confidential information concerning the Bank.

To ensure that staff adhere to the highest ethical standards, Compliance organises training for all new staff members on the Code of Conduct and fraud awareness. In addition, staff working in the Banking Department receive training against financial crime. Compliance ensures that such training is repeated at regular intervals, using a mix of wokshops and e-learning.

Following a review of the Code of Conduct in 2019/20, the BIS issued practical guidance to remind staff that it does not tolerate any form of harassment. The Code of Conduct and the guidance encourage staff to report any incidents of harassment that they see or are subject to, and are intended to ensure that the BIS remains a respectful work environment.

Legal Service

The BIS Legal Service advises the Board, Management and the business areas of the BIS on all legal matters relating to the Bank's activities, to ensure that the Bank acts at all times with due respect for the rule of law. It also assists in the internal rule-making of the Bank and maintains its central repository of internal policies, procedures and rules. In addition, it facilitates discussion and cooperation among central bank lawyers and other professionals on legal topics of common interest.

As such, the Legal Service is not primarily a control function, but, in addition to its main advisory role, it contributes to the management and control of legal risks, including litigations, across the organisation.

Among other activities, over the past year the Legal Service contributed actively to the institutional and legal organisation of the three first centres of the Innovation Hub, in particular with the establishment of a new office in Singapore under a specific immunity framework.

In December 2019, the Legal Service organised a legal experts meeting attended by general counsels of member central banks on legal aspects of cryptocurrencies and central bank digital currencies.

Social and environmental responsibility

The international financial cooperation facilitated by the BIS helps to promote and maintain a well functioning financial system, which benefits society as a whole. But beyond its core mission, the Bank seeks to increasingly integrate social and environmental concerns into its operations. These efforts include fostering diversity among its staff, making charitable donations and addressing climate-related challenges.

Fostering diversity

The BIS acknowledges the benefits that a balanced workforce brings to the organisation. With staff from around 60 countries, the Bank has an impressive level of diversity of cultures and nationalities (see page 116). Gender balance is among the Bank's priorities, particularly at managerial and leadership levels.

Against this background, a framework for action is being established to provide a holistic approach to gender diversity by focusing actions on four key dimensions: awareness and sponsorship; staff rules, regulations and policies; external recruitment; and internal talent.

The percentage of female line managers continues to increase. Recruitment triggered by the various Innovation BIS 2025 initiatives has provided an opportunity to review the Bank's recruitment process and put more emphasis on the creation of diverse candidate pools and balanced interview panels. This has resulted in the recruitment of 45% female candidates in the year 2019/20. In the same period, the Bank's people-related policies were fully reviewed in a benchmark exercise conducted by the University of St Gallen (Switzerland), and staff focus groups were established to listen to feedback from staff on gender diversity.

The Bank is developing a comprehensive diversity strategy, which will include training on inclusion and a review of relevant policies with the aim to consolidate and build further on improving the gender balance.

Combating climate change

The BIS has been active in supporting central banks in addressing climate change-related risks, both directly and indirectly through its involvement with the Central Banks and Supervisors Network for Greening the Financial System (NGFS). The Bank has observer status on the network's steering committee.

In February 2020, the BIS hosted a meeting of the NGFS steering committee in Basel and an outreach session with European members of the NGFS. In addition, staff members from the Risk Management unit, the Banking Department, the Monetary and Economic Department and the Financial Stability Institute (FSI) continue to actively take part in NGFS working groups and contribute to their work programme.

The BIS also contributed to various global research efforts on green finance, by researching the pricing of environmental risk by financial institutions and the role of central banks in addressing climate change-related risks. In addition, the BIS has compiled and periodically updates a database containing key statistics on the global green bond market, to be shared with NGFS member institutions.

Deputy General Manager Luiz Awazu Pereira da Silva co-authored *The green swan: central banking and financial stability in the age of climate change*. Released in January 2020, the publication received extraordinary attention from the media and public alike, illustrating the keen interest of the central banking community in this very important topic.

The FSI continued to focus on deepening financial sector supervisors' understanding of climate-related risks. In September 2019, it published FSI Connect tutorials on climate risks in insurance followed by an FSI Insights paper on climate risk assessment in the insurance sector. In February 2020, it hosted a cross-sectoral policy implementation meeting on climate risk assessment in the financial sector.

BIS committees have also begun to focus on climate-related risks. The BCBS has set up a high-level Task Force on Climate-related Financial Risks (TFCR), which has published a stocktake of supervisory and regulatory initiatives related to climate-related risks. The TFCR is currently working on a set of analytical reports on the transmission channels and measurement methodologies of climate-related financial risks, and will develop a set of effective supervisory practices to mitigate such risks.

Some of the BIS's hosted organisations are also active in this area. The Financial Stability Board (FSB), in addition to its ongoing sponsorship of the recommendations and follow-up work of the Task Force on Climate-related Financial Disclosures (TCFD), is examining the financial stability implications of climate change, and as part of this work hosted a public-private sector workshop in February 2020. The International Association of Insurance Supervisors (IAIS), in collaboration with the Sustainable Insurance Forum, published an issues paper on the implementation of the recommendations of the TCFD in February 2020 and started work on an application paper to support supervisors in their efforts to integrate a climate risk perspective into insurance supervision. This paper is expected to be adopted in November 2020 during the IAIS annual conference which is themed around sustainable insurance.

On the banking side, in 2019 the BIS launched its green bond initiative, which seeks to promote green finance through sizeable climate-friendly investments (see page 41). In addition, the BIS Pension Fund has adopted a sustainability policy, while the Risk Management unit has plans to assess climate-related financial risks on the Bank's balance sheet.

Regarding the Bank's internal efforts to combat climate change, the BIS has been taking measures to decrease its greenhouse gas emissions from its business operations and is seeking opportunities to green its activities, in terms of both reducing its environmental footprint and, where viable, reorienting its investment management preferences.

In addition, as part of Innovation BIS 2025, the BIS has articulated its ambitions to further augment its sustainability credentials. The BIS Green Team, a group of staff volunteers supported by BIS Management, was reconstituted in late 2019 to raise awareness on environmental and sustainability issues across the Bank. Having analysed the Bank's environmental footprint, the Green Team now aims to launch targeted awareness-raising initiatives in the coming months.

Contributing to the local community

The BIS provides financial support to local charities and for selected cultural and social activities within the Basel region, where most of its staff and their families live. Requests for donations are examined by the Donations Committee, which makes recommendations on the social and cultural activities to be supported. The committee is cross-departmental and its members are appointed by the Secretary General. In 2019/20, 82% of donations went to social activities and 18% to cultural initiatives. A special donation was also made to the International Committee of the Red Cross to contribute to its efforts to face the challenges posed by the Covid-19 crisis.

In addition, the Bank engages regularly with its local community by opening its doors to local groups who wish to visit its premises and learn about its role (see pages 114–15).

Public archives

The BIS's historical archives are open to the public. All records relating to the Bank's business and operational activities which are over 30 years old are available for consultation, with the exception of a limited number of records that remain private or confidential even after 30 years have elapsed. The archives are located in the Tower building and are open to researchers by appointment only.

In 2019/20, 19 researchers visited the BIS archive for a total of 70 days.

Budget and remuneration

Bank budget policy

On an annual basis, Management prepares an overall business plan for the forthcoming financial year consistent with the strategic direction and financial framework agreed with the BIS Board of Directors. Corresponding resource requirements are assessed and plans prioritised to produce a draft budget for discussion with the Board. The agreement of the Board on the Bank's budget and related business plans is required before the start of each financial year.

The budget of the Bank comprises three key components:

- The regular administrative budget, which covers the Bank's ongoing annual expenditure, and its direct contribution to support the secretariats of the FSB, the IAIS and IADI.

- The regular capital budget, which covers annual expenditure on fixed assets (such as buildings, IT hardware and software).
- Additionally, special budgets are established from time to support large multi-year change programmes which include both administrative and capital elements. An example of this is the budget for the Innovation BIS 2025 strategy, which is a multi-year envelope covering all costs related to the programme as well as targeted savings.

The consolidation of these various components represents the overall budget of the Bank. Regular reporting on expenditure relative to the approved budget is provided to Management and the Board throughout the year to support oversight and monitoring.

Remuneration policy

Jobs at the BIS are classified into grades associated with a structure of salary ranges. The salaries of individual staff members move within the ranges of the structure on the basis of performance.

The BIS carries out comprehensive surveys on a regular basis to benchmark its salaries against compensation in comparable institutions and market segments. In benchmarking, the Bank focuses on the upper half of market compensation in order to attract highly qualified staff. The analysis takes into account the differing rates of taxation on compensation at the surveyed institutions. In years between comprehensive salary surveys, the salary structure is adjusted on the basis of general salary movements in the comparator market.

The salaries of senior officials are also regularly benchmarked against compensation in comparable institutions and market segments (see page 101). The Annual General Meeting approves the remuneration of members of the Board of Directors, with adjustments taking place at regular intervals (see page 98).

BIS staff members have access to a contributory health insurance plan and a contributory defined benefit pension plan. At the Bank's headquarters, non-Swiss staff members recruited from abroad, including senior officials, are entitled to an expatriation allowance as well as an education allowance for their children, subject to certain conditions.

Taxation

The majority of BIS staff employed at the Bank's Basel headquarters and the Asian and Americas representative offices are, under agreements with the relevant host countries, exempt as a rule from income tax on Bank salaries and allowances that would otherwise be levied by those host countries.

However, they remain subject to tax levied in the host countries on income from sources other than the Bank, as well as other taxes (eg wealth or property tax).

Organisation

The BIS has four main departments. They encompass economic research, banking activities, support to central bank collaboration on technological developments impacting the financial system and general internal support.

The Monetary and Economic Department (see pages 17–27) undertakes research and analysis to shape the understanding of policy issues concerning central banks, including innovation and monetary policy frameworks, provides committee support and organises key meetings of senior central bankers and other officials in charge of financial stability.

The BIS Innovation Hub (see pages 29–33) identifies and develops in-depth insights into critical trends in financial technology of relevance to central banks, explores the development of public goods to enhance the functioning of the global financial system, and serves as a focal point for a network of central bank experts on innovation. In the year under review, the Bank established regional centres for the BIS Innovation Hub in Hong Kong SAR, Singapore and Switzerland.

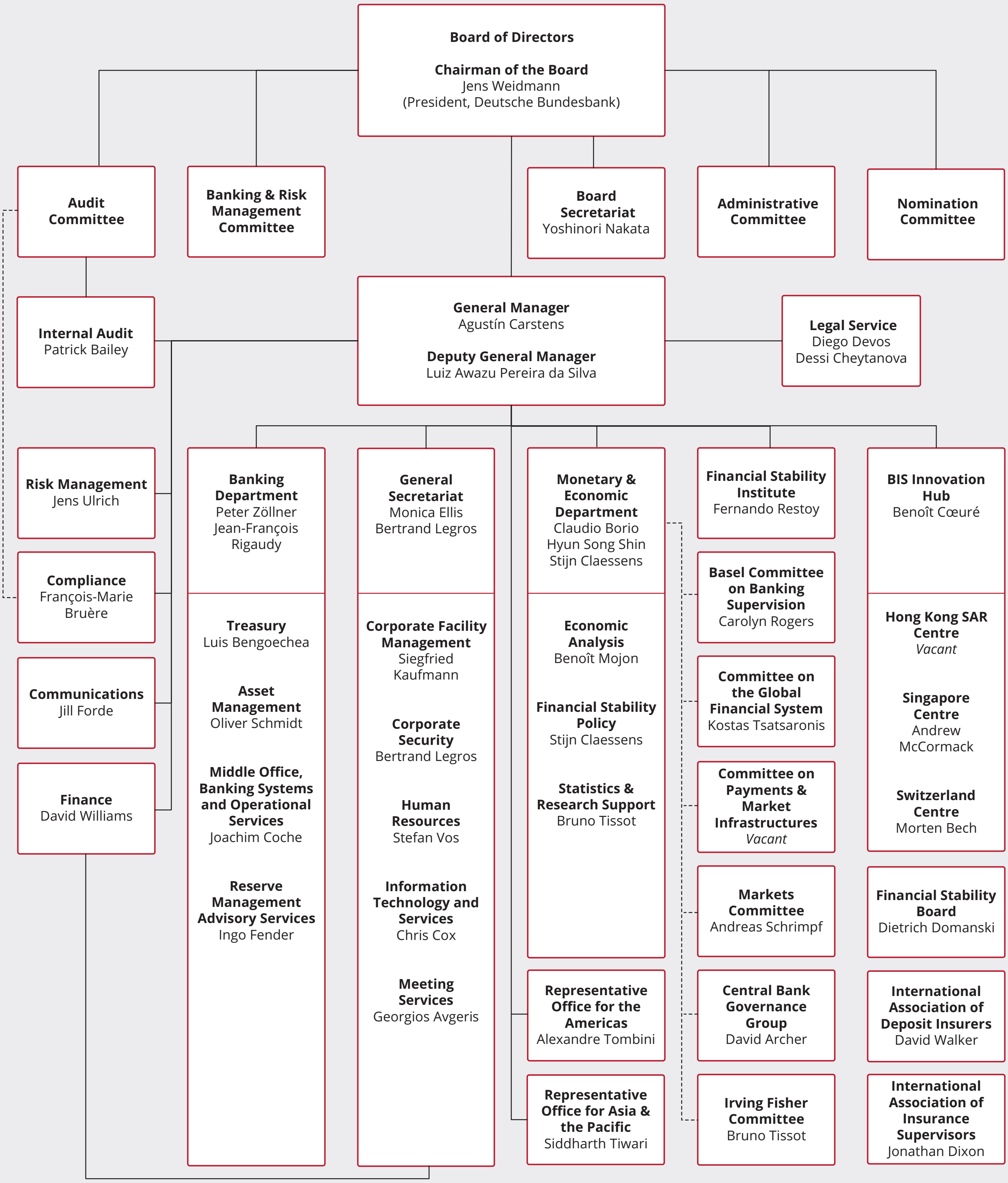
The Banking Department (see pages 35–43) provides a range of financial services to support central banks in the management of their foreign exchange and gold reserves and invests the BIS's own capital.

The General Secretariat provides the organisation with comprehensive corporate services in the areas of IT, human resources, finance, facilities management, security and meeting services.

The BIS is further supported by the Legal Service and the Communications, Compliance, Internal Audit and Risk Management units. In addition, the BIS's Financial Stability Institute (see pages 45–7) promotes the implementation of global regulatory standards and sound supervisory practices worldwide.

The BIS has two representative offices: one for Asia and the Pacific, located in Hong Kong, and one for the Americas, located in Mexico City (see pages 49–57). A number of international groups engaged in the pursuit of financial stability have their secretariats at the BIS (see page 63).

Organisation of the BIS, May 2020



Stress test: meeting the operational challenges of Covid-19

How does a hub for central bank cooperation continue to operate with borders closed and airports shut down? And how does it keep up its banking services to more than a hundred institutional customers?

The coronavirus pandemic has tested business resilience in an unprecedented way. Here we describe the Bank's coordinated response at all its locations.

The first countermeasures taken by the BIS were at its representative office and Innovation Hub Centre in Hong Kong SAR. Starting in late January, they shifted to business continuity mode, including social distancing and split operations.

In Switzerland, most of the Bank's staff were working in split teams from early March, with additional protective measures in place. Thus, when the Swiss authorities announced their more stringent social isolation measures, almost all Basel-based staff were able to start working from home within a day or two. This left less than 10% of staff at the Basel offices, allowing everyone else to work remotely, including the senior management team.

For its part, the representative office in Mexico also moved to split operations on 16 March, and to fully remote working, except for essential staff, on 31 March.

From the outset, the Bank's response to the pandemic has been led by a team chaired by the Deputy General Manager, and comprising representatives from key business units. The top priority is the safeguarding of staff and visitors at the BIS offices around the world.

The rapid shift to full remote working across all global locations was made easier by the Bank's recent IT Infrastructure and Security Investment programme, which was completed at the end of March 2020. The programme introduced new network and mobile working technologies that let users securely access the full capabilities of the Bank's IT systems while working from home.

In addition, 900 pieces of hardware were delivered to Bank staff so that they could work more productively from home over an extended period. These measures allowed almost the entire staff to shift to remote working from the second week of March without any major disruptions. It was also essential that staff had access to virtual meeting technology. An existing Innovation BIS 2025 initiative to introduce this technology to the Bank was accelerated, with a new videoconferencing package being deployed to all Bank users over a single weekend.

Meetings have shifted seamlessly to virtual format to ensure the BIS continues to function as a forum for central bank cooperation. Video- and teleconferencing were used to sustain the BIS's internal and external meetings. These include the Economic Consultative Committee and the Global Economy Meeting, which have convened regularly since March, together with scheduled Board and Board committee meetings.

A specialist team was set up to provide support in organising large virtual conferences. An early example of the new approach was the annual meeting of central bank Governors and financial institution CEOs on 7 April and a webinar focusing on the macroeconomics of epidemics, which was co-hosted with Northwestern University on 8 April. Meanwhile, the Financial Stability Institute has shifted its entire programme to webinar format.

Webinars and online counselling services were also used to aid line managers in leading their teams in a context of remote work and significant uncertainty. These services were also made available to staff.

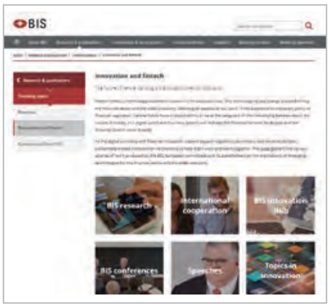
The BIS's banking services to central banks have continued as normal. Indeed, transaction volumes increased substantially in March, given increased demand by client central banks in a stressed market environment. All front and back office functions shifted smoothly to business continuity mode, thanks to the Banking Department's careful preparations and prior training. Traders have harnessed their powerful workstations remotely, working from home. This underlines the importance of thorough business continuity planning – being able to maintain business as usual even in the most testing circumstances.

Entering the second half of 2020, the authorities have indicated that measures will be eased in the Bank's jurisdictions, even if some preventive measures will remain in place. The BIS will continue to follow official guidance and to ensure that all measures are taken to continue providing uninterrupted services to its member central banks and the wider community, while at all times protecting the safety of staff and visitors.

Communications and engagement

The BIS strives to engage with its stakeholders in appealing and innovative ways. In the year under review, the BIS continued to work on presenting its data in more dynamic and user-friendly ways and simplifying the language used in its communications. The year also saw the following highlights in our communications and engagement work.

Digital enhancements and social media



To reflect its growing focus on technological innovation, in October 2019 the BIS inaugurated a page on its website dedicated to innovation and fintech. The page gathers the various strands of work produced by the BIS, its hosted committees and its stakeholders on the implications of emerging technologies for the financial sector and the wider economy.

In addition, in October 2019 the consolidated version of the Basel Framework was launched on the BIS website. This interactive tool brings together all current and future BCBS standards in a modular structure, making them easier to navigate. Visits to the page increased dramatically from the time the framework was posted for consultation in April and the end of 2019.

The Bank launched a podcast, BISness, in June 2019. Fifteen podcasts were posted during 2019/20, covering topics ranging from big data to green finance. You can subscribe to BISness on Apple podcasts, Spotify or Google podcasts.

Engaging with the local community

The BIS has solid connections with the city of Basel, where the Bank is headquartered, and with Switzerland in general. This year the Bank continued to strengthen these ties and build better local awareness of its activities. In particular, preparations for the Bank's 90th anniversary include a wide outreach programme to the local and central bank community. Some of the planned events have had to be postponed due to Covid-19.

Each year the Bank hosts visits from a number of groups who want to learn more about the organisation. In 2019/20, these included a visit from a department

of FINMA, the Swiss financial market supervisory authority, for which the BIS presented a tailored programme and arranged meetings in which FINMA representatives and their BIS counterparts exchanged views. Due to Covid-19, several visits had to be cancelled or postponed towards the end of the financial year. This includes opening its doors to the public as part of its 90th anniversary programme.

The BIS also hosts annually the children of staff members for “Zukunftstag” (take your child to work day). This year 44 children from ages eight to 14 attended to learn not only about the work of the BIS as an institution, but also more about what their parents do during the working day.

Engaging with staff

Building and strengthening connections with staff is also a priority for the BIS. Over the past year, a series of internal events was introduced to raise awareness of the behind-the-scenes work in different areas in relation to Innovation BIS 2025. This included Innovation Bytes, a series of short, interactive presentations by staff members who are running key initiatives behind the Bank’s new strategy. Panel discussions like Share & Learn gave experts from different areas of the Bank the opportunity to discuss issues like cryptocurrencies and blockchain in simple language that all staff could understand. After the Covid-19 outbreak, a number of new online resources were deployed to enable staff to stay connected and collaborate while working remotely.

Social media channels

83,916	47,431	4,700	16,209
Twitter followers	**LinkedIn** followers	**YouTube** subscribers	**Podcast** downloads

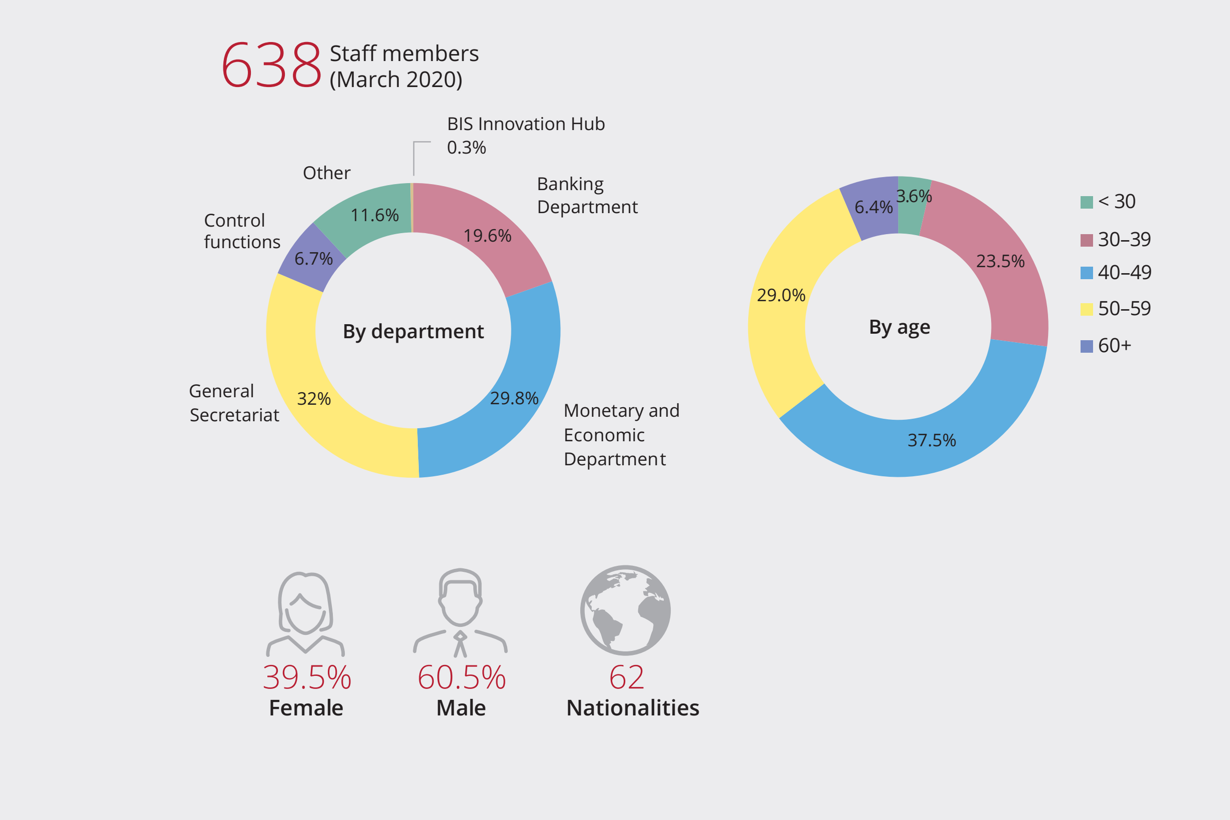
Staff

The BIS is a diverse global organisation. As of 31 March 2020, the Bank employed 638 staff members, excluding hosted associations. Its modest size encourages collaboration and knowledge-sharing both inside and outside the institution.

The Bank's employees are its greatest asset. The Bank's efforts to provide an excellent level of service to its customers is mirrored in the high quality of its staff. They have expertise in finance, banking, risk management, international law, monetary and financial economics, statistics, financial technology and cyber security, among other fields.

The Bank's economists and research analysts work on issues that are relevant to policymakers globally and are involved in up-to-the-minute policy debates. As the BIS is the "bank for central banks", staff in the banking and risk management units are well placed to understand the needs and risk constraints of central banks and monetary authorities, and to respond to the evolving needs of their reserve managers. Everyone working in corporate services plays a vital part in the organisation, working closely with different business units to support the Bank's core business. Those who are part of the Bank's control functions play an instrumental role in upholding the Bank's high business and governance standards.

In early 2020, BIS staff proved their extraordinary resilience and determination to keep the Bank working in the face of the Covid-19 outbreak (see pages 112–13).



People Strategy

As part of the Innovation BIS 2025 programme, the Bank launched the People Strategy to align its human resources management policies and practices with the evolving needs of the organisation. To identify, develop and deploy talent while skill requirements are rapidly shifting is key to meeting the Bank's strategic goals of creating a more agile organisation, able to deliver at a faster pace and with a drive towards continuous improvement. Hand in hand with this, the BIS aims to promote a strong performance culture in which staff are motivated and engaged. In this regard, the People Strategy prioritises a number of initiatives related to performance management, talent management, strategic workforce planning, staff mobility and promoting shared mindsets across the organisation.

A foundational element of much of this work was the development of a competency model this past year that emphasises the values of the organisation linked to Innovation BIS 2025: leveraging technology, thinking forward, working dynamically and creatively, collaborating closely, and empowering and inspiring people. This model is linked to the Bank's performance management framework, in order to encourage these behaviours and to foster innovation and new ways of working.

In support of the Bank's goals to attract a diverse pool of talent to the organisation (see pages 105–6), work on the People Strategy also focused on changes to the Bank's recruiting processes, sourcing and the use of technology to reach a broader audience. This allowed the Bank to handle a 50% increase in recruitment volume last year due to the ramping-up of many of the Innovation BIS 2025 initiatives, while increasing the diversity of talent within the organisation in terms of background and experience, gender and nationality. The Bank will continue to expand its diversity initiatives by remaining focused on the inflow of talent, providing training to address possible biases and improving inclusion to consolidate and further improve the gender balance.

Meet our people

Jenny

Member of Secretariat, Committee on Payments and Market Infrastructures

Being a member of the Committee on Payments and Market Infrastructure's secretariat involves organising and participating in the various working groups on the international standards, as well as contributing to analysis on the latest trends.

We work very closely with the International Organization of Securities Commissions (based in Madrid) as we are the joint standard setters for financial market infrastructures. At the same time, there are also lots of crossovers between our work and the other committees hosted by the BIS.

I am currently supporting different groups, one of which recently published a report on the use of tokens for wholesale payments. I have also co-authored two articles in the *BIS Quarterly Review* – one on tokenisation on securities and the other on innovations in payments. It is a demanding role that requires technical knowledge, negotiation skills and strong verbal and written communication skills. Working at the BIS is a great opportunity to develop an understanding of the perspectives of different jurisdictions and different types of authority on key policy issues.

Paul

Staffing Manager, Human Resources

Innovation BIS 2025 has challenged our recruitment team in three ways: we have seen a sharp increase in the need for tech-related profiles across the whole Bank; we want to attract a more diverse range of talent; and we are continuously looking for ways to streamline our recruitment processes through technology. In response, we have shifted our approach to attracting tech and specialist professionals, among whom the BIS has traditionally had low visibility. We have moved away from posting jobs on job boards to a more intentional and targeted approach to identifying and directly contacting candidates across a range of professional networking platforms. This has proved effective, particularly in attracting under-represented groups. We have also introduced video interviewing platforms and tools to streamline our recruitment process and reduce the time it takes to fill our vacancies. And we have standardised the use of online assessment tools to hone our decision-making process. Being able to materially contribute to Innovation BIS 2025 has been rewarding, as our efforts start to make a visible difference.

Giulio

Research Analyst, Monetary and Economic Department

In my day-to-day work, I support MED's Innovation and the Digital Economy unit. This unit was established as part of the Innovation BIS 2025 initiative to study the implications of technology in the economic, financial and policy spaces.

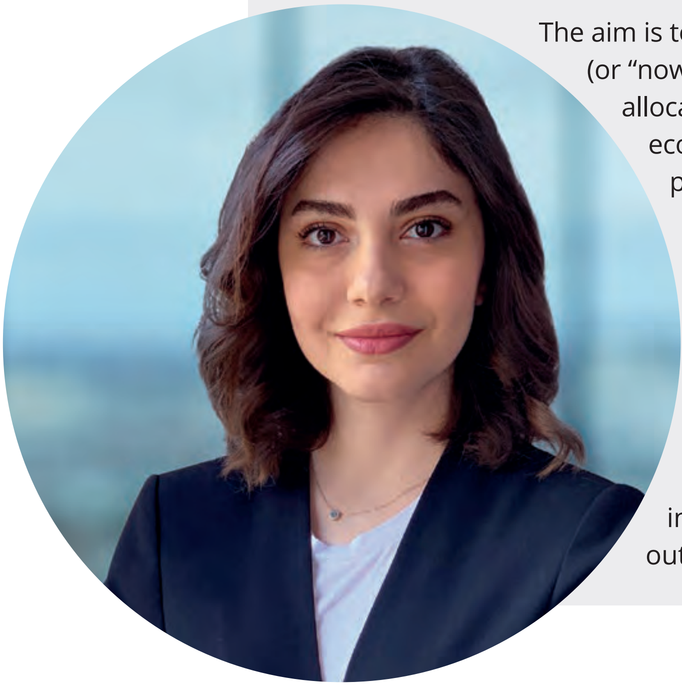
Working with the economists, I have contributed to research projects covering topics such as fintech and big tech lending trends and the implications for the financing of small and medium-sized enterprises, regtech, data privacy, cryptocurrencies and central bank digital currencies. For example, we conducted a stocktaking exercise on a selected list of retail central bank digital currency projects for publication in the *BIS Quarterly Review.*

Given the novelty of the topics, one trend in my work is towards finding new data sources and using new techniques to access and harness the data. To do this, I need to be ready for whatever comes next, which I find is challenging but extremely motivating.

Niloufar

Graduate, Banking Department

During my time with the BIS Graduate Programme within the Banking Department's Financial Analysis group, I have contributed to work on developing a dynamic asset allocation model for a multi-asset class investment portfolio.



The aim is to use financial and non-financial data to forecast (or "nowcast") economic indicators and change the asset allocations of the portfolio accordingly. When the economic situation changes, for example during a pandemic, it is very valuable to have some kind of signal that allows us to react swiftly.

Traditional optimisation methods are not always the best we can do; for this purpose, we used machine learning techniques to develop an optimised asset allocation model during times of market crisis. This model is generic and can be extended to any kind of portfolio in order to design a dynamic allocation that can outperform static portfolios.

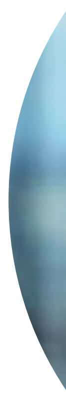
Robert

Engineer, Premises Management and Planning

Our team works on architectural solutions for a more modern, efficient and innovative work environment. We focus on optimising the use of existing space and also on fostering collaboration by introducing new working environments.

This year, we worked with our colleagues in the Americas Office to support the reconstruction and extension of their offices for the new dealing room. We also created a space for the Bank's new Cyber Range, a training facility for central banks to strengthen their cyber defence skills. Meanwhile, technical improvements such as new digital meeting room panels allow the Bank to utilise meeting rooms more efficiently.

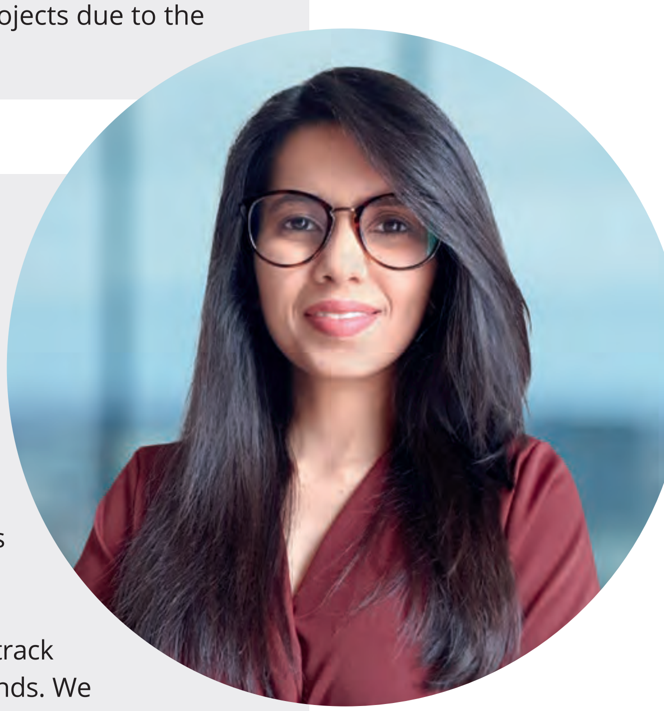
Crucially, we responded to the coronavirus threat by replanning office spaces to accommodate split teams and for adequate social distancing in meeting rooms. We are also rescheduling construction projects due to the pandemic's impact.



Zunaira

Developer, Applications and Platforms

As a member of the Data and Analytics team, I'm responsible for turning numbers into visual representations. When done right, such visuals can offer key insights into the data in a way that is meaningful and intuitive. To do this, we apply concepts of visual perception to graphically show the relationships and patterns in the data.



The informative dashboards we create are being used to track key performance indicators, and discover outliers and trends. We have also created a "DataViz Community" to foster collaboration and learning, and to develop best practice and ensure a consistent user experience.

My most recent project has been to transform the Financial Summary report pack, as produced by the Banking Department and Risk Management, into interactive visualisations for the monthly Finance Committee management meetings. Easy-to-understand visuals, live data connection and interactivity now let the business area representatives show key insights and interact with the data dynamically.

Kerstin

Adviser, Innovation Hub Switzerland

I joined the Swiss Centre of the BIS Innovation Hub on secondment from the Swiss National Bank (SNB). I work on building a prototype of a platform that central banks can use to monitor fast-paced electronic markets. Built on a cloud environment, the prototype seeks to use state-of-the-art open source applications.

Technological innovations continue to make trading in financial markets ever faster, and increasingly trading is done by machines and algorithms. This poses a challenge for central banks in terms of how they monitor these markets in practice. For many central banks, tracking foreign exchange markets is particularly important, and this is our initial focus.

I am excited to be part of the Innovation Hub and be able to shape this project from the beginning. My contribution is to bring in expertise on FX market structure, high-frequency data and market microstructure. Our interdisciplinary team is working on the technological frontier to process ultra-fast and large data, to extract meaningful insights on FX market conditions and developments in real time. We collaborate closely with IT providers as well as with financial market experts within the BIS, SNB and beyond.

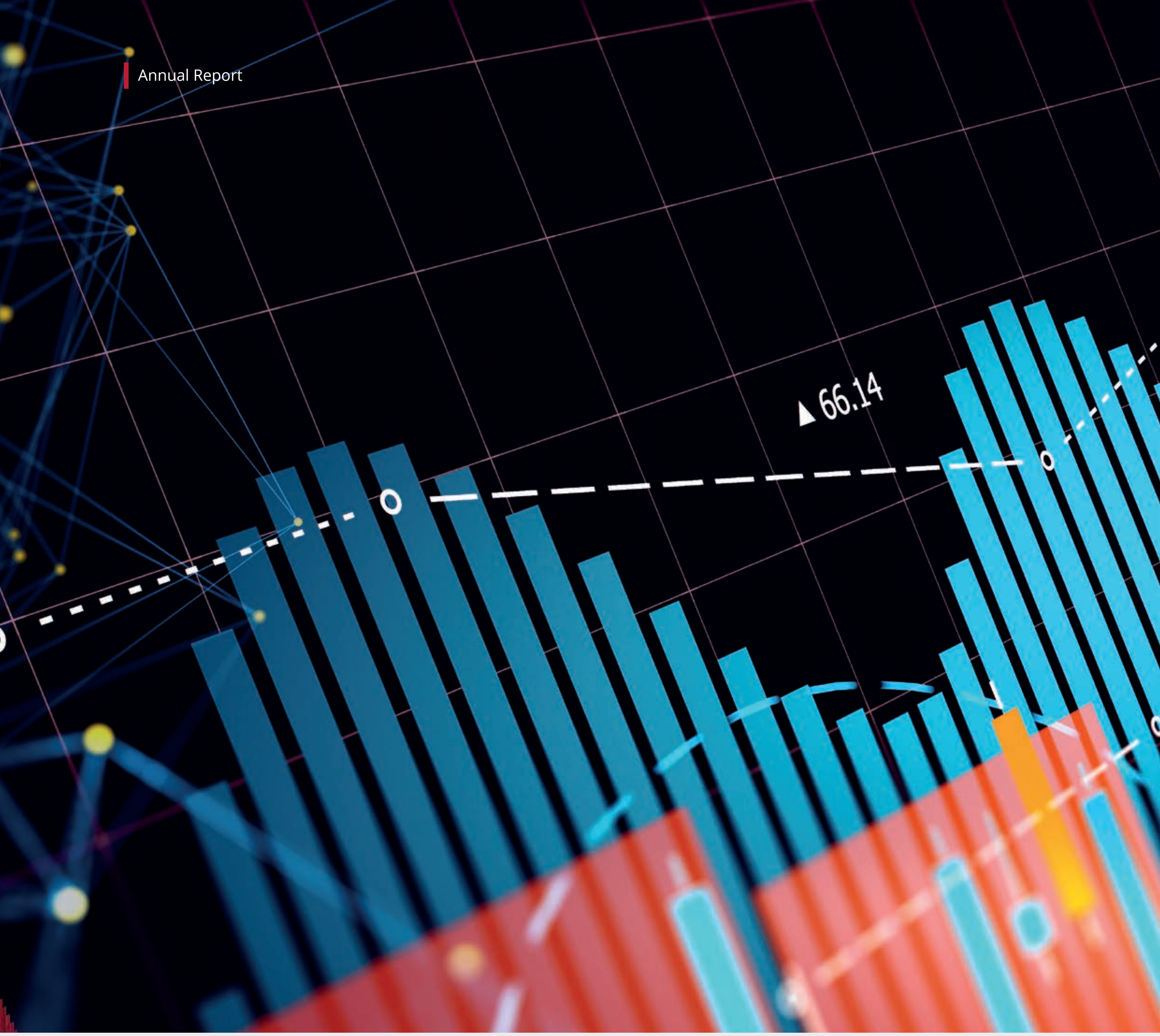
Jaime

Deputy Chief Representative, Office for the Americas

I am very proud to have taken part in the launch of the Bank's new dealing room in the Representative Office for the Americas. This new facility complements the banking services provided by our dealing rooms in Basel and Hong Kong SAR. It allows us to be closer to reserve managers of central banks in the region, who are now able to trade with us during their whole trading session. In addition, having relationship managers based in their same time zone will help us better serve their needs.

This project represents a milestone for the BIS and enhances its footprint in the Americas. As the project leader, I coordinated the building and equipment of this new facility, as well as the hiring and training of the team responsible for dealing in financial markets and covering central banks in the region.

Being able to offer banking services in a new time zone consolidates BIS efforts to serve our customer central banks on a 24-hour basis, which is an important goal in our Innovation BIS 2025 strategy. We have a big challenge ahead, but I am very confident that with the excellent team we have put together we will be able to meet it.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Financial statements

The BIS's financial statements for the financial year ended 31 March 2020 provide an analysis of the Bank's balance sheet and profit and loss account, together with other financial, capital adequacy and risk management disclosures. The financial statements are prepared in accordance with the Statutes and accounting policies of the Bank, and are externally audited.

Letter to shareholders

Submitted to the Annual General Meeting of the Bank for International Settlements held by video conference on 30 June 2020

Ladies and gentlemen

It is our pleasure to submit to you the financial statements of the Bank for International Settlements for the financial year ended 31 March 2020.

Pursuant to Article 49 of the Bank's Statutes, they are presented in a form approved by the Board of Directors on 12 May 2020, and are subject to approval by shareholders at the Annual General Meeting.

The net profit for the year amounted to SDR 165.5 million, compared with SDR 461.1 million for the preceding year. Due to the exceptional circumstances of the Covid-19 pandemic, the Board of Directors proposes that no annual dividend be paid. The Board further recommends, in application of Article 51 of the Bank's Statute, that SDR 8.3 million of the 2019/20 net profit be transferred to the general reserve fund and the remainder – amounting to SDR 157.2 million – to the free reserve fund.

Basel, 1 June 2020

Agustín Carstens
General Manager

Luiz Awazu Pereira da Silva
Deputy General Manager

Contents

Balance sheet

As at 31 March

SDR millions	Note	**2020**	2019
Assets			
Cash and cash equivalents	2	54,021.4	60,756.4
Securities purchased under resale agreements	3	56,018.6	62,904.4
Loans and advances	3	54,038.9	41,856.5
Government and other securities	3	103,706.1	97,055.6
Gold and gold loans	4	31,436.8	19,654.3
Derivative financial instruments	5	3,521.0	2,564.9
Accounts receivable and other assets	6	5,555.2	6,115.2
Land, buildings and equipment	7	199.3	188.3
Total assets		**308,497.3**	291,095.6
Liabilities			
Currency deposits	8	250,194.8	241,604.6
Securities sold under repurchase agreements	9	148.8	549.1
Gold deposits	10	15,221.1	11,333.4
Derivative financial instruments	5	3,049.2	1,455.4
Accounts payable	11	17,212.6	15,116.8
Other liabilities	12	1,030.9	1,087.0
Total liabilities		**286,857.4**	271,146.3
Shareholders' equity			
Share capital	14	706.4	698.9
Less: shares held in treasury	14	(1.7)	(1.7)
Statutory reserves	15	16,867.8	16,326.3
Profit and loss account		165.5	461.1
Other equity accounts	16	3,901.9	2,464.7
Total shareholders' equity		**21,639.9**	19,949.3
Total liabilities and shareholders' equity		**308,497.3**	291,095.6

Profit and loss account

For the financial year ended 31 March

SDR millions	Note	**2020**	2019
Interest income	17	282.3	237.7
Interest expense	18	(453.3)	(449.4)
Change in ECL impairment provision	19	(1.8)	(0.2)
Net income on financial assets and liabilities at fair value through profit and loss	20	554.0	949.3
Net interest and valuation income		**381.1**	737.4
Net gain / (loss) on sales of currency assets at fair value through other comprehensive income	21	109.2	(10.6)
Net fee income	23	3.0	0.9
Net foreign exchange income	24	13.0	35.6
Total income		**506.3**	763.3
Administrative expense	25	(315.3)	(280.0)
Depreciation	7	(25.5)	(22.2)
Operating expense		**(340.8)**	(302.2)
Net profit		**165.5**	461.1

Statement of comprehensive income

For the financial year ended 31 March

SDR millions	Note	2020	2019
Net profit		**165.5**	461.1
Other comprehensive income			
Items that are or may be reclassified subsequently to profit and loss			
Currency assets at fair value through other comprehensive income			
Net change in fair value during the year		544.7	207.2
Net change in expected credit loss impairment provision		1.8	0.1
Reclassification to profit and loss	21	(109.2)	10.6
Net movement on currency assets at fair value through other comprehensive income		**437.3**	217.9
Gold at fair value through other comprehensive income			
Net change in fair value during the year	16B	807.4	74.1
Reclassification to profit and loss		–	–
Net movement on gold at fair value through other comprehensive income		**807.4**	74.1
Items that will not be reclassified to profit and loss			
Re-measurement of defined benefit obligations	16C	**192.6**	(28.2)
Total comprehensive income		**1,602.8**	724.9

Statement of cash flows

For the financial year ended 31 March

SDR millions	Note	**2020**	2019
Cash flow from / (used in) operating activities			
Interest income received		370.4	306.3
Interest expenses paid		(439.2)	(442.4)
Net fee income	23	3.0	0.9
Net foreign exchange transaction gain	24	22.2	16.1
Administrative expense	25	(315.3)	(280.0)
Adjustments for non-cash flow items			
Net income on financial assets and liabilities at fair value through profit and loss	20	554.0	949.3
Net change in ECL impairment provision	19	(1.8)	(0.2)
Net foreign exchange translation gain	24	(9.2)	19.5
Lease interest expense	18	(0.2)	–
Change in accruals and amortisation		(102.1)	(75.8)
Change in operating assets and liabilities			
Currency deposits		9,072.8	31,635.9
Currency banking assets		(9,160.1)	(47,507.0)
Gold deposits		3,887.7	1,473.9
Gold banking assets		(10,974.2)	3,849.6
Change in cash collateral balance on derivative transactions		1.2	–
Accounts receivable and other assets		(5.2)	1.4
Accounts payable and other liabilities		126.4	245.2
Net derivative financial instruments		637.7	(2,522.9)
Net cash flow used in operating activities		**(6,331.9)**	(12,330.2)
Cash flow from / (used in) investment activities			
Change in currency investment assets		(61.9)	1,166.3
Change in gold investment assets		–	(0.2)
Change in securities sold under repurchase agreements in investment portfolios		(400.3)	(1,545.9)
Capital expenditure on land, buildings and equipment	7	(26.2)	(18.1)
Net cash flow used in investment activities		**(488.4)**	(397.9)

SDR millions	Note	2020	2019
Cash flow from / (used in) financing activities			
Issue of shares		224.5	–
Dividends paid		(136.7)	(131.2)
Repayment of principal on lease liabilities		(2.4)	–
Net cash flow from / (used in) financing activities		**85.4**	(131.2)
Total net cash flow		**(6,735.0)**	(12,859.3)
Net effect of exchange rate changes on cash and cash equivalents		1,254.5	(2,236.5)
Net movement in cash and cash equivalents		(7,989.5)	(10,622.8)
Net change in cash and cash equivalents		**(6,735.0)**	(12,859.3)
Cash and cash equivalents, beginning of year	2	**60,756.4**	73,615.8
Cash and cash equivalents, end of year	2	**54,021.4**	60,756.4

Movements in shareholders' equity

SDR millions	Note	Share capital	Shares held in treasury	Statutory reserves	Profit and loss	Other equity accounts: Defined benefit obligations	Other equity accounts: Gold and securities revaluation	Shareholders' equity
Balance as at 31 March 2018		**698.9**	**(1.7)**	**15,950.1**	**508.1**	**(210.1)**	**2,410.3**	**19,355.6**
Allocation of ECL provision following a change in accounting policy on 1 April 2018		–	–	(0.7)	–	–	0.7	–
Payment of 2017/18 dividend		–	–	–	(131.2)	–	–	(131.2)
Allocation of 2017/18 profit		–	–	376.9	(376.9)	–	–	–
Total comprehensive income	16	–	–	–	461.1	(28.2)	292.0	724.9
Balance as at 31 March 2019		**698.9**	**(1.7)**	**16,326.3**	**461.1**	**(238.3)**	**2,703.0**	**19,949.3**
Payment of 2018/19 dividend		–	–	–	(136.7)	–	–	(136.7)
Allocation of 2018/19 profit		–	–	324.4	(324.4)	–	–	–
Issue of shares		7.5	–	217.0	–	–	–	224.5
Total comprehensive income	16	–	–	–	165.5	192.6	1,244.7	1,602.8
Balance as at 31 March 2020		**706.4**	**(1.7)**	**16,867.8**	**165.5**	**(45.7)**	**3,947.6**	**21,639.9**

Introduction

The Bank for International Settlements (BIS, "the Bank") is an international financial institution which was established pursuant to the Hague Agreements of 20 January 1930 as well as the Bank's Constituent Charter and its Statutes. The headquarters of the Bank are at Centralbahnplatz 2, 4002 Basel, Switzerland. The objectives of the BIS, as laid down in Article 3 of its Statutes, are to promote cooperation among central banks, to provide additional facilities for international financial operations and to act as trustee or agent for international financial settlements. The scope of these financial statements is defined in accounting policy 2.

Accounting policies

The accounting policies set out below have been applied to both of the financial years presented except as described in the following paragraphs.

Effective 1 April 2018, the Bank applied a new classification and measurement approach for its financial instruments. The new approach amended the terminology of the classifications used for financial instruments, but did not change the underlying accounting other than through the implementation of an expected credit loss (ECL) impairment provision, the value of which at 1 April 2018 was SDR 0.7 million. The Bank elected not to restate comparative figures, and the financial statements were adjusted to show the impact of this change on the opening statutory reserves. Last year's financial statements describe the change of accounting policy on 1 April 2018.

Effective 1 April 2019, the Bank adopted a new accounting policy related to leases. See accounting policy 20 for further information. Due to immateriality, the Bank elected not to restate the comparative balances in the prior periods, and adjusted its opening balance sheet for the cumulative effect of applying the new policy. Note 1 to the financial statements describes the impact of the change in accounting policy.

1. Critical judgments and estimates

The preparation of the financial statements requires the Bank's Management to apply judgment and to make estimates.

The judgments which have the most significant effect on the financial statements concern the selection and application of accounting policies to ensure that the financial statements present a true and fair view of the financial position and performance of the Bank. The most critical accounting policies for the Bank's financial reporting are those which concern:

- the scope of the financial statements (see accounting policy 2);
- the functional and presentation currency (see accounting policy 3);
- the classification and measurement of financial instruments, and the application of these policies to the Bank's portfolios (see accounting policies 4–6); and
- accounting for gold assets and liabilities, and for the Bank's overall own gold position (see accounting policy 10).

The critical estimates having the most significant effect on the amounts recognised in the financial statements are those which concern:

- the valuation of currency deposits classified as fair value through profit and loss; and
- post-employment obligations, the estimation of which is dependent on long-term actuarial assumptions.

There are also judgments involved in making disclosures, including the methodology used to determine the fair value hierarchy disclosures.

When making estimates, Management exercises judgment based on available information. Actual results could differ significantly from these estimates.

2. Scope of the financial statements

These financial statements recognise all assets and liabilities that are controlled by the Bank and in respect of which the economic benefits, as well as any rights and obligations, lie with the Bank.

As part of its activities, the Bank undertakes financial transactions in its own name but for the economic benefit of other parties, including transactions on a custodial or agency basis. These include transactions undertaken on behalf of the staff pension fund and the BIS Investment Pools ("BISIPs"). These are reporting entities with their own financial statements, but which do not have separate legal personality from the Bank. The Bank also undertakes transactions in its name on behalf of dedicated mandates, where the Bank is the investment manager of a customer investment portfolio. Unless otherwise stated, such transactions are not included in these financial statements. Note 28 provides further information on the BISIPs and dedicated mandates. Note 13 provides further information on the staff pension fund.

The Bank hosts the secretariats of three independent associations – the Financial Stability Board (FSB), the International Association of Deposit Insurers (IADI) and the International Association for Insurance Supervisors (IAIS) and supports the activities of the BIS Sports club. It also acts in an administrative capacity for the International Journal of Central Banking (IJCB). These five associations each have their own legal personality and financial statements, and are therefore independent of the Bank. Unless otherwise stated, the activities of these five independent associations are not included in these financial statements.

3. Functional and presentation currency

The functional and presentation currency of the Bank is the Special Drawing Right (SDR) as defined by the International Monetary Fund (IMF). The composition of the SDR is subject to periodic review. As currently calculated, one SDR is equivalent to the sum of USD 0.58252, EUR 0.38671, Renminbi 1.0174, JPY 11.9 and GBP 0.085946.

Monetary assets and liabilities are translated into SDR at the exchange rates ruling at the balance sheet date. Other assets and liabilities and profits and losses are translated into SDR at the exchange rates ruling at the date of the transaction. Exchange differences arising from the retranslation of monetary assets and liabilities and from the settlement of transactions are included as net foreign exchange income in the profit and loss account.

All figures in these financial statements are presented in SDR millions unless otherwise stated. Amounts are rounded to the nearest SDR 0.1 million, and consequently there may be small differences both within and between disclosures.

4. Recognition, de-recognition, classification and measurement of financial assets

The Bank recognises financial assets on the trade date, being the date on which the Bank commits to purchase the assets. Financial assets are de-recognised on the trade date of a sale (when the Bank commits to transfer substantially all the risks and rewards of ownership), or when the contractual cash flows from the assets have expired. On initial recognition, financial assets are classified as either:

- amortised cost;
- fair value through other comprehensive income ("FVOCI"); or
- fair value through profit and loss ("FVPL").

The classification determines the measurement of financial assets, and how this is reflected in the Bank's financial statements. The classification depends on the business model for managing the assets and on the cash flow characteristics of the assets, as described below.

Amortised cost

Financial assets can be classified as amortised cost if two criteria are met:

1. the financial assets are held within a business model with the objective of holding the assets to collect the contractual cash flows; and
2. the contractual terms on the financial assets give rise to cash flows that are solely payments of principal or interest.

Amortised cost financial assets are measured in the balance sheet using the effective interest rate method, with the carrying value adjusted by the expected credit loss (ECL) for each asset. Interest is included in the profit and loss account under “Interest income” or “Interest expense” (negative interest) on an accruals basis. The movement in the ECL impairment provision on these assets is recognised in the profit and loss account under “Change in ECL impairment provision”.

Fair value through other comprehensive income (FVOCI)

Financial assets can be classified as FVOCI if two criteria are met:

1. the financial assets are held within a business model with the objective of collecting the contractual cash flows or potentially selling the assets; and
2. the contractual terms on the financial assets give rise to cash flows that are solely payments of principal or interest.

FVOCI financial assets are measured in the balance sheet at fair value. In addition, an amortised cost book value is calculated using the effective interest rate method, including an adjustment for the ECL impairment provision of each asset. Changes in the book value (due to the accrual of interest) are included as “Interest income” or “Interest expense” (negative interest) in the profit and loss account. Unrealised valuation movements, adjusted by the ECL impairment provision, are recognised through the “Securities revaluation account” in other comprehensive income (OCI). Interest revenue, the movement in ECL impairment provision and foreign exchange gains or losses are recognised in the profit and loss account. Upon disposal of the assets, gains or losses are recognised in the profit and loss account as “Net gain on sales of financial assets at fair value through other comprehensive income”.

Fair value through profit and loss (FVPL)

All other financial assets are classified as FVPL. These include:

- derivative financial assets,
- assets that are held for trading, or that are held within a business model that is managed on a fair value basis; and
- assets which contain contractual terms that give rise to cash flows that are not solely payments of principal or interest.

In addition, the Bank chooses to classify financial assets as FVPL if the use of the classification removes or significantly reduces an accounting mismatch. Any such classification is made on the date of initial recognition, and is irrevocable.

FVPL financial assets are measured in the balance sheet at fair value. The accrual of interest and all realised and unrealised movements in fair value are included within “Net income on financial assets and liabilities at fair value through profit and loss”.

Reclassification

Groups of financial assets are reclassified if there is a fundamental change to the way they are managed. Reclassifications are applied prospectively from the date of change, with no restatement of previously recognised gains, losses or interest. Financial assets which are classified as FVPL in order to remove or significantly reduce an accounting mismatch cannot be reclassified.

Impairment of financial assets

The Bank assesses impairment on financial assets which are classified as either FVOCI or amortised cost, and also for loan commitments. Impairment is assessed from the date of initial recognition using a three-stage model.

Stage 1 applies to financial assets on which there has not been a significant increase in credit risk since initial recognition. The ECL impairment provision is calculated on a 12-month forward-looking basis.

Stage 2 applies to financial assets on which there has been a significant increase in credit risk since initial recognition. The ECL impairment provision is calculated taking into account the full expected life of the financial asset.

Stage 3 applies to financial assets which are considered to be credit impaired. The ECL impairment provision is calculated on a lifetime basis, but the effective interest rate on the financial asset is recalculated based on the amortised cost (including the ECL).

The key inputs into the measurement of the ECL impairment provision are:

- The probability of default (PD), which represents the estimated likelihood of a borrower defaulting on its financial obligation over a specific time period. PDs are regularly re-estimated using a combination of internal and external data, along with judgment.
- Loss-given-default (LGD) is the proportion of an exposure that is lost as a result of a counterparty default. LGD estimates are informed by observed external LGD data.
- Exposure at default (EAD) is the magnitude of the exposures in the event of a default and is determined based on the future expected cash flows discounted at the effective interest rate. The EAD reflects the offsetting effects of any collateral received.

The ECL impairment provision is presented in the balance sheet as follows:

- for financial assets measured at amortised cost: as a deduction from the gross carrying amount of the asset;
- for financial assets measured at FVOCI: within the “Securities revaluation account” in other equity; and
- for loan commitments: as a provision within “Loans and advances”.

5. Recognition, de-recognition, classification and measurement of financial liabilities

The Bank recognises financial liabilities on the trade date, being the date on which the Bank commits to issue the liabilities. Financial liabilities are de-recognised on the trade date of a repurchase (when the Bank commits to buy back the financial liability), or when the contractual cash flows from the financial liabilities have expired. On initial recognition, financial liabilities are classified as either:

- fair value through profit and loss; or
- amortised cost.

The classification determines the measurement of financial liabilities, and how this is reflected in the Bank’s financial reporting. The classification depends on the characteristics of the liabilities, as described below.

Fair value through profit and loss (FVPL)

Financial liabilities are classified as FVPL if they are derivative financial liabilities, or are held for trading. In addition, the Bank chooses to classify financial liabilities as FVPL if the use of the classification removes or significantly reduces an accounting mismatch. Any such classification is made on the date of initial recognition, and is irrevocable.

FVPL financial liabilities are measured in the balance sheet at fair value. The accrual of interest and all realised and unrealised movements in fair value are included within "Net income on financial assets and liabilities at fair value through profit and loss".

Amortised cost

All other financial liabilities are classified as amortised cost.

Amortised cost financial liabilities are measured in the balance sheet using the effective interest rate method. Interest is included in the profit and loss account under "Interest expense" or "Interest income" (negative interest) on an accruals basis. Any gains or losses on redemption are recognised in the profit and loss account.

6. The application of the classification and measurement approach to the Bank's portfolios

All very short-dated financial assets (cash and cash equivalents) and liabilities (sight and notice deposit accounts) are classified as amortised cost. The classification of other financial assets and liabilities is determined by the Bank's asset and liability portfolio structure. The Bank's assets and liabilities are organised into four sets of portfolios.

A. Currency banking portfolios ("borrowed funds")

The Bank operates a currency banking book (comprising currency deposit liabilities, and related assets and derivatives). The Bank acts as a market-maker in its currency deposit liabilities. As a result of this activity, the Bank incurs realised profits or losses when these liabilities are repurchased from customers. Under the Bank's accounting policies, some of these financial instruments would be classified as FVPL, while others would be classified as FVOCI or amortised cost. In accordance with the Bank's risk management policies, the market risk inherent in this activity is managed on an overall fair value basis. As such, the realised and unrealised profits or losses on currency deposit liabilities are largely offset by realised and unrealised losses or profits on the related assets and derivatives. To reduce the accounting inconsistency that would otherwise arise from recognising realised and unrealised gains and losses on different bases, the Bank chooses to classify all financial assets and liabilities (other than those which are very short-dated) in its currency banking portfolios as FVPL.

B. Gold banking portfolio ("borrowed gold")

The Bank operates a gold banking book (comprising gold deposit liabilities and related gold loan assets). All gold loan and deposit financial assets and liabilities in this portfolio are classified as amortised cost. All derivatives are classified as FVPL.

C. Currency investment portfolios ("own funds")

The Bank's investment portfolios comprise assets, liabilities and derivatives relating principally to the investment of the Bank's shareholders' equity.

The Bank invests most of its shareholders' equity in financial instruments. Most of the currency financial assets in investment portfolios (other than those which are very short-dated) are classified as FVOCI. Any related currency financial liabilities (including securities sold under repurchase agreements) are classified as amortised cost.

In addition, the Bank invests some of its shareholders' equity in portfolios that are managed with a mandate which permits active trading. The financial instruments in these portfolios (other than those which are very short-dated) are classified as FVPL currency assets and liabilities.

D. Gold investment portfolio ("own gold")

The Bank invests some of its shareholders' equity in gold and gold loans. These assets are classified as amortised cost. The Bank's overall own gold position is treated as an FVOCI asset (as further described in accounting policy 10 below).

Accounting policies 7 to 14 below describe the application of these accounting policies to individual items in the balance sheet.

7. Cash and cash equivalents

Cash and cash equivalents consist of cash and sight and notice accounts with banks, which are very short-term financial assets that typically have notice periods of three days or less. Notice accounts include balances at futures clearing brokers. They are classified as amortised cost.

8. Securities purchased under resale agreements

Securities purchased under resale agreements ("reverse repurchase agreements") are collateralised loan transactions through which the Bank lends cash and receives an irrevocable commitment from the counterparty to return the cash, plus interest, at a specified date in the future. As part of these agreements, the Bank receives collateral in the form of securities to which it has full legal title, but must return equivalent securities to the counterparty at the end of the agreement, subject to the counterparty's repayment of the cash. As the Bank does not acquire the risks or rewards associated with ownership of these collateral securities, they are not recognised as assets in the Bank's balance sheet. The collateralised loans relating to securities purchased under resale agreements are recognised as assets, and are classified as either FVPL (currency banking portfolios) or FVOCI (currency investment portfolios).

9. Loans and advances, and government and other securities

Loans and advances comprise fixed-term loans to commercial banks, and advances under committed and uncommitted standby facilities which the Bank provides for its customers. Government and other securities are debt securities issued by governments, international institutions, other public sector institutions, commercial banks and corporates. They include treasury bills, commercial paper, certificates of deposit, fixed and floating rate bonds, covered bonds and asset-backed securities.

These financial assets are classified as either FVPL (banking portfolios) or FVOCI (investment portfolios).

10. Gold and gold loans

Gold comprises gold bar assets held in custody at central banks and sight accounts denominated in gold. Gold loans comprise fixed-term gold loans. Gold and gold loans are classified as amortised cost, and are included in the balance sheet at their weight in gold (translated at the gold market price and USD exchange rate into SDR) plus accrued interest.

Gold loans are recognised on a trade date basis. Purchases and sales of gold bar assets are recognised on a settlement date basis, with forward purchases or sales treated as derivatives prior to settlement date.

The treatment of realised gains or losses on gold transactions, and unrealised gains or losses on the retranslation of the net gold position, depends on the management objective for which the gold is held, as described below:

A. Gold banking portfolio ("borrowed gold")

Gains or losses on the retranslation of the net position in gold in the banking portfolio are included under "Net foreign exchange income" as net translation gains or losses.

B. Gold investment portfolio ("own gold")

The Bank's overall own gold position is treated as an FVOCI asset.

Unrealised gains or losses on the Bank's gold investment assets over their deemed cost are included in the "Gold revaluation account", which is reported under the balance sheet heading "Other equity accounts". The movement in fair value is included in the statement of comprehensive income under the heading "Gold at fair value through other comprehensive income – net change in fair value during the year".

All of the Bank's gold investment assets were held on 31 March 2003 (when the Bank changed its functional and presentation currency from the gold franc to the SDR). The deemed cost of these assets is approximately SDR 151 per ounce, based on the value of USD 208 per ounce that was applied from 1979 to 2003 following a decision by the Bank's Board of Directors, translated at the 31 March 2003 exchange rate.

Realised gains or losses on disposal of gold investment assets are included in the profit and loss account as "Net gain on sales of gold investment assets".

11. Derivative financial instruments

Derivatives are used either to manage the Bank's market risk or for trading purposes. The Bank trades most of its gold swaps under its derivative ISDA contracts, and accounts for them in a similar manner to currency swaps. Derivatives are classified as FVPL, and are included in the balance sheet as either assets or liabilities, depending on whether the contract has a positive or a negative fair value for the Bank.

12. Currency deposits

Currency deposits comprise sight and notice deposit accounts along with BIS deposit instruments.

Sight and notice deposit accounts are very short-term monetary liabilities that typically have notice periods of three days or less. They are classified as amortised cost.

BIS deposit instruments comprise currency deposit products offered by the Bank to its customers. They are classified as FVPL.

13. Securities sold under repurchase agreements

Securities sold under repurchase agreements ("repurchase agreements") are collateralised deposit transactions through which the Bank receives cash and provides an irrevocable commitment to return the cash, plus interest, at a specified date in the future. As part of these agreements, the Bank transfers legal title of collateral securities to the counterparty. At the end of the contract, the counterparty must return equivalent securities to the Bank, subject to the Bank's repayment of the cash. As the Bank retains the risks and rewards associated with ownership of these securities, they continue to be recognised as assets in the Bank's balance sheet. The collateralised deposits are recognised as liabilities and are classified as either FVPL (currency banking portfolios) or amortised cost (currency investment portfolios).

14. Gold deposits

Gold deposits comprise unallocated sight and fixed-term deposits of gold from central banks.

Unallocated gold deposits provide customers with a general claim on the Bank for delivery of gold of the same weight and quality as that delivered by the customer to the Bank, but do not provide the right to specific gold bars. Unallocated gold deposits are classified as amortised cost. They are included in the balance sheet on a trade date basis at their weight in gold (translated at the gold market price and USD exchange rate into SDR) plus accrued interest.

Allocated (or "earmarked") gold deposits provide depositors with a claim for delivery of the specific gold bars deposited by the customer with the Bank on a custody basis. Beneficial ownership and risk remain with the customer. As such, allocated gold deposit liabilities and the related gold bar assets are not included in the Bank's balance sheet and are disclosed as off-balance sheet items.

15. Securities lending

The Bank participates in securities lending transactions in which it lends debt securities in exchange for a fee. The transactions are conducted under standard agreements employed by financial market participants. The securities which have been transferred are not de-recognised from the balance sheet since the risks and rewards of ownership are not transferred, even if the borrower has the right to sell or re-pledge the securities. Such Bank-owned securities transferred to a borrower are presented in the balance sheet as part of "Government and other securities".

16. Determination of fair value of financial instruments

The majority of the Bank's financial instruments are classified as either FVPL or FVOCI, and hence are included in the balance sheet at fair value. The fair value of a financial instrument is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date in the principal market (or, in its absence, the most advantageous market to which the Bank has access at that date).

The Bank considers published price quotations in active markets as the best evidence of fair value. Where no reliable price quotations exist, the Bank determines fair values using a valuation technique appropriate to the particular financial instrument. Such valuation techniques may involve using market prices of recent arm's length market transactions in similar instruments or may make use of financial models such as discounted cash flow analyses and option pricing models. Where financial models are used, the Bank aims to make maximum use of observable market inputs as appropriate, and relies as little as possible on its own estimates. The Bank values its positions at their exit price, so that assets are valued at the bid price and liabilities at the offer price. Derivative financial instruments are valued on a bid-offer basis, with valuation reserves, where necessary, included in derivative financial liabilities.

17. Interest income and expense

Interest income and interest expense relate to financial instruments which are classified as either FVOCI or amortised cost. Interest income includes "negative" interest on liabilities, while interest expense includes "negative" interest on assets and interest on lease liabilities.

Interest income and interest expense are recognised in the profit and loss account using the effective interest rate method. Interest income is calculated by applying the effective interest rate to the gross carrying amount of an asset, except for assets which are purchased (or subsequently become) credit impaired (impairment stage 3). For financial assets purchased as credit impaired, the original credit adjusted effective interest rate is applied to the amortised cost of the financial asset. For financial assets which subsequently become credit impaired, interest income is calculated by applying the effective interest rate to the amortised cost value of the asset.

18. Accounts receivable and accounts payable

Accounts receivable and accounts payable are principally very short-term amounts relating to the settlement of financial transactions. They are recognised on a trade date basis and subsequently accounted for at amortised cost until their settlement.

19. Land, buildings and equipment

Expenditure on land, buildings and equipment is recognised as an asset in the balance sheet where it is probable that the Bank will obtain future economic benefits. Buildings and equipment assets are depreciated on a straight line basis over the estimated useful lives of the assets concerned, as follows:

- buildings – 50 years;
- building installations and machinery – 15 years;
- information technology equipment – 4 years; and
- other equipment – 4 to 10 years.

The Bank's land is not depreciated. Right-of-use assets are depreciated on a straight line basis over the lease term. The Bank undertakes an annual review of impairment of land, buildings and equipment. Where the carrying amount of an asset is greater than its estimated recoverable amount, the asset is written down to the lower value.

20. Leases

In the course of its business, the Bank enters into lease contracts, and contracts that contain lease components. On initial recognition of such contracts, the Bank calculates a "right of use asset" and a lease liability, both of which are based on the present value of lease payments. The Bank's incremental borrowing rate (or, if applicable, the interest rate implicit in the lease) is used as the discount rate for determining the present value. The right-of-use asset is included under "Land, buildings and equipment", and is depreciated on a straight line basis over the term of the lease. It is reviewed for impairment annually. The lease liability is included under "Other liabilities", and is reduced when the Bank makes payments under the lease. Interest expense is calculated based on the outstanding lease liability and the discount rate.

The Bank leases certain premises under contracts that can contain non-lease components (such as maintenance). The Bank does not separate such components from the lease payments, and therefore the right-of-use asset and lease liability are based on the total lease payment.

21. Provisions

Provisions are recognised when the Bank has a present legal or constructive obligation as a result of events arising before the balance sheet date and it is probable that economic resources will be required to settle the obligation, provided that a reliable estimate can be made of the amount of the obligation. Best estimates and assumptions are used when determining the amount to be recognised as a provision.

22. Taxation

The Bank's special legal status in Switzerland is set out principally in its Headquarters Agreement with the Swiss Federal Council. Under the terms of this document, the Bank is exempted from virtually all direct and indirect taxes at both federal and local government level in Switzerland. Similar agreements exist with the government of the People's Republic of China for the Asian Office in Hong Kong SAR, with the Mexican government for the Americas Office, and with the Singapore government for the BIS Innovation Hub Centre in Singapore. Income and gains received by the Bank may be subject to tax imposed in other countries. Such income and gains are recognised on a gross basis, with the corresponding tax recognised as an expense.

23. Post-employment benefit obligations

The Bank operates three post-employment benefit arrangements, respectively, for staff pensions, Directors' pensions and staff medical benefits. An independent actuarial valuation is performed annually for each arrangement.

A. Staff pensions

The liability in respect of the staff pension arrangement is based on the present value of the defined benefit obligation less the fair value of the fund assets, both at the balance sheet date. The defined benefit obligation is calculated using the projected unit credit method. The present value of the defined benefit obligation is determined from the estimated future cash outflows. The rate used to discount the cash flows is determined by the Bank based on the market yield of highly rated corporate debt securities in Swiss francs which have a duration approximating that of the related liability.

The amount charged to the profit and loss account represents the sum of the current service cost of the benefits accruing for the year under the scheme, and interest at the discount rate on the net of the defined benefit obligation less the fair value of the fund assets. Past service costs from plan amendments are immediately recognised through profit and loss. Gains and losses arising from re-measurement of the obligations, such as experience adjustments (where the actual outcome is different from the actuarial assumptions previously made) and changes in actuarial assumptions, are charged to other comprehensive income in the year in which the re-measurement is applied. They are not included in profit and loss in future years.

B. Directors' pensions and staff post-employment medical benefits

The liability, the defined benefit obligation, the amount charged to the profit and loss account, and the gains and losses arising from re-measurement in respect of the Bank's other post-employment benefit arrangements are calculated on a similar basis to that used for the staff pension arrangement.

24. Statement of cash flows

The Bank's statement of cash flows is prepared using an indirect method. It is based on the movements in the Bank's balance sheet, adjusted for changes in financial transactions awaiting settlement.

Notes to the financial statements

1. Change of accounting policy for leases

Effective 1 April 2019, the Bank adopted a new accounting policy related to operating leases. Due to immateriality, the Bank elected not to restate comparative figures. The change in accounting policy affected the following items as at 1 April 2019, with no effect on opening reserves:

SDR millions	Increase / (decrease) in shareholders' equity due to change in accounting policy
Land, buildings and equipment (right-of-use assets): cost	12.0
Other liabilities (lease liabilities)	(12.0)

Implementing the new policy in the financial year ended 31 March 2020 reduced rental expense (within administrative expense) by SDR 2.8 million, and increased depreciation by SDR 2.7 million and interest expense by SDR 0.2 million. Overall, the new accounting policy had an immaterial impact on the Bank's net profit in the financial year ended 31 March 2020.

2. Cash and cash equivalents

Cash and cash equivalents comprise sight accounts at central and commercial banks, as well as notice accounts at commercial banks. Included within the cash balances is collateral received from counterparties in relation to derivatives transactions. More detail on this collateral is included in the "Risk management" section of these financial statements, note 3C, "Credit risk mitigation". Cash balances are analysed in the table below:

As at 31 March

SDR millions	**2020**	2019
Balance at central banks	53,147.7	60,164.2
Balance at commercial banks	288.5	34.5
Total cash and sight accounts	**53,436.2**	60,198.7
Notice accounts	585.2	557.7
Total cash and cash equivalents	**54,021.4**	60,756.4

3. Currency assets

Currency assets comprise the following products:

Securities purchased under resale agreements are collateralised loan transactions. During the term of the agreement, the Bank monitors the fair value of the loan and related collateral securities, and may call for additional collateral (or be required to return collateral) based on movements in their market value.

Loans and advances comprise fixed-term loans to commercial banks and advances. Advances are drawings of committed and uncommitted standby facilities which the Bank provides for its customers.

Government and other securities are debt securities issued by governments, international institutions, other public sector institutions, commercial banks and corporates. They include treasury bills, commercial paper, certificates of deposit, fixed and floating rate bonds, covered bonds and asset-backed securities.

The tables below analyse the Bank's holdings of currency assets in accordance with their classification.

As at 31 March 2020

SDR millions	FVPL	FVOCI	Total
Securities purchased under resale agreements	**55,869.8**	**148.8**	**56,018.6**
Loans and advances	**54,038.9**	**–**	**54,038.9**
Government and other securities			
Sovereigns and central banks	59,093.8	14,469.5	73,563.3
Other	28,407.2	1,735.6	30,142.8
Total government and other securities	**87,501.0**	**16,205.1**	**103,706.1**
Total currency assets	**197,409.7**	**16,353.9**	**213,763.6**

As at 31 March 2019

SDR millions	FVPL	FVOCI	Total
Securities purchased under resale agreements	62,355.2	549.2	62,904.4
Loans and advances	41,856.5	–	41,856.5
Government and other securities			
Sovereigns and central banks	57,985.2	14,298.8	72,284.0
Other	23,014.6	1,757.0	24,771.6
Total government and other securities	80,999.8	16,055.8	97,055.6
Total currency assets	185,211.5	16,605.0	201,816.5

The previous year's presentation of the above tables has been amended to align the categories of currency assets more closely with the credit risk default table in the "Risk management" section of these financial statements, note 3B, "Default risk".

Government and other securities classified as FVPL as at 31 March 2020 include SDR 908.7 million (2019: nil) of securities that are part of the currency investment portfolios (own funds) that have been classified as FVPL because the portfolio mandate permits active trading.

The Bank lends some of its securities in exchange for a fee. Government and other securities which are transferred in securities lending transactions (and were not subject to de-recognition from the balance sheet to the extent of the Bank's continuing involvement) represented SDR 100.9 million as at 31 March 2020 (2019: SDR 91.1 million).

The Bank gives or pledges as collateral some of its debt securities in certain derivative and repurchase agreements transactions. For more detail, see the "Risk management" section, note 3C, "Credit risk mitigation".

4. Gold and gold loans

As at 31 March

SDR millions	**2020**	2019
Gold investment assets	3,878.1	3,069.8
Gold banking assets	27,558.7	16,584.5
Total gold and gold loan assets	**31,436.8**	19,654.3
Comprising:		
Gold bars	31,145.5	19,120.6
Sight accounts denominated in gold	67.2	20.5
Gold loans	224.1	513.2

The Bank's gold investment assets are included in the balance sheet at their weight in gold (translated at the gold market price and USD exchange rate into SDR) plus accrued interest on gold loans. The excess of this value over the deemed cost value is included in the gold revaluation account, which is reported under the balance sheet heading "Other equity accounts".

Included in "Gold banking assets" is SDR 12,334.4 million (326 tonnes) of gold (2019: SDR 5,248.5 million; 175 tonnes) that the Bank holds in connection with its gold swap contracts.

5. Derivative financial instruments

The main types of derivative instruments used by the Bank are as follows:

Currency and gold options are contractual agreements under which the seller grants the purchaser the right, but not the obligation, to either buy (call option) or sell (put option), by or on a set date, a specific amount of a currency or gold at a predetermined price. In consideration, the seller receives a premium from the purchaser.

Currency and gold swaps, cross-currency swaps and interest rate swaps are contractual agreements to exchange cash flows related to currencies, gold or interest rates (for example, fixed rate for floating rate). Cross-currency interest rate swaps involve the exchange of cash flows related to a combination of interest rates and foreign exchange rates. Except for certain currency and gold swaps and cross-currency interest rate swaps, no exchange of principal takes place.

Currency and gold forwards are contractual agreements involving the exchange of foreign currencies or gold at a future date.

Forward rate agreements are interest rate forward contracts that result in cash settlement at a future date for the difference between a contracted rate of interest and the prevailing market rate.

Futures contracts include bond and interest rate futures, which represent contractual agreements to receive or pay a net amount based on changes in bond prices or interest rates at a future date. Futures contracts are settled daily with the exchange. Associated margin payments are settled by cash or marketable securities.

Swaptions are contractual agreements under which the seller grants the purchaser the right, without imposing the obligation, to enter into a currency or interest rate swap at a predetermined price by or on a set date. In consideration, the seller receives a premium from the purchaser.

TBAs ("to be announced") are investments in forward contracts for investment in mortgage-backed securities, whereby the investor acquires a portion of a pool of as yet unspecified mortgages, which will be announced on a given delivery date. The Bank classifies these financial instruments as derivatives because it typically opens and closes the positions before the delivery date.

Exchange traded equity futures and equity options represent contractual agreements to receive or pay a net amount based on changes in equity index levels at a future date. Those instruments are traded for the management of the BIS pension fund only.

The Bank enters into derivatives transactions for its own benefit, and also on behalf of customers, investment entities operated by the Bank, and the staff pension fund. Over-the-counter (OTC) derivatives transactions are legally documented under the Bank's derivative master contracts, and are subject to its collateralisation processes (and netting rules in the event of default of one of the parties). The Bank recognises all derivatives transacted in its name. Where the economic benefit lies with a customer, an investment entity or the staff pension fund, the Bank recognises both the original derivative contract and an exactly offsetting derivative contract with the beneficial party.

As at 31 March	**2020**			2019		
	Notional amounts	Fair values		Notional amounts	Fair values	
SDR millions		Assets	Liabilities		Assets	Liabilities
Cross-currency swaps	2,613.8	9.1	(37.3)	404.6	5.1	(9.3)
Currency and gold forwards	7,407.0	41.2	(32.4)	2,897.4	19.8	(16.4)
Currency, gold and equity options	857.4	0.1	(9.8)	219.2	–	(0.5)
Currency and gold swaps	214,708.8	2,153.2	(1,504.4)	185,414.5	1,853.5	(521.9)
Forward rate agreements	2,689.0	0.7	(0.9)	6,967.2	2.7	(3.6)
Futures contracts	2,005.3	1.0	(1.2)	4,103.5	1.4	(1.1)
Interest rate swaps	214,341.2	1,313.4	(1,461.5)	249,397.8	682.4	(902.6)
TBAs	220.5	2.3	(1.7)	–	–	–
Total derivative financial instruments	**444,843.0**	**3,521.0**	**(3,049.2)**	449,404.2	2,564.9	(1,455.4)

6. Accounts receivable and other assets

As at 31 March		
SDR millions	**2020**	2019
Financial transactions awaiting settlement	5,536.1	6,103.0
Other assets	19.1	12.2
Total accounts receivable and other assets	**5,555.2**	6,115.2

"Financial transactions awaiting settlement" relates to short-term receivables, typically due in three business days or less, where transactions have been effected but cash has not yet been received.

7. Land, buildings and equipment, and depreciation

For the financial year ended 31 March							2020	2019
SDR millions	Land	Buildings and installations	IT and other equipment	Computer software Intangible assets	Assets under construction	Right-of-use assets	Total	Total
Historical cost								
Balance at beginning of year	**46.4**	**288.1**	**23.3**	**52.2**	**10.0**	**–**	**420.0**	414.3
Change in accounting policy						12.0	12.0	–
Capital expenditure	–				23.3	–	23.3	18.1
Transfers	–	5.5	1.8	9.9	(17.2)	–	–	–
Change in right-of-use assets	–	–	–	–	–	1.2	1.2	–
Disposals and retirements	–	–	(1.7)	(3.1)	–	–	(4.8)	(12.4)
Balance at end of year	**46.4**	**293.6**	**23.4**	**59.0**	**16.1**	**13.2**	**451.7**	420.0
Depreciation								
Balance at beginning of year	**–**	**186.8**	**14.3**	**30.6**	**–**	**–**	**231.7**	221.9
Change in accounting policy	–	–	–	–	–	–	–	–
Depreciation	–	11.1	2.5	9.2		2.7	25.5	22.2
Disposals and retirements	–	–	(1.7)	(3.1)	–	–	(4.8)	(12.4)
Balance at end of year	**–**	**197.9**	**15.1**	**36.7**	**–**	**2.7**	**252.4**	231.7
Net book value at end of year	**46.4**	**95.7**	**8.3**	**22.3**	**16.1**	**10.5**	**199.3**	188.3

Changes in right-of-use assets include new lease transactions, along with extensions and amendments of existing leases. Assets under construction are not subject to depreciation until they are completed and put into service.

The Bank's practice is to retire assets from the fixed asset register at the latest when their age reaches twice their estimated useful life. Due to retirement of assets, SDR 4.8 million has been removed from the historical cost and from accumulated depreciation for the year ended 31 March 2020 (2019: SDR 12.4 million).

8. Currency deposits

Currency deposits comprise the following products:

Sight and notice deposit accounts are very short-term financial liabilities, typically having a notice period of three days or less.

Medium-Term Instruments (MTIs) are fixed rate investments at the Bank issued with initial maturities of between one and 10 years.

Callable MTIs (CMTIs) are MTIs that are callable at the option of the Bank at an exercise price of par. At 31 March 2020, the call date of all CMTIs had expired.

FIXBIS are fixed rate investments at the Bank for any maturities between one week and one year.

FRIBIS are floating rate investments at the Bank with maturities of one year or longer for which the interest rate is reset in line with prevailing market conditions.

Fixed-term deposits are fixed rate investments at the Bank, typically with an initial maturity of less than one year.

Dual Currency Deposits (DCDs) are fixed-term deposits that are repayable on the maturity date either in the original currency or at a fixed amount in a different currency at the option of the Bank. The balance sheet total for DCDs includes the fair value of the embedded foreign exchange option. These deposits all mature between April and September 2020 (2019: between April and June 2019).

The Bank acts as the sole market-maker in certain of its currency deposit liabilities and has undertaken to repay some of these financial instruments at fair value, in whole or in part, at one to three business days' notice.

The amount the Bank is contractually obliged to pay at maturity in respect of its FVPL currency deposits that were outstanding at 31 March 2020 (including total future interest payments) is SDR 196,806.2 million (2019: SDR 225,095.9 million).

Sight and notice deposit accounts are classified as amortised cost, while all other deposits are classified as FVPL.

As at 31 March

SDR millions	**2020**	2019
Repayable at one to three days' notice		
Sight and notice deposit accounts	49,355.2	13,006.6
Medium-Term Instruments (MTIs)	28,756.5	41,332.6
Callable MTIs (CMTIs)	4,649.8	4,515.9
Fixed Rate Investments at the BIS (FIXBIS)	63,990.9	74,178.8
	146,752.4	133,033.9
Other currency deposits		
Floating Rate Investments at the BIS (FRIBIS)	1,039.5	1,029.4
Fixed-term deposits	101,560.3	107,325.6
Dual Currency Deposits (DCDs)	842.6	215.7
	103,442.4	108,570.7
Total currency deposits	**250,194.8**	241,604.6

9. Securities sold under repurchase agreements

As at 31 March

SDR millions	**2020**	2019
Amortised cost	148.8	549.1
Fair value through profit and loss	–	–
Total securities sold under repurchase agreements	**148.8**	549.1

Further information on the collateral related to repurchase agreements is provided in the "Risk management" section, note 3C, "Credit risk mitigation".

10. Gold deposits

Gold deposit liabilities placed with the Bank originate entirely from central banks.

11. Accounts payable

"Accounts payable" consists of financial transactions awaiting settlement, relating to short-term payables where transactions have been effected but cash has not yet been transferred.

12. Other liabilities

As at 31 March

SDR millions	**2020**	2019
Post-employment benefit obligations (see note 13)		
Staff pensions	477.0	453.0
Directors' pensions	10.8	11.4
Medical benefits	493.7	597.9
Lease liabilities	11.0	–
Other liabilities	38.4	24.7
Total other liabilities	**1,030.9**	1,087.0

13. Post-employment benefit obligations

The Bank operates three post-employment arrangements:

1. A defined benefit pension arrangement for its staff in the event of retirement, disability or death. The arrangement also applies to the staff of the three independent associations hosted by the Bank (the FSB, IADI and the IAIS). Under this arrangement, benefits accrue according to years of participation and pensionable remuneration. These benefits are paid out of a pension fund without separate legal personality. Contributions are made to this fund by the Bank and by staff. The fund is the beneficial owner of assets on which it receives a return. These assets are administered by the Bank for the sole benefit of the participants in the arrangement. Except as shown in this note, and as described in note 5, "Derivative financial instruments", these assets are not recognised as assets of the Bank. The Bank remains ultimately liable for all benefits due under the arrangement. The defined benefit obligation and the related expense for the staff pension plan includes amounts related to an unfunded legacy arrangement for cleaning staff. The disbursements for this arrangement are not paid out of the assets in the fund, as described above.
2. An unfunded defined benefit arrangement for its Directors, whose entitlement is based on a minimum service period of 49 months.
3. An unfunded post-employment medical benefit arrangement for its staff and their dependents. Employees who leave the Bank after becoming eligible for early retirement benefits from the pension arrangement are eligible for post-employment medical benefits. The arrangement also applies to the staff of the three independent associations hosted by the Bank (the FSB, IADI and the IAIS).

All three arrangements operate in Swiss francs and are valued annually by an independent actuary. During 2020/21, the Bank expects to make contributions of SDR 36.0 million (2019/20: SDR 35.3 million) to its post-employment arrangements.

All matters of a general policy nature arising in connection with the management of the assets of the pension fund are dealt with by the Pension Fund Committee. The committee is chaired by the Deputy General Manager, and includes members of Senior Management, along with staff representatives and external pension experts. The Pension Fund Committee determines the investment policies of the fund, sets its risk tolerance, and establishes the long-term strategic allocation policy on the basis of regular asset liabilities studies. It also supervises the arrangements made by the Bank in this regard, including selecting external investment managers. If necessary, the Pension Fund Committee makes recommendations on changes to the contribution rate of the Bank to ensure the long-term actuarial equilibrium of the Pensions System, including a sufficient safety margin.

A. Amounts recognised in the balance sheet

As at 31 March	Staff pensions		Directors' pensions		Post-employment medical benefits	
SDR millions	**2020**	2019	**2020**	2019	**2020**	2019
Present value of obligations	(1,586.6)	(1,617.3)	(10.8)	(11.4)	(493.7)	(597.9)
Fair value of fund assets	1,109.6	1,164.3	–	–	–	–
Liability at end of year	**(477.0)**	(453.0)	**(10.8)**	(11.4)	**(493.7)**	(597.9)

B. Present value of defined benefit obligations

The reconciliation of the opening and closing amounts of the present value of the benefit obligations is as follows:

As at 31 March	Staff pensions		Directors' pensions		Post-employment medical benefits	
SDR millions	**2020**	2019	**2020**	2019	**2020**	2019
Present value of obligations at beginning of year	(1,617.3)	(1,538.1)	(11.4)	(10.8)	(597.9)	(567.1)
Employee contributions	(7.2)	(6.9)	–	–	–	–
Benefit payments	64.7	45.7	0.5	0.4	3.9	3.6
Service cost	(70.5)	(56.8)	(0.6)	(0.6)	(25.1)	(25.8)
Interest cost	(11.3)	(13.6)	(0.1)	(0.1)	(4.6)	(5.7)
Actuarial gain / (loss) arising from experience adjustments	17.1	(4.2)	0.8	–	69.8	12.1
Actuarial gain / (loss) arising from changes in demographic assumptions	22.3	8.7	0.1	(0.1)	9.3	21.6
Actuarial gain / (loss) arising from changes in financial assumptions	96.9	(46.8)	0.6	(0.3)	81.3	(34.6)
Foreign exchange differences	(81.3)	(5.3)	(0.7)	0.1	(30.4)	(2.0)
Present value of obligations at end of year	**(1,586.6)**	(1,617.3)	**(10.8)**	(11.4)	**(493.7)**	(597.9)

The following table shows the weighted average duration of the defined benefit obligations for the Bank's three post-employment benefit arrangements:

As at 31 March	Staff pensions		Directors' pensions		Post-employment medical benefits	
Years	**2020**	2019	**2020**	2019	**2020**	2019
Weighted average duration	**16.7**	17.8	**13.5**	13.9	**24.3**	26.5

C. Amounts recognised in the profit and loss account

For the financial year ended 31 March	Staff pensions		Directors' pensions		Post-employment medical benefits	
SDR millions	**2020**	2019	**2020**	2019	**2020**	2019
Service cost	(70.5)	(56.8)	(0.6)	(0.6)	(25.1)	(25.8)
Interest cost on net liability	(3.1)	(3.4)	(0.1)	(0.1)	(4.6)	(5.7)
Amounts recognised in operating expense	**(73.6)**	(60.2)	**(0.7)**	(0.7)	**(29.7)**	(31.5)

D. Re-measurement of defined benefit obligations recognised in other comprehensive income

For the financial year ended 31 March	Staff pensions		Directors' pensions		Post-employment medical benefits	
SDR millions	**2020**	2019	**2020**	2019	**2020**	2019
Return on plan assets in excess of opening discount rate	(93.8)	16.2	–	–	–	–
Actuarial gain / (loss) loss arising from experience adjustments	17.1	(4.2)	0.8	–	69.8	12.1
Actuarial gain / (loss) arising from changes in demographic assumptions	22.3	8.7	0.1	(0.1)	9.3	21.6
Actuarial gain / (loss) arising from changes in financial assumptions	96.9	(46.8)	0.6	(0.3)	81.3	(34.6)
Foreign exchange gain / (loss) on items in other comprehensive income	(4.7)	(0.3)	(0.3)	–	(6.8)	(0.5)
Amounts recognised in other comprehensive income	**37.8**	(26.4)	**1.2**	(0.4)	**153.6**	(1.4)

E. Analysis of movement on fair value of fund assets for staff pensions

The reconciliation of the opening and closing amounts of the fair value of fund assets for the staff pension arrangement is as follows:

For the financial year ended 31 March		
SDR millions	**2020**	2019
Fair value of fund assets at beginning of year	1,164.3	1,143.5
Employer contributions	30.9	29.4
Employee contributions	7.2	6.9
Benefit payments	(64.7)	(45.7)
Interest income on plan assets	8.2	10.2
Return on plan assets in excess of opening discount rate	(93.8)	16.2
Foreign exchange differences	57.5	3.8
Fair value of fund assets at end of year	**1,109.6**	1,164.3

F. Composition and fair value of assets for the pension fund

The table below analyses the assets of the pension fund and the extent to which the fair values of those assets have been calculated using quoted prices in active markets. The pension fund does not invest in financial instruments issued by the Bank.

As at 31 March	2020			2019		
SDR millions	Quoted in active market	Unquoted	Total	Quoted in active market	Unquoted	Total
Cash (including margin accounts)	59.5	–	59.5	87.4	–	87.4
Government and other securities	285.1	–	285.1	243.5	–	243.5
Fixed income funds	194.6	–	194.6	169.7	–	169.7
Equity funds	374.2	24.3	398.5	443.8	38.1	481.9
Real estate funds	–	123.6	123.6	26.2	91.2	117.4
Commodity-linked notes	–	48.8	48.8	–	60.1	60.1
Derivative financial instruments	(1.3)	0.8	(0.5)	0.5	3.8	4.3
Total	**912.1**	**197.5**	**1,109.6**	971.1	193.2	1,164.3

G. Principal actuarial assumptions used in these financial statements

As at 31 March	2020	2019
Applicable to staff pension arrangement		
Discount rate	0.50%	0.70%
Applicable to post-employment medical benefit arrangement		
Discount rate	0.50%	0.75%
Applicable to Directors' pension arrangement		
Discount rate	0.50%	0.60%
Applicable to staff and Directors' pension arrangements		
Assumed increase in pensions payable	0.50%	1.00%
Applicable to staff pension arrangement		
Assumed average salary increase rate	1.70%	2.60%
Applicable to Directors' pension arrangement		
Assumed Directors' pensionable remuneration increase rate	0.50%	1.00%
Applicable to post-employment medical benefit arrangement		
Long-term medical cost inflation assumption	3.00%	4.00%

The assumed increases in staff salaries, Directors' pensionable remuneration and pensions payable incorporate an inflation assumption of 0.50% at 31 March 2020 (2019: 1.00%).

H. Life expectancies

The life expectancies, at age 65, used in the actuarial calculations for the staff pension arrangement are:

As at 31 March

Years	**2020**	2019
Current life expectancy of members aged 65		
Male	21.6	20.5
Female	23.6	22.6
Life expectancy of members aged 65 projected forward in 10 years' time		
Male	22.4	21.9
Female	24.4	23.7

I. Sensitivity analysis of significant actuarial assumptions

The Bank is exposed to risks from these obligations and arrangements, including investment risk, interest rate risk, foreign exchange risk, longevity risk and salary risk.

Investment risk is the risk that plan assets will not generate returns at the expected level.

Interest rate risk is the exposure of the post-employment benefit obligations to adverse movements in interest rates, including credit spreads. A decrease in interest rates will increase the present value of these obligations. However, in the case of the staff pension arrangement this may be offset, either fully or partly, by an increase in value of the interest bearing securities held by the fund.

Foreign exchange risk is the exposure of the post-employment benefit obligations to adverse movements in exchange rates between the Swiss franc, which is the operating currency of the post-employment benefit arrangements, and the SDR, which is the functional currency of the Bank.

Longevity risk is the risk that actual outcomes differ from actuarial estimates of life expectancy.

Salary risk is the risk that higher than expected salary rises increase the cost of providing a salary-related pension.

The tables below show the estimated impact on the defined benefit obligations resulting from a change in key actuarial assumptions:

As at 31 March	**Staff pensions** Increase / (decrease) in defined benefit obligation	
SDR millions	**2020**	2019
Discount rate		
Increase by 0.5%	(123.8)	(134.2)
Decrease by 0.5%	141.2	153.6
Rate of salary increase		
Increase by 0.5%	34.9	40.4
Decrease by 0.5%	(33.3)	(37.2)
Rate of pension payable increase		
Increase by 0.5%	103.1	108.4
Decrease by 0.5%	(92.0)	(98.7)
Life expectancy		
Increase by 1 year	53.9	64.7
Decrease by 1 year	(55.5)	(63.1)

As at 31 March	Directors' pensions Increase / (decrease) in defined benefit obligation	
SDR millions	**2020**	2019
Discount rate		
Increase by 0.5%	(0.7)	(0.7)
Decrease by 0.5%	0.8	0.8
Rate of pension payable increase		
Increase by 0.5%	0.7	0.7
Decrease by 0.5%	(0.6)	(0.6)
Life expectancy		
Increase by 1 year	0.5	0.6
Decrease by 1 year	(0.5)	(0.6)

As at 31 March	Post-employment medical benefits Increase / (decrease) in defined benefit obligation	
SDR millions	**2020**	2019
Discount rate		
Increase by 0.5%	(58.3)	(72.3)
Decrease by 0.5%	68.6	86.1
Medical cost inflation rate		
Increase by 1.0%	118.3	163.6
Decrease by 1.0%	(87.0)	(118.2)
Life expectancy		
Increase by 1 year	42.5	56.8
Decrease by 1 year	(40.5)	(52.0)

The above estimates were arrived at by changing each assumption individually, holding other variables constant. They do not include any correlation effects that may exist between variables.

14. Share capital

The Bank's share capital consists of:

As at 31 March		
SDR millions	**2020**	2019
Authorised capital: 600,000 shares, each of SDR 5,000 par value, of which SDR 1,250 is paid up	3,000.0	3,000.0
Issued capital: 565,125 shares (2019: 559,125)	2,825.6	2,795.6
Paid-up capital (25%)	**706.4**	698.9

During the financial year ended 31 March 2020, the Bank issued 3,000 shares each to the central banks of Kuwait and Morocco. This increased the number of member central banks to 62 (31 March 2019: 60).

The number of shares eligible for dividend is:

As at 31 March	**2020**	2019
Issued shares	565,125	559,125
Shares held in treasury	(1,000)	(1,000)
Outstanding shares eligible for dividend	**564,125**	558,125
Of which:		
Eligible for full dividend	558,125	558,125
New shares eligible for dividend pro rata from the value date of subscription	6,000	–

Shares held in treasury consist of 1,000 shares of the Albanian issue which were suspended in 1977.

15. Statutory reserves

The Bank's Statutes provide for application of the Bank's annual net profit, by the Annual General Meeting at the proposal of the Board of Directors, to three specific reserve funds: the legal reserve fund, the general reserve fund and the special dividend reserve fund; the remainder of the net profit after payment of any dividend is generally allocated to the free reserve fund.

Legal reserve fund. This fund is currently fully funded at 10% of the Bank's paid-up capital.

General reserve fund. After payment of any dividend, 5% of the remainder of the Bank's annual net profit currently must be allocated to the general reserve fund.

Special dividend reserve fund. A portion of the remainder of the annual net profit may be allocated to the special dividend reserve fund, which shall be available, in case of need, for paying the whole or any part of a declared dividend. Dividends are normally paid out of the Bank's net profit.

Free reserve fund. After the above allocations have been made, any remaining unallocated net profit is generally transferred to the free reserve fund.

Receipts from the subscription of the Bank's shares are allocated to the legal reserve fund as necessary to keep it fully funded, with the remainder being credited to the general reserve fund.

The free reserve fund, general reserve fund and legal reserve fund are available, in that order, to meet any losses incurred by the Bank. In the event of liquidation of the Bank, the balances of the reserve funds (after the discharge of the liabilities of the Bank and the costs of liquidation) would be divided among the Bank's shareholders.

The table below analyses the movements in the Bank's statutory reserves over the last two years:

SDR millions	Legal reserve fund	General reserve fund	Special dividend reserve fund	Free reserve fund	Total statutory reserves
Balance at 31 March 2018	**69.8**	**3,689.5**	**184.0**	**12,006.8**	**15,950.1**
Allocation of ECL provision following change in accounting policy at 1 April 2018	–	–	–	(0.7)	(0.7)
Allocation of 2017/18 profit	–	18.8	–	358.1	376.9
Balance at 31 March 2019	**69.8**	**3,708.3**	**184.0**	**12,364.2**	**16,326.3**
Allocation of 2018/19 profit	–	16.2	–	308.2	324.4
New shares issued	0.8	216.2	–	–	217.0
Balance at 31 March 2020	**70.6**	**3,940.7**	**184.0**	**12,672.4**	**16,867.8**

At 31 March 2020, statutory reserves included share premiums of SDR 1,276.6 million (2019: SDR 1,059.6 million).

In accordance with Article 51 of the Bank's Statutes, the following profit allocation will be proposed at the Bank's Annual General Meeting for the 2020 profit:

SDR millions	2020
Net profit	**165.5**
Proposed dividend:	
No dividend is proposed	–
Profit available for allocation	**165.5**
Proposed transfers to reserves:	
General reserve fund	(8.3)
Special dividend reserve fund	–
Free reserve fund	(157.2)
Balance after allocation to reserves	–

16. Other equity accounts

Other equity accounts comprise the revaluation accounts for FVOCI assets (gold and currency investment assets) as well as the re-measurement gains or losses on defined benefit obligations.

As at 31 March

SDR millions	**2020**	2019
Securities revaluation account	572.3	135.0
Gold revaluation account	3,375.3	2,568.0
Re-measurement of defined benefit obligations	(45.7)	(238.3)
Total other equity accounts	**3,901.9**	2,464.7

A. Securities revaluation account

This account contains the difference between the fair value and the amortised cost of the Bank's currency investment assets classified as FVOCI.

SDR millions	Fair value of assets	Historical cost	Securities revaluation account	Gross gains	Gross losses
As at 31 March 2020	16,353.9	15,784.2	**569.7**	582.7	(13.0)
As at 31 March 2019	16,605.0	16,470.8	135.0	157.0	(22.0)

The securities revaluation account at 31 March 2020 includes an ECL impairment provision of SDR –1.8 million (31 March 2019: SDR –0.8 million).

B. Gold revaluation account

This account contains the difference between the book value and the deemed cost of the Bank's gold investment assets. All of the Bank's gold investment assets were held on 31 March 2003 (when the Bank changed its functional and presentation currency from the gold franc to the SDR). The deemed cost of these assets is approximately SDR 151 per ounce, based on the value of USD 208 per ounce that was applied from 1979 to 2003 following a decision by the Bank's Board of Directors, translated at the 31 March 2003 exchange rate. The movement in the gold revaluation account was as follows:

For the financial year ended 31 March

SDR millions	**2020**	2019
Balance at beginning of year	2,568.0	2,493.9
Gold price movement	807.4	74.1
Balance at end of year	**3,375.3**	2,568.0

C. Re-measurement of defined benefit obligations

This account contains the gains and losses from re-measurement of the Bank's post-employment benefit obligations.

For the financial year ended 31 March

SDR millions	**2020**	2019
Balance at beginning of year	(238.3)	(210.1)
Staff pensions	37.8	(26.4)
Directors' pensions	1.2	(0.4)
Post-employment medical benefits	153.6	(1.4)
Net movement on the re-measurement of defined benefit obligations	**192.6**	(28.2)
Balance at end of year	**(45.7)**	(238.3)

Note 13D provides further analysis of the re-measurement of the Bank's post-employment benefit obligations.

17. Interest income

For the financial year ended 31 March

SDR millions	**2020**	2019
Assets classified as amortised cost		
Cash and cash equivalents	5.3	14.4
Gold loan and sight accounts denominated in gold	0.7	0.3
	6.0	14.7
Financial assets classified as FVOCI		
Securities purchased under resale agreements	0.6	1.6
Government and other securities	237.5	209.8
	238.1	211.4
Interest income on liabilities classified as amortised cost	**38.2**	11.6
Total interest income	**282.3**	237.7

Total interest income is net of "negative" interest income of SDR 131.2 million (2019: SDR 165.4 million). The previous year's figures for interest income on government and other securities have been increased by SDR 0.2 million since originally reported in the 2019 financial statements. This amendment is in relation to the change in the ECL impairment provision, which was formerly presented within interest income but is now presented as a separate line item in the profit and loss account. The change in ECL impairment provision is analysed in note 19.

18. Interest expense

For the financial year ended 31 March

SDR millions	**2020**	2019
Liabilities classified as amortised cost		
Currency deposits: sight and notice deposit accounts	(321.3)	(282.7)
Gold deposits	–	–
Securities sold under repurchase agreements	(0.6)	(1.3)
Interest on lease liabilities	(0.2)	–
	(322.1)	(284.0)
Interest expense on assets classified as amortised cost or FVOCI	**(131.2)**	(165.4)
Total interest expense	**(453.3)**	(449.4)

Total interest expense is net of "negative" interest expense of SDR 38.2 million (2019: SDR 11.6 million).

19. Change in ECL impairment provision

The Bank assesses impairment of financial assets which are classified as either FVOCI or amortised cost, and also in relation to loan commitments. The Bank takes a prudent stance on investments and managing its credit exposures. It monitors its exposures on an ongoing basis. It uses its standard credit risk methodology for assessing ECL and related key inputs for its ECL calculation, including estimates for probability-of-default (PDs), loss-given-default (LGDs) and exposure-at-default (EADs) for individual exposures. No significant changes in estimation techniques were made during the reporting period.

Estimating ECL involves judgement. At 31 March 2020, financial markets responded with substantial volatility to concerns regarding the increased uncertainty in economic outlook. The review of credit exposures in scope of the ECL calculation concluded that no changes were required to internal ratings or other key inputs or assumptions used for the ECL quantification.

All credit exposures were assessed to be in stage 1 during the financial years ended 31 March 2020 and 31 March 2019.

In these financial statements, the change in the ECL impairment provision is presented as a separate line item in the profit and loss account, with the comparative figures for last year adjusted respectively. In last year's financial statements, the net change in the financial year ended 31 March 2019 was included within interest income due to its immateriality.

For the financial year ended 31 March

SDR millions	**2020**	2019
Financial assets classified as amortised cost	–	–
Financial assets classified as FVOCI	(1.8)	(0.2)
Loan commitments	–	–
Net change in ECL impairment provision	**(1.8)**	(0.2)

20. Net income on financial assets and liabilities at fair value through profit and loss

For the financial year ended 31 March

SDR millions	**2020**	2019
Financial assets		
Securities purchased under resale agreements	223.0	198.6
Loans and advances	632.0	508.8
Government and other securities	1,040.5	920.2
	1,895.5	1,627.6
Financial liabilities		
Currency deposits	(4,419.2)	(3,881.4)
	(4,419.2)	(3,881.4)
Derivative financial instruments	**3,077.7**	3,203.1
Net income on financial assets and liabilities at FVPL	**554.0**	949.3

The net income on financial assets and liabilities at fair value through profit and loss comprises the accrual of effective interest, along with realised and unrealised valuation movements, as further analysed in the following table:

For the financial year ended 31 March

SDR millions	**2020**	2019
Financial assets		
Interest	1,519.8	1,377.4
Realised and unrealised valuation movements	375.7	250.2
	1,895.5	1,627.6
Financial liabilities		
Interest	(3,471.6)	(3,514.1)
Realised and unrealised valuation movements	(947.6)	(367.3)
	(4,419.2)	(3,881.4)
Derivative financial instruments		
Interest	2,934.0	3,064.1
Realised and unrealised valuation movements	143.7	139.0
	3,077.7	3,203.1
Net income on financial assets and liabilities at FVPL	**554.0**	949.3

21. Net gain / (loss) on sales of currency assets at fair value through other comprehensive income

For the financial year ended 31 March

SDR millions	2020	2019
Disposal proceeds	5,445.0	10,853.3
Amortised cost	(5,335.8)	(10,863.9)
Net gain / (loss) on sales of currency assets at FVOCI	**109.2**	(10.6)
Comprising:		
Gross realised gains	110.3	47.6
Gross realised losses	(1.1)	(58.2)

22. Net gain on sales of gold investment assets

The Bank did not sell any own gold during the financial years ended 31 March 2020 and 31 March 2019.

23. Net fee income

For the financial year ended 31 March

SDR millions	2020	2019
Third-party asset management net fee income	14.6	13.5
Other income	4.4	3.6
Withholding taxes	(8.6)	(7.5)
Other fees and expenses	(7.4)	(8.7)
Net fee income	**3.0**	0.9

24. Net foreign exchange income

For the financial year ended 31 March

SDR millions	2020	2019
Net transaction gain	22.2	16.1
Net translation movement	(9.2)	19.5
Net foreign exchange income	**13.0**	35.6

25. Administrative expense

The following table analyses the Bank's administrative expense in Swiss francs (CHF), the currency in which most expenditure is incurred:

For the financial year ended 31 March

CHF millions	**2020**	2019
Board of Directors		
Directors' fees	2.0	2.0
Pensions to former Directors	1.0	0.9
Travel and other costs	1.2	1.3
	4.2	4.2
Management and staff		
Remuneration	156.6	137.0
Pensions	97.4	82.2
Other personnel-related expense	64.2	64.9
	318.2	284.1
Office and other expense	**89.7**	84.7
BIS administrative expense	**412.1**	373.0
Direct contributions to hosted international organisations	15.7	15.7
Total administrative expenses in CHF millions	**427.8**	388.7
Total administrative expense in SDR millions	**315.3**	280.0

The average number of full-time equivalent senior officials and officials employed on behalf of the Bank during the financial year ended 31 March 2020 was 595 (2019: 584). In addition to the above regular BIS staff, the Bank accommodates up to 12 graduates a year and supports secondments from other organisations. Lastly, the Bank also employs a small number of cleaners (currently five). The cost of all employees employed on behalf of the Bank is included within management and staff expense.

The Bank hosts the secretariats of three independent associations – the Financial Stability Board (FSB), the International Association of Deposit Insurers (IADI) and the International Association of Insurance Supervisors (IAIS). The Bank makes a financial contribution to support these international associations including paying some salaries and other post-employment costs. These amounts are shown under "Direct contributions to hosted organisations". The staff employed on behalf of the independent associations are not included within the average number of employees quoted above. The Bank also provides indirect support for these organisations, in the form of logistical, administrative and staffing-related support. The cost of this support is included within the Bank's regular administrative expense categories.

26. Dividend per share

For the financial year ended 31 March	2020	2019
Net profit for the financial year (SDR millions)	165.5	461.1
Weighted average number of shares eligible for dividend	558,764.3	558,125.0
Dividend per share (SDR per share)	–	245.0
Total dividend (SDR millions)	–	136.7

Due to the exceptional circumstances of the Covid-19 pandemic, it is proposed that the Bank not pay a dividend for the financial year ended 31 March 2020.

27. Exchange rates

The following table shows the principal exchange rates and prices used to translate balances in foreign currency and gold into SDR:

	Spot rate as at 31 March		Average rate for the financial year	
	2020	2019	2020	2019
USD	0.731	0.721	0.726	0.713
EUR	0.802	0.809	0.807	0.826
JPY	0.0068	0.0065	0.0067	0.0064
GBP	0.910	0.939	0.923	0.936
Renminbi	0.103	0.107	0.104	0.106
CHF	0.759	0.723	0.736	0.720
Gold (per ounce)	1,178.3	932.7	1,062.4	900.4

28. Off-balance sheet items

The following items are not included in the Bank's balance sheet:

As at 31 March

SDR millions	2020	2019
Gold bars held under earmark arrangements	14,386.1	11,386.4
Nominal value of securities:		
Securities held under safe custody arrangements	2,164.3	2,265.4
Securities held under collateral pledge agreements	39.3	38.7
Net asset value of portfolio management mandates:		
BISIPs	16,030.6	11,242.4
Dedicated mandates	4,145.5	4,175.6

Gold bars held under earmark arrangements comprise specific gold bars which have been deposited with the Bank on a custody basis. They are included at their weight in gold (translated at the gold market price and the USD exchange rate into SDR). At 31 March 2020, gold bars held under earmark amounted to 380 tonnes of gold (2019: 380 tonnes).

Portfolio management mandates include BIS Investment Pools and dedicated mandates.

The BISIPs are a range of open-ended investment funds created by the Bank. The BISIPs do not have a separate legal personality from the Bank, but are a series of separate reporting entities, each with its own financial statements. The Bank has an agency relationship with the BISIPs. Transactions are conducted in the name of the BIS, and investments are held by a custodian appointed by the BIS, but all of the economic benefit lies with the BISIP customers. The Bank does not invest for its own account in the BISIPs. Because the Bank does not participate in the risks or rewards of the BISIPs, the financial instruments transacted on behalf of the BISIPs are excluded from the BIS balance sheet, and are reported as off-balance sheet items.

Dedicated mandates are portfolios which are managed by the Bank in accordance with investment guidelines set by the customer. Transactions are conducted in the name of the customer, investments are held by a custodian appointed by the customer, and all of the economic benefit lies with the customer. Because the Bank does not participate in the risks or rewards of the dedicated mandates, the financial instruments transacted on behalf of the dedicated mandates are excluded from the BIS balance sheet, and are reported as off-balance sheet items.

The Bank transacts derivative financial instruments on behalf of the BISIPs and dedicated mandates. Such derivatives are governed by the Bank's ISDA contracts, and are subject to the netting and offsetting arrangements specified in those contracts. In certain circumstances, derivatives transacted on behalf of BISIPs and dedicated mandates could be offset against other derivatives transacted by the BIS on behalf of the Bank, the staff pension fund, other BISIPs or other dedicated mandates. For this reason, all derivatives transacted by the Bank are included in the Bank's balance sheet. Such derivatives transacted on behalf of BISIPs and dedicated mandates are represented in the BIS balance sheet along with an equal and offsetting transaction between the Bank and the BISIP or dedicated mandate.

For both the BISIPs and the dedicated mandates, the Bank is remunerated by a management fee which is included under "Net fee income" in the profit and loss account.

29. Commitments

The Bank provides a number of committed standby facilities for its customers on a collateralised or uncollateralised basis. At 31 March 2020, there were no outstanding commitments that were collateralised (2019: nil), and SDR 219.4 million of uncollateralised commitments (2019: SDR 216.2 million).

The BIS is committed to supporting the operations of the three independent associations – the FSB, IADI and the IAIS. In each case, the Bank has a separate agreement specifying the terms of support and the length of the commitment. In accordance with these agreements, the Bank was the legal employer of 73 staff members (2019: 77) working in the secretariats of the hosted international organisations.

30. Fair value hierarchy

The Bank categorises its financial instrument fair value measurements using a hierarchy that reflects the observability of inputs used in measuring that value. A valuation level is assigned according to the least observable input that is significant to the fair value measurement in its entirety. An input is determined to be significant if its contribution to the value of the financial instrument is greater than 5%. Market liquidity is a consideration in determining whether an input is observable, and hence its fair value hierarchy level. The fair value hierarchy used by the Bank comprises the following levels:

Level 1 – Instruments valued using unadjusted quoted prices in active markets for identical financial instruments.

Level 2 – Instruments valued with valuation techniques using inputs which are observable for the financial instrument either directly (ie as a price) or indirectly (ie derived from prices for similar financial instruments). This includes observable interest and foreign exchange rates, spreads and volatilities.

Level 3 – Instruments valued using valuation techniques where the significant inputs are not observable in financial markets. This includes illiquid prices and spreads derived from illiquid prices.

As at 31 March 2020

SDR millions	Level 1	Level 2	Level 3	Total
Financial assets classified as FVPL				
Securities purchased under resale agreements	–	55,869.8	–	55,869.8
Loans and advances	–	54,038.9	–	54,038.9
Government and other securities	60,479.7	26,767.0	254.3	87,501.0
Derivative financial instruments	4.2	3,516.8	–	3,521.0
Financial assets classified as FVOCI				
Securities purchased under resale agreements	–	148.8	–	148.8
Government and other securities	15,096.1	1,109.0	–	16,205.1
Total financial assets accounted for at fair value	**75,580.0**	**141,450.3**	**254.3**	**217,284.6**
Financial liabilities classified as FVPL				
Currency deposits	–	(200,839.6)	–	(200,839.6)
Securities sold under repurchase agreements	–	–	–	–
Derivative financial instruments	(4.1)	(3,045.1)	–	(3,049.2)
Total financial liabilities accounted for at fair value	**(4.1)**	**(203,884.7)**	**–**	**(203,888.8)**

As at 31 March 2019

SDR millions	Level 1	Level 2	Level 3	Total
Financial assets classified as FVPL				
Securities purchased under resale agreements	–	62,355.2	–	62,355.2
Loans and advances	–	41,856.5	–	41,856.5
Government and other securities	54,787.5	26,212.3	–	80,999.8
Derivative financial instruments	1.5	2,563.4	–	2,564.9
Financial assets classified as FVOCI				
Securities purchased under resale agreements	–	549.2	–	549.2
Government and other securities	15,335.5	720.3	–	16,055.8
Total financial assets accounted for at fair value	70,124.5	134,256.9	–	204,381.4
Financial liabilities classified as FVPL				
Currency deposits	–	(228,598.0)	–	(228,598.0)
Derivative financial instruments	(1.2)	(1,454.2)	–	(1,455.4)
Total financial liabilities accounted for at fair value	(1.2)	(230,052.2)	–	(230,053.4)

A. Transfers between levels in the fair value hierarchy

Of the assets categorised as level 1 at 31 March 2020, SDR 162.2 million related to assets that were categorised as level 2 at 31 March 2019. Of the assets categorised as level 2 at 31 March 2020, SDR 5,399.8 million related to assets that had been categorised as level 1 at 31 March 2019. The transfer of assets between levels 1 and 2 reflected specific market conditions existing at the reporting dates that affected the observability of the market prices as defined above. No liabilities were transferred between fair value hierarchy levels.

B. Assets and liabilities categorised at fair value level 3

The accuracy of the Bank's valuations is ensured through an independent price verification exercise performed by the valuation control function.

As at 31 March 2020, a small percentage of the Bank's financial instrument valuations were produced using valuation techniques that utilised significant unobservable inputs. These financial instruments are categorised as level 3. For these instruments, the determination of fair value requires subjective assessment and judgment depending on liquidity, pricing assumptions, the current economic and competitive environment and the risks affecting the specific instrument. In such circumstances, valuation is determined based on Management's own judgments about the assumptions that market participants would use in pricing the asset or liability (including assumptions about risk). Both observable and unobservable inputs may be used to determine the fair value of positions that have been classified within level 3. As a result, the unrealised gains and losses for assets and liabilities within level 3 presented in the table above may include changes in fair value that were attributable to both observable and unobservable inputs.

The financial instruments categorised as level 3 comprise illiquid bonds. During the financial year ended 31 March 2020, the Bank categorised SDR 254.3 million of securities as level 3 in the fair value hierarchy.

Of these securities, SDR 101.5 million were valued using illiquid prices, and SDR 152.8 million were valued using illiquid spreads.

As at 31 March 2020

SDR millions	FVPL	**Total**
Balance at beginning of year	–	–
Purchases	**216.2**	**216.2**
Sales	–	–
Transfers in	**35.9**	**35.9**
Transfers out	–	–
Net interest and valuation	0.4	0.4
Foreign currency translation impact	1.7	1.7
Subtotal net gain recorded in net profit	**2.1**	**2.1**
Balance at end of year	**254.3**	**254.3**
Unrealised losses relating to assets still held at the reporting date	**(0.6)**	**(0.6)**

Quantitative disclosures of valuation techniques

The following table provides the representative range of minimum and maximum values and the associated weighted averages of each significant unobservable input for level 3 assets by the related valuation technique most significant to the related financial instrument.

As at 31 March 2020

	Fair value *(SDR millions)*	Valuation technique	Unobservable input	Minimum value of input	Maximum value of input	Weighted average of input	Unit	Relationship of unobservable input to fair value
Debt securities	101.5	Price	Bond prices	98.0	101.2	100.7	Points	A change in the prices of 1 point would increase / decrease the fair value by SDR 1.0 million
Debt securities	152.8	Discounted cash flow based on spread to yield curve	Bond spreads	8.0	238.0	66.0	Basis-points	A change in the spreads of 100 basis-points would increase / decrease the fair value by SDR 2.1 million
Total level 3 assets at fair value	**254.3**							

C. Financial instruments not measured at fair value

In accordance with its accounting policies, the Bank accounts for certain financial instruments at amortised cost. Using the same valuation techniques as used for fair valued financial instruments, Management estimates that the fair values of these financial instruments would be materially the same as the carrying values shown in these financial statements for both 31 March 2020 and 31 March 2019. If the valuation of these instruments were categorised using the fair value hierarchy, the valuation of “gold loans” and “securities sold under repurchase agreements” would be considered level 2. All other amortised cost financial instruments would be considered level 1.

D. Impact of changes in the Bank’s creditworthiness

The fair value of the Bank’s liabilities may be affected by any change in its creditworthiness. If the Bank’s creditworthiness deteriorated, the value of its liabilities should decrease, and the change in value would be reflected as a movement in other comprehensive income. The Bank regularly assesses its creditworthiness as part of its risk management processes. The Bank’s assessment of its creditworthiness did not indicate a change which could have had an impact on the fair value of the Bank’s liabilities during the period under review.

E. Valuation of financial assets and liabilities

The stressed market conditions at 31 March 2020 increased the degree of judgment involved in the valuation of the Bank’s financial assets and liabilities. The Bank reconsidered some of its valuation processes, and applied judgment in determining the appropriate valuation methods and inputs for each financial instrument. Reflecting generally lower market liquidity, level 1 observable prices were not available for some financial assets, and these were instead valued using a discounted cash flow model based on a spread to a standard market yield curve. Such valuations are level 2 or level 3, and require estimation of appropriate valuation parameters. Changes in estimates of these parameters could significantly affect the reported fair values. The valuation impact is opposite for a one basis point parallel downward change in the underlying yield curve. Management uses a move of 200 basis points as a stress test. The valuation impact of a 1 basis point parallel upward change in the underlying yield curve assumptions of key financial instruments is shown in the table below:

For the financial year ended 31 March

SDR millions	2020	2019
Securities purchased under resale agreements	(0.2)	(0.2)
Loans and advances	(2.0)	(1.3)
Government and other securities	(13.1)	(12.9)
Currency deposits	9.2	10.0
Derivative financial instruments	0.7	(0.8)

31. Geographical analysis

A. Total liabilities

As at 31 March

SDR millions	2020	2019
Africa and Europe	89,916.5	76,774.7
Asia-Pacific	162,483.9	161,918.4
Americas	26,262.0	20,289.8
International organisations	8,195.0	12,163.4
Balance at end of year	**286,857.4**	271,146.3

B. Off-balance sheet items

As at 31 March

SDR millions	2020			2019		
	Gold bars held under earmark	Nominal value of securities	Net asset value of portfolio management mandates	Gold bars held under earmark	Nominal value of securities	Net asset value of portfolio management mandates
Africa and Europe	6,249.5	–	3,598.7	4,954.0	–	3,810.3
Asia-Pacific	4,053.1	2,164.3	10,584.8	3,208.2	2,265.4	8,466.8
Americas	4,083.5	39.3	5,992.6	3,224.2	38.7	3,141.0
Total	**14,386.1**	**2,203.6**	**20,176.1**	11,386.4	2,304.1	15,418.1

The geographical distribution in the above table reflects the geographical origin of the underlying investors in the above off-balance sheet items, and not the geographical location of the investment assets.

C. Credit commitments

As at 31 March

SDR millions	**2020**	2019
Asia-Pacific	219.4	216.2
Total	**219.4**	216.2

32. Related parties

The Bank considers the following to be its related parties:

- the members of the Board of Directors;
- the senior officials of the Bank;
- close family members of the above individuals;
- the Bank's post-employment benefit arrangements; and
- central banks whose Governor is a member of the Board of Directors and institutions that are connected with these central banks.

A listing of the members of the Board of Directors and senior officials is shown in the sections of the Annual Report entitled "Board of Directors" and "BIS Management". The Bank provides services to the pension fund on a free-of-charge basis, including investment management, accounting, reporting, valuation and monitoring. Note 13 provides further details of the Bank's post-employment benefit arrangements.

A. Related party individuals

Note 25 provides details of the total compensation of the Board of Directors.

The total compensation of the senior officials recognised in the profit and loss account amounted to:

For the financial year ended 31 March

CHF millions	**2020**	2019
Salaries, allowances and medical cover	8.0	7.4
Post-employment benefits	2.6	2.5
Total compensation	**10.6**	9.9
SDR equivalent in millions	7.8	7.1

The Bank offers personal deposit accounts for staff members and Directors. The accounts bear interest at a rate determined by the Bank based on the rate offered by the Swiss National Bank on its staff accounts. The movements and total balance on personal deposit accounts relating to members of the Board of Directors and the senior officials of the Bank were as follows:

For the financial year ended 31 March

CHF millions	**2020**	2019
Balance at beginning of year	13.2	12.4
Deposits taken and other inflows	2.5	2.5
Withdrawals and other outflows	(0.8)	(1.7)
Balance at end of year	**14.9**	13.2
SDR equivalent in millions	11.3	9.6
Interest expense on deposits in CHF millions	–	0.1

Balances related to individuals who are appointed as members of the Board of Directors or as senior officials of the Bank during the financial year are included in the table above as other inflows. Balances related to individuals who ceased to be members of the Board of Directors or senior officials of the Bank during the financial year are included in the table above as other outflows.

In addition, the Bank operates a blocked personal deposit account for certain staff members who were previously members of the Bank's savings fund, which closed on 1 April 2003. The terms of these blocked accounts are such that staff members cannot make further deposits or withdrawals and the balances are paid out when they leave the Bank. The accounts bear interest at a rate determined by the Bank based on the rate offered by the Swiss National Bank on its staff accounts plus 1%. The total balance of blocked accounts at 31 March 2020 was SDR 7.2 million (2019: SDR 7.5 million). They are reported under the balance sheet heading "Currency deposits".

B. Related party customers

The BIS provides banking services to its customers, which are predominantly central banks, monetary authorities and international financial institutions. In fulfilling this role, the Bank, in the normal course of business, enters into transactions with customers which are related parties (as defined above). These transactions include making advances, and taking currency and gold deposits. It is the Bank's policy to enter into transactions with related party customers on similar terms and conditions to transactions with other, non-related party customers. The following tables show balances relating to these transactions, which the Bank believes are representative of the general level of business undertaken with related party customers during the year.

Balances with related party customers

As at 31 March	2020			2019		
	Balance sheet total	Balance with related parties		Balance sheet total	Balance with related parties	
SDR millions / percentages	*SDR millions*	*SDR millions*	*%*	*SDR millions*	*SDR millions*	*%*
Assets						
Cash and cash equivalents	54,021.4	53,142.0	98.4	60,756.4	60,145.7	99.0
Securities purchased under resale agreements	56,018.6	7,012.4	12.5	62,904.4	6,325.9	10.1
Loans and advances	54,038.9	227.4	0.4	41,856.5	–	–
Government and other securities	103,706.1	3,444.7	3.3	97,055.6	3,135.0	3.2
Gold and gold loans	31,436.8	31,369.6	99.8	19,654.3	19,419.3	98.8
Derivative financial instruments	3,521.0	80.8	2.3	2,564.9	60.1	2.3
Other assets	19.1	1.2	6.3	12.2	0.1	0.8
Liabilities						
Currency deposits	(250,194.8)	(138,725.3)	55.4	(241,604.6)	(96,421.0)	39.9
Gold deposits	(15,221.1)	(11,302.8)	74.3	(11,333.4)	(8,946.8)	78.9
Derivative financial instruments	(3,049.2)	(66.8)	2.2	(1,455.4)	(8.8)	0.6

Main profit and loss items arising from transactions with related party customers

For the financial year ended 31 March	2020			2019		
	Profit and loss total	Balance with related parties		Profit and loss total	Balance with related parties	
SDR millions / percentages	*SDR millions*	*SDR millions*	*%*	*SDR millions*	*SDR millions*	*%*
Interest income	282.3	37.0	13.1	237.7	9.5	4.0
Interest expense	(453.3)	(329.2)	72.6	(449.4)	(310.6)	69.1
Net change in ECL impairment provision	(1.8)	–	–	(0.2)	–	–
Net income on financial assets and liabilities at fair value through profit and loss						
Financial assets	1,895.6	119.5	6.3	1,627.6	100.2	6.2
Financial liabilities	(4,419.2)	(1,796.9)	40.7	(3,881.4)	(1,568.5)	40.4
Derivative financial instruments	3,077.6	73.0	2.4	3,203.1	60.1	1.9

33. Contingent liabilities

In the opinion of the Bank's Management, there were no significant contingent liabilities at 31 March 2020 (31 March 2019: nil).

Capital adequacy

1. Capital adequacy framework

As an international financial institution that is overseen by a Board composed of Governors of major central banks and that has no national supervisor, the Bank is committed to maintaining its superior credit quality and financial strength, in particular in situations of financial stress.

The Bank assesses its capital adequacy on a continuous basis. Its capital planning process focuses on two elements: an economic capital framework and a financial leverage framework. The disclosures in this section relating to credit, market, operational and liquidity risk are based on the Bank's own assessment of capital adequacy derived in accordance with these two BIS frameworks.

Regulatory capital ratios are not used as indicators of BIS capital adequacy because key aspects of the business model for the BIS banking activities are not adequately captured. In the main, these relate to the high level of solvency targeted by the Bank as well as the way regulatory capital ratios reflect portfolio concentrations and interest rate risk in the banking book.

To facilitate comparability, the Bank has implemented a framework that is consistent with guidance issued by the Basel Committee on Banking Supervision (BCBS). Following this, the Bank discloses a Common Equity Tier 1 capital ratio (Pillar 1), risk-weighted assets and more detailed related information. In addition, the Bank calculates for reference a Liquidity Coverage Ratio.

The Bank maintains a capital position substantially in excess of the regulatory minimum requirement in order to ensure its superior credit quality.

Effective 1 April 2019, the Bank updated its capital adequacy framework and related capital planning process. Where relevant, the comparative figures presented in these financial statements for 31 March 2019 have been restated to the new basis.

2. Economic capital

The Bank's economic capital methodology relates its risk-bearing capacity to the amount of economic capital needed to absorb potential losses arising from its exposures. Consistent with guidance from the BCBS, the risk-bearing capacity is defined as Common Equity Tier 1 capital which is based on components of the Bank's equity as set out in the following table.

Common Equity Tier 1 capital includes the profit and loss account. It is adjusted by the Bank's current estimate of the amount of the profit and loss account that will be paid as a dividend (the "dividend adjustment"), to ensure that Common Equity Tier 1 capital includes only the component of the profit and loss account that is expected to be allocated to statutory reserves.

As at 31 March

SDR millions	2020	2019[1]
Share capital	706.4	698.9
Statutory reserves per balance sheet	16,867.8	16,326.3
Less: shares held in treasury	(1.7)	(1.7)
Share capital and reserves	**17,572.5**	17,023.5
Securities revaluation account	572.3	135.1
Gold revaluation account	3,375.3	2,567.9
Re-measurement of defined benefit obligations	(45.7)	(238.3)
Other equity accounts	**3,901.9**	2,464.7
Expected loss	(59.4)	(34.0)
Intangible assets	(24.3)	(28.3)
Prudential adjustments	**(83.7)**	(62.3)
Profit and loss account	**165.5**	461.1
Dividend adjustment	–	(136.7)
Common Equity Tier 1 capital	**21,556.2**	19,750.3

[1] Restated to reflect the revised capital adequacy framework and related capital planning process.

As part of the capital planning process, Management allocates economic capital to risk categories within its risk-bearing capacity. Allocations are made to each category of financial risk (ie credit and market risk) as well as operational risk. Capital is also assigned to a minimum cushion of capital that is not utilised by risk categories ("minimum capital cushion") providing an additional margin of safety. The difference between its risk-bearing capacity and the total economic capital utilisation, the "available economic capital", is available for further risk-taking.

Reflecting the high level of solvency targeted by the Bank, the economic capital framework measures economic capital to a 99.99% confidence level assuming a one-year horizon, except for FX settlement risk. The amount of economic capital set aside for FX settlement risk is based on an assessment by Management. The Bank's economic capital framework is subject to regular review and calibration.

The following table summarises the Bank's economic capital allocation and utilisation as well as the resulting available economic capital:

As at 31 March

	2020		2019[1]	
SDR millions	Allocation	Utilisation	Allocation	Utilisation
Insolvency and transfer risk	7,400.0	5,931.4	6,600.0	5,362.0
FX settlement risk	300.0	300.0	300.0	300.0
Credit risk	7,700.0	6,231.4	6,900.0	5,662.0
Market risk	4,200.0	3,807.0	4,200.0	3,455.0
Operational risk	1,100.0	1,100.0	1,100.0	1,100.0
Minimum capital cushion	3,233.4	3,233.4	2,962.3	2,962.3
Total economic capital (A)	**16,233.4**	**14,371.8**	15,162.3	13,179.3
Common Equity Tier 1 capital (B)		**21,556.2**		19,750.3
Available economic capital (B) – (A)		**7,184.4**		6,571.0

[1] Restated to reflect the revised capital adequacy framework and related capital planning process.

3. Financial leverage

The Bank complements its capital adequacy assessment with a financial leverage framework using a ratio that compares the Bank's Common Equity Tier 1 capital with its total exposure. The exposure measure is supplemented by the pension fund asset value as well as regulatory exposure adjustments relating to committed and uncommitted facilities, repurchase agreements and derivatives.

The following table shows the calculation of the Bank's financial leverage ratio:

As at 31 March

SDR millions	2020	2019[1]
Common Equity Tier 1 capital (A)	**21,556.2**	19,750.3
Total balance sheet assets	**308,497.3**	291,095.6
Derivatives	2,775.8	2,874.0
Securities purchased under resale agreements	10.1	–
Committed and uncommitted facilities	3,745.2	3,897.4
Pension fund assets	1,109.6	1,164.3
Exposure adjustments	**7,640.7**	7,935.7
Total BIS exposure (B)	**316,138.0**	299,031.3
BIS leverage ratio (A) / (B)	**6.8%**	6.6%

[1] Restated to reflect the revised capital adequacy framework and related capital planning process.

4. Common Equity Tier 1 capital ratio

The economic capital framework and the financial leverage framework described above are the main tools used for assessing the Bank's capital adequacy. Risk-weighted assets, minimum capital requirements and the Common Equity Tier 1 capital ratio are disclosed to facilitate comparability. Guidance issued by the BCBS includes several approaches for calculating risk-weighted assets and the corresponding minimum capital requirements. In principle, the minimum capital requirements are determined by taking 8% of the risk-weighted assets.

For credit risk, the Bank has adopted the advanced internal ratings-based approach for the majority of its exposures. Under this approach, the risk weighting for a transaction is determined by the relevant Basel risk weight function using the Bank's own estimates for key inputs. Expected loss is calculated for credit risk exposures subject to the advanced internal ratings-based approach and is calculated at the balance sheet date. In accordance with the requirements of the Basel frameworks, the expected loss is compared with write-offs, if applicable, and any shortfall is deducted from the Bank's Common Equity Tier 1 capital. For securitisation exposures and relevant other assets, the Bank has adopted the standardised approach. Under this approach, risk weightings are mapped to exposure types.

Risk-weighted assets for market risk are derived following an internal models approach based on a value-at-risk (VaR) methodology calibrated to stressed and non-stressed market conditions. For operational risk, the advanced measurement approach is used. This approach also relies on VaR.

More details on the assumptions underlying the calculations are provided in the sections on credit risk, market risk and operational risk.

The following table provides information on risk-weighted assets and related minimum capital requirements:

As at 31 March		2020			2019		
SDR millions	Approach used	Amount of exposure	Risk-weighted assets (A)	Minimum capital requirement (B)	Amount of exposure	Risk-weighted assets (A)	Minimum capital requirement (B)
Credit risk							
Exposure to sovereigns, banks and corporates	Advanced internal ratings-based approach, where (B) is derived as (A) x 8%	218,276.3	31,124.7	2,490.0	204,923.0	20,111.3	1,608.9
Securitisation exposures and other assets	Standardised approach, where (B) is derived as (A) x 8%	642.7	1,287.1	103.0	316.2	221.4	17.7
Market risk							
Exposure to foreign exchange risk and gold price risk	Internal models approach, where (A) is derived as (B) / 8%	–	27,562.9	2,205.0	–	22,037.9	1,763.0
Operational risk							
	Advanced measurement approach, where (A) is derived as (B) / 8%	–	8,909.2	712.7	–	10,031.1	802.5
Total			**68,883.9**	**5,510.7**		52,401.7	4,192.1

The Common Equity Tier 1 capital ratio is set out in the following table:

As at 31 March *SDR millions*	2020	2019[1]
Total Common Equity Tier 1 capital (A)	**21,556.2**	19,750.3
Total risk-weighted assets (B)	**68,883.9**	52,401.7
Common Equity Tier 1 capital ratio (A) / (B)	**31.3%**	37.7%

[1] Restated to reflect the revised capital adequacy framework and related capital planning process.

Risk management

1. Risks faced by the Bank

The Bank supports its customers, predominantly central banks, monetary authorities and international financial institutions, in the management of their reserves and related financial activities.

Banking activities form an essential element of meeting the Bank's objectives and ensure its financial strength and independence. The BIS engages in banking activities that are customer-related as well as activities that are related to the investment of its shareholders' equity, each of which may give rise to financial risk comprising credit risk, market risk and liquidity risk. The Bank is also exposed to operational risk.

Within the risk frameworks defined by the Board of Directors, the Management of the Bank has established risk management policies designed to ensure that risks are identified, appropriately measured and controlled as well as monitored and reported.

2. Risk management approach and organisation

The Bank maintains superior credit quality and adopts a prudent approach to financial risk-taking, by:

- maintaining an exceptionally strong capital position;
- investing its assets predominantly in high credit quality financial instruments;
- seeking to diversify its assets across a range of sectors;
- adopting a conservative approach to its tactical market risk-taking and carefully managing market risk associated with the Bank's strategic positions, which include its gold holdings; and
- maintaining a high level of liquidity.

A. Organisation

Under Article 39 of the Bank's Statutes, the General Manager is responsible to the Board for the management of the Bank, and is assisted by the Deputy General Manager. The Deputy General Manager is responsible for the Bank's independent risk management and compliance functions. The General Manager and the Deputy General Manager are supported by senior management advisory committees.

The key advisory committees are the Executive Committee, the Finance Committee and the Compliance and Operational Risk Committee. The first two committees are chaired by the General Manager and the third by the Deputy General Manager, and all include other senior members of the Bank's Management. The Executive Committee advises the General Manager primarily on the Bank's strategic planning and the allocation of resources, as well as on decisions related to the broad financial objectives for the banking activities and strategic operational risk management issues. The Finance Committee advises the General Manager on the financial management and policy issues related to the banking business, including the allocation of economic capital to risk categories. The Compliance and Operational Risk Committee, chaired by the Deputy General Manager, provides a forum for considering important compliance and operational risk matters, ensures the coordination of compliance matters and operational risk management throughout the Bank and informs or advises the Executive Committee as appropriate.

The independent risk management functions for financial risks and operational risk are performed by the Risk Management unit. The Head of Risk Management reports to the Deputy General Manager. The Head of the Operational Risk unit within Risk Management has reporting lines to the Deputy General Manager and the Head of Risk Management.

The Bank's independent compliance function is performed by the Compliance unit. The objective of this function is to assist Management in ensuring that all activities of the BIS and its staff are conducted in accordance with compliance laws, rules and standards. The Chief Compliance Officer reports to the Deputy General Manager and also has a direct access to the Audit Committee, which is an advisory committee to the Board of Directors.

The Finance unit and the Legal Service complement the Bank's risk management. The Finance unit operates a valuation control function, produces the Bank's financial statements and controls the Bank's expenditure by setting and monitoring the annual budget. The objective of the valuation control function is to ensure that the Bank's valuations comply with its valuation policy and procedures. The Finance unit reports to the Deputy General Manager and the Secretary General.

The Legal Service provides legal advice and support covering a wide range of issues relating to the Bank's activities. The Legal Service reports to the General Manager.

The Internal Audit function evaluates and improves the effectiveness of risk management, control, and governance systems and processes. Internal Audit provides an independent, objective assurance function, and advises on best practice. Internal Audit has reporting lines to the General Manager and the Deputy General Manager, and to the Audit Committee.

B. Risk monitoring and reporting

The Bank's financial and operational risk profile, position and performance are monitored on an ongoing basis by the relevant units. Financial risk, operational risk and compliance reports aimed at various management levels are provided regularly to enable Management to adequately assess the Bank's risk profile and financial condition.

Management reports financial and risk information to the Board of Directors on a monthly and a quarterly basis. Furthermore, the Audit Committee receives regular reports from Internal Audit, and the Compliance, Finance and Operational Risk Management units. The Banking and Risk Management Committee, another advisory committee to the Board, receives regular reports from the Risk Management unit. The preparation of reports is subject to comprehensive policies and procedures, thus ensuring strong controls.

C. Risk methodologies

The Bank revalues virtually all of its financial instruments to fair value on a daily basis and reviews its valuations monthly, taking into account necessary adjustments for impairment. It uses a comprehensive range of quantitative methodologies for valuing financial instruments and for measuring risk to its net profit and equity. The Bank reassesses its quantitative methodologies in the light of its changing risk environment and evolving best practice.

The Bank's model validation policy defines the roles and responsibilities and processes related to the implementation of new or materially changed risk and valuation models.

A key methodology used by the Bank to measure and manage risk is the calculation of economic capital based on value-at-risk (VaR) techniques. VaR expresses the statistical estimate of the maximum potential loss on the current positions of the Bank measured to a specified level of confidence and a specified time horizon. VaR models depend on statistical assumptions and the quality of available market data and, while forward-looking, they extrapolate from past events. VaR models may underestimate potential losses if changes in risk factors fail to align with the distribution assumptions. VaR figures do not provide any information on losses that may occur beyond the assumed confidence level.

The Bank's economic capital framework covers credit risk, market risk and operational risk. As part of the capital planning process, the Bank allocates economic capital to the above risk categories commensurate with principles set by the Board and taking account of the business strategy. Reflecting the high level of solvency targeted by the Bank, the economic capital framework measures economic capital to a 99.99% confidence level assuming a one-year time horizon. An additional amount of economic capital is allocated for FX settlement risk based on Management's risk assessment. Moreover, capital is set aside for a "minimum capital cushion" which provides an additional margin of safety.

The management of the Bank's capital adequacy is complemented by a comprehensive stress testing framework, and a financial leverage framework. The stress testing framework supplements the Bank's risk assessment, including its VaR and economic capital calculations for financial risk. The Bank's key market risk factors and credit exposures are stress-tested. The stress testing includes the analysis of severe historical and adverse hypothetical macroeconomic scenarios, as well as sensitivity tests of extreme but still plausible movements of the key risk factors identified. The Bank also performs stress tests related to liquidity risk. The financial leverage framework focuses on a ratio that sets the Common Equity Tier 1 capital in relation to its total balance sheet exposure.

3. Credit risk

Credit risk arises because a counterparty may fail to meet its obligations in accordance with the agreed contractual terms and conditions. A financial asset is considered past due when a counterparty fails to make a payment on the contractual due date.

The Bank manages credit risk within a framework and policies set by the Board of Directors and Management. These are complemented by more detailed guidelines and procedures at the level of the independent risk management function.

A. Credit risk assessment

Credit risk is continuously controlled at both a counterparty and an aggregated level. The independent risk management function performs individual counterparty credit assessments following a well defined internal rating process. As part of this process, counterparty financial statements and market information are analysed. The rating methodologies depend on the nature of the counterparty. Based on the internal rating and specific counterparty features, the Bank sets a series of credit limits covering individual counterparties and countries. Internal ratings are assigned to all counterparties. In principle, the ratings and related limits are reviewed at least annually. The main assessment criterion in these reviews is the ability of the counterparties to meet interest and principal repayment obligations in a timely manner.

Credit risk limits at the counterparty level are approved by the Bank's Management and fit within a framework set by the Board of Directors.

On an aggregated level, credit risk, including default and country transfer risk, is measured, monitored and controlled based on the Bank's economic capital calculation for credit risk. To calculate economic capital for credit risk, the Bank uses a portfolio VaR model. Management limits the Bank's overall exposure to credit risk by allocating an amount of economic capital to credit risk.

B. Default risk

The tables in this section show the exposure of the Bank to default risk, without taking into account any impairment allowance collateral held or other credit enhancements available to the Bank. Credit risk is mitigated through the use of collateral and legally enforceable netting or setoff agreements. The corresponding assets and liabilities are not offset on the balance sheet.

The exposures set out in the tables below are based on the gross carrying value of the assets in the balance sheet as categorised by sector, geographical region and credit quality. The gross carrying value is the fair value of the financial instruments, except in the case of very short-term financial instruments (sight and notice accounts) and gold. Provisions for estimated credit losses on instruments valued at amortised cost are not included in the exposure amounts. Commitments are reported at their notional amounts. Gold and gold loans exclude gold bar assets held in custody at central banks, and accounts receivable and other assets do not include unsettled liabilities issued because these items do not represent credit exposures of the Bank.

The vast majority of the Bank's assets are invested in sight accounts at central banks, or in securities issued by governments and financial institutions rated A– or above by at least one of the major external credit assessment institutions. Limitations on the number of high-quality counterparties in these sectors mean that the Bank is exposed to single-name concentration risk. As at 31 March 2020, two single names each contributed more than 5% of the total exposure reported in the table below (2019: five single names).

Default risk by asset class and issuer type

The following tables show the exposure of the Bank to default risk by asset class and issuer type, without taking into account any impairment loss allowance, collateral held or other credit enhancements available to the Bank. "Public sector" includes international and other public sector institutions.

As at 31 March 2020

SDR millions	Sovereign and central banks	Public sector	Banks	Corporate	Securitisation	Total
On-balance sheet exposure						
Cash and cash equivalents	53,137.3	577.3	306.8	–	–	54,021.4
Gold and gold loans	224.1	–	67.2	–	–	291.3
Securities purchased under resale agreements	7,012.4	–	36,120.9	12,885.3	–	56,018.6
Loans and advances	5,072.8	40.0	48,926.1	–	–	54,038.9
Government and other securities	73,563.3	11,328.9	9,138.7	9,258.1	417.1	103,706.1
Derivative financial instruments	251.4	7.4	3,261.8	0.4	–	3,521.0
Accounts receivable and other assets	5.9	4.5	193.4	5.8	–	209.6
Total on-balance sheet exposure	**139,267.2**	**11,958.1**	**98,014.9**	**22,149.6**	**417.1**	**271,806.9**
Commitments						
Undrawn unsecured facilities	219.4	–	–	–	–	219.4
Total commitments	**219.4**	**–**	**–**	**–**	**–**	**219.4**
Total exposure	**139,486.6**	**11,958.1**	**98,014.9**	**22,149.6**	**417.1**	**272,026.3**

As at 31 March 2019

SDR millions	Sovereign and central banks	Public sector	Banks	Corporate	Securitisation	Total
On-balance sheet exposure						
Cash and cash equivalents	60,154.6	539.3	62.5	–	–	60,756.4
Gold and gold loans	298.7	–	235.0	–	–	533.7
Securities purchased under resale agreements	6,325.9	–	37,525.7	19,052.8	–	62,904.4
Loans and advances	4,074.6	–	37,781.9	–	–	41,856.5
Government and other securities	72,284.0	10,072.9	6,353.8	8,226.4	118.5	97,055.6
Derivative financial instruments	120.7	4.4	2,438.4	1.4	–	2,564.9
Accounts receivable and other assets	4.0	2.0	60.5	6.2	–	72.7
Total on-balance sheet exposure	143,262.5	10,618.6	84,457.8	27,286.8	118.5	265,744.2
Commitments						
Undrawn secured facilities	216.2	–	–	–	–	216.2
Total commitments	216.2	–	–	–	–	216.2
Total exposure	143,478.7	10,618.6	84,457.8	27,286.8	118.5	265,960.4

Default risk by geographical region

The following tables represent the exposure of the Bank to default risk by asset class and geographical region, without taking into account any impairment loss allowance, collateral held or other credit enhancements available to the Bank. Exposures are allocated to regions based on the country of incorporation of each legal entity.

As at 31 March 2020

SDR millions	Africa and Europe	Asia-Pacific	Americas	International institutions	Total
On-balance sheet exposure					
Cash and cash equivalents	27,224.9	26,178.2	41.0	577.3	54,021.4
Gold and gold loans	291.3	–	–	–	291.3
Securities purchased under resale agreements	40,385.1	8,621.1	7,012.4	–	56,018.6
Loans and advances	37,533.2	9,272.8	7,232.9	–	54,038.9
Government and other securities	33,636.1	41,652.4	23,961.5	4,456.1	103,706.1
Derivative financial instruments	2,861.5	376.0	280.3	3.2	3,521.0
Accounts receivable and other assets	11.1	2.6	194.6	1.3	209.6
Total on-balance sheet exposure	**141,943.2**	**86,103.1**	**38,722.7**	**5,037.9**	**271,806.9**
Commitments					
Undrawn unsecured facilities	–	219.4	–	–	219.4
Total commitments	**–**	**219.4**	**–**	**–**	**219.4**
Total exposure	**141,943.2**	**86,322.5**	**38,722.7**	**5,037.9**	**272,026.3**

As at 31 March 2019

SDR millions	Africa and Europe	Asia-Pacific	Americas	International institutions	Total
On-balance sheet exposure					
Cash and cash equivalents	38,473.0	21,707.4	36.7	539.3	60,756.4
Gold and gold loans	533.7	–	–	–	533.7
Securities purchased under resale agreements	49,981.1	2,925.8	9,997.5	–	62,904.4
Loans and advances	30,049.4	6,549.8	5,257.3	–	41,856.5
Government and other securities	26,560.7	41,508.5	23,809.9	5,176.5	97,055.6
Derivative financial instruments	1,916.4	360.9	283.7	3.9	2,564.9
Accounts receivable and other assets	69.2	1.3	0.2	2.0	72.7
Total on-balance sheet exposure	147,583.5	73,053.7	39,385.3	5,721.7	265,744.2
Commitments					
Undrawn unsecured facilities	–	216.2	–	–	216.2
Total commitments	–	216.2	–	–	216.2
Total exposure	147,583.5	73,269.9	39,385.3	5,721.7	265,960.4

Default risk by counterparty / issuer rating

The following tables show the exposure of the Bank to default risk by class of financial asset and counterparty / issuer rating, without taking into account any impairment allowance, collateral held or other credit enhancements available to the Bank. The ratings shown reflect the Bank's internal ratings expressed as equivalent external ratings.

As at 31 March 2020

SDR millions	AAA	AA	A	BBB	BB and below	Unrated	Total
On-balance sheet exposure							
Cash and cash equivalents	25,771.2	1,897.8	26,227.3	125.0	0.1	–	54,021.4
Gold and gold loans	–	224.1	67.2	–	–	–	291.3
Securities purchased under resale agreements	–	19,897.7	27,508.8	8,612.1	–	–	56,018.6
Loans and advances	2,208.1	1,478.5	47,076.6	638.5	2,637.2	–	54,038.9
Government and other securities	6,541.8	40,029.8	48,165.6	8,968.9	–	–	103,706.1
Derivative financial instruments	–	155.9	3,175.7	169.8	16.1	3.5	3,521.0
Accounts receivable and other assets	–	0.8	2.6	191.5	2.1	12.6	209.6
Total on-balance sheet exposure	**34,521.1**	**63,684.6**	**152,223.8**	**18,705.8**	**2,655.5**	**16.1**	**271,806.9**
Commitments							
Undrawn unsecured facilities	–	–	–	219.4	–	–	219.4
Total commitments	**–**	**–**	**–**	**219.4**	**–**	**–**	**219.4**
Total exposure	**34,521.1**	**63,684.6**	**152,223.8**	**18,925.2**	**2,655.5**	**16.1**	**272,026.3**

As at 31 March 2019

SDR millions	AAA	AA	A	BBB	BB and below	Unrated	Total
On-balance sheet exposure							
Cash and cash equivalents	31,969.6	6,788.7	21,869.9	128.2	–	–	60,756.4
Gold and gold loans	–	298.7	235.0	–	–	–	533.7
Securities purchased under resale agreements	–	25,378.6	30,700.4	6,825.4	–	–	62,904.4
Loans and advances	1,692.1	929.0	36,384.0	468.9	2,382.5	–	41,856.5
Government and other securities	8,117.4	37,311.3	46,829.7	4,797.2	–	–	97,055.6
Derivative financial instruments	–	37.8	2,429.0	87.5	7.1	3.5	2,564.9
Accounts receivable and other assets	0.2	0.6	31.6	29.3	0.5	10.5	72.7
Total on-balance sheet exposure	41,779.3	70,744.7	138,479.6	12,336.5	2,390.1	14.0	265,744.2
Commitments							
Undrawn unsecured facilities	–	–	–	216.2	–	–	216.2
Total commitments	–	–	–	216.2	–	–	216.2
Total exposure	41,779.3	70,744.7	138,479.6	12,552.7	2,390.1	14.0	265,960.4

C. Credit risk mitigation

Netting

Netting agreements give the Bank a legally enforceable right to net transactions with counterparties under potential future conditions, notably an event of default. Such master netting or similar agreements apply to counterparties with which the Bank conducts most of its derivatives transactions, as well as to counterparties used for repurchase and reverse repurchase agreement transactions. Where required, netting is applied when determining the amount of collateral to be requested or provided, but the Bank does not typically settle assets and liabilities on a net basis during the normal course of business. As such, the amounts shown in the Bank's balance sheet are the gross amounts.

Collateral

The Bank mitigates credit risk by requiring counterparties to provide collateral. The Bank receives collateral in respect of most derivative contracts and reverse repurchase agreements and for advances made under collateralised facility agreements. During the term of these transactions, further collateral may be called or collateral may be released based on the movements in value of both the underlying instrument and the collateral that has been received. The Bank is required to provide collateral in respect of repurchase agreements and some derivative contracts.

For derivative contracts and reverse repurchase agreements, the Bank accepts as collateral high-quality sovereign, state agency and supranational securities and, in a limited number of cases, cash. For advances made under collateralised facility agreements, collateral accepted includes currency deposits with the Bank, units in the BIS Investment Pools and gold.

Under the terms of its collateral arrangements, the Bank is permitted to sell or reuse collateral received on derivative contracts and reverse repurchase agreements, but upon expiry of the transaction must return equivalent financial instruments to the counterparty. At 31 March 2020, the Bank had not sold, lent or reused any of the collateral it held (2019: nil).

The fair value of collateral held which the Bank had the right to sell was:

As at 31 March

SDR millions	**2020**	2019
Collateral held in respect of:		
Derivatives	1,095.2	848.9
Securities purchased under resale agreements	38,088.2	43,421.5
Total	**39,183.4**	44,270.4

Financial assets and liabilities subject to netting or collateralisation

The tables below show the categories of assets and liabilities which are either subject to collateralisation, or for which netting agreements would apply under potential future conditions such as the event of default of a counterparty.

The amount of collateral required is usually based on valuations performed on the previous business day, whereas the Bank's balance sheet reflects the valuations of the reporting date. Due to this timing difference, the valuation of collateral can be higher than the valuation of the underlying contract in the Bank's balance sheet. The amount of the collateral obtained is also impacted by thresholds, minimum transfer amounts and valuation adjustments ("haircuts") specified in the contracts. In these tables, the mitigating effect of collateral has been limited to the balance sheet value of the underlying net asset. In certain derivatives transactions, the Bank has provided or received collateral in the form of cash and cash equivalents, with the corresponding balance recorded as part of other assets or other liabilities, respectively, in the balance sheet as of year-end.

As at 31 March 2020	Effect of risk mitigation					Analysed as:	
SDR millions	Gross carrying amount as per balance sheet	Adjustments for settlement date effects	Enforceable netting agreements	Collateral (received) / provided (limited to balance sheet value)	Exposure after risk mitigation	Amounts not subject to risk mitigation agreements	Amounts subject to risk mitigation agreements
Financial assets							
Securities purchased under resale agreements	56,018.6	(11,324.5)	–	(44,684.1)	10.0	–	10.0
Advances	2,637.3	–	–	(2,637.3)	–	–	–
Derivative financial instruments	3,521.0	–	(2,057.8)	(822.6)	640.6	116.5	524.1
Financial liabilities							
Securities sold under repurchase agreements	(148.8)	–	–	148.7	–	–	–
Derivative financial instruments	(3,049.2)	–	2,057.8	171.8	–	–	–

As at 31 March 2019	Effect of risk mitigation					Analysed as:	
SDR millions	Gross carrying amount as per balance sheet	Adjustments for settlement date effects	Enforceable netting agreements	Collateral (received) / provided (limited to balance sheet value)	Exposure after risk mitigation	Amounts not subject to risk mitigation agreements	Amounts subject to risk mitigation agreements
Financial assets							
Securities purchased under resale agreements	62,904.4	(13,438.4)	–	(49,458.5)	7.5	–	7.5
Advances	2,382.5	–	–	(2,382.5)	–	–	–
Derivative financial instruments	2,564.9	–	(1,082.9)	(848.9)	633.1	46.0	587.1
Financial assets							
Securities sold under repurchase agreements	(549.1)	–	–	549.1	–	–	–
Derivative financial instruments	(1,455.4)	–	1,082.9	–	–	–	–

As at 31 March 2020, the Bank pledged SDR 315.1 million (31 March 2019: nil) of debt securities as collateral under its obligations related to derivative financial instrument contracts. The counterparties have an obligation to return these securities to the Bank.

D. Economic capital for credit risk

The Bank determines economic capital for credit risk (except for FX settlement risk, which is included in the utilisation for credit risk) using a VaR methodology on the basis of a portfolio VaR model, assuming a one-year time horizon and a 99.99% confidence level. The amount of economic capital set aside for FX settlement risk reflected in the Bank's economic capital calculations is based on an assessment by Management.

For the financial year	**2020**				2019			
SDR millions	Average	High	Low	At 31 March	Average	High	Low	At 31 March[1]
Economic capital utilisation for credit risk	5,919.6	6,321.1	5,493.9	**6,231.4**	8,228.4	9,399.3	6,653.2	5,662.0

[1] Restated to reflect the revised capital adequacy framework and related capital planning process.

E. Minimum capital requirements for credit risk

Exposure to sovereigns, banks and corporates

For the calculation of risk-weighted assets for exposures to sovereigns, banks and corporates, the Bank has adopted an approach that is consistent with the advanced internal ratings-based approach.

As a general rule, under this approach risk-weighted assets are determined by multiplying the credit risk exposures with risk weights derived from the relevant BCBS regulatory risk weight function using the Bank's own estimates for key inputs. These estimates for key inputs are also relevant to the Bank's economic capital calculation for credit risk.

The credit risk exposure for a transaction or position is referred to as the exposure at default (EAD). The Bank determines the EAD as the notional amount of on- and off-balance sheet credit exposures, except for securities and derivative contracts. The EAD for securities is based on market value, the EAD for derivatives is calculated using an approach consistent with the internal models method. In line with the EAD methodology for derivatives, the Bank calculates effective expected positive exposures that are then multiplied by a factor alpha as set out in the framework.

Key inputs to the risk weight function are a counterparty's estimated one-year probability of default (PD) as well as the estimated loss-given-default (LGD) and maturity for each transaction.

Due to the high credit quality of the Bank's investments and the conservative credit risk management process at the BIS, the Bank is not in a position to estimate PDs and LGDs based on its own default experience. The Bank calibrates each counterparty PD estimate through a mapping of internal rating grades to external credit assessments taking external default data into account. Similarly, LGD estimates are derived from external data. Where appropriate, these estimates are adjusted to reflect the risk-reducing effects of collateral obtained giving consideration to market price volatility, re-margining and revaluation frequency. The recognition of the risk-reducing effects of collateral obtained for derivative contracts, reverse repurchase agreements and collateralised advances is accounted for in calculating the EAD.

The table below details the calculation of risk-weighted assets. The exposures are measured taking netting and collateral benefits into account. The total amount of exposures reported in the table as at 31 March 2020 includes SDR 98.1 million for interest rate contracts (2019: SDR 107.4 million) and SDR 635.4 million for FX and gold contracts (2019: SDR 481.6 million). In line with the BCBS frameworks, the minimum capital requirement is determined as 8% of risk-weighted assets.

As at 31 March 2020

Internal rating grades expressed as equivalent external rating grades *SDR millions / percentages*	Amount of exposure *SDR millions*	Exposure-weighted PD *%*	Exposure-weighted average LGD *%*	Exposure-weighted average risk weight *%*	Risk-weighted assets *SDR millions*
AAA	33,883.0	0.01	9.5	1.2	408.1
AA	50,726.8	0.03	40.0	13.7	6,967.0
A	123,510.3	0.06	45.0	16.1	19,868.6
BBB	10,147.4	0.20	55.6	37.1	3,760.7
BB and below	8.8	59.63	58.4	53.7	4.7
Total	**218,276.3**				**31,009.1**

As at 31 March 2019[1]

Internal rating grades expressed as equivalent external rating grades *SDR millions / percentages*	Amount of exposure *SDR millions*	Exposure-weighted PD *%*	Exposure-weighted average LGD *%*	Exposure-weighted average risk weight *%*	Risk-weighted assets *SDR millions*
AAA	41,353.6	0.01	8.9	1.3	544.7
AA	51,423.2	0.02	34.5	9.0	4,634.4
A	106,354.7	0.04	44.6	11.9	12,708.5
BBB	5,784.9	0.21	56.1	36.6	2,116.8
BB and below	6.6	5.02	58.7	159.8	10.5
Total	204,923.0				20,014.9

[1] Restated to reflect updates in the BCBS regulatory framework.

At 31 March 2020, the minimum capital requirement for credit risk related to exposures to sovereigns, banks and corporates was SDR 2,480.7 million (2019: SDR 1,601.2 million).

The following table summarises the impact of collateral arrangements on the amount of credit exposure after taking netting into account:

SDR millions	Amount of exposure after taking netting into account	Benefits from collateral arrangements	Amount of exposure after taking into account netting and collateral arrangements
As at 31 March 2020	269,732.1	51,455.8	**218,276.3**
As at 31 March 2019	264,828.8	59,905.8	204,923.0

Securitisation exposures

The Bank invests in securitisation exposures based on traditional, ie non-synthetic, securitisation structures. Given the scope of the Bank's activities, risk-weighted assets are determined according to the standardised approach for securitisation. Under this approach, external credit assessments of the securities are used to determine the relevant risk weights. External credit assessment institutions used for this purpose are Moody's Investors Service, Standard & Poor's and Fitch Ratings. Risk-weighted assets are then derived as the product of the market values of the exposures and the associated risk weights. In line with the BCBS framework, the minimum capital requirement is determined as 8% of risk-weighted assets.

The following table shows the Bank's investments in securitisation analysed by type of securitised assets:

As at 31 March 2020

SDR millions	External rating	Amount of exposures	Risk weight	Risk-weighted assets
Securities backed by other receivables (government-sponsored)	AAA	337.6	20%	67.5
Securities backed by mortgages		79.5	1250%	994.1
Total		**417.1**		**1,061.6**

As at 31 March 2019

SDR millions	External rating	Amount of exposures	Risk weight	Risk-weighted assets
Securities backed by other receivables (government-sponsored)	AAA	118.5	20%	23.7
Total		118.5		23.7

At 31 March 2020, the minimum capital requirement for securitisation exposures was SDR 84.9 million (2019: SDR 1.9 million).

4. Market risk

The Bank is exposed to market risk through adverse movements in market prices. The main components of the Bank's market risk are gold price risk, interest rate risk and foreign exchange risk. The Bank measures market risk and calculates economic capital based on a VaR methodology using a Monte Carlo simulation technique. Risk factor volatilities and correlations are estimated, subject to an exponential weighting scheme, over a six-year observation period. Furthermore, the Bank computes sensitivities to certain market risk factors.

In line with the Bank's objective of maintaining its superior credit quality, economic capital is measured at the 99.99% confidence level assuming a one-year holding period. The Bank calculates the economic capital utilisation for market risk on the basis of a stressed market data set. The Bank's Management manages market risk economic capital usage within a framework set by the Board of Directors. VaR limits are supplemented by operating limits.

To ensure that models provide a reliable measure of potential losses over the one-year time horizon, the Bank has established a comprehensive regular backtesting framework, comparing daily performance with corresponding VaR estimates. The results are analysed and reported to Management.

The Bank also supplements its market risk measurement based on VaR modelling and related economic capital calculations with a series of stress tests. These include severe historical scenarios, adverse hypothetical macroeconomic scenarios and sensitivity tests of gold price, interest rate and foreign exchange rate movements.

A. Gold price risk

Gold price risk is the exposure of the Bank's financial condition to adverse movements in the price of gold.

The Bank is exposed to gold price risk principally through its holdings of gold investment assets. These gold investment assets are held in custody or placed on deposit with commercial banks. At 31 March 2020, the Bank's net gold investment assets were 102 tonnes with a value of SDR 3,878.1 million (2019: 102 tonnes, SDR 3,069.8 million), approximately 18% of its equity (2019: 15%). The Bank sometimes also has small exposures to gold price risk arising from its banking activities with central and commercial banks. Gold price risk is measured within the Bank's VaR methodology, including its economic capital framework and stress tests.

B. Interest rate risk

Interest rate risk is the exposure of the Bank's financial condition to adverse movements in interest rates, including credit spreads. The Bank is exposed to interest rate risk through the interest-bearing assets relating to the management of its equity held in its investment portfolios and investments relating to its banking portfolios. The investment portfolios are managed using a fixed-duration benchmark of bonds.

The Bank measures and monitors interest rate risk using a VaR methodology and sensitivity analyses taking into account movements in relevant money market rates, government bond yields, swap rates and credit spreads.

The following tables show the impact on the Bank's equity of a 1% upward shift in the relevant yield curve per time band:

As at 31 March 2020

SDR millions	Up to 6 months	6 to 12 months	1 to 2 years	2 to 3 years	3 to 4 years	4 to 5 years	Over 5 years	Total
Euro	(6.0)	(13.8)	(27.3)	(38.9)	(39.8)	(28.5)	(16.5)	(170.8)
Japanese yen	19.5	0.8	0.1	–	(0.1)	–	0.1	20.4
Pound sterling	(0.9)	(1.6)	(7.4)	(10.2)	(17.8)	(5.9)	–	(43.8)
Renminbi	(0.2)	(4.6)	(5.3)	(3.3)	(9.4)	(17.8)	(38.1)	(78.7)
Swiss franc	4.4	(0.3)	(0.3)	(0.2)	(0.3)	(0.8)	(2.7)	(0.2)
US dollar	(19.6)	(15.9)	(20.5)	(31.9)	(16.2)	(50.7)	(155.1)	(309.9)
Other currencies	(0.3)	0.3	(0.4)	(1.0)	(0.9)	(0.4)	(0.1)	(2.8)
Total	**(3.1)**	**(35.1)**	**(61.1)**	**(85.5)**	**(84.5)**	**(104.1)**	**(212.4)**	**(585.8)**

As at 31 March 2019

SDR millions	Up to 6 months	6 to 12 months	1 to 2 years	2 to 3 years	3 to 4 years	4 to 5 years	Over 5 years	Total
Euro	(0.3)	(8.3)	(32.4)	(38.5)	(39.8)	(26.9)	(21.0)	(167.2)
Japanese yen	28.2	0.3	(0.1)	(0.2)	0.2	–	–	28.4
Pound sterling	(1.4)	(1.5)	(5.6)	(16.3)	(14.1)	(5.7)	–	(44.6)
Renminbi	(0.7)	(2.7)	(9.0)	(3.2)	(6.6)	(10.3)	(23.6)	(56.1)
Swiss franc	15.9	(0.1)	(0.5)	(0.5)	(0.3)	(0.4)	(3.2)	10.9
US dollar	(3.7)	(9.5)	(11.4)	(23.0)	(38.4)	(43.0)	(170.7)	(299.7)
Other currencies	0.6	(0.1)	–	0.4	(0.2)	–	–	0.7
Total	38.6	(21.9)	(59.0)	(81.3)	(99.2)	(86.3)	(218.5)	(527.6)

C. Foreign exchange risk

The Bank's functional currency, the SDR, is a composite currency comprising fixed amounts of USD, EUR, JPY, GBP and Renminbi. Currency risk is the exposure of the Bank's financial condition to adverse movements in exchange rates. The Bank is exposed to foreign exchange risk primarily through the assets relating to the management of its equity. The Bank is also exposed to foreign exchange risk through managing its customer deposits and through acting as an intermediary in foreign exchange transactions. The Bank reduces its foreign exchange exposures by matching the relevant assets to the constituent currencies of the SDR on a regular basis, and by limiting currency exposures arising from customer deposits and foreign exchange transaction intermediation.

The following tables show the Bank's assets and liabilities by currency and gold exposure. The net foreign exchange and gold position in these tables therefore includes the Bank's gold investments. To determine the Bank's net foreign exchange exposure, the gold amounts need to be removed. The SDR-neutral position is then deducted from the net foreign exchange position excluding gold to arrive at the net currency exposure of the Bank on an SDR-neutral basis.

As at 31 March 2020

SDR millions	SDR	USD	EUR	GBP	JPY	RMB	CHF	Gold	Other currencies	Total
Assets										
Cash and cash equivalents	577.2	22.0	14,589.9	7.2	25,942.1	217.5	12,589.8	–	75.7	54,021.4
Securities purchased under resale agreements	–	10,230.6	23,466.9	11,332.5	10,819.2	169.4	–	–	–	56,018.6
Loans and advances	–	32,499.1	18,047.1	1,033.3	–	103.3	605.4	–	1,750.7	54,038.9
Government and other securities	–	33,847.1	25,086.5	4,788.2	30,670.7	2,952.2	266.2	–	6,095.2	103,706.1
Gold and gold loans	–	0.2	–	–	–	–	–	31,436.6	–	31,436.8
Derivative financial instruments	1,542.8	86,023.6	(41,629.5)	(1,776.7)	(27,527.2)	(1,460.0)	(5,036.7)	(874.5)	(5,740.8)	3,521.0
Accounts receivable and other assets	–	5,059.5	0.7	464.3	–	2.7	9.7	–	18.3	5,555.2
Land, buildings and equipment	166.0	2.3	1.6	0.7	–	–	28.6	–	0.1	199.3
Total assets	**2,286.0**	**167,684.4**	**39,563.2**	**15,849.5**	**39,904.8**	**1,985.1**	**8,463.0**	**30,562.1**	**2,199.2**	**308,497.3**
Liabilities										
Currency deposits	(2,522.2)	(204,184.1)	(20,595.5)	(13,204.3)	(399.1)	(3,283.4)	(376.5)	–	(5,629.7)	(250,194.8)
Securities sold under repurchase agreements	–	–	–	(148.8)	–	–	–	–	–	(148.8)
Gold deposits	–	–	–	–	–	–	–	(15,221.1)	–	(15,221.1)
Derivative financial instruments	854.4	48,958.7	(4,474.5)	(513.8)	(35,707.0)	3,161.5	(7,339.9)	(11,475.6)	3,487.0	(3,049.2)
Accounts payable	–	(4,851.4)	(9,189.8)	(617.8)	(2,536.1)	–	–	–	(17.5)	(17,212.6)
Other liabilities	–	(4.4)	(1.5)	(0.2)	–	–	(1,016.3)	–	(8.5)	(1,030.9)
Total liabilities	**(1,667.8)**	**(160,081.2)**	**(34,261.3)**	**(14,484.9)**	**(38,642.2)**	**(121.9)**	**(8,732.7)**	**(26,696.7)**	**(2,168.7)**	**(286,857.4)**
Net currency and gold position	**618.2**	**7,603.2**	**5,301.9**	**1,364.6**	**1,262.6**	**1,863.2**	**(269.7)**	**3,865.4**	**30.5**	**21,639.9**
Adjustment for gold	–	–	–	–	–	–	–	(3,865.4)	–	(3,865.4)
Net currency position	**618.2**	**7,603.2**	**5,301.9**	**1,364.6**	**1,262.6**	**1,863.2**	**(269.7)**	**–**	**30.5**	**17,774.5**
SDR-neutral position	(618.2)	(7,309.6)	(5,323.0)	(1,341.7)	(1,380.9)	(1,801.1)	–	–	–	(17,774.5)
Net currency exposure on SDR-neutral basis	**–**	**293.6**	**(21.1)**	**22.9**	**(118.3)**	**62.1**	**(269.7)**	**–**	**30.5**	**–**

As at 31 March 2019

SDR millions	SDR	USD	EUR	GBP	JPY	RMB	CHF	Gold	Other currencies	Total
Assets										
Cash and cash equivalents	539.3	17.0	26,246.8	10.8	21,688.9	1.3	12,177.5	–	74.8	60,756.4
Securities purchased under resale agreements	–	11,372.1	35,926.9	11,054.1	4,551.3	–	–	–	–	62,904.4
Loans and advances	–	26,527.6	11,879.4	1,764.7	–	–	179.9	–	1,504.9	41,856.5
Government and other securities	–	33,830.8	18,535.6	4,770.4	29,262.1	4,930.5	325.0	–	5,401.2	97,055.6
Gold and gold loans	–	0.3	–	–	–	–	–	19,654.0	–	19,654.3
Derivative financial instruments	2,860.2	103,109.3	(62,017.1)	(1,013.7)	(36,313.4)	4,541.6	(2,844.4)	(3,170.7)	(2,586.9)	2,564.9
Accounts receivable and other assets	–	2,935.5	2,665.5	–	157.5	339.0	8.8	–	8.9	6,115.2
Land, buildings and equipment	178.3	–	–	–	–	–	10.0	–	–	188.3
Total assets	3,577.8	177,792.6	33,237.1	16,586.3	19,346.4	9,812.4	9,856.8	16,483.3	4,402.9	291,095.6
Liabilities										
Currency deposits	(2,039.9)	(190,841.5)	(23,764.7)	(13,122.0)	(717.6)	(6,219.1)	(357.8)	–	(4,542.0)	(241,604.6)
Securities sold under repurchase agreements	–	–	(441.2)	(107.9)	–	–	–	–	–	(549.1)
Gold deposits	–	–	–	–	–	–	–	(11,333.4)	–	(11,333.4)
Derivative financial instruments	8.4	20,807.2	7,527.8	(1,650.5)	(15,690.8)	(1,651.6)	(8,874.8)	(2,078.4)	147.3	(1,455.4)
Accounts payable	–	(1,013.5)	(11,651.4)	(434.7)	(1,783.1)	(218.6)	–	–	(15.5)	(15,116.8)
Other liabilities	–	(0.5)	(0.3)	–	–	–	(1,084.9)	–	(1.3)	(1,087.0)
Total liabilities	(2,031.5)	(171,048.3)	(28,329.8)	(15,315.1)	(18,191.5)	(8,089.3)	(10,317.5)	(13,411.8)	(4,411.5)	(271,146.3)
Net currency and gold position	1,546.3	6,744.3	4,907.3	1,271.2	1,154.9	1,723.1	(460.7)	3,071.5	(8.6)	19,949.3
Adjustment for gold	–	–	–	–	–	–	–	(3,071.5)	–	(3,071.5)
Net currency position	1,546.3	6,744.3	4,907.3	1,271.2	1,154.9	1,723.1	(460.7)	–	(8.6)	16,877.8
SDR-neutral position	(1,546.3)	(6,436.8)	(4,797.1)	(1,237.7)	(1,186.3)	(1,673.6)	–	–	–	(16,877.8)
Net currency exposure on SDR-neutral basis	–	307.5	110.2	33.5	(31.4)	49.5	(460.7)	–	(8.6)	–

D. Economic capital for market risk

The Bank measures market risk based on a VaR methodology using a Monte Carlo simulation technique taking correlations between risk factors into account. Economic capital for market risk is also calculated following this methodology measured to the 99.99% confidence level and assuming a one-year holding period. The Bank calculates the economic capital utilisation for market risk on the basis of a stressed market data set. The stressed data set is subject to regular review and calibrated to take account of the Bank's key market risk exposures and market risk drivers.

The Bank measures its gold price risk relative to changes in the USD value of gold. The foreign exchange risk component, resulting from changes in the USD exchange rate versus the SDR, is included in the measurement of foreign exchange risk. The following table shows the key figures of the Bank's exposure to market risk in terms of economic capital utilisation over the past two financial years:

For the financial year	2020				2019			
SDR millions	Average	High	Low	At 31 March	Average	High	Low	At 31 March[1]
Economic capital utilisation for market risk	3,664.9	3,977.9	3,415.2	**3,807.0**	3,344.7	3,636.7	3,176.5	3,455.0

[1] Restated to reflect the revised capital adequacy framework and related capital planning process.

The following table provides a further analysis of the Bank's economic capital utilisation for market risk by category of risk:

For the financial year	2020				2019			
SDR millions	Average	High	Low	At 31 March	Average	High	Low	At 31 March[1]
Gold price risk	2,536.5	2,898.6	2,186.4	**2,752.9**	2,246.2	2,407.3	2,109.1	2,221.7
Interest rate risk	2,345.8	2,479.5	2,198.0	**2,346.8**	2,187.5	2,573.2	1,949.7	2,369.7
Foreign exchange risk	764.4	924.2	610.5	**836.9**	699.0	754.0	575.2	663.5
Diversification effects	(1,981.8)	(2,267.7)	(1,758.9)	**(2,129.6)**	(1,788.0)	(1,920.3)	(1,663.2)	(1,799.9)
Total				**3,807.0**				3,455.0

[1] Restated to reflect the revised capital adequacy framework and related capital planning process.

E. Minimum capital requirements for market risk

For the calculation of minimum capital requirements for market risk under the BCBS framework, the Bank has adopted a banking book approach consistent with the scope and nature of its business activities. Consequently, market risk-weighted assets are determined for gold price risk and foreign exchange risk, but not for interest rate risk. The related minimum capital requirement is derived using the VaR-based internal models method. Under this method, VaR calculations are performed using the Bank's VaR methodology, assuming a 99% confidence level and a 10-day holding period for both a stressed and non-stressed market data sets.

The actual minimum capital requirement is derived as the sum of the minimum capital requirements based on the VaR calculated for both the stressed and non-stressed market data sets. For each data set, the higher of the VaR on the calculation date and the average of the daily VaR measures on each of the preceding 60 business days (including the calculation date) is used subject to a multiplication factor of three plus a potential add-on depending on backtesting results. For the period under consideration, the number of backtesting outliers observed remained within the range where no add-on is required. The following table summarises the market risk development relevant to the calculation of minimum capital requirements and the related risk-weighted assets over the reporting period:

As at 31 March	2020			2019[1]		
SDR millions	VaR	Risk-weighted assets (A)	Minimum capital requirement (B)	VaR	Risk-weighted assets (A)	Minimum capital requirement (B)
Market risk, where (A) is derived as (B) / 8%	500.2	27,562.9	**2,205.0**	406.0	22,037.9	1,763.0

[1] Restated to reflect updates in the BCBS regulatory framework.

5. Operational risk

Operational risk is defined by the Bank as the risk of financial loss, or damage to the Bank's reputation, or both, resulting from one or more risk causes, as outlined below:

- Human factors: insufficient personnel, lack of requisite knowledge, skills or experience, inadequate training and development, inadequate supervision, loss of key personnel, inadequate succession planning, or lack of integrity or ethical standards.
- Failed or inadequate processes: a process is poorly designed or unsuitable, or is not properly documented, understood, implemented, followed or enforced.
- Failed or inadequate systems: a system is poorly designed, unsuitable or unavailable, or does not operate as intended.
- External events: the occurrence of an event having an adverse impact on the Bank but outside its control.

Operational risk includes legal risk, but excludes strategic risk.

The Bank's operational risk management framework, policies and procedures comprise the management and measurement of operational risk, including the determination of the relevant key parameters and inputs, business continuity planning and the monitoring of key risk indicators.

The Bank has established a procedure of immediate reporting for operational risk-related incidents. The Operational Risk Management unit develops action plans with the respective units and follows up on their implementation on a regular basis.

For the measurement of operational risk economic capital and operational risk-weighted assets, the Bank has adopted a VaR approach using a VaR-based Monte Carlo simulation technique that is consistent with the advanced measurement approach. Consistent with the BCBS recommendations, the quantification of operational risk does not take into account reputational risk. Internal and external loss data as well as scenario estimates are key inputs in the calculations. In quantifying its operational risk, the Bank has reviewed parts of its quantification methodology during the reporting period to take into account the protection it may obtain from selected insurance coverage.

A. Economic capital for operational risk

Consistent with the parameters used in the calculation of economic capital for financial risk, the Bank measures economic capital for operational risk to the 99.99% confidence level assuming a one-year holding period. The following table shows the key figures of the Bank's exposure to operational risk in terms of economic capital utilisation over the past two financial years:

For the financial year	2020				2019			
SDR millions	Average	High	Low	At 31 March	Average	High	Low	At 31 March[1]
Economic capital utilisation for operational risk	1,100.0	1,100.0	1,100.0	**1,100.0**	1,300.0	1,300.0	1,300.0	1,100.0

[1] Restated to reflect the revised capital adequacy framework and related capital planning process.

B. Minimum capital requirements for operational risk

The calculation of the minimum capital requirement for operational risk is determined assuming a 99.9% confidence level and a one-year time horizon. The following table shows the minimum capital requirements for operational risk, and the related risk-weighted assets:

As at 31 March	2020			2019		
SDR millions	VaR	Risk-weighted assets (A)	Minimum capital requirement (B)	VaR	Risk-weighted assets (A)	Minimum capital requirement (B)
Operational risk, where (A) is derived as (B) / 8%	712.7	8,909.2	**712.7**	802.5	10,031.1	802.5

6. Liquidity risk

Liquidity risk arises when the Bank may not be able to meet expected or unexpected current or future cash flows and collateral needs without affecting its daily operations or its financial condition.

The Bank's currency and gold deposits, principally from central banks and international institutions, comprise 93% (2019: 93%) of its total liabilities. At 31 March 2020, currency and gold deposits originated from 175 depositors (2019: 180 depositors). Within these deposits, there are significant individual customer concentrations, with five customers each contributing in excess of 5% of the total on a settlement date basis (2019: five customers).

Outstanding balances in the currency and gold deposits from central banks, international organisations and other public institutions are the key drivers of the size of the Bank's balance sheet. The Bank is exposed to funding liquidity risk mainly because of the short-term nature of its deposits and because it undertakes to repurchase at fair value certain of its currency deposit instruments at one or two business days' notice. In line with the Bank's objective to maintain a high level of liquidity, it has developed a liquidity management framework, including a ratio, based on conservative assumptions for estimating the liquidity available and the liquidity required.

A. Maturity profile of cash flows

The following tables show the maturity profile of cash flows for assets and liabilities. The amounts disclosed are the undiscounted cash flows to which the Bank is committed. Options are included in the table at fair value and are shown in the "Up to 1 month" category.

As at 31 March 2020

SDR millions	Up to 1 month	1 to 3 months	3 to 6 months	6 to 12 months	1 to 2 years	2 to 5 years	5 to 10 years	Over 10 years	Total
Assets									
Cash and cash equivalents	54,021.4	–	–	–	–	–	–	–	54,021.4
Securities purchased under resale agreements	39,608.7	5,079.5	–	–	–	–	–	–	44,688.2
Loans and advances	11,120.7	13,147.0	10,771.8	16,878.2	298.2	–	–	–	52,215.9
Government and other securities	8,213.2	17,993.8	15,444.4	17,423.3	18,803.4	18,856.8	4,334.9	–	101,069.8
Gold and gold loans	31,248.1	188.8	–	–	–	–	–	–	31,436.9
Total assets	**144,212.1**	**36,409.1**	**26,216.2**	**34,301.5**	**19,101.6**	**18,856.8**	**4,334.9**	**–**	**283,432.2**
Liabilities									
Currency deposits									
Deposit instruments repayable at 1–3 days' notice	(56,957.3)	(21,970.9)	(18,030.0)	(27,901.7)	(12,542.3)	(7,987.1)	(74.3)	–	(145,463.6)
Other currency deposits	(52,527.9)	(24,918.4)	(16,890.1)	(6,361.3)	–	–	–	–	(100,697.7)
Securities sold under repurchase agreements	(148.8)	–	–	–	–	–	–	–	(148.8)
Gold deposits	(15,221.1)	–	–	–	–	–	–	–	(15,221.1)
Total liabilities	**(124,855.1)**	**(46,889.3)**	**(34,920.1)**	**(34,263.0)**	**(12,542.3)**	**(7,987.1)**	**(74.3)**	**–**	**(261,531.2)**
Derivatives									
Net settled cash flows									
Options and interest rate contracts	(59.0)	10.7	80.5	30.6	(119.4)	(88.2)	0.2	–	(144.6)
Gross settled cash flows									
Interest rate contracts									
Inflows	34.0	37.9	57.9	164.4	1,925.4	440.7	–	–	2,660.3
Outflows	(34.4)	(33.6)	(55.5)	(158.5)	(1,917.8)	(436.9)	–	–	(2,636.7)
Subtotal	(0.4)	4.3	2.4	5.9	7.6	3.8	–	–	23.6
Currency and gold contracts									
Inflows	131,694.3	47,663.1	24,577.4	22,546.8	–	–	–	–	226,481.6
Outflows	(131,303.1)	(47,546.0)	(24,391.8)	(22,221.2)	–	–	–	–	(225,462.1)
Subtotal	391.2	117.1	185.6	325.6	–	–	–	–	1,019.5
Total derivatives	**331.8**	**132.1**	**268.5**	**362.1**	**(111.8)**	**(84.4)**	**0.2**	**–**	**898.5**
Total future undiscounted cash flows	**19,688.8**	**(10,348.1)**	**(8,435.4)**	**400.6**	**6,447.5**	**10,785.3**	**4,260.8**	**–**	**22,799.5**

As at 31 March 2019

SDR millions	Up to 1 month	1 to 3 months	3 to 6 months	6 to 12 months	1 to 2 years	2 to 5 years	5 to 10 years	Over 10 years	Total
Assets									
Cash and Cash equivalents	60,756.4	–	–	–	–	–	–	–	60,756.4
Securities purchased under resale agreements	44,299.9	5,168.7	–	–	–	–	–	–	49,468.6
Loans and advances	12,602.0	7,539.2	12,663.3	9,249.7	–	–	–	–	42,054.2
Government and other securities	7,816.0	17,572.3	18,882.0	17,438.1	8,602.0	24,544.4	4,030.3	27.2	98,912.5
Gold and gold loans	19,271.7	84.0	–	299.0	–	–	–	–	19,654.7
Total assets	144,746.0	30,364.2	31,545.5	26,986.8	8,602.0	24,544.4	4,030.3	27.2	270,846.4
Liabilities									
Currency deposits									
Deposit instruments repayable at 1–3 days' notice	(15,728.8)	(24,586.9)	(30,931.7)	(21,417.8)	(17,758.0)	(10,397.3)	–	–	(120,820.5)
Other currency deposits	(76,301.3)	(20,561.1)	(14,118.0)	(6,724.5)	–	–	–	–	(117,704.9)
Securities sold under repurchase agreements	(549.0)	–	–	–	–	–	–	–	(549.0)
Gold deposits	(11,333.4)	–	–	–	–	–	–	–	(11,333.4)
Total liabilities	(103,912.5)	(45,148.0)	(45,049.7)	(28,142.3)	(17,758.0)	(10,397.3)	–	–	(250,407.8)
Derivatives									
Net settled cash flows									
Options and interest rate contracts	(67.9)	(63.4)	(46.3)	26.7	79.6	(141.0)	(0.4)	–	(212.7)
Gross settled cash flows									
Interest rate contracts									
Inflows	56.9	8.8	3.0	60.7	150.1	137.6	–	–	417.1
Outflows	(59.5)	(8.5)	(2.2)	(61.1)	(149.5)	(137.3)	–	–	(418.1)
Subtotal	(2.6)	0.3	0.8	(0.4)	0.6	0.3	–	–	(1.0)
Currency and gold contracts									
Inflows	99,932.5	48,181.8	24,913.2	17,338.0	18.7	–	–	–	190,384.2
Outflows	(99,036.6)	(47,816.5)	(24,541.6)	(16,964.8)	(18.8)	–	–	–	(188,378.4)
Subtotal	895.9	365.3	371.6	373.2	(0.1)	–	–	–	2,005.9
Total derivatives	825.4	302.2	326.1	399.5	80.1	(140.7)	(0.4)	–	1,792.2
Total future undiscounted cash flows	41,658.9	(14,481.6)	(13,178.1)	(756.0)	(9,075.9)	14,006.4	4,029.9	27.2	22,230.8

The following table shows the contractual expiry date of the credit commitments as at the balance sheet date:

Contractual expiry date *SDR millions*	Up to 1 month	1 to 3 months	3 to 6 months	6 to 12 months	1 to 2 years	2 to 5 years	5 to 10 years	Maturity undefined	Total
As at 31 March 2020	–	–	–	219.4	–	–	–	–	**219.4**
As at 31 March 2019	–	–	–	216.2	–	–	–	–	216.2

The following table shows the contractual undiscounted cash flows under lease contracts at the balance sheet date:

Contractual expiry date *SDR millions*	Up to 1 month	1 to 3 months	3 to 6 months	6 to 12 months	1 to 2 years	2 to 5 years	5 to 10 years	Maturity undefined	Total
As at 31 March 2020	(0.3)	(0.7)	(0.3)	(1.5)	(2.8)	(4.9)	(0.9)	–	**(11.4)**
As at 31 March 2019	–	–	–	–	–	–	–	–	–

B. Liquidity ratio

The Bank has adopted a liquidity risk framework taking into account regulatory guidance issued by the Basel Committee on Banking Supervision related to the Liquidity Coverage Ratio (LCR). The framework is based on a liquidity ratio that compares the Bank's available liquidity with a liquidity requirement over a one-month time horizon assuming a stress scenario. In line with the BCBS liquidity risk framework, the underlying stress scenario combines an idiosyncratic and a market crisis. However, the liquidity ratio differs in construction from the LCR to reflect the nature and scope of the BIS banking activities − in particular, the short-term nature of the Bank's assets and liabilities. Within the Bank's liquidity framework, the Board of Directors has set a limit for the Bank's liquidity ratio which requires the liquidity available to be at least 100% of the potential liquidity requirement.

The following table provides information on the development of the Bank's liquidity ratio for the last two years:

For the financial year	**2020**				2019			
Percentages	Average	High	Low	At 31 March	Average	High	Low	At 31 March
Liquidity ratio	134.2%	157.5%	118.9%	**127.7%**	139.6%	163.6%	117.5%	142.1%

The liquidity available is determined as the cash inflow from financial instruments over a one-month horizon, along with potential additional liquidity which could be generated from the disposal of highly liquid securities, or by entering into sale and repurchase agreements for a part of the Bank's remaining unencumbered high-quality liquid securities. In calculating the amount of potential additional liquidity, an assessment is performed to identify securities which are of high credit quality and highly liquid. This is followed by a projection of the amounts that could reasonably be generated through selling these securities or entering into repurchase transactions.

The Bank determines the liquidity required as the sum of the cash outflow from financial instruments over a one-month horizon, the estimated early withdrawal of currency deposits, and the estimated drawings of undrawn facilities. As regards currency deposits, it is assumed that all deposits that mature within the time horizon are not rolled over and that a proportion of non-maturing currency deposits is withdrawn from the Bank prior to contractual maturity. At 31 March 2020, the estimated outflow of currency deposits in response to the stress scenario amounted to 50.7% (2019: 50.4%) of the total stock of currency deposits. Moreover, it is assumed that undrawn facilities committed by the Bank would be fully drawn by customers, along with a proportion of undrawn uncommitted facilities.

The following table shows the Bank's estimated liquidity available, the liquidity required and the resulting liquidity ratio:

As at 31 March

SDR billions	**2020**	2019
Liquidity available		
Estimated cash inflows	118.8	127.8
Estimated liquidity from sales of highly liquid securities	35.1	40.9
Estimated sale and repurchase agreements	8.6	2.8
Total liquidity available (A)	**162.5**	171.5
Liquidity required		
Estimated withdrawal of currency deposits	123.8	118.6
Estimated drawings of facilities	2.1	2.1
Estimated other outflows	1.4	0.1
Total liquidity required (B)	**127.3**	120.8
Liquidity ratio (A) / (B)	**127.7%**	142.1%

For reference, the Bank also calculates an LCR following the principles set out in the guidance issued by the BCBS. At 31 March 2020, the Bank's LCR stood at 177.9% (2019: 196.2%).

Independent auditor's report

To the Board of Directors and to the General Meeting
of the Bank for International Settlements, Basel

Report on the audit of the financial statements

Opinion

We have audited the financial statements of the Bank for International Settlements, which comprise the balance sheet as at 31 March 2020, the profit and loss account, the statement of comprehensive income, the statement of cash flows, movements in shareholders' equity and notes, as well as capital adequacy and risk management disclosures for the year then ended, including a summary of significant accounting policies.

In our opinion, the financial statements as at 31 March 2020 give a true and fair view of the financial position of the Bank for International Settlements and of its financial performance and its cash flows for the year then ended in accordance with the accounting policies described in the financial statements and the Statutes of the Bank.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those provisions and standards are further described in the "Auditor's responsibilities for the audit of the financial statements" section of our report.

We are independent of the Bank for International Settlements in accordance with the International Ethics Standards Board for Accountants' Code of Ethics for Professional Accountants (IESBA Code) and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Other matter

The financial statements of the Bank for International Settlements for the year ended 31 March 2019 were audited by another firm of auditors whose report, dated 13 May 2019, expressed an unmodified opinion on those statements.

Other Information

Management is responsible for the other information in the annual report. The other information comprises all information included in the annual report, but does not include the financial statements and our auditor's report thereon.

Our opinion on the financial statements does not cover the other information in the annual report and we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information in the annual report and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of Management and the Board of Directors for the financial statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with the accounting policies described in the financial statements and the Statutes of the Bank, and for such internal control as Management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, Management is responsible for assessing the Bank for International Settlement's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless Management either intends to liquidate the Bank for International Settlements or to cease operations, or has no realistic alternative but to do so.

The Board of Directors is responsible for overseeing the Bank for International Settlement's financial reporting process.

Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Bank for International Settlement's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by Management.
- Conclude on the appropriateness of the Managements' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Bank for International Settlement's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Bank for International Settlements to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with the Audit Committee regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

PricewaterhouseCoopers AG

Andrin Bernet
Audit expert

Natalia Dmitrieva

Zürich, 22 May 2020

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Promoting global monetary and financial stability

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