

Ireland: Financial Sector Assessment Program-Technical Note on Financial Interconnectedness of the Market-Based Finance Sector



IRELAND

FINANCIAL SECTOR ASSESSMENT PROGRAM

TECHNICAL NOTE ON FINANCIAL INTERCONNECTEDNESS OF THE MARKET-BASED FINANCE SECTOR

July 2022

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June 28, 2022

TECHNICAL NOTE

FINANCIAL INTERCONNECTEDNESS OF THE MARKET-BASED FINANCE SECTOR

Prepared By
**Monetary and Capital Markets
Department**

This Technical Note was prepared by IMF staff in the context of the Financial Sector Assessment Program (FSAP) in Ireland. 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

AIF	Alternative Investment Fund
AUM	Assets Under Management
BIS	Bank for International Settlements
CBI	Central Bank of Ireland
CC	Central Counterparties
CRE	Commercial Real Estate
CSO	Central Statistics Office
DTC	Deposit Taking Corporations
FAU	Financial Auxiliaries
FSAP	Financial Stability Assessment Program
FSB	Financial Stability Board
FVC	Financial Vehicle Corporations
GDP	Gross Domestic Product
GOV	Government
HH	Households
IC	Insurance Corporations
IF	Investment Funds
IIFA	International Investment Fund Association
IMF	International Monetary Fund
MBF	Market-based Finance
MFI	Monetary Financial Institutions
MMF	Money Market Funds
NBFI	Non-Bank Financial Institutions
NFC	Non-Financial Corporations
OFI	Other Financial Institutions
PF	Pension Funds
REIT	Real Estate Investment Trust
ROW	Rest of the World
SME	Small and Medium Enterprises
SPE	Special Purpose Entity
SPV	Special Purpose Vehicles
TN	Technical Note
UCITS	Undertaking for the Collective Investment for Transferable Securities
WEO	World Economic Outlook

EXECUTIVE SUMMARY

This technical note¹ investigates the interconnectedness between the market-based finance (MBF) sector in Ireland and the rest of the financial system, with a view to assessing potential financial stability risks. The MBF sector, the largest component of the financial system, totals over 14 times GDP and is comprised of the funds sector—both money-market (170 percent of GDP) and investment funds (850 percent of GDP)—as well as other financial institutions (OFIs), which comprise of special purpose entities (SPEs, 240 percent of GDP) and a catch-all category entitled “OFI residual” (160 percent of GDP). Chapter I provides an overview of the potential financial stability risks associated with the MBF sector, with a focus on the funds sector, and places it in its domestic and global context. Chapter II maps out the interlinkages between the non-banks, banks, and the real sector using network analysis to assess the strength and direction of interconnectedness. Chapter III delves into the balance sheet exposures of major categories of Irish funds, the largest component of the MBF sector, to further assess channels of risk transmission. The analysis focuses on a network of complex inter-sectoral financial relationships, based on a range of lending and borrowing instruments, and several findings emerge.

Ireland has made good progress in implementing the recommendations from the 2016 FSAP, but some important data gaps remain to be closed. While many linkages between the domestic economy and the MBF sector have been analyzed, challenging data gaps and opaque linkages relating to the OFI residual should continue to be explored through ongoing cooperation at a domestic and international level. The Central Bank of Ireland (CBI) has made significant strides in the collection, monitoring, and analysis of data on MBF and improved its regulation of funds. CBI has also made progress on closing data gaps as recommended by the previous FSAP, including improving visibility on the underlying investor base in funds, reducing the size of the OFI residual, collecting information on the business models of SPEs, and researching on the use of leverage in funds. However, the CBI’s fund stress-testing model remains under development and there remain some gaps in terms of granular data collection and analysis of the interconnectedness and composition of the significant activity of the remaining OFI residual.

There are four main findings based on the analysis:

- **First, Irish funds have limited links to domestic banks and households.** Bank asset claims on Irish funds are negligible, while bank liabilities to funds are comprised mostly of deposits corresponding to around 4 percent of GDP. Households do not have liabilities to the funds, and their claims on funds, which comprise of their holdings of fund shares, stand at less than 1 percent of GDP. As such, these linkages appear to pose relatively lower risk.
- **Second, in contrast, Irish funds have significant interlinkages with OFIs resident in Ireland, as part of Ireland’s large, internationally-oriented financial sector.** The OFI sector consists of SPEs and the OFI residual, which includes entities that engage in non-bank financial intermediation. The financial linkages of Irish funds with OFIs are sizeable, with fund asset claims and liabilities to the total OFI sector close to 30 and 50 percent of GDP respectively. While there has been good progress in understanding the links between funds and SPEs, the nature,

¹ This Technical Note was authored by Tara Iyer, Monetary and Capital Markets Department, in the context of the 2022 Ireland Financial Sector Assessment Program.

business rationale, and riskiness of many fund exposures to entities in the OFI residual sector are not fully transparent.

- **Third, OFIs – while largely internationally focused – also have significant linkages to the domestic economy.** OFI financial assets and liabilities are sizeable, at 250 and 270 percent of GDP², respectively. Most of these transactions relate to internationally focused activities, but entities within the OFI sector also have meaningful linkages with domestic banks, households, and firms. OFIs hold deposits in domestic banks totaling 12 percent of GDP (about 7 percent of total bank deposits) and SPE loans to Irish households total 12 percent of GDP, or more than 30 percent of the household loan stock. SPE loans to Irish NFCs total about 15 percent of GDP, or about 10 percent of the NFC loan stock.³ A subset of those SPEs engage in new lending to the economy. Depending on their funding model, SPEs that engage in new lending to the local economy could potentially amplify financial cycles in Ireland and make the economy more vulnerable to global financial shocks. Beyond SPEs, granular balance sheet risk metrics for entities in the OFI residual sector do not currently exist.
- **Fourth, funds and banks have common exposures to the domestic commercial real estate (CRE) sector, which represents a potential channel of contagion.** The CBI has conducted in-depth analysis of these links, supplementing supervisory data with a deep-dive survey of property fund activity. It has also consulted on macroprudential measures to guard against potential financial stability risks from the property fund sector. This reflects the fact that property funds hold a material share of the outstanding stock of commercial real estate, and so represent a key direct channel of interlinkages between the broader funds sector and the real economy. Data on the extent of cross-border and non-bank lending to the CRE sector could be improved. Given the common exposures of multiple financial sub-sectors, shocks to the CRE market could pose risks to the financial system and lead to adverse feedback to the domestic economy through a contagion channel.

The analysis suggests that, notwithstanding progress, work remains to be done to elucidate fully the linkages between parts of the MBF sector and the rest of the financial system, and to the domestic economy, to explore further areas of potential systemic risk. A key area of risk lies in the opacity and lack of granular data on financial transactions of entities in the OFI residual sector. Based on the analysis, the FSAP makes eight recommendations for the authorities.

² Non-financial assets and liabilities of OFIs amount to an additional 130 and 150 percent of GDP, respectively.

³ However, the impact of this lending on the domestic economy remains an open question, given the large footprint of multi-national firms in Ireland and the preponderance of their operations being outside the country.

Table 1. Ireland: Main Recommendations on Interconnectedness of Market-Based Finance

#	Recommendations	Addressee	Timing*	Priority**
1.	Disaggregate the OFI residual into foreign controlled versus indigenous entities to better understand linkages to the domestic economy. (¶22)	CBI, CSO	MT	M
2.	Deepen understanding of the risks and vulnerabilities associated with loans between SPEs and NFCs and from SPEs to SMEs and households. (¶30)	CBI, CSO	ST	H
3.	Intensify the collaboration between the CBI, the CSO, and international regulators on the nature of the OFI residual linkages to the domestic economy. (¶33)	CBI, CSO	MT	M
4.	Conduct risk analysis of the OFI residual at a granular balance sheet level. (¶34)	CBI, CSO	MT	M
5.	Conduct more deep-dives to further enhance the monitoring of risks of sub-segments of the funds sector. (¶50)	CBI	ST	H
6.	Conduct further in-depth analyses of the indirect linkages of the funds sector to the domestic economy, with a focus on funds' claims on the SPEs and OFI residual sectors. (¶63)	CBI	ST	H
7.	Ensure sufficient resources at the CBI MBF unit to allow it to monitor developments and conduct the analyses recommended in this technical note. (¶64)	CBI	MT	M
8.	Reduce the remaining data gaps in the non-bank lending and cross-border financing to the CRE sector. (¶72)	CBI	MT	M

* C = Continuous; I = Immediate (within one year); ST = Short Term (within 1-3 years); MT = Medium Term (within 3-5 years).

** H = High; M = Medium; L = Low.