

The risks of closed-ended long-term debt funds

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With low investment growth since 2009 and the announced reduction of long-term bank lending (Basel III), policy-makers are anxious to support alternative sources of long-term private funding for the real economy. The current European Commission proposal to create a dedicated regulatory regime for long-term investment funds (ELTIF) is an example of a broader policy effort to promote investors' long-term commitment to the financing of the continent's infrastructure and small and medium enterprises (European Commission [2013])¹.

This debate is mostly about debt financing: on the demand side, long-term debt is what the European economy needs most, and on the supply side, institutional investors are mostly interested in fixed-income assets with a better yield than long-term government bonds, and are willing to consider unlisted, illiquid assets. If banks cannot or will not lend long, new channels of financial intermediation may be necessary.

But this trend is also raising new regulatory questions: developing alternative sources of financing to bank loans may be beneficial to the real economy, but may also create new "shadow banking" risks. These issues were raised in a recent consultation by the Central Bank of Ireland (Central Bank of Ireland [2013]), to which

EDHEC-Risk Institute contributed a response, focusing on the risks created by closed-ended long-term debt funds and, in particular, the opportunity to allow investment funds to originate new debt instruments (see Blanc-Brude and Ismail [2013a], available on the EDHEC-Risk Institute website).

Where do shadow banks come from?

The notion that new debt funds contribute to the ex nihilo creation of a parallel lending sector that is beyond the reach of the regulator is a

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misconception, falsely opposing bank and non-bank lending.

Of course, investment funds originating new debt instruments fall within the Financial Stability Board definition of "shadow banking" and are thus potential sources of runs and excessive maturity, liquidity or credit risk transformation. But loan origination by shadow banking entities requires numerous economic functions that are best and often only provided by actual banks. Banks typically act as the originator, servicer, trustee and underwriter of new debt, and also play a crucial credit assessment function in the

context of both their regulated and un-regulated activities. Recent research shows that banks have directly created and managed most shadow banking activities to date (see Cetorelli and Peristiani [2012] for a review).

Banks are thus likely to play numerous roles in the decision to originate long-term loans taken by ring-fenced investment funds. These funds would be more accurately described as off (bank) balance sheet origination vehicles in response to the demand for long-term funding of the real economy, under the constraints imposed by the implementation of Basel III to the regulated banking sector.

How debt funds will create value

The academic literature has long documented how banks create value by taking (or not) the decision to originate new credits. These mechanisms are essential to understand what value and what risks private investment funds allowed to originate debt might create, and also how they may be expected to operate as shadow banking entities.

As issuers of corporate loans, banks are, famously, "delegated monitors": Diamond (1984) and Fama (1985) argue that financial intermediaries have a cost advantage in monitoring defaultable debt because they benefit from diversification and scale economies at the loan portfolio level. They also provide re-contracting services, eg, Gertner and Scharfstein (1991) and Bolton and Scharfstein (1996) discuss the benefits of debt restructuring and of 'working out' credit issues for borrowers. ▶

¹ The Commission's request that the European Insurance and Occupational Pensions Authority (EIOPA) should consider revising the Solvency II Standard Formula to accommodate long-term investment (Faull 2012) is another example of this trend.

◀ Banks also provide a “certification” service by signalling the future credit quality of borrowers to the equity market. Such certification effects are documented in a recent paper by Bushman and Wittenberg-Moerman (2012) studying the relationship between arranger reputation and loan performance and confirming a consistent relationship between bank reputation and the quality of borrowers’ credit.

But while arguments in favour of developing alternative sources of funding usually oppose the role played by banks and capital markets, existing research suggests that banks also provide valuable services in the area of bond underwriting, including certification, information revelation, credit risk assessment and pricing. For instance, Ang and Richardson (1994), Kroszner and Rajan (1994) and Puri (1994) show that bank underwriting tends to have a better long-term performance (lower default rates) than investment house underwriting.

Banks are also more likely to underwrite credit for SMEs. Gande et al (1997) examine the pricing and characteristics of bank and investment house underwritings in the US. They show that bank underwriting consists much more often (33%) of small issues (below \$75m) compared to investment house underwriting (8%). Likewise, Gande, Puri and Saunders (1999) show that underwriter spreads and ex ante yields decrease significantly as the presence of commercial banks in the underwriting sector increases, in particular in relation to lower rated and smaller issues.

More recently, Fernando, May and Megginson (2012) use the collapse of Lehman Brothers to test whether investment banking relationships have value for their clients. The bankruptcy of the underwriter can be associated with significant drops in market capitalisation for some of its clients, affecting both those clients that had mandated numerous issues or recent and small issues. Likewise, Andres, Betzer and Limbach (2012) use the high-yield bond market to test the value of delegated monitoring. They find that those banks acting as bond trustees in the lower-grade bond segment can reduce at-issue bond yields and that those issues are associated with lower defaults and downgrades.

Empirical evidence suggests strongly that banks tend to underwrite smaller and riskier issues than investment houses do, and that their access to borrower information through relationships allows for a more accurate pricing of credit risk (lower spreads) and better long-term performance, in part thanks to workouts and restructurings. In other words, as underwriters, banks are shown to have reduced a market failure springing from the information asymmetry between lenders and borrowers in credit markets.

Thus, it is difficult to imagine private debt funds providing long-term financing to SMEs and infrastructure projects achieving better certification effects and reduction of information asymmetries than banks can, unless banks themselves are heavily involved in the decision to originate taken by these funds.

The potential role played by private debt funds should be recognised for what it is: allowing the origination of bank loans, off the regulated banking sector’s balance sheet, ie, without the benefit of any of the formal guarantees that regulated entities benefit from (deposit insurance and last resort access to liquidity through the central bank) but also without the capital charges that make long-term loans unpalatable to the same regulated lenders.

Hence, private debt funds with the power to originate are unlikely to exist and function on a significant scale – one that is commensurate

with providing long-term financing to the real economy – without the direct involvement of banks. This conclusion is important to understand the potential contribution to systemic risk of investment funds allowed to originate private debt.

Would long-term debt funds contribute to systemic risk?

Systemic risk, the risk of observing cascading defaults across the financial system, is state-dependent and the regulation of specific types of investment vehicles should focus on their marginal contribution to systemic risk, ie, their propensity to create additional losses in bad states of the world (see Acharya et al [2010]).

Closed-ended debt funds dedicated to building genuinely long-term private debt portfolios for institutional investors would create minimal liquidity, maturity and credit transformation

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risks. With limited links to other financial institutions and no maturity and liquidity funding mismatches, an exogenous shock (eg, a recession) affecting the asset value of private debt funds across the board could lead to losses for investors but would seldom create additional losses that propagate throughout the financial system in bad states of the world, ie, contribute to systemic risk.

Endogenous shocks are much more likely to create feedback loops and increase systemic risk (Haldane and May [2012]). Hence, recent debates have focused on what endogenous sources of credit risks may exist within long-term debt funds, in particular the role of leverage, (the absence of) diversification and collateral/underlying valuation.

Leverage constraints

Since 2008, the use of leverage has been frowned upon in regulatory and policy circles because leverage magnifies losses and thus contributes directly to increasing systemic risk. Hence, both regulator and policy maker tend to suggest that only low levels of borrowing should be allowed in long-term debt funds.

Still, a distinction should be made between fund-level borrowing that is either senior or junior to investors’ claims, as well as between short-term and long-term fund borrowing.

While short-term borrowing may be useful for operational purposes, it may also be used to pay back investors and mask the deterioration of the fund’s asset value. Conversely, long-term fund borrowing, matching the investment term agreed with investors for the fund may provide a useful first-loss junior tranche (provided by a bank-manager) or it may provide a senior tranche boosting the returns of the fund’s investors, especially if the fund’s assets are otherwise very safe, low-yielding instruments.

In the junior case, the net marginal contribution of such leverage to systemic risk would be positive but, in all likelihood, small, ie, a synchronised increase in underlying defaults

would hit the providers of the junior tranche simultaneously, possibly in a bad state of the world, but this loss would be small relative to the size of the financial system.

In the case of senior fund leverage, its ability to contribute to systemic risk is a matter of asset risk. Since they do not exhibit liquidity funding mismatches or engage in maturity transformation, leveraging long-term investment funds of new private debt does not contribute to systemic risk. Instead, it is the correlation of the credit risk of underlying loans with bad states of the world which should guide the opportunity to leverage private debt funds.

For example, debt funds with underlying assets that almost never default in any state of the world (eg, infrastructure project finance debt backed by government revenue guarantees, as is the case in the UK or France) could be highly leveraged since their propensity to create new losses in bad states of the world would be almost zero. Conversely, leveraging debt funds with underlying assets that are highly correlated with bad states of the world (eg, loans to SMEs) would constitute a net positive contribution to systemic risk.

Hence, the frequent suggestion to limit debt fund leverage across the board at an arbitrary level of 20 or 30% (see for example Central Bank of Ireland [2013]) is too ad hoc to be convincing. Instead, robust and transparent credit risk benchmarking is necessary (we return to this below).

Diversification constraints

The risk of concentration of loan portfolios originated by private debt funds has also been raised by the regulator. Hence, it is often argued that on long-term debt funds should be imposed a diversification constraint, either industrial, geographic or both, as well as by number of loans.

With concentrated loan portfolios, investors do not benefit fully from diversification and may indeed face higher losses in bad states of the world. Hence, concentration may contribute to systemic risk insofar as investors may face higher losses, but it does not create any new transmission mechanism for these losses.

Unlike leverage, which can increase the impact of mechanisms that are otherwise sources of loss transmission (cascading defaults), concentration only increases the size of potential losses but not their propagation. What matters from a regulatory perspective is that risks be well-understood and identified by investors, who remain responsible for the risk they take.

Moreover, there is a trade-off between diversification and the quality of credit information available to lenders which may justify concentration at the point of origination.

Traditionally, the finance literature has argued that a loan portfolio can be diversified by expanding its borrower base. But the literature has long recognised that lenders are likely to be under-diversified because of the importance of long-term client relationships and their role in monitoring and gathering information about borrowers (Diamond [1984]).

Indeed, two effects are at play in the determination of the investment profile of loan portfolios: information and diversification. Expanding lending across new sectors or countries may create diversification benefits but it may also come at a cost in terms of credit quality if lenders are less familiar with new types of borrowers.

Recent research on loan book diversification suggests that lenders benefit from being specialised and find that those banks that expand into new industrial sectors do not necessarily

improve the efficiency of their loan portfolio. Using detailed bank data from Italy, Germany, Ireland and Jamaica, Langrin and Roach (2008), Acharya, Saunders and Hasan (2002), Hayden, Porath and Westernhagen (2007) and Dionne and David (2005) show that diversifying across industrial sectors is at best of limited interest and may significantly damage the efficiency of bank loan books.

These results suggest that the trade-off between familiarity and ambiguity identified by Boyle et al (2012) may be on the side of familiarity when it comes to loan portfolios. Hence, imposing diversification constraints across the board is likely to be too ad hoc and even counter-productive. Instead, underlying and portfolio credit risk need to be better understood and documented

Towards transparent credit risk benchmarking

Historically, the gradual lowering of underwriting criteria, in a context where investment products were opaque, made asset valuations (two market participants agreeing on a price) impossible in bad states of the world, and has been a key source of loss propagation (see Luttrell, Rosenblum and Thies [2009]; Cerutti, C., and McGuire [2012]; Lane [2013], for a detailed discussion).

The quality of the collateral/underlying of an investment fund originating debt instruments is determined by the credit risk of its borrowers, ie, it depends on the fund manager's ability to assess and manage credit risk and to monitor loan books.

While a closed-ended, illiquid type of private debt fund would not face a run or short-term funding problem if investors lost faith in its past lending decisions and current ability to manage the fund's loan book, the reversal of expectations regarding such funds' asset values would certainly contribute to systemic risk since it is more likely to happen in bad states of the world.

To avoid contributing to systemic risk, the difficulties related to collateral valuation can be addressed thanks to adequate and transparent credit risk benchmarking, backed up by the standardisation of the cash flow reporting of borrowers.

This may require substantial efforts on the part of the industry to impose norms for the reporting of borrower cash flows, as well as their centralisation in an independent database for the purpose of benchmarking the credit risk of private debt instruments at the underlying level as well as the aggregate level.

An early example of such reporting already exists in the project financing sector, in which lenders insist on the clear definition of a base case debt service and debt service cover ratio (DSCR – the ratio of the firm's free cash flow to its debt service in a given period) at financial close, and monitor borrowers' DSCR on a regular basis until maturity. Using the example of infrastructure project finance loans, we propose in a recent paper to use the DSCR to measure and benchmark credit risk in infrastructure project finance (Blanc-Brude and Ismail [2013b]).

Contrary to the current credit rating methods, which focus on issue-specific credit risk, a statistical approach using a robust estimation of the distribution of the DSCR, allows the estimation of both systematic and idiosyncratic credit risks. Beyond project finance, similar reporting

and aggregation of borrower information to develop the ongoing monitoring of private debt credit quality can be envisaged in other sectors, such as SMEs for example.

Conclusion

Investors can be expected to take risks knowingly when investing in debt fund structures. As shadow banking entities, investments in such funds do not benefit from any formal public sector guarantees and investors may make a loss.

Avoiding the creation of investment vehicles that have net positive contribution to systemic risk can be achieved by allowing only those private debt funds matching the liquidity, maturity and credit risk profile of investors, thus minimising the corresponding transformation risks that can create runs following a sharp change of expectations.

Above all, transparency about the nature of credit risk in debt funds should play a key role

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in avoiding a divergence of incentives between originator and investors. Such transparency requires the standardisation of cash flow reporting and the development of adapted benchmarking methodologies.

Properly regulated shadow banking debt funds are the opportunity to combine the benefits of a focus on collateral/underlying value, which requires benchmarking and transparency, with the significant value otherwise created by banks in the financial intermediation process, especially certification effects and the reduction of information asymmetries, leading to lower default rates, and the monitoring and re-contracting of borrowers' debt, leading to higher recovery rates.

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