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BRAZIL

FINANCIAL SECTOR ASSESSMENT PROGRAM

December 2018

TECHNICAL NOTE ON FUND MANAGEMENT - REGULATION, SUPERVISION AND SYSTEMIC RISK MONITORING

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FUND MANAGEMENT: REGULATION, SUPERVISION AND SYSTEMIC RISK MONITORING

Prepared By
Monetary and Capital Markets
Department

This Technical Note was prepared by IMF staff in the context of the Financial Sector Assessment Program in Brazil. It contains technical analysis and detailed information underpinning the FSAP's findings and recommendations. Further information on the FSAP can be found at

http://www.imf.org/external/np/fsap/fssa.aspx

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Glossary

ANBIMA Brazilian Financial and Capital Markets Association

AUM Assets under management

B3 Brasil Bolsa Balcão

BCB Brazilian Central Bank (Banco Central do Brasil)

CDI Certificado de Deposito Interbancário

CETIP Central de Custódia e de Liquidação Financeira de Títulos

CIS Collective investment scheme

CMN National Monetary Council (Conselho Monetário Nacional)

COMEF Financial Stability Committee

CVM Securities and Exchange Commission of Brazil (Comissão de Valores Mobiliários)

EGM Extraordinary General Meeting

ETF Exchange-traded fund

FSAP Financial Sector Assessment Program

GDP Gross Domestic Product
IMF International Monetary Fund

IOSCO International Organization of Securities Commissions

IOSCO Objectives and Principles of Securities Regulation

LA Liquid assets

LCR Liquidity Coverage Ratio

MoU Memorandum of understanding

NAV Net Asset Value
OTC Over-the-counter
PCO Predicted cash outflow

SELIC Sistema Especial de Liquidação e Custodia

SME Small and medium-sized enterprise

SRO Self-regulatory organization

SUSEP Superintendence of Private Insurance (Superintendência de Seguros Privados)

TNA Total Net Assets
VaR Value at Risk

EXECUTIVE SUMMARY

Brazil has a large and diverse investments funds sector which is subject to a robust regulatory framework. The competent authority, the Comissão de Valores Mobiliários (CVM), requires high standards of the entities it oversees and makes good use of the extensive data it receives from market participants on an ongoing basis. Fiduciary administrators play an important role as the main gatekeeper for investment funds and, despite the highly concentrated nature of the industry, there is evidence that they make a significant contribution to the safety and soundness of the sector as a whole.

The institutional set-up for oversight of the sector—in particular the role and status of ANBIMA—should be improved. The lack of a statutory basis for ANBIMA's role means that it is not able to be fully effective as an SRO, and the CVM is not able to oversee or rely on what ANBIMA does. The two entities cooperate relatively closely on the development of the regulatory framework but ANBIMA is completely independent for the purposes of its supervisory and enforcement activity. The CVM is not represented in any of ANBIMA's decision-making bodies, nor does it provide input to the developments of ANBIMA's risk-based approach or its supervisory priorities. This leads to duplication of supervisory effort between the two entities. A more extensive and formal set of cooperation arrangements should be put in place between CVM and ANBIMA. A first step towards a more balanced model would be for CVM to have some oversight of, and input into, ANBIMA's supervisory plan and risk-based methodology. This enhanced cooperation and increased oversight by CVM could ultimately provide a basis for giving ANBIMA statutory recognition for its SRO role.

The resources of the CVM do not appropriately reflect the number of entities in the investment fund sector that it oversees, the growth of the sector in recent years and the important role played by investment funds in financial markets in Brazil as a whole. The last open competition through which the CVM was able to recruit new staff was held in 2010. This has resulted in a lack of staff resources. Notwithstanding the risk-based supervisory approach adopted by the CVM, the lack of staff means that certain issues are not addressed in a way that CVM itself would consider appropriate. As such, the resources of CVM should be increased as a matter of priority and, as a further means of reinforcing the CVM's independence, the authority should be given more freedom to hire appropriate staff.

There is scope for the rules on leverage and liquidity management to be strengthened further.

The lack of a regulatory definition of leverage hampers the authorities' ability to measure and compare leverage across the investment funds sector. Similarly, the absence of a regulatory cap on leverage could increase the risk of vulnerabilities arising in specific funds or groups of funds. With respect to liquidity management, there is a strong and balanced framework to prevent the build-up of liquidity problems. However, fiduciary administrators lack the tools to deal with situations in which illiquidity risk has crystallized and are obliged to move immediately to a suspension of subscriptions and redemptions. In the absence of powers for the CVM to intervene when illiquidity problems arise, giving fiduciary administrators access to a broader range of liquidity management tools would allow for more flexibility in the management of situations of illiquidity. The CVM should

therefore give due priority to its ongoing work to establish a definition of leverage by the end of 2019, in coordination with IOSCO, and subsequently set a cap on the leverage that can be generated by a particular fund and/or by a group of funds managed by the same asset manager. It should also take steps to broaden the set of liquidity management tools available to fiduciary administrators.

While transparency is a key principle in the investment funds sector in Brazil and the CVM receives extensive data for the purposes of its regulatory monitoring, there are some data gaps that need to be addressed. The data that is most detailed, as well as being received in a format that facilitates automated analysis, relates to 555 funds (retail investment funds). This is appropriate as this category of funds represents approximately 90 percent of the total AUM. However, in order to give the CVM as full a picture as possible of the sector, it should initiate discussions with market participants and any other relevant stakeholders on how to bring the data on non-555 funds to the same level. Taking these steps in the short term would help ensure that the CVM is well placed for any shift in future by investors towards non-555 funds.

The CVM's rules on the termination of investment funds are rather high-level and leave significant discretion to the fiduciary administrator on how the process is run. CVM should issue more guidance to market participants on the termination process, taking into account the IOSCO Report on Good Practices for the Termination of Investment Funds. CVM should also be given a statutory basis to allow it to participate in the termination process.

Table 1. Brazil: Main Recommendations			
Recommendation	Priority	Addressee	
A more extensive and formal set of cooperation arrangements should be put in place between CVM and ANBIMA regarding investment fund supervision.	High	CVM and ANBIMA	
The resources of the CVM should be increased.	High	Ministry of Finance	
The CVM should prioritize its ongoing work in order to establish a definition of leverage by the end of 2019, in coordination with IOSCO, then set a cap on the level of leverage that can be generated by a particular fund and/or by a group of funds managed by the same asset manager.	High	CVM	
Fiduciary administrators should have access to a broader range of liquidity management tools that can be put in place without requiring the prior approval of unitholders.	Medium	CVM	
CVM should monitor carefully the impact of the waterfall approach on second-round redemption effects in cases where a fund faces unexpected redemption requests	Medium	CVM	
The CVM should initiate discussions with market participants on how to gather more detailed and structured data on non-555 investment funds.	Medium	CVM	
The CVM should cooperate with the BCB, ANBIMA and B3 to encourage market participants to use SELIC instead of CDI as a benchmark.	Medium	CVM	
The CVM should issue more detailed guidance on the termination of investment funds. CVM should also be given a statutory basis to allow it to participate in the termination process.	Medium	CVM	

INTRODUCTION

- 1. Brazil has a significant fund management market, as befits its status as the largest economy in South America. The total investment fund assets under management (AUM) by Brazilian fund management companies reached R\$3.57 trillion by the end of December 2016, representing roughly 55 percent of Brazil's GDP. This makes it the seventh largest fund management sector globally.
- 2. The mission reviewed issues relevant for systemic risk in the regulatory and supervisory approach to investment funds. This included authorization, ongoing supervision, valuation, measures to deal with extraordinary circumstances, and segregation and safekeeping of fund assets, building on the relevant IOSCO Objectives and Principles of Securities Regulation (the IOSCO Principles), in particular Principles 6, 24, 25, 26, 27, 28)¹; other relevant recent IOSCO standards;² and analysis of vulnerabilities that could stem from the interconnectedness with other areas of the financial sector, banks in particular. The mission also assessed the arrangements made in Brazil for monitoring systemic risk arising from asset management activities.
- 3. Supervision of the industry falls under the mandate of the Comissão de Valores Mobiliários (CVM). The regulatory framework for investment funds was amended in 2014 with the introduction of a CVM instruction regulating mutual funds (the predominant investment fund type, representing almost 90 percent of the industry)³. The Brazilian Financial and Capital Markets Association (Associação Brasileira das Entidades dos Mercados Financeiros e de Capitais) (ANBIMA) acts as a voluntary self-regulatory organization (SRO) for (among others) the investment funds industry, as it can issue guidance and discipline its members and impose fines. It is not overseen by the CVM.

FUND MANAGEMENT

A. Market Structure

4. 555⁴ funds are predominant, representing approximately 90 percent of AUM.
555 funds can be retail investment funds and/or restricted funds. Fixed income funds make up a large majority of AUM (approximately 65 percent), followed by multi-market funds with 20 percent.

¹ These cover, inter alia, the capacity of the regulator to identify, monitor, mitigate and manage systemic risk; the need for the regulatory system to set standards for the eligibility, governance, organization and operational conduct of investment fund managers; and the importance of appropriate oversight by regulators of hedge funds and/or their managers. IOSCO, May 2017.

² For example, Principles for the Valuation of Collective Investment Schemes (May 2013), Good Practice for Fees and Expenses of Collective Investment Schemes (August 2016), Good Practices for the Termination of Investment Funds (November 2017).

³ Instruction 555/14, which replaced Instruction 409/04.

⁴ So called because the rules governing the formation, registration and operation of these investment funds in Brazil is set out in CVM Instruction 555/14.

The relatively high level of interest rates in Brazil in recent years has meant that investors have been able to achieve high returns while being exposed to a relatively low level of risk. As interest rates have decreased from their recent peak of 14.25 percent, investors have started to show more interest in products other than fixed income. Total assets under management for Brazilian investment funds have grown from R\$ 1,954,780 million in 2011 to R\$ 3,573,335 million in 2016.

	Investment Funds and CVM Instructions
Main Group	Туре
5	555 (Equity, Fixed Income, Foreign Exchange or Multimarket funds)
	Private Equity Funds
ructured	Asset Backed Securities Funds
on-555)	Real Estate Funds
	National Film Industry Funding Funds

- 5. Among non-555 funds, the biggest category by AUM is private equity funds followed by asset-backed securities funds. Non-555 funds are typically closed-ended and, with the exception of Real Estate and National Film Industry Funding funds, available for marketing to professional and qualified investors only. The portfolios of these funds are generally less liquid and the funds themselves are subject to less detailed reporting requirements than 555 funds.
- 6. The key service providers for investment funds in Brazil are fiduciary administrators and asset managers. It is possible for the same legal entity to be authorized by CVM both as a fiduciary administrator and an asset manager. These entities are known as full administrators. This is a common model in the Brazilian investment funds sector, with the top 5 full administrators accounting for approximately 66 percent of the total AUM of 555 funds.

B. Regulation

- 7. The legal framework is a combination of federal law, the National Monetary Council (CMN) Resolutions and CVM Instructions. The federal law assigns responsibility for supervision of the investment funds sector to CVM. CMN resolutions, meanwhile, set out the broad principles that the CVM should follow in the performance of its role. Finally, the detailed rules to be followed by regulated entities are contained in legally binding instructions issued by the CVM. The main laws and regulations applicable to investment funds are:
- Federal Law No. 6,385/76, as amended, which regulates Brazilian capital markets and established the CVM.

- CVM Rule 438/06, as amended, which consolidates the accounting rules applicable to retail investment funds.
- CVM Rule 539/14, as amended, which covers the suitability rules and consolidate the definitions of qualified and professional investors.
- CVM Rule 555/14, which governs the formation, registration and operation of mutual funds in Brazil.
- CMN (Conselho Monetário Nacional) Resolution No. 3,334/05, as amended, which sets out the rules applicable to financial institutions acting as fund managers and portfolio managers.
- CMN Resolution No. 3,568/08, as amended, which, inter alia, addresses the foreign exchange controls applicable to investment funds investing abroad.
- **8.** ANBIMA has a combined role as the representative and advocacy body for the capital markets sector, including investment funds and their service providers, and as a voluntary self-regulatory organization (SRO)⁵. The SRO role covers three main pillars: (i) rulemaking; (ii) market oversight; and (iii) enforcement. The rulemaking activity involves the development of best practice codes that are adhered to on a contractual basis by its 275 members (a large majority of which are involved in fund management activity) but also on a voluntary basis by around 400 portfolio managers. This means that the ANBIMA codes effectively cover the entire investment funds sector. ANBIMA's Supervisory Department, which currently has 45 staff, has a range of tools at its disposal including on-site inspections (both periodic and ad hoc) and thematic reviews. Finally, ANBIMA has the power to issue sanctions and penalties. Penalties can take the form of a public admonition, a fine (capped at 100x the monthly membership fees of entities), removal of the ANBIMA "seal", or expulsion of an entity from ANBIMA. Expulsion does not definitively prevent a market participant from operating in the investment funds sector but it does make it substantially more difficult for the entity to find clients and service providers.
- 9. The lack of a statutory basis for ANBIMA's role means that it is not able to be fully effective as an SRO, and the CVM is not able to oversee or take due account of what ANBIMA does. The two entities cooperate relatively closely on the development of the regulatory framework but ANBIMA is completely independent for the purposes of its supervisory and enforcement activity. The CVM is not represented in any of ANBIMA's decision-making bodies, nor does it provide input to the developments of ANBIMA's risk-based approach or its supervisory priorities. Although efforts are under way to improve coordination and information-sharing, there is currently duplication of supervisory effort between the two entities.
- 10. Recommendation: A more extensive and formal set of cooperation arrangements should be put in place between CVM and ANBIMA. A first step towards a more balanced model

⁵ See also Box 1 below for more on ANBIMA's role.

would be for CVM to have some oversight of, and input into, ANBIMA's supervisory plan and risk-based methodology.⁶ This enhanced cooperation and increased oversight by CVM could ultimately provide a basis for giving ANBIMA statutory recognition for its SRO role.

Box 1. ANBIMA

Background

ANBIMA was created in October 2009 by the merger of the former National Association of Investment Banks (ANBID) and the former National Association of Financial Market Institutions (ANDIMA), institutions that had represented the market for more than four decades. As well as being the representative body for capital markets in Brazil, ANBIMA has a role as a voluntary SRO. It adopts codes of good practice, supervises application of those codes on an ongoing basis and has the ability to issue a range of penalties in case of non-compliance.

Membership

ANBIMA has 275 members covering the full spectrum of capital markets activity. In the investment funds sector, there are also approximately 400 asset managers who are not members but who choose to apply ANBIMA's codes of good practice. Taken together, this means that ANBIMA covers almost the entire investment fund management sector. ANBIMA provides a system of certification for individuals wishing to be authorized by the CVM to perform asset management activity. Certification is subject to passing an exam, for which the pass rate is roughly one-third of entrants.

Governance

ANBIMA's main decision-making body is the General Assembly, where each member has one vote regardless of the size or the assets of the institution. The General Assembly chooses the members of ANBIMA's Board and Ethics and Fiscal Councils, decides on the content of the self-regulation codes and scrutinizes the annual accounts. The ANBIMA Board is responsible for leading and managing the association, setting the strategic objectives and implementing the decisions of the General Assembly. The Board is made up of representatives from member institutions and the composition aims at reflecting the diversity of the membership, both in terms of size and market segment.

ANBIMA also has specific internal bodies that are responsible for the supervisory and enforcement activities of the association. These are the Monitoring Council and the Self-Regulation Board. The Monitoring Council is composed of representatives of ANBIMA's member institutions, while the Self-Regulation Board is made up of a mixture of ANBIMA members and representatives of other trade associations (the latter forming the majority). Potential breaches are first identified by ANBIMA's Supervisory Department and brought to the attention of the Monitoring Commission, which carries out a first analysis. Matters are then escalated to the Self-Regulation Board, which issues the relevant penalty depending on the seriousness of the matter.

⁶ Principle 9 of the IOSCO Principles states that, where the regulatory system makes use of Self-Regulatory Organizations (SROs) that exercise some direct oversight responsibility for their respective areas of competence, such SROs should be subject to the oversight of the Regulator and should observe standards of fairness and confidentiality when exercising powers and delegated responsibilities.

11. ANBIMA's role, both on rulemaking and supervisory activity, has expanded in recent years. This can be explained by the relative freedom ANBIMA enjoys in setting its budget. By contrast, the number of staff working in the relevant department of the CVM (Office of Institutional Investors Supervision) has not increased in line with the growth of the investment funds sector in recent years. CVM staff are recruited through open competitions but the CVM does not control when such a competition takes place. The last one took place in 2010. This means that the CVM is not able to replace staff, not even those who retire from the authority. This has resulted in significant staff vacancies. Notwithstanding the risk-based supervisory approach adopted by the CVM, the lack of resources inevitably means that certain issues are not addressed in the way that CVM itself would consider appropriate.

12. The tables below show the progression in the number of staff for, respectively, the CVM as a whole and the Office of Institutional Investor Supervision over the period 2013–2017.

CVM					
	2013	2014	2015	2016	2017
Analysts	225	249	245	235	228
Inspectors	112	119	113	108	104
Executive Agents	129	125	121	114	110
Total	466	493	479	457	442

Office of Institutional Investor Supervision					
	2013	2014	2015	2016	2017
Analysts	35	37	36	34	29
Inspectors	1	2	2	3	4
Executive Agents	8	7	7	6	6
Total	44	46	45	43	39

13. Recommendation: The resources of CVM should be increased to reflect the significant number of entities under its supervision, the growth of the investment funds sector in recent years, and the important role the sector plays in financial markets in Brazil more broadly. As a further means of reinforcing the CVM's independence, the authority should be given more freedom to hire appropriate staff.

Overview of Key Entities in Brazilian Investment Funds Sector

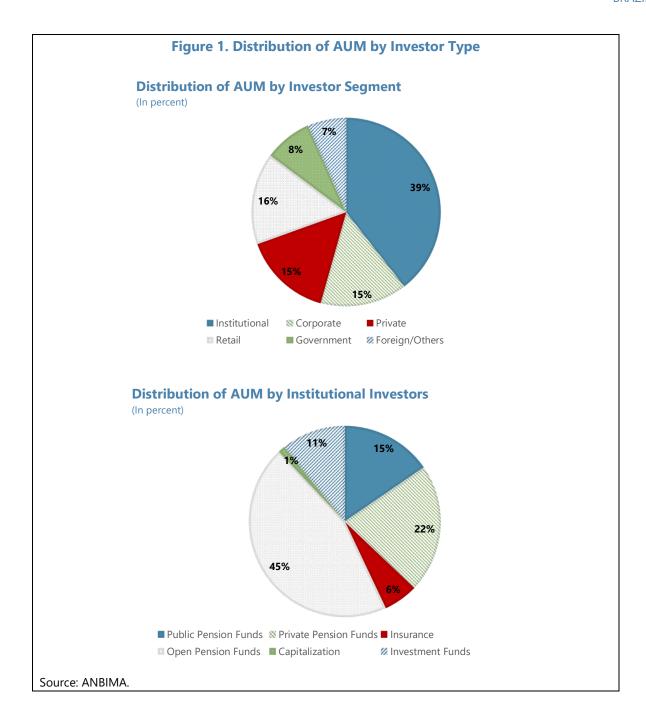
14. Brazilian investment funds are required to be structured as a condominium, i.e. a pool of assets. Unitholders each hold a fraction of the assets of the fund and enjoy equal rights and duties. The units are dematerialized and nominative. The main decision-making body of the fund is the general assembly of unitholders, in which each unit held confers one vote. Fiduciary administrators, asset managers, custodians, auditors, and other service providers are always subject to the decisions of the general assembly.

- 15. The main service providers for investment funds are fiduciary administrators, asset managers and custodians, all of which are authorized by the CVM. The fiduciary administrator, which is regulated by CVM Instruction 558/15, is effectively the main fund "gatekeeper". Its duties include preparation and disclosure of investment funds constitutive documents and periodic information; hiring and supervising all service providers necessary for the fund's proper functioning (e.g. supervising compliance by the asset manager with the regulatory framework, in particular the fund's investment strategy limits and liquidity management policies); and controlling subscriptions and redemptions by investors.
- 16. Asset managers, which are hired by the fiduciary administrator, are responsible for making and implementing investment decisions with a view to achieving the fund's objective. In doing so the manager must always act in accordance with the fund's founding documents and in compliance both with CVM Instruction 558 and the Instruction governing the specific type of fund managed.
- **17. Custodians are the entities responsible for safekeeping the investment fund's assets.** A specific CVM Instruction (542) covers these entities.
- **18.** In the Brazilian framework investors are categorized as professional, qualified or retail. The categorization has an impact on the types of fund that can be marketed to each group. The following are considered professional investors:
- Financial Institutions
- Insurance companies
- Pension funds
- Individuals with more than R\$10 million in financial assets
- Investment funds, clubs (if managed by an asset manager authorized by CVM) and the following authorized market participants: registered representatives, asset managers (individual), analysts and advisors
- Foreign investors

The following are treated as qualified investors:

- Professional investors
- Individuals with more than R\$1 million in financial assets
- Individuals approved in exams or holders of certificates accepted by CVM as a requisite for registration as registered representatives, asset managers (individual), analysts and advisors.

All investors who are neither professional nor qualified are considered to be retail investors.



19. The following table shows the types of fund that can be marketed to each category of investor. In practice many asset managers choose to market their funds only to qualified or professional investors even where this is not required by the rules.

Table 3. Brazil: Investment Funds and Investor Profile

Croup	Typo	Investors Profile		
Group	Туре	Retail	Qualified	Professional
	Equity	✓	✓	✓
FFF	Fixed Income	✓	✓	✓
555	Foreign Exchange	✓	✓	✓
	Multimarket	✓	✓	✓
	Private Equity	×	✓	✓
Structured	Asset-Backed Securities	×	✓	✓
	Real Estate	✓	✓	✓
	National Film Industry Funding	✓	✓	✓

Source: CVM

Diversification Rules

20. Specific instructions of the CVM apply to particular categories of funds and lay down more detailed rules for each. The following tables set out the portfolio concentration limits by, respectively, issuer and asset type for 555 funds. The limits must always be applied jointly e.g. a fund may invest up to 100 percent of its NAV in securities issued by financial institutions authorized by the Banco Central do Brasil (BCB) (per Table 5) but may only invest up to 20 percent of its NAV in the securities of a given financial institution (per Table 4). This means that a fund investing entirely in financial institutions authorized by the BCB must invest in at least five different such institutions. Similarly, a fund investing exclusively in the securities of publicly listed companies would have to spread its investments across at least 10 such companies due to the 10 percent limit in Table 4.

Table 4. Brazil: Portfolio Concentration Limits by Type of Issuer

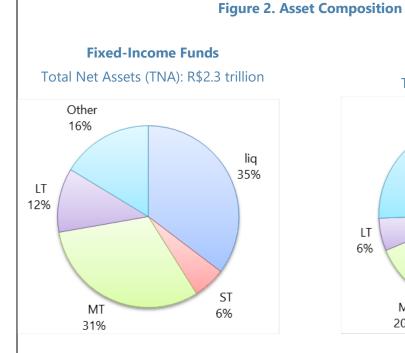
Instruction 555/14, Article 102 item	Issuer Classification	Percentage of Investment Fund NAV in a Single Issuer
I	Financial Institution authorized by BCB	20
II	Publicly listed company	10
III	Investment Fund	10
IV	Person fund or company not listed in the above items	5
V	Federal Government	unlimited

Source: CVM

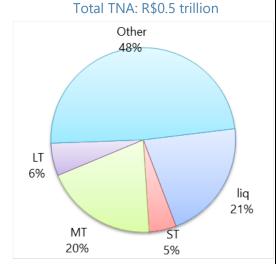
Financial Asset	Maximum NAV (percent)
 Investment funds unit Fund of funds unit Units of investment funds exclusively targeted at qualified Investors Units of funds of funds exclusively targeted at qualified investors Real estate funds units Asset-backed investment funds units Asset-backed funds of funds units ETFs units Real Estate Receivables certificates 	20
 Units of investment funds investing in non-standardized credit receivables Units of investment funds investing in other investment funds that invest in non-standardized credit receivables Units of investment funds targeted exclusively at professional investors Units of funds of funds targeted exclusively at professional investors 	5
 Federal Government Bonds Gold (if negotiated at exchanges or other organized markets) Financial Institutions Bonds Securities other than those already listed in this table, provided they were publicly offered and in compliance with CVM rules Publicly listed companies' promissory notes, bonds and shares, if they were publicly offered in compliance with CVM rules Derivatives 	Unlimited

21. Government securities are the predominant asset class for Brazilian investment funds.

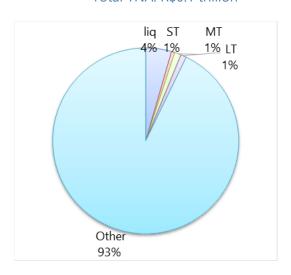
The charts below show the asset composition of the aggregated portfolios of 555 fixed income, multi-market and equity funds. Taking into account that the credit rating for Brazilian government securities is below investment grade, it is a potential area of concern that investment funds are so focused on this asset class (although it should be noted that increased exposure by investment funds to non-Brazilian sovereign bonds could introduce other risks, such as exchange-rate risk).



Multi-Market Funds



Equity FundsTotal TNA: R\$0.1 trillion



Note: Liquid Assets (reverse repo), ST/MT/LT: Short-term, Medium-term, Long-term government

bonds

Source: BCB

Data as of September 2017

Valuation of Assets

- **22.** Each fiduciary administrator is required to have a manual, published on its website, setting out its valuation practices for both liquid and illiquid assets. The CVM verifies the appropriateness of these practices as part of its risk-based supervision plan, and the annual independent audit to which fiduciary administrators are subject must include an analysis of whether these practices are being followed. All investment funds are obliged to follow national accounting standards that are adherent to IFRS. This means that the Brazilian framework is in line with IOSCO Principle 27.
- **23. Most Brazilian investment funds calculate their NAV and prices of their units on a daily basis.** The fiduciary administrator is responsible for the calculation. Less frequent calculation is allowed only for funds that do not offer daily dealing, in which case it must be appropriate to the dealing frequency, and this has to be explicitly provided for in the fund's by-laws. The CVM considers pricing errors as operational errors in a broader sense, so that any losses suffered by investors as a result have to be refunded by the fiduciary administrator.
- 24. Issues around valuation of assets are one of the key supervisory priorities for CVM as set out in the 2017–18 Supervision Plan. There are three strands to the CVM's work. The first involves systematic analysis of auditors' comments on investment funds' financial statements, which may be followed by a request by the CVM to the fiduciary administrator for clarification on the matter and how it was resolved. This activity has consistently been included in all of the CVM's Supervision Plans since 2007, reflecting the importance that CVM attaches to it as a means of identifying potential issues. The second stream of work involves an assessment of the mark-to-market valuation methodologies published by fiduciary administrators in order to check their appropriateness. The final aspect takes the form of a sample check of the valuation performed on assets of particular funds. The CVM selects these assets based on risk parameters such as liquidity, use of models and the likelihood of conflicts of interest.

Managing the Risk of Large Redemptions

- 25. The framework for 555 funds includes a range of safeguards designed to promote liquidity risk management. These can be classed under three broad headings: (i) transparency (such as investor disclosure and specific regulatory reporting on liquidity); (ii) limits at the portfolio level (such as diversification limits both by asset type and issuer); and (iii) establishment of suitable policies and procedures (such as on liquidity risk management and stress testing). Fiduciary administrators and asset managers also have to ensure that the redemption frequency of a fund is consistent with the investment strategy.
- **26. Fiduciary administrators are required to carry out stress tests on the portfolios of the funds they administer.** These stress tests are required to (at least) take into account redemption pressures, liquidity of the assets, liabilities and conversion periods, and must be carried out at a frequency appropriate to the fund's characteristics, to the historical variations of the chosen

scenarios and to current market conditions. The CVM can ask to be provided with the result of the stress tests although it does not carry out its own stress tests.

- 27. In the event of a material liquidity issue arising, the only tool available to the fiduciary administrator is to suspend subscriptions and redemptions. If the suspension lasts for more than five days, an extraordinary general meeting (EGM) of the unitholders must be called and held within 15 days. The EGM can then decide among a range of options including replacement of the fiduciary administrator and/or the asset manager; redemption in kind; lifting the suspension; creation of a side pocket; and liquidation of the fund.
- 28. Recommendation: It would be beneficial for fiduciary administrators to have access to a broader range of liquidity management tools, such as deferred redemptions, gates or side pockets, that could be put in place where appropriate in the best interests of the unitholders, but without requiring unitholder approval at an EGM⁷. This would give fiduciary administrators more flexibility to manage situations of illiquidity without necessarily resorting to a suspension.
- 29. When faced with unexpected redemption requests that are material in size, asset managers have discretion to choose between a waterfall⁸ and a pro rata⁹ approach to selling assets of the portfolio. The use of the waterfall approach can lead to a situation in which the fund breaches the regulatory thresholds for portfolio concentration. The CVM's policy is not to apply penalties or sanctions for such "passive breaches". Such an approach may have the unintended consequence of encouraging more unitholders to redeem if they see that the fund is becoming less liquid.
- 30. Recommendation: In the event that an investment fund experiences a serious liquidity shortage, CVM should carefully monitor the impact of the waterfall approach on second-round redemption effects and, if appropriate, reconsider its policy of not taking enforcement action against passive breaches of portfolio concentration limits.

Leverage

31. Brazilian investment funds are not able to borrow directly but they can generate leverage through the use of derivatives and through repurchase and securities lending activities. In the CVM's risk-based Supervision Plan for 2017–18, there is a specific risk event on leverage. Among the supervisory actions undertaken in this context, CVM monitors margin

⁷ The CVM is currently carrying out work in this area.

⁸ Under the waterfall approach, fund managers liquidate their most liquid securities first, and then use cash to cover the residual redemptions.

⁹ Under the pro rata approach, managers use cash and liquidate securities in proportion of their share in their liquidity buffers.

requirements imposed by B3¹⁰ on exchange-traded derivatives and cross-checks them against data on liquidity and redemptions provided by fiduciary administrators. Where there is a discrepancy, the CVM follows up with a request for more information.

- **32.** Leverage is low on average¹¹ although pockets of higher leverage do exist, primarily in exclusive-investor funds held by banks. Margin requirements set by B3 act as a brake but there is no regulatory definition of leverage, nor is there a cap on leverage for individual funds or groups of funds managed by the same asset manager. CVM has started work to develop a definition and hopes to reach a conclusion by the end of 2019.
- **33. Derivative positions must be taken into account when calculating the portfolio concentration limits by issuer and asset type.** According to the regulations, fixed income, real estate, private equity and asset-backed securities funds may only engage in derivative transactions for hedging purposes. Equity and multimarket funds are permitted to use derivatives as a means of achieving a higher return, but the constitutive documents of the fund have to disclose explicitly to investors that the fund is exposed to higher risk.
- **34.** Recommendation: The CVM should give due priority to its ongoing work in order to establish a definition of leverage by the end of 2018. The CVM should coordinate its work with that of IOSCO. As a second step, the CVM should set limits on the level of leverage that can be generated by a particular fund and/or by a group of funds managed by the same asset manager.

Termination

35. The decision to wind up an investment fund can only be taken by a meeting of the general assembly of unitholders. The general assembly has to decide how the fund will be liquidated, including the overall timing of the process and whether in-kind redemptions will be used. The auditor responsible for the financial statements of the fund must give an opinion about the fairness of the winding-up process. The CVM plays no role in the termination process other than receiving information on the outcome from the fiduciary administrator.

¹⁰ B3 was created in March 2017 by the merger of BM&FBOVESPA and CETIP. The combined entity provides financial market infrastructure services.

¹¹ As noted elsewhere in this technical note, there is no single definition of leverage in the Brazilian investment funds framework. However, a number of different metrics can be used to provide an indication of the overall picture:

⁻ The accounting ratio of assets to net capital for investment funds is around 103 percent.

Exposure to securities lending represents 0.5 percent of industry NAV;

⁻ Exposure to reverse repos represents 1.18 percent of industry NAV;

⁻ Required margin for derivative contracts represents 1.8 percent of industry NAV. 50 percent of the notional value of all derivatives is subject to margin deposits (exchanged-traded derivatives);

⁻ The Gross Notional Exposure of all derivative contracts is equivalent to 71 percent of industry NAV (this does not take into account netting or hedging arrangements).

36. Recommendation: The CVM's rules on the termination of investment funds are rather high-level and leave significant discretion to the fiduciary administrator on how the process is run. CVM should issue more guidance to market participants on the termination process, taking into account the IOSCO Report on Good Practices for the Termination of Investment Funds. CVM should also be given a statutory basis to allow it to participate in the termination process.

C. Authorization

- **37. CVM** is responsible for authorizing firms (principally fiduciary administrators and asset managers) to conduct fund management activities. The specific criteria to be satisfied are set out in CVM Instruction 558/15 and include having senior managers that are fit and proper, establishing appropriate policies and structures for risk management, and submitting information on oversight of compliance and delegated activities. Applications for authorization are handled by the Office of Institutional Investors Supervision at the CVM.
- **38. CVM relies mainly on off-site research for the assessment of entities against the relevant eligibility criteria.** This research makes use of a range of sources such as the database of the Brazilian Department of Federal Revenue and CVM's own internal registers. Information submitted by applicants during the authorization process is kept on file and verified during on-site inspections as part of the CVM's ongoing supervision. Discussions are currently under way between CVM and ANBIMA with a view to the latter having an enhanced role in the authorization process for asset managers. ANBIMA would carry out initial due diligence on an applicant before submitting the file to CVM, in line with its current role on initial public offerings. Depending on the outcome of the current discussions, it may be the case that CVM would put in place a fast-track procedure for the authorization of such applicants.
- **39.** It is possible for the same legal entity to be authorized by CVM both as a fiduciary administrator and an asset manager. These entities are known as full administrators. This is a common model in the Brazilian investment funds sector, with the top 5 full administrators accounting for approximately 66 percent of the total AUM of 555 funds. In such cases the CVM requires that there be proper separation between the two functions. Full administrators typically belong to a financial conglomerate that includes banking and insurance entities.
- **40. With the exception of ETFs, the CVM does not assess eligibility criteria for investment funds before authorization.** Specific instructions of the CVM apply to particular categories of funds and set out limits on concentration by issuer and asset type. Authorization is granted automatically when the fiduciary administrator files the necessary documents (including the fund's constitutive documents, the designation of independent auditor and a declaration by the fiduciary administrator that the fund documentation is fully compliant with applicable regulation). With respect to ETFs, the CVM's assessment prior to authorization includes an analysis of the index to be tracked (CVM Instrument 359 sets out specific criteria for the index).
- 41. The overnight unsecured CDI benchmark is still widely used by market participants in **Brazil.** This is despite the fact that the market is very lightly traded and is not generally perceived to

be representative of the true cost of funding for large banks relative to the much more active SELIC repo market.

42. Recommendation: The CVM should cooperate with the BCB and other relevant authorities to encourage market participants to use SELIC instead of CDI as a benchmark.

Delegated Management

43. The fiduciary administrator is responsible for selection of any third-party service providers needed for the proper functioning of the investment fund. The fiduciary administrator is jointly liable with the third-party service provider for any losses suffered by investors due to operational failings, rule breaches or enforcement action by the CVM. All services that can be delegated to third party providers are activities regulated by the CVM.

Custodians

- **44. Only financial institutions regulated by the BCB may act as custodians of investment funds' assets.** Separate authorization must be granted by CVM before custody services can be provided. CVM Instruction 542 sets out the requirements that have to be fulfilled by custodians, including that they put in place appropriate operational and technological capabilities, in particular to ensure confidentiality and quality of information; and that they maintain processes and IT systems that allow the registration, processing and the control of the positions and the custody accounts. For assets that can be held physically, the custodian is obliged to maintain physical structures with restricted access as well as safety mechanisms that ensure the integrity of the securities.
- **45.** All financial assets of a fund must be registered in a system registry, subject to custody or safekeeping by the central securities depository. Assets must be held in specific accounts opened in the name of the fund. Related party custody is permitted but the authorization procedure of the CVM checks the existence of appropriate safeguards against conflicts of interest.

Foreign Funds

46. CVM guidance explains that distribution/marketing of investment funds in Brazil is a regulated activity restricted to entities domiciled in Brazil. In practice, the most common way in which a foreign investment fund is made available to Brazilian investors is through the establishment of a domestic fund which then invests in the foreign fund. Rule changes introduced in Instruction 555 made the regime for investments by Brazilian funds in foreign assets more flexible. It is now possible for funds open to professional investors to invest up to 100 percent in non-Brazilian assets. This threshold drops to 40 percent for funds open to qualified investors, and 20 percent for retail funds. The average amount of total NAV currently invested in foreign assets is low (approximately 2.5 percent), which suggests that the limits are sufficiently flexible.

D. Supervision

CVM's Supervisory Approach

47. CVM applies a risk-based approach to its supervision of the investment fund sector.

This approach involves development of a matrix in which "risk events" are ranked according to probability and impact (to be understood as the potential for damage to the CVM's objectives). The assessment of impact takes into account various factors such as the number and type of investors that would be affected. Damage to a retail investment fund with a large investor base (more than 1500 unitholders) would be considered more impactful than to a closed-ended fund targeted at professional investors. The outcome of this exercise is fed into the two-year Supervision Plan approved by the CVM's Board.

48. The CVM also develops a specific supervision plan for thematic work which typically focuses on new or innovative themes. The 2017–2018 Supervision Plan includes thematic work on: verification of compliance with applicable rules by certain types of securitization vehicles; policies and procedures of fiduciary administrators to prevent money laundering; and interconnectedness of the investment fund industry with other sectors of the financial markets such as banking and pension funds. The table below details the number of entities that were inspected by the CVM in 2015, 2016 and 2017. These figures illustrate the need for the CVM to be given additional resources.

Table 6. Brazil: Number of Inspected Participants and Products

2015	2016	2017		
Fiduciary	44	50	51	
Asset managers	1nvestment Funds	39	34	37
Source: CVM				

Use of Regulatory Reporting

49. Fiduciary administrators are obliged to provide CVM with an extensive set of information on the 555 funds they administer. On a daily basis the CVM receives data on the price of units, the number of unitholders, the NAV, AUM, and subscription and redemption requests. This is complemented by monthly data on the portfolio composition, a trial balance¹², value-at-risk and the profile of unitholders (both the absolute numbers and by percentage distribution of the fund's net assets). All of this data has to be provided in a structured format using the CVM's system for electronic filing. This provision of data reflects the important role played by transparency in the investment funds sector in Brazil. By way of illustration, the detailed portfolio holdings of all investment funds are made public on a monthly basis. Derogations are only allowed in cases where an asset manager is seeking to build up a position in a security, and even then, the disclosure can only be delayed for three months.

¹² A trial balance is an internal bookkeeping or accounting report that lists the balances in each of an organization's general ledger accounts.

- **50.** Reporting obligations apply also in respect of non-555 funds, although not on a daily basis. This includes data on portfolio composition, the profile of unitholders and audited financial statements. Most of this information does not have to be provided in the same structured format as the data on 555 funds. CVM is considering ways in which it could use data from B3 to give it a better overview of real estate funds [not for publication]. For asset-backed securities funds there are greater challenges due to the significant number of assets in such funds and the high turnover.
- 51. The data provided by fiduciary administrators to CVM on 555 funds allows the CVM to monitor the liquidity of these funds on an ongoing basis. On a daily basis, CVM monitors liquidity under normal market conditions based on i) Liquid Assets (LA), which is the total value of assets that can be transformed into cash in current market conditions within the redemption period for the investment fund; and ii) Predicted Cash Outflow (PCO), which is the total value of cash outflow predicted to happen within the redemption period for the investment fund. Where a fund has a PCO greater than its LA, CVM asks the fiduciary administrator for an explanation. If the CVM is not satisfied with the explanation, it uses its supervisory powers to ensure that appropriate action is taken e.g. ensuring that the fund increases the liquidity of its holdings.

Recommendation: CVM already benefits from receiving extensive data on 555 investment funds, which contributes significantly to the successful fulfilment of its supervisory objectives. In order to give the CVM as full a picture as possible of the sector, it should initiate discussions with market participants and any other relevant stakeholders on how to bring the data on non-555 funds to the same level. Taking these steps in the short term would help ensure that the CVM is well placed for any shift in future by investors towards non-555 funds.

Enforcement

52. CVM is responsible for enforcing compliance with the rules applicable to the investment funds sector¹³. For breaches that are less material, the CVM issues a warning letter to the relevant entity demanding an action plan to remedy the situation and a timeline to implement it. In the event of non-compliance, the CVM can choose to pursue more intrusive enforcement action. Formal enforcement action, which must ultimately be approved by the CVM Board, can result in a warning, a fine, or removal of the entity's authorization. The main sources of information on potential breaches of regulation are investor complaints or police investigations.

Table 7. Brazil: Number of Inspected Participants—Routine Versus On-Demand ¹				
2015 2016 2017				
Routine	70	86	75	
On-Demand	38	10	38	

Source: CVM

¹On-Demand inspections are those arising from complaints or criminal investigations.

¹³ ANBIMA also plays a role in enforcement—see paragraph 13 and Box 1 above for more details.

53. The CVM carried out 19 enforcement actions that led to judicial proceedings over the period 2014–2016. These included for irregularities such as carrying out investment activity without CVM authorization, churning of investment fund portfolios and insufficient due diligence. The level of enforcement activity carried out by CVM should be analyzed alongside the activities of ANBIMA in this area. For example, in 2017 ANBIMA imposed 269 fines on entities within the investment funds sector. This is a further illustration of the difficulties posed by the relative lack of resource of the CVM and the lack of clarity in its relationship with ANBIMA on supervisory and enforcement matters.

E. Systemic Risk Monitoring

- **54. CVM cooperates with the BCB for the purposes of monitoring systemic risk arising from the investment funds sector.** The BCB has designed specific tools to aid in early detection of the build-up of vulnerabilities that could affect the banking sector. These monitoring tools are designed according to the transmission channels through which shocks could propagate between the investment fund sector and the banking sector. The BCB already monitors two aspects of the investment fund sector: liquidity and interconnections between investment funds and banks.
- **55.** The BCB also monitors investment funds' claims on banks as another transmission channel between the sectors. To facilitate this monitoring, the BCB developed a "connections matrix" consisting of almost all financial connections registered in trade repositories (SELIC¹⁴, Cetip, BM&F and Bovespa-CBLC). This matrix also uses register data shared by the CVM with the BCB, which is essential to the identification of the parties holding specific financial positions. It also uses data on significant shareholders of investment funds shared by CVM to identify whether an investment fund is owned to a significant extent by (and therefore to some extent can behave as if it were) another type of entity e.g. an insurance company or a pension fund. This data on significant shareholders allows the BCB to monitor interconnectedness of investment funds and other (non-bank) financial entities such as pension funds and insurers.
- 56. Recommendation: The BCB and CVM should work together to assess the liquidity of the government bond market, paying particular attention to a possible spike in yields, due to liquidity shocks to investment funds that could affect other financial sectors. This analysis

should also take into account investor protection concerns that could arise due to the concentration of investment fund assets in these securities¹⁵.

57. The BCB has analyzed the extent to which investment funds in Brazil can be considered shadow banks. Shadow banking is defined as a credit intermediation system that involves activities and entities that are outside the traditional banking system. The Brazilian authorities sought to identify more precisely the investment funds that could fall under this definition, being those involved in credit risk transfer, leveraging, and maturity and liquidity

¹⁴ The term SELIC can refer to a repository and the benchmark associated with the BCB's overnight rate.

¹⁵ Further information on and discussion of the concentration of investment fund holdings in government securities can be found in the FSSA (see e.g. Figure 1 and paragraph 22) and the technical note on Stress Testing.

transformations. As a result of the application of a methodology developed by the CVM, several fund categories—such as closed-ended exclusive-investor funds and equity funds—were excluded from the scope of shadow banking entities. Overall, the exercise resulted in funds representing R\$256.9 billion (i.e. about 10.9 percent of the total Brazilian investment funds industry) being seen as potentially posing a typical shadow banking risk.

Box 2. BCB/CVM Work on "Step-in" Risk

The BCB has carried out specific work to monitor so-called "step-in" risk arising from illiquidity of investment funds. This takes account of the high number of financial conglomerates in Brazil that have banking, insurance and asset management arms. The entities within the conglomerate share the same name or brand, ownership and are marketed together, frequently via online banking platforms. This results in a situation in which clients and investors effectively see the bank and the investment fund as a single entity. As such, a liquidity problem at an investment fund could leave the bank feeling that it has to "step in" and provide liquidity to the investment fund (by swapping illiquid for liquid assets). Banks are under no statutory or contractual obligation to take such action but reputational risk means that they may feel obliged to do so nevertheless. This makes it particularly important to monitor liquidity levels of those investment funds connected to banks for the purposes of identifying possible sources of systemic risk.

To that end, the BCB monitors bank-specific liquidity indicators that take step-in risk into account. It also monitors aggregate liquidity indicators of the investment fund industry. The bank-specific liquidity indicator consists of the Liquidity Coverage Ratio (LCR) adjusted for the liquidity of the investment funds managed by the asset manager that is part of the same group. The likely step-in amount, which is the difference between the liquidity available to the investment fund and the liquidity needed in a stress scenario, is added to the denominator of the LCR. The resulting metric indicates a bank's resilience to liquidity pressures arising from the investment funds under management by a related party asset manager.

The data needs for the BCB to compute this adjusted-LCR are large but the BCB and the CVM collaborate smoothly in sharing the data under an MoU signed in 2014. The CVM provides the BCB with granular data on the portfolio of each 555 investment fund and on each fund TNA. This data is used to reconcile and cross-check data from trade repositories on securities held by investment funds. This allows the BCB to compute on a daily basis the liquidity available to each investment fund. The CVM also provides liability data on investment funds, identifying the category of each fund (fixed income, equity fund, etc.). Given that the likely liquidity runoff ratio of an investment fund depends on its category (for example, funds with less liquid assets, an institutional investor base and a long-recommended holding period are less likely to require significant liquidity in the short term), the liability data allows for the calculation of each investment fund's liquidity needs. Taken together, the data on asset composition and liabilities from the CVM, combined with data from trade repositories, allows for the calculation of the step-in risk of each investment fund.

For the same reason, the BCB also monitors an aggregate liquidity indicator of investment funds, computed with the same data provided by the CVM. Given its importance, this indicator was selected to enter the revamped "Financial Stability Map" monitored by the BCB's Financial Stability Committee during its quarterly meetings.