FSB FINANCIAL STABILITY BOARD

Peer Review of Brazil

Review report

28 November 2024

The Financial Stability Board (FSB) coordinates at the international level the work of national financial authorities and international standard-setting bodies in order to develop and promote the implementation of effective regulatory, supervisory and other financial sector policies. Its mandate is set out in the FSB Charter, which governs the policymaking and related activities of the FSB. These activities, including any decisions reached in their context, shall not be binding or give rise to any legal rights or obligations.

Contact the Financial Stability Board

Sign up for e-mail alerts: www.fsb.org/emailalert
Follow the FSB on X/Twitter: @FinStbBoard
E-mail the FSB at: fsb@fsb.org

Copyright © 2024 Financial Stability Board. Please refer to the terms and conditions

Table of Contents

Foreword 1

Abbreviations 2

Executive summary 3

1. Introduction 7

2. Regulation and supervision of investment funds 8

   2.1. Market structure 8

   2.2. Regulatory and supervisory framework 11

3. Steps taken and actions planned 15

   3.1. Leverage 16

   3.2. Liquidity mismatch 18

   3.3. CVM oversight of ANBIMA 22

   3.4. Financial stability analysis 24

4. Conclusions and recommendations 25

   4.1. Ensure CVM resources reflect the growth in the size of the industry and in responsibilities 26

   4.2. Further enhance monitoring of systemic risks from interconnectedness 26

   4.3. Further enhance the leverage monitoring framework and broadening the range of anti-dilution LMTs 27

   4.4. Further enhance oversight of ANBIMA 27

Annex 1: Brazil’s implementation of G20 reforms (as of September 2024) 30

Annex 2: ANBIMA liquidity indicators 35

Annex 3: FSB and SSB work on investment funds 36

Foreword

Financial Stability Board (FSB) member jurisdictions have committed, under the FSB Charter and in the *FSB Framework for Strengthening Adherence to International Standards,*[1] to undergo periodic peer reviews. To fulfil this responsibility, the FSB has established a regular programme of country and thematic peer reviews of its member jurisdictions.

Country reviews focus on the implementation and effectiveness of regulatory, supervisory or other financial sector policies in a specific FSB jurisdiction. They examine the steps taken or planned by national/regional authorities to address IMF-World Bank Financial Sector Assessment Program (FSAP) and Reports on the Observance of Standards and Codes recommendations on financial regulation and supervision as well as on institutional and market infrastructure that are deemed most important and relevant to the FSB's core mandate of promoting financial stability. Country reviews can also focus on regulatory, supervisory or other financial sector policy issues not covered in the FSAP that are timely and topical for the jurisdiction and for the broader FSB membership. Unlike the FSAP, a peer review does not comprehensively analyse a jurisdiction's financial system structure or policies, or its compliance with international financial standards.

FSB jurisdictions have committed to undergo an FSAP assessment every five years; peer reviews taking place typically two to three years following an FSAP will complement that cycle. As part of this commitment, Brazil volunteered to undergo a peer review in 2023-2024.

This report describes the findings and conclusions of the Brazil peer review, including the key elements of the discussion in the FSB's Standing Committee on Standards Implementation (SCSI) in September 2024. It is the second FSB peer review of Brazil and is based on the objectives and guidelines for the conduct of peer reviews set forth in the *Handbook for FSB Peer Reviews.*[2]

The analysis and conclusions of this peer review are based on the responses to a questionnaire by financial authorities in Brazil and reflect information on the progress of relevant reforms as of July 2024. The review has also benefited from dialogue with the Brazilian authorities as well as discussion in the FSB SCSI.

The draft report for discussion was prepared by a team chaired by María José Gómez Yubero (Comisión Nacional del Mercado de Valores, Spain) and comprising Bryana Lee (Ontario Securities Commission, Canada), Jules Joyez (Banque de France) and Carol Ngai (Hong Kong Securities and Futures Commission). José Manuel Portero Bujalance (Comisión Nacional del Mercado de Valores, Spain) provided support to the chair. Lara Douglas and Giovanni di Iasio (FSB Secretariat) provided support to the team and contributed to the preparation of the report.

1 FSB (2010), *FSB Framework for Strengthening Adherence to International Standards*, January.

2 FSB (2017), *Handbook for FSB Peer Reviews*, April.

Abbreviations

ANBIMA	Brazilian Financial and Capital Markets Association
AUM	Assets under Management
B3	Stock exchange in São Paulo, formerly BM&FBOVESPA
BCB	Brazilian Central Bank (Banco Central do Brasil)
CoAg	Cooperation agreement
CMN	National Monetary Council (Conselho Monetário Nacional)
CVM	Securities and Exchange Commission of Brazil (Comissão de Valores Mobiliários)
FCR	Fund Capital Risk metric
FIF	Financial Investment Fund
FSAP	Financial Sector Assessment Program
FSB	Financial Stability Board
GDP	Gross Domestic Product
GNE	Gross Notional Exposure
IMF	International Monetary Fund
IOSCO	International Organization of Securities Commissions
LMT	Liquidity Management Tool
MOU	Memorandum of understanding
NAV	Net asset value
OTC	Over the counter
NBFI	Non-bank financial intermediation
OEF	Open Ended Fund
RBS	Risk based supervision
SCSI	Standing Committee on Standards Implementation (SCSI)
SRO	Self-regulatory organisation
SUSEP	Superintendency of Private Insurance

Executive summary

Background and objectives

The main purpose of this peer review is to examine Brazil's regulation and supervision of investment funds, including by following up on relevant Financial Sector Assessment Program (FSAP) recommendations and Financial Stability Board (FSB) initiatives and recommendations. The review follows up on the findings and recommendations from Brazil's first FSB peer review in 2017 and examines subsequent developments in: the Brazilian authorities' approach to monitoring vulnerabilities in investment funds; regulatory and supervisory measures to manage identified vulnerabilities and the linkages with banks; and institutional arrangements for supervising investment funds in Brazil.

Main findings

The Brazilian investment funds sector has grown significantly since 2017, reaching R$8.8 trillion in Assets Under Management (AUM) in March 2024. This represents 80% of GDP, a percentage that is comparable to advanced economies and is the highest among developing economies. The number of asset managers has nearly doubled in this time, although 58% of AUM is managed by the five largest firms. The sector is highly interconnected with domestic banks and government; almost 25% of total AUM of Brazilian funds is composed of liabilities of Brazilian banks, while more than 30% is invested in securities issued by the federal government.

Brazilian authorities have taken significant steps to strengthen the regulation and supervision of investment funds and have largely addressed the recommendations from the 2017 peer review. The introduction of Resolution 175/2022 has substantially modernised the regulation of the investment funds sector, including by introducing measures to limit leverage and expanding the availability of Liquidity Management Tools (LMTs). A new bilateral agreement has been signed between the Securities and Exchange Commission of Brazil (Comissão de Valores Mobiliários, CVM) and the Brazilian Financial and Capital Markets Association (ANBIMA).

Notwithstanding this progress, there is room for further work to improve authorities' ability to monitor vulnerabilities associated to investment funds' activities. These include (i) increasing the resources available to CVM to regulate and supervise investment funds, (ii) continuing to enhance the system-wide monitoring of financial stability risks associated with investment funds, (iii) monitoring market developments that may affect leverage and liquidity mismatch and update the regulatory framework (as appropriate) and (iv) taking further steps to formalise CVM's oversight of the SRO activities of ANBIMA.

Increasing the resources available to CVM to regulate and supervise investment funds

It is critical that CVM is appropriately resourced to carry out regulation and supervision of the industry and oversight of ANBIMA's self-regulatory activities. There has been no recruitment into CVM since 2010 due to budgetary limitations and, as staff retire or resign, they are not replaced. This poses a risk that CVM supervision will be unable to match the growth in the industry and the policy expectations under the new regulations. The 2018 FSAP also recommended the

enforcement function of CVM be strengthened by, among other things, ensuring adequate resources for prosecution.

Continuing to enhance the system-wide monitoring of financial stability risks associated with investment funds

Brazilian authorities have put in place a surveillance framework to monitor some of the vulnerabilities and risks associated with concentration and interconnectedness in the Brazilian financial system. The Brazilian Central Bank (Banco Central do Brasil, BCB) can identify the ultimate holders of quotas in investment funds, with a focus on bank holders. Regular simulation analyses are used to evaluate contagion risks between investment funds and banks.

BCB, CVM and AMBIMA have taken steps to safeguard the resilience of the secondary market for government bonds, which is the core financial market in Brazil. BCB monitors the market to detect possible anomalies, such as sudden spikes in prices and abnormal trading volumes. Resolution 175/2022 introduces the use of side pockets, which could help reduce market stress induced by fire sales of assets by investment funds. ANBIMA provides price references for certain traded securities, including government bonds, contributing to market transparency and benefiting market participants and policymakers.

The interconnectedness among domestic investments funds, banks and the government is very high. During stress, this may interact with the high concentration in the fund sector and amplify adverse shocks. Overall, also given the increased size of the investment fund sector, these vulnerabilities may have increased since last peer review. While BCB and CVM constantly monitor interconnectedness and concentration in the Brazilian financial system, they should continue to enhance their monitoring toolkit, including from a system-wide perspective.

Monitoring market developments that may affect leverage and liquidity mismatch, and update the regulatory framework

Leverage. The 2017 peer review recommended that CVM should develop measures for leverage of investment funds, monitor on an ongoing basis and introduce limitations on leverage. Brazilian investment funds are not permitted to borrow directly but certain types of funds can take on leverage using derivatives, up to a specified limit.

The new Resolution 175/2022 specifies leverage limits for certain types of investment funds. CVM and B3 - the sole domestic Central Clearing Counterparty (CCP) - have developed an advanced methodology to calculate a metric called the Fund Capital Risk (FCR), which is used to evaluate investment funds' leverage against the leverage limits set under Resolution 175/2022. The FCR metric indicates the estimated financial loss of a fund by simulating the daily liquidation of its entire portfolio under the worst-case risk scenario. It is calculated daily by B3 and supplied directly to CVM. It does not consider derivatives and exposures held by funds outside of B3's CCP, such as those with other (domestic and foreign) central counterparties or exposures that are not centrally cleared. In such cases, fund managers are required to calculate the fund's capital risk and consider it jointly with the FCR metric calculated by B3. If the sum exceeds the leverage limit specified in Resolution 175/2022, the fund manager must notify CVM. If there is no limit breach, the total leverage of the fund is not reported to CVM. This means that CVM does not necessarily have the overall picture of leverage in the investment funds.

Considering the newly granted permission for investment funds to allocate up to 100% of their AUM to cross-border assets and the potential for a new CCP to enter the domestic market, CVM should constantly monitor the overall derivative exposures and associated leverage of investment funds. This may include (i) tracking main developments by collecting data and building times series on gross notional exposures (GNE, as per IOSCO's definition) of all derivative positions, which would complement the FCR metric, and (ii) extending the methodology for the calculation of the FCR metric to include positions outside of B3, which would increase the effectiveness of leverage limits specified by Resolution 175/2022.

Liquidity mismatch. The 2017 peer review recommended that CVM should (a) consider allowing post-event liquidity management tools (LMTs) to be deployed at short notice without the approval of investors; and (b) assess the adequacy of existing liquidity risk management tools and consider whether to broaden the range of such tools available.

Resolution 175/2022 allows for the possibility for redemption gates and side pockets to be deployed as post-event (or quantity-based) LMTs at short notice without the approval of investors, if they are provided for in the fund's bylaws. The implementation of these LMTs is in progress as there remains another year until final implementation of the Resolution 175/2022.

In terms of anti-dilution LMTs, Resolution 175/2022 allows redemption fees to be used under normal market conditions. CVM did consider the introduction of other anti-dilution LMTs, such as swing pricing. They are concerned that making anti-dilution LMTs mandatory for a wide range of funds with daily liquidity could reduce the competitiveness of these funds. This is because investors may perceive the anti-dilution LMTs as additional costs. Additionally, CVM's view is that using LMTs such as swing pricing during times of market stress could be complex and less precise. In exceptional situations, quantity-based LMTs such as redemption gates would provide a more equitable treatment of investors compared to anti-dilution LMTs, including swing pricing, particularly in less diversified and shallower markets like Brazil.

Furthermore, CVM believe that the risk of first mover advantage is already mitigated through daily pricing of fund assets and proper management of the fund's liquidity demand and supply. This can be achieved through the implementation of preventive and predictive practices and procedures. To enable rapid identification and rectification of structural liquidity issues, CVM introduced comprehensive and advanced daily and monthly liquidity monitoring, accompanied by detailed follow-up with investment funds, with enforcement action taken where appropriate. Nonetheless, CVM should continue to review market practices and recommendations to reduce vulnerabilities associated to liquidity mismatch in investment funds and periodically consider whether broadening the range of anti-dilution LMTs is appropriate.

Taking further steps to formalise CVM's oversight of the SRO activities of ANBIMA

The 2017 peer review recommended that CVM should review and reconsider its bilateral agreements with ANBIMA so that regulatory authority for investment funds is exerted by CVM or by a self-regulatory organisation (SRO) that is subject to oversight from CVM and free from conflicts of interest. The 2018 FSAP also included a recommendation for strengthened cooperation allowing CVM proper oversight of ANBIMA's SRO activities in the investment fund sector.

ANBIMA is a voluntary SRO that undertakes data collection and provides operational guidance through Self-Regulation Codes on implementation of regulations, education and training and supervision activities. Since the 2017 peer review, a new bilateral agreement between CVM and ANBIMA has been signed, which establishes obligations with regard to ANBIMA's self-regulatory activities. This agreement includes five annexes that establish the criteria and parameters of ANBIMA's supervisory work. ANBIMA's data collection and supervision activities provide a useful complementary information source for CVM's supervision. Whilst ANBMIMA has developed liquidity indicators, CVM has retained full and exclusive supervision of leverage and liquidity mismatch.

ANBIMA's self-regulatory activities play an important role in the overall regulation of the industry. The bilateral agreement between CVM and ANBIMA sets out the mechanisms by which CVM can exert oversight of ANBIMA's SRO activities. However, in such agreement, there is scope for more explicit formalisation of certain arrangements and oversight practices adopted by, and available to, CVM. These could include a requirement from CVM that ANBIMA have internal policies and procedures that address conflicts of interest inherent in its role as an SRO, so that such policies and procedures can be formally monitored and addressed by CVM; the introduction of a formal process for ANBIMA to refer or escalate matters requiring regulatory intervention; formal reference in the agreement to CVM's powers to act based on the reports delivered from ANBIMA to CVM; and a formal requirement for ANBIMA to act on CVM's opinion on ANBIMA's self-regulatory rules.

Recommendations

In response to these main findings, the peer review has identified the following recommendations to the Brazilian authorities:

1. CVM resources dedicated to the regulation and supervision of investment funds should be replaced upon retirement or resignation, and generally increased. This increase is required to reflect the recent significant growth in the fund sector and CVM's responsibilities to supervise investment funds under the new regulatory framework.

2. The authorities should continue to enhance the monitoring of financial stability risks associated with investment funds' activities, including with a system-wide perspective. This is particularly needed given the high concentration in the fund industry and the elevated and multi-layered interconnectedness between domestic banks, funds and the government.

3. Looking forward, CVM should (i) continue to enhance the monitoring and policy framework for investment fund leverage to also capture activities taking place outside the only CCP that is currently operating in the Brazilian market (B3); and (ii) consider broadening the range of anti-dilution LMTs available to investment funds consistent with market developments and in light of the FSB's Revised Recommendations and IOSCO's Guidance published in December 2023.

4. CVM should take further steps to enhance its oversight of ANBIMA's SRO activities, including by addressing gaps in its current oversight, formalising existing practices through policies and procedures that are explicitly included in its agreement with ANBIMA, and providing more granular detail about CVM's oversight of ANBIMA's SRO activities in the agreement where greater clarity is needed.

1. Introduction

Brazil's first FSB peer review was published in 2017. The review focused on trade reporting and its use in systemic risk monitoring, and the regulation and supervision of investment funds.[3] The review found that significant progress had been made on both topics.

Brazil stood out among its FSB peers for the pioneering work it has carried out on trade reporting and its use in systemic risk monitoring. The regulatory and supervisory framework for investment funds had been strengthened, while regular monitoring of liquidity risk in the sector was underway. However, there was additional work to be done in both areas. On trade reporting, this involved intensified monitoring of any increased operational risks within private financial market infrastructure; implementing international data standards; and establishing arrangements to facilitate authorities' access to trade repository-held data on a cross-border basis. On investment funds, this involved defining and monitoring leverage on an ongoing basis; reviewing the range and functioning of liquidity risk management tools; and reviewing arrangements with an industry body (ANBIMA) so that regulatory authority for investment funds is exerted by CVM or by an SRO that is subject to oversight by CVM and free from conflicts of interest. The review set out recommendations in these areas.

Brazil subsequently underwent an FSAP Update in 2018.[4] The FSAP noted that Brazil's financial system has been stable and continues to be dominated by large, vertically integrated conglomerates. The financial system is large and dominated by banks and investments funds; financial markets are dominated by short-term assets and derivatives; and the public sector plays a dominant role in the financial sector, with public banks providing 55% of bank credit. The FSAP found that banks were broadly resilient to severe financial shocks, and supervision and regulation have strengthened at both micro and systemic levels for banks, financial market infrastructures and funds. Nevertheless, it also noted that strengthening the underpinnings of regulatory agencies - BCB, the Superintendency of Private Insurance (SUSEP) and CVM – is needed; there are areas where improvements in the supervisory process are needed; enhancing the macroprudential and crisis management frameworks would help shelter the financial sector against risks in the future; and improving financial intermediation efficiency, reforming the role of public banks and developing the long-term fixed income market are crucial to the financial sector.

The IMF's 2023 Article IV consultation noted that after a rapid recovery from the pandemic, economic activity is converging towards potential levels.[5] The financial sector has remained resilient, the banking system is sound and systemic risks are contained. Banks have limited exposure to interest rate shocks, as their security holdings are mostly of short maturity or with variable coupons.

Brazil has made good progress in implementing Basel III reforms and preliminary steps have been undertaken in relation to Compensation reforms. No further steps are planned in relation to completing implementation of Resolution, OTC Platform trading or NBFI reforms. Annex 1 provides an overview of Brazil's implementation status of G20 financial reforms as of October

---

3 See FSB (2017), *Peer review of Brazil*, April.

4 See IMF (2018), Brazil: Financial System Stability Assessment, *IMF Country Report* No. 18/339, November.

5 See IMF(2023), Brazil: 2023 Article IV Consultation, *IMF Country Report* No. 2023/288, July.

2024, including the steps taken to date and actions planned by the authorities in core reform areas (not covered in this peer review) where implementation has not yet been completed.

This peer review assesses Brazil's regulation and supervision of investment funds.

2. Regulation and supervision of investment funds

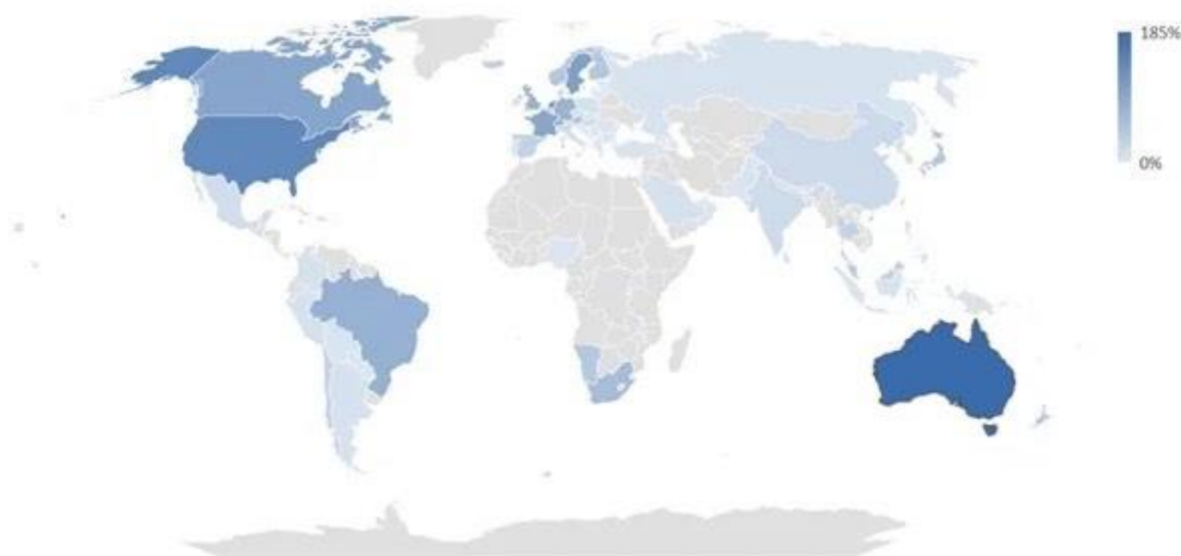
2.1. Market structure

2.2.1 Overview

In Brazil, the investment funds sector has grown significantly since 2017 and reached R$8.8 trillion in Assets Under Management (AUM) in March 2024, representing 80% of GDP.[6] This ratio is comparable to those in advanced economies, such as the United States and the European Union, while it is the highest in Latin America and among developing economies (See Graph 1).

Global view of investment fund assets to GDP (2020)

In per cent **Graph 1**



Sources: World Bank; FSB.

Just over half of AUM is held in fixed income funds (52%), while multimarket investment funds are the second largest type of fund by AUM (21%, see Table 1 below).

6 Figures exclude funds-of-funds, to avoid double counting.

Table 1: Structure and size of investment funds sector in Brazil (March 2024)

Type of Fund	Investor Type	Open-ended/Closed-ended	AUM (R$Bn)	% of total AUM	Number of funds	% of total number of funds
Fixed Income	Unrestricted/Restricted	Open/Closed	4,622	52%	2,853	15%
Multimarket	Unrestricted/Restricted	Open/Closed	1,893	21%	8,863	45%
Private Equity	Restricted	Closed	784	9%	1,697	9%
Equity	Unrestricted/Restricted	Open/Closed	652	7%	2,640	13%
Real Estate	Unrestricted/Restricted	Closed	319	4%	975	5%
Standard Asset-Backed Securities	Unrestricted/Restricted	Open/Closed	263	3%	1,334	7%
Non-standard Asset-Backed Securities[1]	Restricted	Open/Closed	198	2%	985	5%
Foreign Exchange	Unrestricted/Restricted	Open/Closed	6	0%	36	0%
Other Investment Funds	Unrestricted/Restricted	Open/Closed	79	1%	217	1%
Total			8,816	100%	19,600	100%

Source: CVM. Percentages may not add to 100 due to rounding. [1] Non-Standard Asset- Backed securities are generally more risky than Standard Asset-Backed securities.

Concentration and interconnectedness

Each investment fund is required to have a fiduciary administrator, an asset manager and a custodian, all of which must be registered with CVM.[7] The registration procedure is part of the Agreement between CVM and ANBIMA. Entities can be registered as "full administrators" which means that they can act as both the fiduciary administrator and the asset manager, provided they comply with separation of information requirements.

There has been exponential growth in the investment funds industry since the 2017 peer review. Although there has been some consolidation of fiduciary administrators, the number of asset managers has nearly doubled and the number of custodians has increased by over a third. The sector is characterised by a high degree of concentration of service providers, as described below:

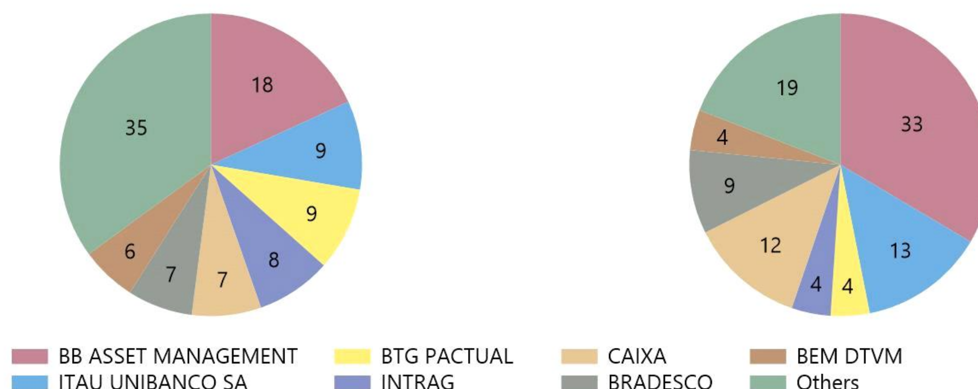
[7] The fiduciary administrator is the principal fund 'gatekeeper'. Its duties include, but are not limited to, preparing and disclosing the investment fund's constitutive documents and periodic information, hiring and supervising all service providers necessary for the investment fund's proper functioning (e.g. supervising the asset manager's adherence to regulation and, specifically, the investment fund's investment strategy limits and liquidity management policies), controlling subscriptions and redemptions by investors, communicating with investors; the relationship with the regulator including reporting and calculating NAV. The asset manager is responsible (subject to the limitations set out in the investment fund's constitutive documents) for making and executing the investment decisions. The custodian is the financial institution responsible for safekeeping of the investment fund's assets. See Box 4 in the FSB (2017), *Peer review of Brazil*, April, for more detail.

- There are 100 active fiduciary administrators, and the largest 10 account for 80% of total AUM of Brazilian funds.
- Of the 1005 active asset managers, 95% of AUM is managed by the largest 144 managers. The five largest asset managers manage 58% of AUM.
- There are 58 active custodians, with 95% of AUM held by 18 of these custodians, all of which are connected to the largest Brazilian financial institutions. Four out of the five largest custodians are connected to the top 10 asset managers.
- Five Brazilian banking groups account for more than half of the total AUM of Brazilian funds. The prominent leader in the market (BB Asset Manager of the Banco do Brasil group) holds twice the market share of the second-largest competitor (Itau Unibanco) and a third of the fixed income investment fund market (see Graph 2).

Market share by investment fund (March 2024)[1]

In per cent **Graph 2**

A. Total B. Fixed income



[1] Percentages may not sum up to 100% due to rounding; Intrag is linked to Itaú Unibanco SA, and BEM DTVM is linked to Bradesco.
Source: ANBIMA; FSB calculations.

The Brazilian financial system is characterised by high degree of interconnectedness between funds, banks and the government. Besides the links between funds and banks already mentioned, 24.6% of total AUM of Brazilian funds is held in the form of short-term lending to – or instruments issued by – Brazilian banks, e.g. money market instruments (6.6%) and reverse repos (18.0%).[8] In addition, 31.1% of total AUM of funds is invested in securities issued by the general government, and the federal government invests in Brazilian funds (1.3% of total equity).

2.2.2 Developments since 2017 peer review report

There has been significant growth in the sector since the last FSB peer review in 2017. This growth continued throughout the COVID-19 pandemic. Much of the growth is driven by fixed income funds (32%), multimarket funds (19%), pension funds (15%), and private equity funds (12%) (see Graphs 3 and 4).

---

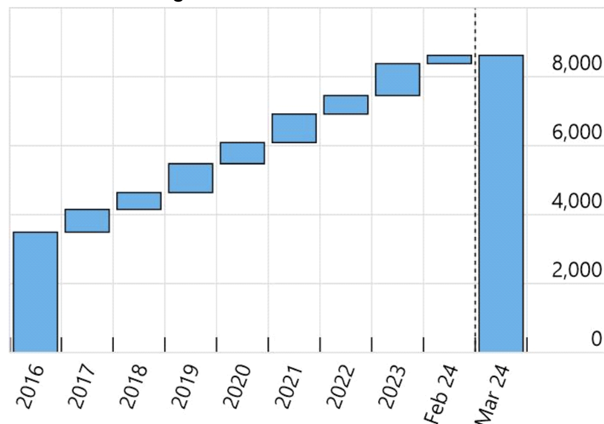
[8] In Brazil, these linkages mainly arise because investment funds channel their liquidity to banks via reverse repo operations backed by government debt; the Central Bank drains this liquidity through reverse repos with banks.

Investment fund AUM

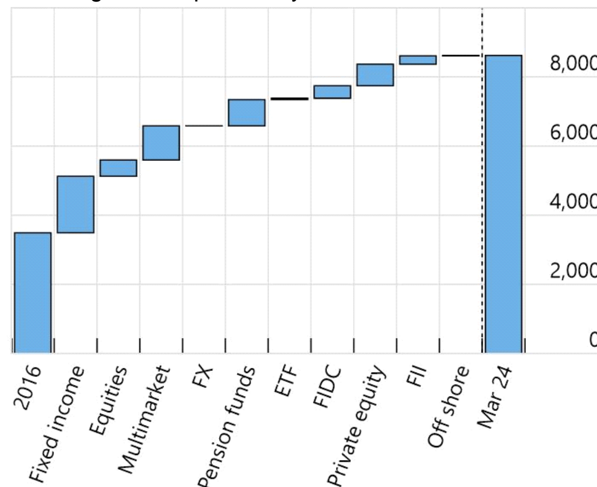
In BRL bm

Graph 3

A. AUM annual growth



B. AUM growth explained by investment fund

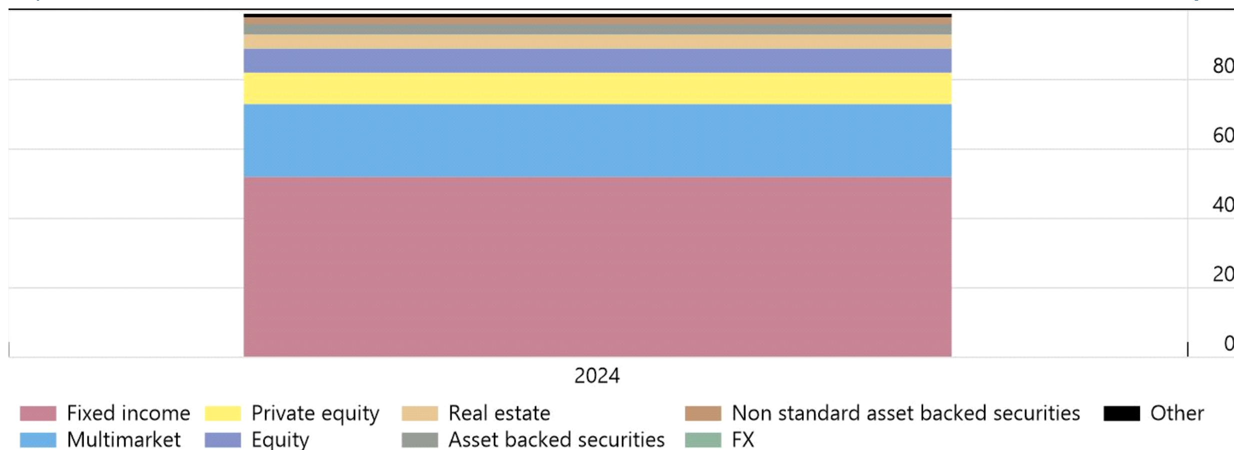


Sources: ANBIMA; FSB calculations.

Market share by investment type in 2024

In per cent

Graph 4



Sources: ANBIMA.

2.2. Regulatory and supervisory framework

2.2.1. Regulatory framework

The overarching normative body that sets monetary and credit policy in Brazil is the National Monetary Council (CMN). The BCB supervises financial institutions taking demand deposits, other financial institutions, currency exchange banks and other financial intermediaries and administrators of third-party assets. The CVM supervises commodities and futures exchanges, stock exchanges and other financial intermediaries and administrators of third-party assets.[9]

[9] See Annex 1 of the FSB Peer review 2017 for further details.

CVM is responsible for the regulation of the investment fund sector within the policy framework defined by the CMN. CVM has the power to make rules, supervise, and sanction operators within the securities markets. All investment funds must be registered with CVM. However, where the asset manager is part of a banking conglomerate, the BCB is responsible for verifying management and risk control mechanisms of asset managers and the segregation between fund administration and management of the administering institution. In such cases, the asset manager is subject to oversight by both the BCB and CVM. In addition, ANBIMA, is an industry association that functions as a voluntary SRO for investment funds through the adoption of codes by its members and its ability to impose fines (see also Section 2.3.3). CVM has oversight over the self-regulatory activities of ANBIMA that are covered in ANBIMA's most recent agreement with CVM, which is described in greater detail in Section 3.3 below.

Since the publication of the first FSB peer review in 2017, CVM has established a new regulatory framework for investment funds through CVM Resolution 175/2022, which came into force in October 2023. Resolution 175/2022 governs all investment funds and revokes several instructions issued by CVM that previously governed investment funds, bringing together Brazil's investment funds regulatory framework under a single rule.

Resolution 175/2022 has substantially progressed and modernised the regulation of the investment funds sector by allowing features in the sector that meet international practices whilst being tailored to the domestic market. The key features introduced are summarised in Box 1 below.

Box 1: Key features of Resolution 175/2022

New features introduced by Resolution 175/2022 include:

- Permitting investment funds to segregate their portfolio into classes of quotas, which allows for diversified strategies to exist in the same investment platform, with the possibility of different governance cost structures, and distribution structures for each class
- Permitting investment funds to limit the liability of quota holders to the number of quotas to which they are subscribed through their bylaws
- Applying liquidation procedures to investment funds that have limited liability for their quota holders when the investment fund does not have sufficient assets to account for their debts, in accordance with the Brazilian Economic Freedom Law
- Improving the balance of responsibilities among the administrator and the portfolio manager
- Requiring investment fund bylaws to provide specific information about administration, distribution and management fees
- Permitting retail investors to access asset-backed securities funds, providing that certain conditions are met
- Permitting investment funds to allocate up to 100% of their AUM on cross-border assets
- Permitting investment funds bylaws to permit redemption barriers for liquidity risk management
- Permitting investment funds to use side pockets for liquidity risk management.

The classification of funds was set up as follows:

I) Financial investment funds (FIF) are those regulated by regulatory Annexe I. It encompasses:

a. Fixed income funds: they must have at least 80% of their portfolio in assets directly related, or synthesised via derivatives, to fixed income products.

b. Multi-market funds: such fund shall have investment policies involving several risk factors, without commitment to concentration on any specific factor.

c. Equity funds: the main risk factor for the portfolio of such fund must be the variation of the prices of shares admitted for trading in the organised market.

d. Foreign-exchange funds: the main portfolio risk factor for such fund must be the variation of foreign currency prices.

II) Alternative investments funds, mentioned from regulatory Annexe II to regulatory Annexe IV. It encompasses:

a. Real Estate Investment Funds (FII): such funds are closed-ended condominium and invest in real estate developments. FIIs may be targeted at general investors (retail) or at qualified investors.

b. Assets Backed Securities Funds (FIDC): they may be organised either as open-ended or closed-ended condominiums. CVM Resolution 175 allows non-qualified investors (retail) to subscribe only senior quotas that have priority in the amortisation and redemption of quotas, while the other classes of quotas will be subordinated to the senior quotas for amortisation and redemption.

c. Private Equity Funds (FIP): these are closed-ended condominium and are restricted to qualified investors. A FIP must maintain at least 90% of its net assets invested in securities.

Limits are set out for each of those funds:

(i) Foreign concentration: to limit the spill over of foreign financial crises to Brazil's investment fund sector and wider financial system. FIF are subject to a limit that varies according to the type of investors, ranging from 20% of the net asset value where the investors are retail, to unlimited when the class is aimed exclusively at professional investors.

(ii) Issuer concentration: requires the manager to diversify its investments. With diversification, the risks of dependency toward a given issuer decrease, which increases the stability outlook of the fund. FIF cannot invest more than 20% of net asset value issued from a single issuer.

(iii) Financial asset concentration: limits asset type concentration concerning FIF, as set per Section V of Chapter VIII of Regulatory Annex I. Assets Backed Securities Funds are also submitted to such requirement according to Regulatory Annex II.

The portfolio manager is responsible for observing the limits on portfolio composition.

Reporting and disclosure

There are comprehensive reporting arrangements in place, requiring regular granular reporting from investment funds to both CVM and BCB. This information and associated analysis may be exchanged between CVM and BCB in accordance with their April 2014 bilateral agreement.[10] In addition, CVM also obtains certain information from B3 and the Central Custody and Financial

[10] CVM and BCB have a bilateral agreement that addresses information sharing, proprietary systems access, joint activities coordination, prior considerations in regulatory updates and derivative contracts admission to being traded and exchanges and organized markets.

Clearing of Securities system.[11] More information about such data and metrics is discussed below in Sections 3.1, 3.2 and 3.4.

CVM publishes on its website some of the information that it receives but does not publish information that it considers to be potentially market sensitive.

Fiduciary administrators are required to inform to CVM the investment funds' liquidity daily and publish details of the portfolio of the investment fund monthly, including information on the margins deposited on behalf of the investment fund to guarantee any derivatives exposures on B3. In addition, fiduciary administrators are required to publish a monthly risk report that discloses the total notional value of all derivatives traded in the B3 clearing system, with a 3-month time lag.[12] Changes in exposures can also be monitored by investors via the publication of this information.

2.2.2. Supervisory framework

CVM is entrusted with broad supervisory powers over the asset management industry, including the power to conduct on-site examinations, investigate illegal acts, suspend or cancel any registrations, and apply penalties to any persons committing violations. In addition, and specific to investment funds, CVM has the power to prohibit market participants from performing any activities that CVM considers to be harmful for normal market functioning; however, CVM notes that it has not had to use this prohibition power to date. Minor regulatory breaches are dealt with by direct communication with the related market participant and establishment of a deadline to implement adjustments, and application of regulatory fines. Sufficiently relevant breaches can trigger stronger actions, including temporary revocation of the authorization to operate or disqualification, up to a maximum period of 20 years.

Within CVM, the Office of Institutional Investors Supervision is responsible for preparing a biennial risk-based supervision (RBS) plan for the industry. This is approved by the CVM Board and includes the framework for both offsite and on-site supervision and for reviewing the quality of ANBIMA's self-regulation activity (see section 3.3 for further details). The RBS plan identifies targets for surveillance on a two-year basis using criteria such as size and interconnectedness of the different service providers related to the investment funds, as well as the class and investment policy of the investment funds. The CVM and BCB also organise joint on-site inspections on financial institutions that administer investment funds.

Off-site supervision focuses on investment fund documents and information disclosed, particularly to investors, daily assessment of industry-wide and individual fund liquidity levels, investment fund leverage, and exposure to different risk factors and diligence levels on credit asset purchases. On-site supervision focuses on assessing the structure of the operator of the investment fund, including staff, systems, controls and routines for management of assets, compliance arrangements, conflicts management, management of information barriers and risk management arrangements.

---

[11] B3, formerly known as BM&FBOVESPA, is the only stock exchange operating in Brazil.

[12] This information is segregated into five risk factors (stock, exchange rate, exchange coupon, interest rate and others) and long or short positions.

The execution of the RBS plan is significantly limited by the shortage of human resources at CVM. There are currently 40 staff in the supervision division although not all are conducting supervision activities. The first competition since 2010 is currently underway, with 60 places available in CVM. However, according to the information available to date, no allocation of new staff to the Investment Fund supervision team is being planned. Retiring staff have not been replaced. Given the exponential growth of participants in the sector, investment in technology to automate the collection, processing and analysis of data is critical and some of the new positions will be targeted to developing this. Budget reductions and delays in execution of available budget have also hampered investment in technology.

2.2.3. Role of ANBIMA

ANBIMA is a non-profit legal entity organised as a civil association that seeks to represent the different types of institutions that are active in Brazilian capital markets, including asset managers, fiduciary administrators, brokerage firms, universal banks and investment banks. ANBIMA's mission is to represent and defend its members' interests while strengthening the local capital market as an instrument to finance the country's socioeconomic development.[13] ANBIMA represents almost all Brazilian capital markets participants, including 1,115 asset managers and fiduciary administrators, representing more than 99% of the investment fund industry's AUM.

ANBIMA's status as an SRO does not have a statutory basis; instead, ANBIMA is a voluntary SRO. ANBIMA has developed a voluntary self-regulatory framework for investment funds managed by its members, which includes a number of codes, including the Portfolio Administration Self-Regulatory Code.[14] In addition, ANBIMA collects and publishes on its website aggregate industry information based on reporting by its members, while CVM publishes fund-specific data.

After the publication of the 2017 peer review, in July 2018, CVM signed a new bilateral agreement with ANBIMA, which is described in greater detail in Section 3.3 below.

3. Steps taken and actions planned

There were three recommendations in the FSB Peer review 2017 related to the regulation and supervision of investment funds. Steps taken for each of these are outlined below, with Resolution 175/2022 substantially addressing the findings.

Brazilian authorities have identified leverage and liquidity mismatch as the two primary vulnerabilities associated with investment funds' activities. However, they have assessed the risk to financial stability as very low (see Sections 3.1 and 3.2).

[13] See anbima.com.br.

[14] See .anbima.com.br self-regulation codes.

3.1. Leverage

Recommendation 4 in the FSB Peer review 2017 indicated that CVM should develop regulatory definitions and measures for leverage of investment funds, monitor leverage on an ongoing basis through information provided by fiduciary administrators, and consider introducing additional limitations on investment fund leverage as appropriate.

Brazilian investment funds are not permitted to borrow directly, but they can take on leverage using derivatives ('synthetic leverage') and securities financing transactions. As far as synthetic leverage is concerned, the majority of derivatives trading of Brazilian investment funds is exchanged in, and cleared by, B3.

Resolution 175/2022 specifies leverage limits in terms of 'maximum gross margin' as a percentage of AUM that should not be exceeded for certain types of funds when using derivatives. Different types of FIF have different leverage limits (see Table 2). Funds other than FIFs are generally not allowed to leverage.[15]

Table 2: Maximum gross margin limits (% of AUM)

FIF	Retail investors	Qualified investors, different from professional investors[16]	Professional investors[17]
Fixed income	20%	20%	No limit[1]
Foreign Exchange	40%	40%	No limit[1]
Equities	40%	40%	No limit[1]
Multimarket	70%[2]	70%[2]	No limit[1]

[1] FIFs exclusively intended for professional investors are not subject to maximum gross margin limits under the Resolution 175 but they may be subject to limits specified in their bylaws. [2] Multimarket funds that engage in long and short operations are not required to observe the gross margin limit, as the risk is related to the price movements of the assets involved in those operations, rather than the gross margin.

CVM uses a metric called Fund Capital Risk (FCR) to evaluate FIF's leverage in relation to their derivatives positions against the limits specified in Resolution 175/2022. This facilitates CVM to conduct both individual (conduct supervision) and industry-wide (prudential analysis)

[15] Non-FIF funds are Asset Backed Securities, Real Estate, Private Equity and ETFs and may only use derivatives for hedging purposes. Private Equity funds may take out loans or raise funds directly from funding organisations up to a value of 30% of the assets in their respective portfolio.

[16] Qualified investors are (i) professional investors, (ii) natural persons or legal entities with financial investments in excess of R$ 1,000,000.00 (one million Brazilian Reais) who additionally attest in writing their status as qualified investors through a specific statement, (iii) natural persons who have passed technical qualification exams or hold certifications approved by the CVM as requirements for the registration of investment advisors, portfolio administrators of securities portfolios, securities analysts, and securities consultants, in relation to their own resources, and (iv) investment clubs, provided their portfolio is managed by one or more unit holders who are qualified investors.

[17] Professional investors are (i) financial institutions and other institutions authorised to operate by the Central Bank of Brazil, (ii) insurance companies and capitalization societies, (iii) open and closed supplementary pension entities, (iv) natural persons or legal entities with financial investments in excess of R$ 10,000,000.00 (ten million Brazilian Reais) who additionally attest in writing their status as professional investors through a specific statement, (v) investment funds, (vi) investment clubs, provided their portfolio is managed by a portfolio manager authorized by the CVM, (vii) investment advisors, portfolio administrators of securities portfolios, securities analysts, and securities consultants authorized by the CVM, in relation to their own resources, (viii) non-resident investors, and (ix) endowment funds.

assessments. The metric has been developed by B3 in collaboration with CVM and financial market participants (see Box 2). The FCR metric indicates the estimated financial loss of a fund by simulating the daily liquidation of its entire portfolio under a worst-case scenario. The metric is calculated daily for all funds that are subject to the leverage limit and guarantee balance held in B3's Clearing House.

The FCR metric information has been made accessible to CVM on a daily basis from January 2024, as well as to fiduciary administrators, portfolio managers and controllers through B3's iMercado Portal.

Box 2: Fund Capital Risk metric[18]

The FCR metric indicates the estimated financial loss for the fund by simulating the daily liquidation of its entire portfolio under a worst-case scenario, and follows the same principles and parameters used in the calculation of margin requirements by B3's central clearing process.

The FCR metric is calculated by discounting the market value of the positions from the result of the cash flow sum obtained from applying the portfolio closing strategy in the worst-case scenario:

$$FCR = CORE0 - MtM$$

$CORE0$ = sum of cash flows generated by applying the portfolio closing strategy using the value under the worst-case scenario.

MtM = sum of cash flows generated by applying the portfolio closing strategy using the value under the neutral scenario, i.e., applying a shock equal to zero to all underlying primitive risk factors.

The FCR metric considers the market risk, the liquidity risk and the cash flow risk:

Market risk consists of the risk of losses resulting from the price variation of the instruments in the defaulting client's portfolio from the moment the margin is calculated until the moment the position is closed. Market risk is introduced through a set of 10,000 scenarios that consider future prices of traded instruments and collateral over the relevant risk horizon for margin calculation (from 1 to 10 days). A risk scenario is defined as the set of values that the primitive risk factors assume over this risk horizon, obtained from the estimation of future variations (or returns) applied to their current values. The set of scenarios used in risk assessment covers historical, quantitative and prospective (what-if) scenarios.

Liquidity risk consists of the combination of the time it takes to close a position and the risk of price variation that the position is exposed to during this closing period. It is determined by factors such as the size of the position being closed, the available liquidity for the closure, and the market risk associated with the position.

Cash flow risk consists of the risk of temporary lack of resources needed to meet obligations to which the central counterparty is exposed when it assumes a client's position for its closure. This risk materializes when there is a mismatch between incoming and outgoing cash flows during the position closing period.

In undertaking conduct supervision, CVM identifies funds with heightened risk based on the FCR metric and assesses their portfolios against defined mandates outlined in their bylaws. CVM's conduct supervision to date has not found evidence of excessive leverage. As of 30 April 2024, 3,951 investment funds (with a total AUM of R$3,085 billion) have committed margin positions with an overall FCR ratio of 2.6% (or R$80 million).

---

[18] Information extracted from B3 Technical Note - Potential Margin Metric Considering Market Risk of Investment Funds.

CVM is of the view that because the FCR metric considers a fund's exposure to potential price variations of risk factors underlying the positions it holds it is more suitable for assessing leverage risk of Brazilian investment funds as compared to the Gross Notional Exposure (GNE) measure recommended by IOSCO for assessing leverage for investment funds.[19] This is driven by the fact that Brazilian investment funds invest heavily in short-term interest rate based derivatives, which result in high GNE, but are of low risk for the fund's strategies, investors and the overall financial market system.

The FCR metric does not consider positions, derivatives and collaterals held by funds outside of B3's Clearing House, such as those held with other central counterparties, in other trading venues, or through direct negotiation with other counterparties. For funds that have OTC positions held outside B3's Clearing House, CVM requires each fund manager to calculate the related capital risk information for these OTC positions and sum it with the FCR metric calculated by B3. If the sum exceeds the gross margin limit (specified by Resolution 175/2022), the fund manager is required to notify CVM. If there is no limit breach, the total leverage is not reported to CVM. For the OTC positions outside B3, there could be differences in the methodology to set margin and collateral requirements and in the estimation of fund's capital risk. These differences in the calculation methodology could hamper the effectiveness of the leverage limits.

As of 30 April 2024, 258 investment funds (with a total AUM of R$1,246 billion) have OTC positions held outside B3. 95% of the OTC transactions made by investment funds outside B3 involve 14 large financial institutions as counterparties with low credit and reputation risk. Although the FCR metric only captures leverage-related activities conducted through B3's Clearing House, CVM believes this does not hinder its supervision of leverage as B3 is currently the only central counterparty operating in Brazil and there are no other organised OTC markets in the Brazilian financial system outside B3 that can register leverage related activities conducted by investment funds.

During prudential analysis, various data points are consolidated to assess the overall stability of the market. This includes information such as required and deposited margin, as well as exposures to key risk factors such as exchange rates, stocks, and interest rates. The objective of this analysis is to identify any abrupt or significantly impactful changes that could potentially lead to market instability or have implications for market participants.

The only leverage permitted for investment funds not covered by the gross margin limits is repurchase agreements (repos), the volume of which was of little significance for the Brazilian investment fund sector. As of 28 March 2024, the size of repo borrowing by Brazilian investment funds amount to R$109 billion, involving government bond collateral, and R$3 billion involving private securities collateral.

3.2. Liquidity mismatch

Recommendation 5 of the FSB Peer review 2017 was that CVM should: (a) consider allowing post-event (quantity-based) LMTs to be deployed at short notice without the approval of investors;

---

[19] See IOSCO (2019) *Recommendations for a Framework Assessing Leverage in Investment Funds*, December.

and (b) assess the adequacy of existing LMTs and consider whether to broaden the range of such tools available to investment funds. [20]

Resolution 175/2022 has retained the general regulatory framework of the previously applicable CVM Instruction 555 regarding liquidity risk management for investment funds. This includes designated closed-ended fund types, diversification limits both by asset type and issuer, and daily market pricing. Investment funds are also required to establish policies, procedures and internal controls to ensure that the liquidity of the asset portfolio is compatible with the timeframes for redemption payment requests and the fulfilment of fund obligations of the fund, as well as to conduct stress tests.

In addition to CVM's general regulatory framework, ANBIMA's self-regulation has laid out more granular rules regarding liquidity management for FIFs, including a methodology that seeks to ensure compatibility between the estimated liquidity demand and supply of FIFs (see Annexe 2).

Historically there has been little use of LMTs in Brazilian investment funds.[21] Prior to the new Resolution 175/2022, in the event of a material liquidity issue, the only tool available to the fiduciary administrators was to suspend subscriptions and redemptions. Fiduciary administrators were required to obtain investor approval before utilising any other tools.

As part of its thematic review on liquidity risk management recommendations,[22] IOSCO noted that before Resolution 175/2022 the regulatory framework in Brazil required the fund manager to follow some kind of contingency procedures (i.e. to call for an assembly of investors to decide on the activation of LMTs) in extraordinary circumstances. As such, Brazil was assessed as partly achieved for one particular IOSCO recommendation which is intended to ensure that any applicable LMTs can be used where necessary, and if being activated, can be exercised in a prompt and orderly manner.

Brazilian authorities acknowledge that the primary concern regarding the adequate availability of anti-dilution tools in Brazil relates to governance issue. Funds in Brazil do not have legal personality, and the investors, through the investors' general meeting, serve as the decision-making body of a fund. While the regulatory framework for funds has recently been revised to enhance the flexibility of their legal structure, the prevailing format for funds is typically a "condominium". Therefore, the appropriateness of the decision-making frameworks (e.g. executive boards or councils) for the use of anti-dilution tools have not been verified.

Resolution 175/2022 allows quantity-based LMTs such as redemption gates and side pockets to be deployed at short notice without the approval of investors, as long as it is provided for in the investment fund's bylaws. Funds that were registered with CVM prior to 2 October 2023 (i.e. effective date of Resolution 175/2022) are required to comply with Resolution 175/2022 by 30 June 2025, and therefore the actual implementation of redemption gates and side pockets by Brazilian investment funds is still in progress.

---

[20] The Recommendation 5 of the FSB Peer review 2017 referred to redemption gates, redemption-in-kind or side pocket arrangements as "post-event liquidity management tools". In its 2023 Revised Recommendations, the FSB agreed to change the terminology and referred to those tools as "quantity-based" LMTs.

[21] Less than 1% of the total number of investment funds has utilised suspension of redemption since February 2015, which is the most used tool.

[22] See IOSCO (2022), *Thematic Review on Liquidity Risk Management Recommendations*, November.

Regarding FSB's 2023 Revised Recommendations and IOSCO's Guidance on anti-dilution (or price-based) LMTs, Resolution 175/2022 allows redemption fees to be used under normal market condition, if it is provided for in the investment fund's bylaws.[23]

Brazilian authorities have considered the introduction of other anti-dilution LMTs (e.g. swing pricing) and believe that making anti-dilution LMTs mandatory for a wide range of funds with daily liquidity could impact the competitiveness of these funds. This is because investors may perceive the anti-dilution LMTs as additional costs and therefore viewed as penalties. It may also lead to the misconception that LMTs can fully replace day-to-day liquidity risk management of funds. Additionally, using tools like swing pricing during times of market stress could be challenging due to the limited availability of price references and measuring the calibration parameters of price-based tools beyond direct transactional costs tends to be more complex and less precise. In exceptional situations, quantity-based tools, such as redemption gates, would provide a more equitable treatment of investors compared to price-based tools such as swing pricing, particularly in less diversified and shallower markets like Brazil, where the use of price-based tools under market volatility conditions may require discretionary estimation of the cost of liquidity.

Furthermore, Brazilian authorities believe that the risk of first mover advantage is already mitigated through daily pricing of fund assets and proper management of the fund's liquidity demand and supply. This can be achieved through the implementation of preventive and predictive practices and procedures. CVM rules aimed specifically at liquidity management require that there are policies, procedures and internal controls to ensure that the liquidity of the asset portfolio is compatible with the timeframes for redemption settlement and the fulfilment of obligations. Both the fiduciary administrator and asset managers are responsible for implementing the policies and procedures throughout the entire life cycle of a fund. This includes product design, ongoing monitoring of the fund's liquidity risk, conducting stress tests and considering estimates for asset and liability indicators.

CVM monitors the liquidity mismatch of all open-ended and non-exclusive investment funds on a daily and monthly basis to identify funds that present temporary or structural liquidity issues or deficiencies in liquidity management policies and procedures of the funds' fiduciary administrators and asset managers.[24]

Daily basis: for each registered open-ended and non-exclusive investment fund and based on information provided by fiduciary administrators, CVM compares the liquidity of the asset portfolio against the projected cash outflows based on redemption requests received by the fund, also considering the redemption settlement timeframe. Where the balance of liquid assets is lower than the expected cash outflows, CVM raises a query with the fund manager. Between December 2022 and November 2023, there were 125 queries, of which 87 were found to be

[23] FSB (2023), *Revised Policy Recommendations to Address Structural Vulnerabilities from Liquidity Mismatch in Open-Ended Funds*, December and IOSCO (2023), *Anti-dilution Liquidty Management Tools - Guidance for Effective Implementation of the Recommendations for Liquidty Risk Management for Collective Investment Schemes*, December that lists five tools: Swing pricing, valuation at bid or ask prices, dual pricing, anti-dilution levy, and subscription / redemption fees.

[24] Exclusive investments funds are designed specifically for one or more investors as requested from a fiduciary administrator. These funds do not require liquidity enforcement because all quota holders are expected to be fully aware of the assets and liquidity characteristics. As at March 2024 this was 14,774 funds, 75% of the total number of funds.

genuine liquidity issues. Following further investigation, 22 Warning letters were sent, 1 letter communicating repeated deficiencies and 4 letters to take the first step of a sanctioning process.

Monthly basis: in January 2020, CVM launched the monthly Liquidity System (see Box 3). This system conducts stress tests to estimate the liquidity of the portfolios of open-ended and non-exclusive investment funds, as well as the funds' redemptions under stressed market conditions, based on the characteristics and concentration of the fund's investor base. This leads to identification of funds with a higher likelihood of liquidity mismatch during stress. Based on the stress tests, between December 2022 and November 2023, 120 Enforcement letters and 27 Warning letters were sent, with 6 instances of structural liquidity issues.

During times of market stress, such as the market turmoil in March 2020, BCB also conducts additional analyses to detect liquidity problems in open-ended funds that could trigger spill-over effects to banking conglomerates or pose a threat to financial stability.[25] Based on a daily moving average window of the ratio between redemptions and AUM, funds that would have their liquid assets exhausted in less than 10 business days under continued average redemptions are identified for further continuous monitoring.

Box 3: CVM's Liquidity System

On the last business day of each month, the Liquidity System calculates the liquidity mismatch of investment funds based on the following information:

(i) composition of investment funds' asset portfolios provided by the fiduciary administrators in the monthly reports of portfolio composition and balance sheets;

(ii) market depth, to ensure that asset sales do not unduly impact market prices; and

(iii) redemption deadlines specified in each fund's bylaws, as well as those of their invested funds.

The Liquidity System calculates the fund assets' liquidity based on market information and CVM compares the calculated liquidity with those reported by the fiduciary administrators to verify whether the information provided by the administrators reflects the actual liquidity situation of each fund.[26]

The Liquidity System also assesses the liquidity mismatch of each investment fund in market stress situations. For this purpose, the highest expected redemption rate (as a percentage of the fund's NAV) during stress according to their fund class, with a 1% probability of occurrence, calculated from July 2005 to June 2014 is used, as indicated in the table below:

Highest expected redemption rate during stress, percent of fund's NAV

Fund Class	Number of Quota holders (n)		
	n <= 20	20 < n <= 2,000	n > 2,000
Fixed Income	10.2%	7.9%	3.1%
Multimarket	4.8%	5.2%	1.8%
Equities	2.0%	3.1%	1.4%
Exchange Rate	5.3%	7.7%	n.a.

[25] For this liquidity analysis purpose, the investment funds' scope is: open-ended, non-exclusive, and not consolidated into prudential conglomerates; with more than 5 quota holders and that no investor holds more than 50% of total equity; with redemption periods no longer than thirty days; with at least 90% of assets invested in the domestic market; and with liquid assets smaller than 50% of total assets.

[26] Certain assets that do not allow consistent estimation of their daily trading and liquidity histories are excluded from the calculation and assets deposited as collaterals are also being excluded.

Two liquidity indices for each open-end and non-exclusive investment fund are calculated:

- **IL1**: ratio between the assets liquidity *reported by the administrators* and expected cash outflows of the fund, according to the redemption rates during stress indicated in the table above; and
- **IL2**: ratio between the asset liquidity *calculated by the Liquidity System* and expected cash outflows of the fund, according to the redemption rates during stress indicated in the table above.

Investment funds with IL1<1 and IL2<1, i.e. indicating liquidity issues in stress scenarios according to both the administrator and the Liquidity System, and those with IL1≥1 and IL2<1, i.e. indicating potential liquidity issues in stress scenarios according only to the Liquidity System, are considered by CVM for further investigation. More specifically, each month CVM selects 10 of these investment funds and requests that the fiduciary administrators and/or portfolio managers provide clarifications regarding their liquidity risk management procedures. Where evidence indicating the existence of structural liquidity management problems, CVM would take appropriate enforcement actions.

3.3. CVM oversight of ANBIMA

Recommendation 6 in the FSB Peer review 2017 was that CVM should review and reconsider its existing and contemplated bilateral agreements with ANBIMA, so that regulatory authority for investment funds is exerted by CVM or by an SRO that is subject to oversight by CVM and free from conflicts of interest.

At the time of the 2017 peer review, CVM had entered into four bilateral agreements with ANBIMA. These agreements provided for the development of an information technology system for public offerings; a simplified procedure for registering public offerings;[27] mutual utilisation of settlement agreements and applied penalties, as well as information sharing; and the development and publication of a hedge fund index.

After the publication of the 2017 peer review, a fifth bilateral agreement was signed by CVM and ANBIMA in July 2018. The agreement establishes each party's rights and obligations with regard to the self-regulatory activities carried out by ANBIMA in the investment funds industry in Brazil, covering both investment funds and their service providers, especially in the areas of administration, management, distribution and qualified services. The agreement is based on the following three pillars:

- regulation, which covers the strategic alignment between the two parties with a view to developing and improving state and self-regulatory rules of common interest
- market supervision and enforcement, which covers optimising public and private supervision and enforcement
- information exchange, which would include supervision or enforcement procedures and periodic, registrar and performance information on investment funds.

The agreement takes the form of an "umbrella" agreement, which allows for different supervisory fronts to be covered in separate annexes that can be added to the agreement subsequently to

[27] Under this agreement, ANBIMA undertakes a review process regarding draft documentation prepared by issuers. Once that documentation has been cleared by ANBIMA, it is eligible for review under the CVM's fast-track process.

the signing of the agreement. The agreement currently includes five annexes, covering portfolio manager accreditation requests, the pricing of assets in investment fund portfolios, the distribution of investment fund shares, portfolio compliance with funds regulations, and inconsistencies in investment funds' AUM and quota values.

Each annexe establishes the criteria and parameters of ANBIMA's supervisory work in the relevant area, which will be guided by the analysis manuals that are part of the annual work plan suggested by ANBIMA, which is evaluated and approved by CVM.

The agreement is managed by a committee made up of up to six representatives of CVM and up to six representatives from ANBIMA, and the committee meets at least once a quarter to cover relevant matters under each of the three aforementioned pillars and to discuss matters within their competence and evaluate the performance of the agreement. The committee is responsible for resolving issues that are relevant to the agreement and any disputes related to the agreement. The committee is also responsible for meeting extraordinarily whenever any of the members deem necessary.

The agreement sets out the relationship between CVM and ANBIMA, including how the two organizations interact and intersect in terms of their scope and responsibilities. For example, under the agreement, CVM and ANBIMA establish annual joint supervision plans based on a risk-based approach, and the supervision plans set out the priorities and topics of common interest for each year. The agreement clarifies that ANBIMA's supervisory activities consider CVM's regulatory rules as well as ANBIMA's own self-regulatory rules, with the aim of seeking to avoid overlapping public and private supervision. In addition, under the agreement, ANBIMA's application of penalties through its self-regulatory activity is based on its self-regulatory rules, while CVM is also entitled to apply sanctions resulting from non-compliance with the legal and regulatory rules supervised by the CVM. However, the agreement indicates that CVM and ANBIMA can take into account the sanctions and penalties applied by the other party. The agreement also requires that ANBIMA makes available to CVM the information produced within its supervision and enforcement activities.

The agreement includes certain mechanisms that allow for oversight by CVM over ANBIMA. In addition to the aforementioned quarterly meetings and CVM's approval of the annual joint supervision plans, ANBIMA's self-regulatory rules are submitted to CVM, who can then express its opinion on the rules. In addition, CVM may, at any time, monitor the performance of ANBIMA and its agents with regard to compliance with the agreement, and broad and unrestricted access must be given to any information or document requested by CVM for this purpose. ANBIMA must keep for 5 years an electronic file containing all documents and correspondence used to carry out the activities established by the agreement.

The results of ANBIMA's work in the areas covered in each annexe to the agreement are reported to CVM as part of the quarterly meetings held under the agreement referenced above. During these meetings, CVM has influence over the criteria and premises adopted for each type of supervision or monitoring undertaken by ANBIMA, and CVM can suggest and change these premises, where necessary, as well as propose new parameters.

CVM has full access to the information produced by ANBIMA in the context of its supervision and enforcement activities where such activities relate to the topics of CVM and ANBIMA's joint annual supervision plan, including information relating to administrative sanctioning by ANBIMA.

CVM's biennial risk-based supervision include a risk event of deficiencies in ANBIMA's performance in its self-regulation activities in certain areas. CVM carries out activities to test ANBIMA's self-regulation performance in these areas and reports on them in its annual report on risk-based supervision. In the 2023-2024 RBS plan, the supervisory priority for this risk event related to investment fund advertising on social media and compliance with regulations for retail fund placement. In the 2022 plan, the supervisory priority was suitability of product offerings for retail funds.

Under the agreement, ANBIMA must appoint agents who are duly qualified and trained to carry out the activities covered by the agreement and who will participate in ANBIMA's training program. The team at ANBIMA assigned to carry out the activities covered in the agreement meet periodically with designated CVM technicians with the aim of improving the training of ANBIMA's team, exchanging experiences, resolving doubts and standardizing criteria used within the agreement.

The agreement and relationship between CVM and ANBIMA are intended to allow the CVM to leverage the supervisory work carried out by ANBIMA over its members and identify redundancies and avoid unnecessary duplication of efforts in its supervisory activities. However, CVM conducts its own supervisory activities in the areas considered by CVM to be the most critical, including liquidity, leverage, related party transactions, illegal regulated activities conducted through digital means (e.g. internet, social media, etc.), investment fund service providers' remuneration, and anti-money laundering and combating the finance of terrorism.

ANBIMA's governance structure and internal policies and procedures address potential conflicts of interest resulting from ANBIMA being both an industry association that represents its members and a voluntary SRO. There is a segregated governance structure for the representation function of ANBIMA as an industry association and its supervision and enforcement function. With regard to the latter function, members of ANBIMA's supervision team are subject to a monitoring commission, which is made up of representatives from ANBIMA's member institutions, and the relevant self-regulation council. ANBIMA has six self-regulation councils covering different areas, including third party resource management (i.e. investment funds), and each self-regulation council is made up of a majority of external participants who are not members of ANBIMA. In addition, all employees of ANBIMA are subject to codes of conduct and confidentiality requirements, which address potential conflicts of interest.

3.4. Financial stability analysis

Brazilian authorities have put in place a surveillance framework to monitor some of the vulnerabilities and risks associated with concentration and interconnectedness in the Brazilian financial system. BCB monitors interconnectedness via holding of investment funds shares and collects monthly information regarding funds quota holders.[28] More specifically, fund administrators must submit information about the identification of the quota holder, its classification, the type, the number and the value of quotas. BCB cross checks such information against data retrieved from the Brazilian Internal Revenue Services. In addition, BCB receives information from CVM and asset registrars, the latter regarding quotas and other registered

[28] BCB Resolution #38, from November 11th, 2020

assets, such as sovereign bonds, repos, derivatives and private securities. By combining these datasets, BCB can identify the ultimate holders of quotas, with a focus on fund quotas held by banks, which is essential to capture several risk dimensions. In addition, BCB regularly conducts simulation analyses to evaluate the contagion risks between investment funds and banks. Issues are shared and discussed at the Financial Stability Committee, which meets quarterly, published in the biannual financial stability report, and earlier shared with CVM, when relevant.

BCB monitors step-in risks for banks that may provide financial support to an investment funds belonging to their conglomerate even beyond or in absence of contractual obligations.[29] For a bank, the step-in risk is measured by the ratio between the value of potential liquidity support to funds managed by managers affiliated with the bank, evaluated in a scenario of significant redemptions in investment funds, and the bank's liquidity excess. The latter is estimated from liquidity stress tests conducted by the BCB. Step-in risk is evaluated in conjunction with other stress tests carried out by the BCB. Moreover, BCB considers step-in risks to assess the liquidity of the bank under stressed conditions through the 'Expanded Liquidity Ratio', which is available monthly to the on-site bank supervision.

BCB also monitors possible contagion from the real sector on financial institutions, e.g. from a bankruptcy of non-financial company. A network of non-financial companies is built based on flows from different payment transactions and exposures of banks to the company, its suppliers and its employees are assessed. Exposures to non-financial companies through investment funds' quotas are also considered.

The monitoring of the secondary market for government bonds

BCB, CVM and ANBIMA have taken steps to ensure and safeguard the efficiency and resilience of the secondary market for government bonds.

BCB monitors the market to detect possible anomalies, such as sudden spikes in prices and abnormal trading volumes. Among other indicators, it tracks the net trading of securities for each issuer type, with the aim of detecting early warning signals of market dysfunction. Resolution 175/2022 introduces the use of side pockets, which could help reduce market stress induced by fire sales of assets by investment funds. More specifically, if certain securities become illiquid during a stress event, the fund is permitted to separate such securities from the rest of the fund. As any redeeming investor would not be able to redeem their side pocket investment from the fund immediately, the tool may help reduce redemption requests and, ultimately, forced asset sales in the market. ANBIMA provides price references for certain traded securities, including government bonds, which help market participants, as well as regulators and policymakers.

4. Conclusions and recommendations

The Brazilian authorities have taken significant steps to strengthen the regulation and supervision of investment funds. The introduction of Resolution 175/2022 has substantially modernised the regulation of the investment funds sector to international standards, which will support the industry whilst mitigating against the key risks of liquidity and leverage. The

---

[29] See BCBS (2017) Guidelines for Identification and management of step-in risk, October.

introduction of maximum gross margin limits for certain fund types and the FCR metric provide an important mechanism to monitor and limit leverage in the investment funds. Comprehensive daily and monthly liquidity monitoring has been introduced accompanied by detailed follow up with investment funds. This allows rapid identification of structural issues of liquidity mismatch. The new Resolution 175/2022 has facilitated the use of redemption gates and side pockets as anti-dilution LMTs. A new bilateral agreement has been signed with ANBIMA that establishes obligations with regard to the self-regulatory activities carried out by ANBIMA with respect to the investment fund industry. This agreement includes five annexes that establish the criteria and parameters of ANBIMA's supervisory work. The agreement also sets out the mechanism by which CVM can exert oversight of ANBIMA's self-regulatory activities.

At the same time further steps can be taken to further enhance supervision and regulation. These include ensuring sufficient resources in CVM; further enhancing the leverage monitoring framework; broadening the range of anti-dilution LMTs; further enhancing monitoring of interconnectedness and further enhance oversight of ANBIMA's self-regulatory activities.

4.1. Ensure CVM resources reflect the growth in the size of the industry and in responsibilities

The increase in number of market participants, as described in section 2.2, as well as the overall growth in the size of the sector, provide a supervision challenge for CVM. The redistribution of some of the responsibilities from the 100 administrators to the 1005 asset managers also increases supervision requirements. CVM has not received any new resources since the last competition in 2010 and staff retiring or resigning have not been replaced. The supervision work of ANBIMA goes some way to providing capacity, particularly through data collection and practical support to the industry to implement regulations in a consistent manner. However, CVM remains ultimately responsible for supervision of the sector and in particular has retained all supervision of risks related to leverage and liquidity mismatch.

Recommendation 1: CVM resources dedicated to the regulation and supervision of investment funds should be replaced upon retirement or resignation and generally increased. This increase is required to reflect the recent significant growth in the fund sector and CVM's responsibilities to supervise investment funds under the new regulatory framework.

4.2. Further enhance monitoring of systemic risks from interconnectedness

The interconnectedness among investments funds, banks and the government, remains very high and has several dimensions and layers. While BCB and CVM constantly monitor risks related to interconnectedness, these interact with the high concentration in the fund sector. Overall, risks related to concentration and interconnectedness may have increased since last peer review.

Recommendation 2: The authorities should continue to enhance the monitoring of financial stability risks associated with investment funds' activities, including with a system wide perspective. This is particularly needed given the high concentration in the fund industry and the elevated and multi layered interconnectedness between domestic banks, funds and the government.

4.3. Further enhance the leverage monitoring framework and broadening the range of anti-dilution LMTs

The introduction of maximum gross margin limits in Resolution 175/2022 along with the provision of the daily FCR metric by B3 to calculate the capital risk per fund is market leading best practice. The evaluation of the metric against the limit allows individual fund supervision as well as systemic risk analysis. However, the FCR metric does not consider positions, derivatives and collaterals held by funds outside of B3's Clearing House, such as overseas trading venues, non-centrally cleared OTC derivatives or derivatives exchanged outside B3. Given that Resolution 175/2022 now allows for more flexibility in investments in cross-border assets and there is the potential for additional central counterparties to participate in the Brazilian capital markets, this monitoring framework may need to be upgraded. This may include (i) tracking main developments by collecting data and building times series on gross notional exposures (GNE, as per IOSCO's definition) of all derivative positions, which would complement the FCR metric, and (ii) extending the methodology for the calculation of the FCR metric to include positions outside of B3, which would increase the effectiveness of leverage limits specified by Resolution 175/2022.

Historically there has been little use of LMTs in Brazilian investment funds. Whilst Resolution 175/2022 provides for the possibility of redemption barriers and side pockets the actual implementation by investment funds in their bylaws is still in progress. Anti-dilution tools such as swing pricing were considered, but not introduced in the legislation. The authorities are concerned with creating a perception that anti-dilution LMTs are a penalty, or that it can replace day to day liquidity management. Furthermore, using the tool in times of market stress could be challenging due to the limited availability of price references.

Recommendation 3: Looking forward, CVM should (i) continue to enhance the monitoring and policy framework for investment fund leverage to also capture activities taking place outside the only CCP that is currently operating in the Brazilian market (B3); and (ii) consider broadening the range of anti dilution LMTs available to investment funds consistent with market developments and in light of the FSB's Revised Recommendations and IOSCO's Guidance published in December 2023.

4.4. Further enhance oversight of ANBIMA

The steps taken by CVM since the 2017 Peer Review to address its relationship with ANBIMA, particularly by entering into the July 2018 bilateral agreement, have provided greater clarity on the respective roles of CVM and ANBIMA, and the way that the two organizations interact and intersect in terms of their scope and responsibilities, as discussed in Section 3.3. The relationship between CVM and ANBIMA and their respective roles with regard to supervision of market participants, as reflected in the July 2018 bilateral agreement, appear to be well-received by market participants.

However, there is room for CVM to further enhance its oversight of ANBIMA's self-regulatory activities. Sufficient oversight of private bodies that act in an SRO capacity remains important

for a regulatory system that makes use of SROs, as highlighted in international standards such as Principle 9 of IOSCO's Objectives and Principles of Securities Regulation.[30]

The agreement includes certain mechanisms that allow for oversight by CVM over ANBIMA, e.g. quarterly meetings, CVM's role in approving the annual joint supervision plans, and CVM's ability to comment on ANBIMA's self-regulatory rules. In addition, there are existing practices that allow for CVM oversight of ANBIMA and for the prevention of conflicts of interest within ANBIMA, although such processes are not formalised or explicitly addressed in the agreement.

In order to strengthen Brazil's investment funds regulatory and supervision framework, CVM should take further steps to enhance its oversight of ANBIMA. In particular, CVM should address gaps in its current oversight of ANBIMA's self-regulatory activities, formalise existing practices through policies and procedures that are explicitly included in CVM's agreement with ANBIMA, and provide more granular detail about CVM's oversight of ANBIMA's self-regulatory activities in the agreement where greater clarity is needed. In particular, CVM should address the following areas:

- **Conflicts of interest**: Given that ANBIMA is an industry association that is also an SRO, there are inherent potential conflicts of interest. The 2017 peer review indicated that the contemplated bilateral agreement between CVM and ANBIMA regarding data collection that was planned at the time would include governance mechanisms and accountability measures to allow CVM to identify and mitigate or eliminate any conflict of interest situations. However, the July 2018 bilateral agreement does not specifically include any provisions relating to preventing or addressing conflicts of interest. As discussed in Section 3.3, ANBIMA's governance structure and internal policies and procedures address potential conflicts of interest. However, the bilateral agreement between CVM and ANBIMA should formalise and explicitly include such governance standards and the requirement that ANBIMA have internal policies and procedures that address conflicts of interest so that CVM can formally monitor and address potential conflicts of interest inherent in ANBIMA's role as an SRO.

- **Mechanisms for ANBIMA to refer or escalate matters to CVM**: While the agreement includes elements of oversight by CVM over ANBIMA, the agreement does not specifically include any formal processes for ANBIMA to refer or escalate matters requiring regulatory intervention. Including such formal processes and providing details about such processes in its agreement with ANBIMA would strengthen CVM's oversight of ANBIMA's self-regulatory activities.

- **CVM's review of ANBIMA's reports**: The agreement requires that certain technical and other reports are delivered periodically from ANBIMA to CVM, but it does not address CVM's powers with regard to such reports, including whether CVM has the power to require that ANBIMA take action on the matters covered in such reports. Greater clarity in the agreement relating to CVM's powers with regard to these reports would strengthen CVM's oversight of ANBIMA as an SRO.

---

[30] See IOSCO (May 2017) Objectives and Principles of Securities Regulation. and IOSCO (May 2017) Methodology for Assessing Implementation of the IOSCO Objectives and Principles of Securities Regulation.

- **CVM’s oversight of ANBIMA’s self-regulatory rules**: The agreement requires that ANBIMA’s self-regulatory rules be submitted to CVM, who can then express its opinion on it. However, the agreement does not address whether ANBIMA is required to act on CVM’s opinion. A more detailed and formal process surrounding CVM’s oversight of ANBIMA’s self-regulatory rules, including its review and/or approval of such rules, would provide greater clarity to the relationship between CVM and ANBIMA.

- **CMV’s ability to sanction ANBIMA**: The agreement does not provide CVM with any sanctioning powers over ANBIMA in case of any wrongdoing on the part of ANBIMA beyond, if ANBIMA breached the agreement, the ability to terminate the agreement or notify ANBIMA to adjust its conduct. Including a formal sanctioning process over ANBIMA in the case of wrongdoing in the agreement would strengthen CVM’s oversight of ANBIMA’s self-regulatory activities.

Recommendation 4: CVM should take further steps to enhance its oversight of ANBIMA’s self regulatory activities, including by addressing gaps in its current oversight, formalising existing practices through policies and procedures that are explicitly included in its agreement with ANBIMA, and providing more granular detail about CVM’s oversight of ANBIMA’s self regulatory activities in the agreement where greater clarity is needed.

Annex 1: Brazil's implementation of G20 reforms (as of September 2024)

This table presents the status of implementation of G20 financial regulatory reforms, drawing on information from various sources. The tables below distinguish between priority areas that undergo more intensive monitoring and detailed reporting via progress reports and peer reviews, and other areas of reform whose monitoring is based on annual survey responses by FSB member jurisdictions. See here for further information.

IMPLEMENTATION STATUS OF REFORMS IN PRIORITY AREAS

Reform Area	BASEL III					COMPENSATION	OVER-THE-COUNTER (OTC) DERIVATIVES				RESOLUTION					NON-BANK FINANCIAL INTERMEDIATION		
	Risk-based capital	Require-ments for SIBs	Large exposures framework	Leverage ratio	Net Stable Funding Ratio (NSFR)		Trade reporting	Central clearing	Platform trading	Margin	Minimum external TLAC for G-SIBs	Transfer / bail-in / temporary stay powers for banks	Recovery and resolution planning for systemic banks	Transfer / bridge / run-off powers for insurers	Resolution planning for SI>1 CCPs	Money market funds (MMFs)	Securiti-sation	Securities financing transactions (SFTs)
Agreed phase-in (completed) date	*2023*	*2016 (2019)*	*2019*	*2023*	*2018*		*end-2012*	*end-2012*	*end-2012*	*2016 (2022)*	*2019/2025 (2022/2028)*							*2017/2023*
Status			C		C												**	

Legend	Final rule or framework implemented. Final rule published but not implemented, draft regulation published or framework being implemented. Draft regulation not published or no framework in place (dark red colour indicates that deadline has lapsed). Requirements reported as non-applicable. Basel III: **C**=Compliant, **LC**=Largely compliant, **MNC**=Materially non-compliant, **NC**=Non-compliant. Compensation: B,I=Principles and Standards deemed applicable only for banks (B) and/or insurers (I). OTC derivatives: R/F=Further action required to remove barriers to full trade reporting (R) or to access trade repository data by foreign authority (F). Non-bank financial intermediation: */**=Implementation is more advanced in one or more/all elements of at least one reform area (money market funds), or in one or more / all sectors of the market (securitisation). Further information on the legend.
Notes	CCPs=Central counterparties. G-SIBs=Global Systemically Important Banks. TLAC=Total Loss-Absorbing Capacity. SI>1=Systemically important in more than one jurisdiction.
Source	FSB, *Promoting Global Financial Stability: 2023 FSB Annual Report*, October 2023.

IMPLEMENTATION STATUS OF REFORMS IN **OTHER AREAS**

Reform area	**Hedge funds**			**Securitisation**			**Supervision**				**Macroprudential frameworks and tools**	
	Registration, appropriate disclosures and oversight of hedge funds	Establishment of international information sharing framework	Enhancing counterparty risk manage-ment	Strengthen-ing of regulatory and capital framework for monolines	Strengthening supervisory requirements or best practices for investment in structured products	Enhanced disclosure of securitised products	Consistent, consolidated supervision and regulation of SIFIs	Establishing supervisory colleges and conducting risk assessments	Supervisory exchange of information and coordination	Strengthen-ing resources and effective supervision	Establishing regulatory framework for macroprudential oversight	Enhancing system-wide monitoring and the use of macropru-dential instruments
Status	REF*	REF	REF*	N/A*	REF	REF	REF	N/A*	REF	REF	REF	REF

Reform area	**Credit rating agencies**		**Accounting standards**	**Risk management**		**Deposit insurance**	**Integrity and efficiency of financial markets**		**Financial consumer protection**
	Enhancing regulation and supervision of CRAs	Reducing the reliance on ratings	Consistent application of high-quality accounting standards	Enhancing guidance to strengthen banks' risk management practices	Enhanced risk disclosures by financial institutions		Enhancing market integrity and efficiency	Regulation and supervision of commodity markets	
Status	REF*	IOG	REF	REF	IOG	REF	REF	REF	REF

Legend	REF=Implementation reported as completed. IOG=Implementation reported as ongoing. ABN=Applicable but no action envisaged at the moment. N/A=Not applicable. *=collected in previous year(s) for all members.
Notes	The FSB has not undertaken an evaluation of survey responses to verify the status or assess the effectiveness of implementation. In a number of cases, the complexity of the reforms and the summarised nature of the responses does not allow for straightforward comparisons across jurisdictions or reform areas. In particular, reforms whose status in a particular area is reported as complete should not be interpreted to mean that no further policy steps (or follow-up supervisory work) are anticipated in that area. CRA = Credit Rating Agency, SIFI = Systemically important financial institution.
Source	FSB, *Jurisdictions' Responses to the IMN Survey*.

Other information	Latest IMF-World Bank FSAP: Nov 2018	Latest FSB Country Peer Review: 2017	Home jurisdiction of G-SIBs: yes	Signatory of IOSCO MMoU: yes	Signatory of IAIS MMoU: yes

The following table presents the steps taken to date and actions planned by the Brazilian authorities in core reform areas (not covered in this peer review) where implementation has not yet been completed. The actions mentioned below have not been examined as part of the peer review and are presented solely for purposes of transparency and completeness.

<table>
<tr><th>Reform area</th><th>Steps taken to date and actions planned (including timeframes)</th></tr>
<tr><td colspan="2">Final Basel III framework</td></tr>
<tr><td>Risk-based capital</td><td>Revised operational risk framework: Final rule is published and will be in force in January-2025 with transition until 2028.
Revised minimum requirements for market risk: The implementation of the minimum requirements for market risk was split in four phases.
• Phase 1 - Final rule covering the boundary between the banking book and the trading book, Market risk terminology, Definitions and application of market risk and Definition of trading desk was published in June 2021 and July 2021. It is in force since March-2022.
• Phase 2 - Default risk capital requirement: Final rule is published and will be in force in July-2024.
• Phase 3 - Implementation of the Standardised approach is in progress. Consultation document expected to be published on 1H2024.
• Phase 4 - Studies for the implementation of the Internal models approach to start in 2025.
Output floor: Brazil has an output floor applicable to each of the internal models individually (market and credit risk). In case of IRB approach, it is portfolio-specific and the scope exactly matches the exposures subject to the IRB approach, not the total RWA as per Basel III.</td></tr>
<tr><td>Leverage</td><td>Given the significant regulatory agenda underway at the BCB, updating the Leverage Ratio (LR) regulation to the 2017 standard as opposed to current 2014 standard was delayed owing to:
• the immaterial methodological differences with previous LEV standard combined with the fact that the LR for Brazil's banks leads to capital requirements that are smaller than those of the risk-based framework and that is not expected to change;
• the need to further discuss internally the wording of the updated regulation and to consult with the public for text clarity given that:
– the LR Total Exposure is the metric used for proportional application of prudential regulation;
– the LR scope of application is being expanded with the inclusion of payment service providers;
– the LR granularity is being refined to require LR compliance also by large individual institutions (solo basis);
Time frame:
• Public consultation: May-August/2024.</td></tr>
</table>

	• Publication: November/2024. • Entry into force: July/2025.
Compensation	Implementing FSB principles for sound compensation practices in Brazilian financial institutions is a task shared by different governmental supervisory entities, depending on the market sector they regulate. Considering the specific legal mandates of these supervisory entities in Brazil, as well as the financial institutions subject to FSB Compensation Principles, this implementation is the responsibility of: • Central Bank of Brazil (BCB) - banking sector. • Superintendence of Private Insurance (SUSEP) - insurance industry. • Securities and Exchange Commission of Brazil (CVM) - asset managers. Given the compensation principles are intended to apply to significant financial institutions, and are especially critical for large, systemically important firms, the efforts for its implementation in the Brazilian market were first directed to the banking sector. It is important to mention that BCB, SUSEP, and CVM do not have the same available structure to include new supervisory activities. In the CVM-specific case, an endemic, considerable lack of resources has been preventing the development of regulation on compensation practices for asset managers from being prioritized. Even so, in 2021 the CVM collected information from some large Brazilian asset management Institutions, regarding the effective alignment of risk and compensation. The questionnaire was intended to obtain elements from the firms about their risk management process, such as the common risk metrics the asset managers used to adjust profits in setting the overall bonus pool, how the firms adjust variable compensation in view of future risks, the role of control functions in the process of risk adjustment, and the extent of board oversight on the adjustment of compensation, among others. Considering the information collected, the CVM verified that some significant Brazilian asset management firms adopt compensation policies to reduce risk exposure, despite the lack of regulation. This information should be useful in a future effort to regulate this matter when CVM achieves the conditions to implement the FSB principles for sound compensation practices in Brazilian asset management firms.
Over-the-counter derivatives	
Platform trading	Unlike other countries, the derivatives market in Brazil has a high concentration on exchange trading, with a small share of the over-the-counter (OTC) market. In 2024, the exchange represents approximately 90% of derivatives trading volume, with only 10% traded on the OTC market. • There are electronic platforms available for the organized OTC market, such as “EHUB”, maintained by BBCE (Brazilian Energy

	Trading Counter), in addition to "Trader" and "NoMe", both maintained by the Brazilian stock exchange - B3. • CVM Resolution 135/2022 establishes the operating rules for regulated securities markets, which includes the OTC market. It is important to highlight that the admission of derivatives to trading on the organized market depends on the approval provided by the CVM of the respective contract model, following Normative Annex II of this Instruction. Based on these models, the Trade Repositories approve the derivative contracts admitted for registration. Therefore, we understand that, in general, the Brazilian derivatives market is compliant with the G-20 recommendations to shift more trading to exchanges or electronic trading platforms, to the extent that exchange-traded contracts have a much more significant share than over-the-counter contracts.
Resolution	
Minimum external TLAC for G-SIBs	The Central Bank of Brazil does not currently adopt TLAC requirements for the sole G-SIB operating within its jurisdiction, a subsidiary of Banco Santander. This decision aims to maintain equitable conditions among the existing D-SIBs in the region, ensuring a level playing field across the financial landscape
Transfer/bail-in/temporary stay powers for banks	Among the three powers mentioned, the Brazilian framework currently possesses only the transfer power. The remaining two powers are outlined in Complementary Bill 281, which was submitted to the National Congress in 2019 and is awaiting approval. The timeline for approval hinges on the political agenda of the legislative body.
Transfer/bridge/run-off powers for insurers	SUSEP, the Brazilian insurance industry supervisory entity, did not report any progress regarding this reform area.
Non-Bank Financial Intermediation	
Securitisation	*CVM Resolution 60/2021* requires securitisation companies to present a monthly report of the status of its distributed asset-backed securities for investors informing, among other things, such as: the performance of the credits, amortization, profitability, prepayments in the period, percentage of overdue assets, percentage of credits due by maturity from 30 days up to over 361 days and percentage of credits covered by risk retention by the assignor or third parties. The rule also requires that public offerings distributed to investors who are not considered qualified have at least one report from a risk rating agency. The risk classification must be updated at least every three months. *CVM Resolution 160*: modernised the prospectus for the public offering of securitised products. It requires the prospectus to disclose descriptive information of the relevant characteristics of credit rights, such as: a) quantity of assigned credit rights and the total value; b) interest rates or returns on assigned credit rights; c) credit due dates; d) repayment periods; e) purpose of credits; and f) description of any guarantees provided for the set of assets. Indication of the credit

	rights levels of concentration, by the debtor, in relation to the total value of credits that serve as underlying assets for the offered securities. Statistical information on defaults, losses, or prepayment of credits of the same nature as the credit rights that will make up the company providing securitization's net worth, comprising a period of three years immediately prior to the offering date, accompanied by an explanation of the methodology used for the purpose of this calculation.
Securities financing transactions	No specific steps planned.

Annex 2: ANBIMA liquidity indicators

The methodology developed by ANBIMA seeks to ensure compatibility between the estimated liquidity demand and supply of FIFs.[31] The indicators must be calculated at the individual fund level, considering the different characteristics of the FIF, its liability and asset profile, as well as the markets in which they operate.

Estimated liquidity demand must necessarily include the already known redemption orders, estimates of future redemptions, as well as costs and obligations of the fund. The following should be considered:

(i) redemption orders already known but pending settlement;

(ii) expected redemption amounts under normal market conditions, calculated using specific and verifiable criteria;

(iii) the degree of concentration of shares per investor;

(iv) time limits for settling redemptions;

(v) the degree of concentration by allocators, distributors and/or other asset managers, and analysis of the expected behaviour of these agents; and

(vi) the fund's investor segment (e.g. retail, private, institutional).

To assist asset managers in estimating and benchmarking the liquidity demand for their funds, ANBIMA, based on the daily information provided by fiduciary administrators, calculates and publishes a monthly redemptions probability matrix by term vertices (redemption period), different fund classes and type of investors.

Estimated liquidity supply must use at least of the following criteria:

(i) cash flow of each asset that integrates the fund's portfolio, including the amounts to be received as periodic interest, amortisation and principal for fixed income assets; or

(ii) estimated trading volume of an asset in the secondary market, based on historical volume discounted by a "haircut" defined in the policy; or

(iii) other criteria, as defined by the asset manager, provided that there is a reasonable basis for their use, can be fully justified in the policy and can be verified for supervisory purposes.

The asset manager must set out how each type of asset is treated as collateral, adjustments and guarantees, and how the methodology would be adjusted by considering the specificities of each asset and trading market to reflect the market dynamics of the assets of FIFs.

Each indicator must refer to a time horizon (analysis horizon), understood as the period for which the liquidity demand and supply have been estimated, in order to mitigate the liquidity risk of FIFs.

---

[31] ANBIMA's Rules and Procedures for Liquidity Management in "555" Funds (or FIFs).

Annex 3: FSB and SSB work on investment funds

The importance of investment funds globally – both in absolute terms and as a share of non-bank financial intermediation assets (NBFI) – has increased over the last decade. Key vulnerabilities of investment funds are associated with liquidity mismatch and leverage. These have been the focus of FSB and International Organization of Securities Commissions (IOSCO) work in recent years. The FSB issued policy recommendations in 2017 to address structural vulnerabilities from asset management activities.[32]

Those recommendations related to liquidity mismatch were assessed in 2022 and revised in 2023, where appropriate. Also in 2023, the IOSCO published guidance on the use of anti-dilution liquidity management tools (LMT).[33] The FSB and IOSCO will review progress by member jurisdictions in implementing their respective revised recommendations and guidance. This stocktake will be followed up with an assessment of the effectiveness of these measures in addressing risks to financial stability. The findings from this exercise will feed into the FSB and IOSCO's assessment of whether implemented reforms have sufficiently addressed these risks, including, if appropriate, whether to refine existing tools or develop additional tools for use by fund managers or authorities.

In 2024, the FSB launched work on leverage in NBFI, which includes investment funds. The work takes a holistic perspective, given the interconnectedness of NBFI and funds with other parts of the financial system. The objective is to enhance authorities' and market participants' ability to monitor vulnerabilities from NBFI leverage, contain NBFI leverage where it is likely to create risks to financial stability, and mitigate the financial stability consequences. To this end, the FSB will publish by the end of 2024 a consultation report with proposed policy approaches for authorities to address systemic risk from NBFI leverage.

---

[32] See FSB (2017), *Policy Recommendations to Address Structural Vulnerabilities from Asset Management Activities*, January. IOSCO operationalised most of the FSB Recommendations related to liquidity risk management by issuing the IOSCO Recommendations in 2018, supplemented with a set of related good practices as a reference guide.

[33] See FSB (2022), *Assessment of the Effectiveness of the FSB's 2017 Recommendations on Liquidity Mismatch in Open-Ended Funds*, December; FSB (2023), *Revised Policy Recommendations to Address Structural Vulnerabilities from Liquidity Mismatch in Open-Ended Funds*, December); FSB (2023), *Enhancing the Resilience of Non-Bank Financial Intermediation: Progress report*, November; and IOSCO (2023) *Anti-dilution Liquidity Management Tools – Guidance for Effective Implementation of the Recommendations for Liquidity Risk Management for Collective Investment Schemes: Final Report*, December.