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# Shadow banking risks in non-securitisation SPEs

Brian Golden & Eduardo Maqui

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## Shadow banking risks in non-securitisation SPEs

Central Bank of Ireland data on non-securitisation SPEs allow for a qualified assessment of shadow banking risks within the sector. While risks appear to be relatively contained, international co-operation is required to undertake a complete risk assessment. Within these SPEs, risks are the most prominent for entities engaged in loan origination, bank-linked portfolio investment or external financing activity. The level of cross-border interconnectedness is high and a full understanding of risks requires an overview of the entire structures, which typically spans more than one jurisdiction.

### Introduction

This Letter outlines some of the complexities and potential risks within Irish-resident non-securitisation special purpose entities (SPEs). At an international level, risks within securitisation SPEs<sup>1</sup> (have been well documented in various official and academic publications.<sup>2</sup> The risk for other types of SPEs are not as well documented.<sup>3</sup>

Shadow banking, or non-bank credit intermediation as it is increasingly termed internationally, essentially describes bank-like activities that take place outside the traditional banking sector.<sup>4</sup> This can involve lending or the facilitation of lending activities by other entities. Securitisation SPEs are almost always considered part of shadow banking on the basis of transforming illiquid assets (such as pools of loans) into cash that can be employed to undertake (further) lending. Non-securitisation SPEs are more nuanced in terms of their inclusion and their reflection of shadow banking risks.

This Letter explores these shadow banking risks within non-securitisation SPEs. There are pockets of leverage and maturity mismatch risks though the complexity of international connections and information gaps therein are a more general cause for concern.

### What are the risks?

Shadow banking risks include:

- Leverage risk: lending activity or the purchase of assets based on credit;
- Maturity risk: investment in longer-term assets dependent on shorter-term funding;
- Liquidity risk: issuing debt based on less liquid assets or guarantees;
- Interconnectedness: extent of links to systemically important institutions, like banks, and cross-border links that make monitoring more difficult.

### SPE activity in Ireland

The Central Bank of Ireland extended the granular reporting requirements applied to securitisation SPEs to non-securitisation SPEs in 2015.<sup>5</sup> Irish-resident non-securitisation SPE assets amounted to €331 billion at end 2017. €185 billion of this potentially formed part of shadow banking credit intermediation chains, i.e. acting as a conduit for credit intermediation by shadow banks (Chart A). This means that the Financial

<sup>1</sup> Also known as Financial Vehicle Corporations, particularly in statistical aggregates.

<sup>2</sup> See Golden and Maqui (2018) for an overview.

<sup>3</sup> See Golden and Hughes (2018) for more details on SPE structures, securitisation and non-securitisation.

<sup>4</sup> The Financial Stability Board defines shadow banking as “credit intermediation involving entities and activities (fully or partly) outside of the regular banking system” (FSB, 2018). The European Systemic Risk Board adopts a similar definition including “all financial sector assets except those of banks, insurance corporations, pension funds and CCPs<sup>4</sup>” (ESRB 2018). Under the ESRB definition, the entire non-securitisation sector is included in shadow banking, though the FSB definition is more nuanced.

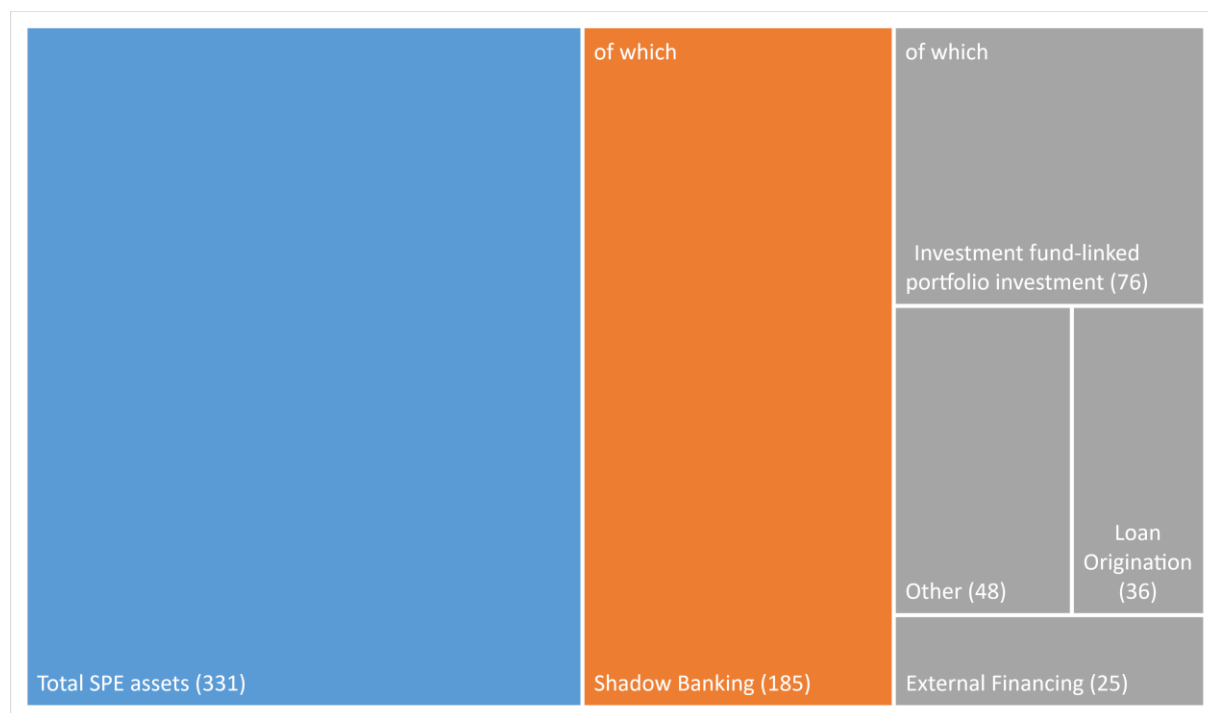
<sup>5</sup> See Barrett et al (2017).

Stability Board (FSB) definition excludes SPEs without credit assets holdings, consolidated into banks, linked to non-financial corporations (NFCs) or engaged in operational leasing activity.<sup>6</sup> Much of this FSB shadow banking figure comprises SPEs undertaking investment activities on behalf of investment funds (€76 billion) though there are significant assets in SPEs engaged in loan origination activity (€36 billion) and external financing (€25 billion).

Chart A

### Shadow banking activity in Irish-resident Non Securitisation SPEs under FSB definition, € billion

(Q4 2017)



Source: Central Bank of Ireland and authors' calculations.

Non-securitisation SPEs are similar to Irish-resident securitisation SPEs regarding their high level of cross-border interconnectedness. However, the broader and more diverse range of business models points to the need for a separate focused shadow banking risk assessment. In this regard, an important dimension within non-securitisation SPEs is a high share of Non-Financial Corporation (NFC) links. Furthermore, while most securitisation SPEs are bankruptcy remote and non-consolidated, around half of non-securitisation SPEs are consolidated into the accounts of other entities, including banks.<sup>7</sup> SPEs as not credit intermediaries themselves and, where SPEs are linked to NFCs or consolidated into banks, they do not form part of a non-bank credit intermediation chain.

### Identifying shadow banking risks

Irish-resident non-securitisation SPEs straddle at least 14 different types of activities (Chart B). These entities are often part of a broader structure. Despite the diversity of activities, the top four categories account for 80 per cent of total assets. The largest activity is fund-linked asset management vehicles which are structured to hold portfolio investments on behalf of investment funds. Intra-group financing entities

<sup>6</sup> This compares to Irish-resident securitisation SPE assets amounting to €401 billion in Q4 2017, with all but €40 billion in assets involved in retained securitisation and/or prudentially consolidated into banks considered as shadow banking.

<sup>7</sup> The key difference between the ESRB and FSB definitions is that the latter excludes SPEs sponsored by Non-Financial Corporations (NFCs) or consolidated into banks.

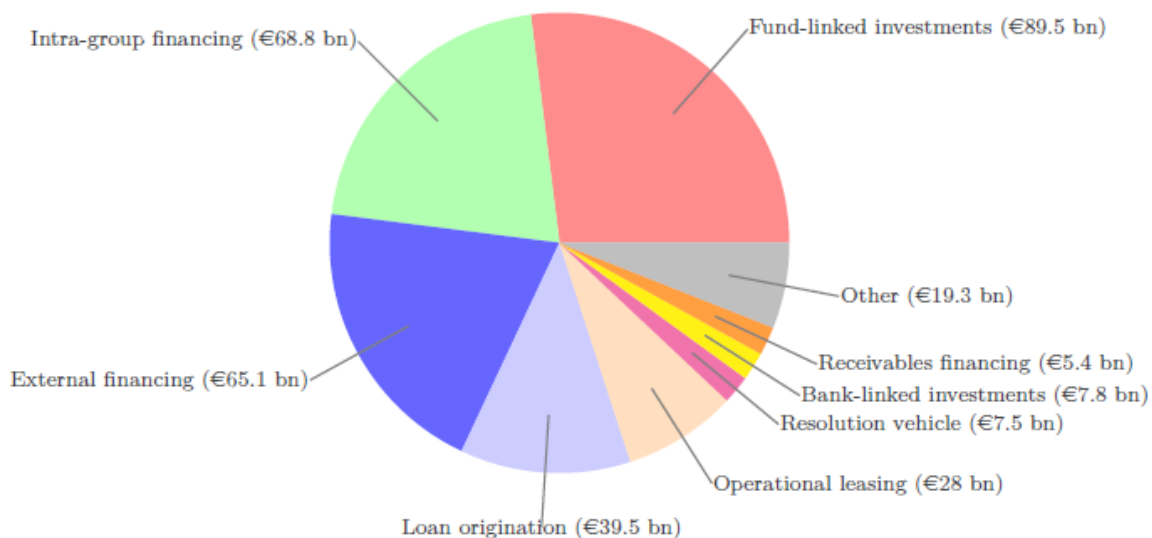
are mostly conducting treasury operations for multinational corporations. In terms of shadow banking risks, the SPEs appear simply to substitute for the activity of the parent entity.

Focusing on leverage risk, loan origination and external financing can take place through an SPE. Loan origination activity is when the SPE grants new loans. SPEs used for external financing are established specifically as vehicle for raising funds for a related entity. They are often structured specifically to lower funding costs or to access funding sources that would not otherwise be available to the sponsor. For example, the sponsor can ring-fence assets in an SPE which can subsequently be used as collateral for issuing debt to investors. The ring fenced collateral provides the investors with protection in the event of sponsor distress. This is often a driving factor behind banks from emerging economies employing Irish-resident non-securitisation SPEs.<sup>8</sup> At times of market stress, the perceived value of such protection could decline, leading to a pro-cyclical effect. Almost half of SPEs engaged in external financing are linked to NFCs, however.

Chart B

### Irish-resident Non Securitisation SPEs: Total assets by activity type

(Q4 2017)



Source: Central Bank of Ireland and authors' calculations.

Focusing on liquidity and maturity risks, advanced economy banks appear to use non-securitisation SPEs mainly to undertake investment activities. Some of these SPEs issue debt with guarantees from the sponsor bank. The funds are then used by the SPE to purchase assets either from the sponsor bank or in the market. Both the sponsor and the external investors share the portfolio returns and risks, with the sponsor increasing its exposure without directly committing assets. The bank has assumed a contingent liability, due to the guarantee provided on the SPE debt. An inability to recoup the portfolio investment or refinance the portfolio may result in a call on the sponsor bank. Moreover, external investors are often issued bonds repayable at shorter maturities than the assets held in the SPE, creating a maturity mismatch and refinancing risk for the bank. These bank linked investment SPEs (€7.8 billion) are mostly non-consolidated (€7 billion).<sup>9</sup>

Outside of this particular business model, risks from liquidity and maturity transformation are not obvious. For example, these risks are virtually absent in SPEs involved in intra-group financing or acting as

<sup>8</sup> See Golden and Hughes (2018).

<sup>9</sup> Therefore, adding €7 billion to shadow banking figures under the FSB definition and €7.8 billion under the ESRB definition in Q4 2017.

holding companies since their assets and liabilities are linked to entities within the same overall corporate structure. Where external investors hold debt securities issued by the SPE, systemic risk is unlikely given the wide variety of activities and purposes. In contrast, stress in one section of the securitisation market can spill over to other sectors more easily given the perception of securitisation as a single market.<sup>10</sup>

Looking at possible counterparty risk within derivative contracts, these are commonly employed to transfer the gains and losses of a portfolio of assets within the SPE to the sponsor and investors with no third parties involved.

### Interconnectedness complexity

Non-securitisation SPEs are involved in complex cross-border structures which can intensify interconnectedness risks. Non-securitisation SPEs resident in Ireland are sponsored by entities from around 40 countries. In many cases, a single structure may involve entities spanning several countries. As such, the immediate links of the Irish SPE may be to entities in a different country to the ultimate sponsor. In some instances, the structure may involve several intermediate companies spread across several jurisdictions. As a result, a full understanding of the risks requires an end-to-end examination of the structure across jurisdictions, which may be very difficult for any single authority to undertake.

To illustrate this, Chart B1 details capital flows to sponsors, or investment entities managed by sponsors, using Irish resident non-securitisation SPEs. This chart are designed to illustrate how Ireland acts as a channel for global flows and some complexity therein. At first glance, even including only those countries accounting for shares of over 2.5 per cent of total assets, the chart provides a snapshot of some complexity within the various interconnections. Looking at the chart in more detail:

- The numbers on the outer ring represent debt flows between Q1 2005 and Q4 2017;
- The arrow-shaped ending point of the links inside the chart represents the share of debt flows from a recipient sponsor country perspective (i.e. inflow);
- When the position of the starting point of links is shorter and not arrow-shaped, the links represent the share of debt flows from a source country perspective (i.e. outflow);
- The colour of the links corresponds to that of the source country;
- Sometimes, the source country and the recipient country are the same.

For example, the green arrow from Ireland to the UK starts between the numbers 30 and 38. This means that €8 billion in debt flows were received by entities in the UK from Irish entities through Irish-resident SPEs.

The source of debt funding is on a first counterparty basis and the sponsor is the entity on whose behalf the SPE was established. As such, the data might not always allow us identify the ultimate investor which is often the first counterparty but, in some cases, may be an intermediary entity between the SPE and investors. This intermediary could be, for example, a fund, another SPE, a broker or a stock exchange.

Cross-country debt flows channelled through these Irish-resident SPEs are concentrated in a small number of countries. As a share of total non-domestic debt flows over the period 2005Q1-2017Q4, the UK, Russia and Luxembourg account for the largest flows. Within-country flows occur to varying degrees, with 20 per cent of all flows from UK entities being channelled to other UK entities while the equivalent figure for Russian is 7 per cent. International financial centres feature strongly in lists of countries with SPE populations compiled by the IMF and OECD, which tentatively suggests that such cross-border interconnectedness is quite common (IMF 2016 and OECD 2017). The main country flows within Chart C1 are:

- Ireland to Russia: largely reflecting the issuance of Russian sponsored SPE debt through the Irish stock exchange or resident intermediary conduits such as asset and capital managers or servicers.

<sup>10</sup> See, for example, Segoviano et al (2013).

This is in line with a general tendency for a substantial portion of emerging market debt to be issued in financial centres in Europe or the US.<sup>11</sup> Securities holdings data collected from euro area custodians suggests that close to half of the underlying investors are actually Russian, meaning flows are from Russian investors to Russian sponsors via third countries. Therefore, flows from Russian investors to Russian sponsors are much larger than implied by within-country flows;

- Ireland to UK: these are largely flows between SPEs and UK-managed investment funds;
- UK to Russia: reflecting to a significant extent flows through a London stock exchange or intermediary conduits.
- UK to Luxembourg: mainly flows into Luxembourg's large non-bank sector and, particularly, investment funds and various leasing structures;
- Luxembourg to Russia: investment funds purchasing debt issued by Russian banks and NFCs;
- UK to UK: UK investment flows into UK banks and UK funds employing SPEs to undertake their investment activities.

For Ireland, debt flows to domestic sponsors are relatively weak, illustrating the sector's role as a channel for global finance rather than being widely used by Irish companies. The flows to Irish-resident sponsors predominantly reflect the activities of:

- fund managers sponsoring SPEs to undertake investment activities on behalf of Irish-resident investment funds, whose shares/units are mostly foreign-held. This activity could potentially form part of a shadow banking credit intermediation chain;
- multi-national corporations headquartered in Ireland engaging in intra-group financing activity or external financing. In Ireland's case, these are NFCs and so not relevant from a shadow banking perspective;
- certain SPEs linked to Irish-resident securitisation SPEs under the NAMA corporate structure and technically forming part of a shadow banking credit intermediation chain;
- operational leasing activity, largely involving aircraft, linked to Irish-resident NFCs and so not relevant for shadow banking.

Overall, flows to domestic sponsors do not form part of activities identified above that give rise to shadow banking risks.

Chart C2 shows the main sectoral links on the same basis. Banks (DTCs or Deposit-Taking Corporations) are the largest sponsor of non-securitisation SPEs though their share has been declining in recent years. Meanwhile, the share of Other Financial Intermediaries (OFI) has been increasing, reflecting a wider range of asset, capital managers, advisors and servicers. In addition, with fund managers employing SPEs to invest on behalf of funds featuring more prominently. NFCs largely employ SPEs for intra-group financing through complex multi-entity structures, as illustrated by the substantial flows to the OFI sector. Debt flows to NFCs from banks reflect external financing activity to a significant extent.

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<sup>11</sup> See, for example, Serena and Moreno (2016).

Chart C1  
**Sponsor-source country shares of the proceeds of debt sales by SPEs, € billion**  
 (Flows between Q1 2005 and Q4 2017)

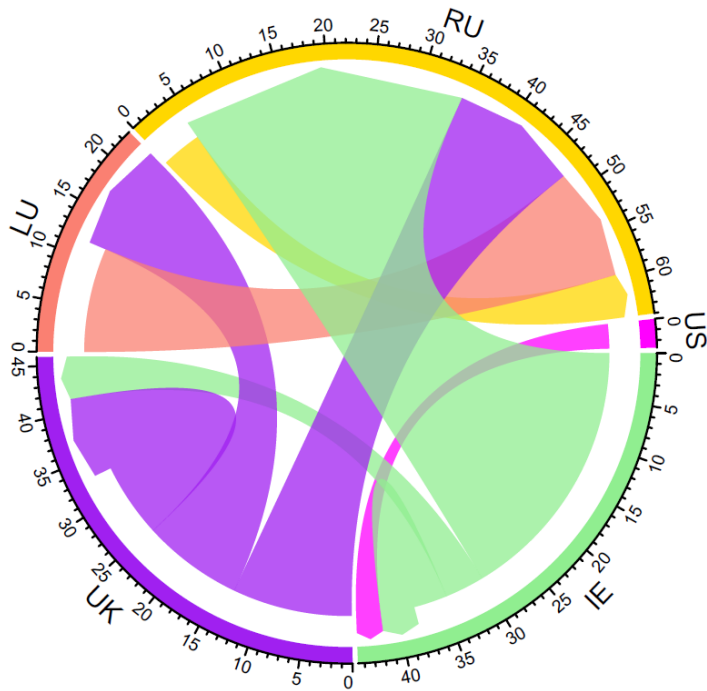
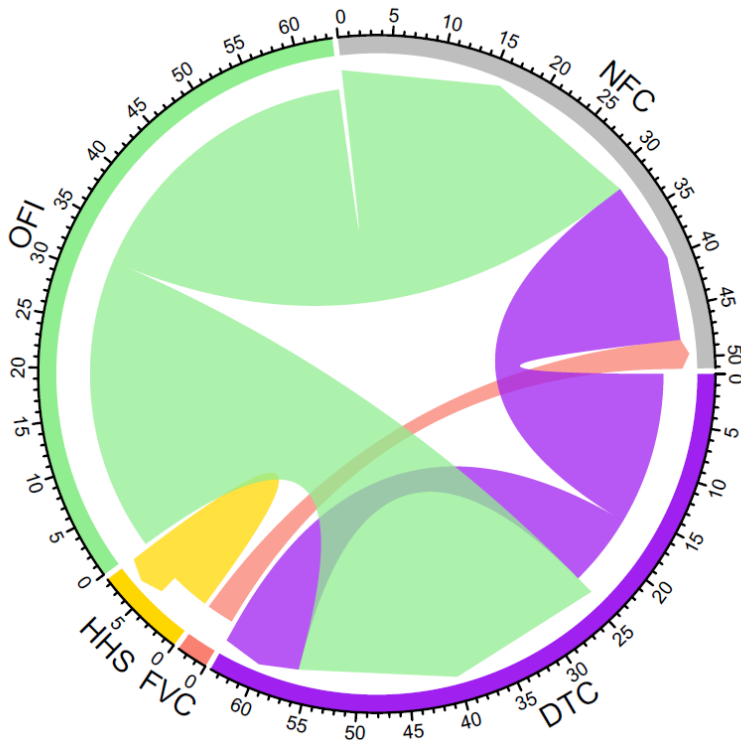


Chart C2  
**Sponsor-source sector shares of the proceeds of debt sales by SPEs**  
 (Flows between Q1 2005 and Q4 2017)



Source: Central Bank of Ireland and authors' calculations.

## Conclusion

Irish-resident SPEs are often part of complex cross-border corporate structures, of which limited information is available. While shadow banking risks appear to be concentrated in certain SPE activity types, this complexity could become a source of generalised instability in terms of information gaps at times of market stress. Fully understanding the motivations behind Irish-resident SPEs and assessing shadow banking links and associated risks requires the close co-operation at an international level. In this regard, the Central Bank of Ireland has begun an analytical project including bilateral engagements with several national authorities in other jurisdictions so as to better understand the business rationale for both securitisation and non-securitisation SPEs.



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