VALIDUS RISK MANAGEMENT

The levels of risk

Private Debt Investor sat down with Validus Risk Management co-founders **Kevin Lester** and **Francois Scheepers**, as well as board member **Professor Florin Vasvari**, to talk about the firm's holistic approach to risk management.

Risk management, compliance, due diligence – they're the unglamorous aspects of alternative investments, but increasingly important. For the burgeoning private debt fund industry, managing risk to preserve investors' capital is paramount. But increasingly, firms like Validus are urging managers to consider risk management as a value-enhancing tool, rather than a cost.

Private Debt Investor meets Validus' two co-chief executives, Kevin Lester and Francois Scheepers, at London Business School, where one of the firm's senior advisors and board members, Florin Vasvari, is a faculty. It's an unseasonably warm September day, matching the trio's disposition as they enthusiastically discuss changing attitudes to risk.

A TRIPARTITE APPROACH

Lester explains how the firm divides risk into three levels. "The first level is what we'd call investment risk. That's the credit decision – who are you going to lend to, how you're going to structure the deal? For a private debt fund, that's really their core competency. So in that type of risk, there's obviously upside and downside. The downside is that if they don't do their job well they make bad investments and they can lose money. The upside is they make good investments, and good returns. But they're paid to take that risk and importantly, they're largely in control of that upside.

"The next level down is what we call market risk, which also has an upside and a downside, but it's essentially random. For example, if you're lending in a foreign currency, you have currency risk attached. Are you lending fixed or floating rate? If it's fixed, rates could go up which can have a negative effect if your peers are lending with floating rates.

"DESPITE ALL THE TECHNOLOGY, IT'S STILL ABOUT PERSONAL INTERACTION, LOOKING THE OTHER GUY IN THE EYE AND BUILDING TRUST"
Francois Scheepers, CFA

"The third level is risks which don't have an upside, only downside. They are things like operational risk, counterparty risk, and liquidity risk. These are the sort of risks a fund definitely wants to mitigate," Lester adds.

He argues that firms want to embrace risk at the first level because of the potential to create upside. At the second level, they want to manage it. And at the third, it's about mitigating it.

Validus concedes that as far as the first level is concerned, consultants have only a limited role to play. "When it comes to the investment risk area, that's what the fund manager is an expert in, so typically the only way an outsider like us could get involved in that area is where it links to extrinsic risks. We're more focused on the second and third levels – the origins of our firm are very much on the second level, the market risk side," Lester explains.

As an illustration, Lester uses the example of an international bond fund as a proxy. Over the last 10 years for a dollar investor, currency issues have contributed between 50 and 80 percent of the volatility of the overall return. "All funds which are invested internationally are aware of that risk; the question is, 'What do you do about it?' That's where we get involved," he adds.

Eliminating one type of risk can increase risk elsewhere however. "A good example at the moment is the emerging market crisis. Take a private debt fund that invests in those markets. Because they're generally perceived as being very risky, they can be very expensive to hedge, the fund will invest in dollars. That eliminates market risk, but it increases investment risk. Let's say you've got an Indian company that's borrowed from you in dollars, but the Rupee has depreciated by 30 percent; so all of a sudden that loan might not get repaid because it's a lot bigger than it was," Lester says.

CORE ACTIVITY, COST, OR DIFFERENTIATOR?

Different firms approach risk management in very different ways, the Validus team argues. Some view it as a core operational activity. Others roll their eyes and view it is as a requirement brought about by increased regulation and ever more demanding investors. The final way, 'the third way', is where funds seek to use risk management as a differentiator or source of competitive advantage. "Currency risk is a classic example, but equally, providing a much more transparent picture of performance to their investors because they've got a handle on the risks involved fits into that category," Lester says.

Scheepers picks up the baton. "In the corporate world, risk management was always a cost centre. Now, because of the volatility in currencies, commodity prices and so on, you can't divorce risk management from the strategic direction and planning. More and more, it needs to be part of the board-level dialogue. We're seeing it increasingly within the funds community now too, especially with investors demanding more transparency.

"Pre-AIFMD, it was a tick-the-box exercise, and I think a lot of people still hope that will remain the case. If you think about it the right way, it doesn't have to be. You can use that energy and effort you're putting in to your risk management programme to add value, increase performance, and aid your next fundraising cycle. If you do it right, it can be very additive."

"PEOPLE ARE TRYING TO GET AHEAD OF THE CURVE, PARTICULARLY IN LIGHT OF ALL THE NEW REGULATIONS"

Kevin Lester

Traditionally, firms have tended to be reactive when it comes to risk management. "A risk issue would come up that had perhaps hurt returns, and a firm would ask, 'How do we address this?' That's difficult because you're already in a hole and trying to get out," Lester argues.

"Now people are trying to get ahead of the curve, particularly in light of all the new regulations. During the financial crisis, things like currencies suddenly became much more volatile than they had been, and returns came under pressure. The combination of those two things woke a lot of people up to the fact that you can't just pretend this isn't there."

Vasvari makes an interesting point about some additional benefits accruing from good risk management. "It doesn't just help the GP on the investor side. It also helps the investment opportunity set. When you deal with other counterparties and you convince them you can hedge risk, you become a more reliable partner. You avoid liquidity crunches if you plan ahead. It makes a lot of investment sense," he says.

Being proactive can also save a firm money in the long-term. "If you think about origination processes, people screen investment opportunities and conduct due diligence, and they spend a lot of money on that. During this due diligence process, a lot of issues can come up, many of which can be anticipated. The cost of hedging against those at an earlier date versus the cost at the due diligence stage can be a lot lower. In relative terms, it makes good business sense to spend a couple of basis points hedging a risk which might be a low probability tail risk, but without it hedged, you might not be able to deliver a positive return if things go wrong. Given the upside is usually limited [in PD funds] you can't really use the upside to overcome losses. One default can kill the whole fund, whereas with private equity, one bad deal can sometimes be more easily accommodated," he says.

Even simple currency volatility can have a severely detrimental effect on performance. Over any given year, the team argues, and based on current volatility, you could expect a detrimental impact of 8 percent or more. That's more than half your return gone if you're a mezzanine fund. If you're doing senior debt, you're staring down the barrel.

Pressure on returns is causing many firms to focus harder on yields rather than capital gains. To survive in such a market, you either need scale – the trio predict bigger fund sizes will become a key feature of the market – or you need

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to manage risk very carefully because the margins are so much smaller.

COUNTING THE COST

For managers looking to build out a fully fledged risk management programme, there are two options: go in-house, or outsource to a specialist. "If you look at the cost of building an in-house risk management team, it probably equates to about €600,000 a year – two or three full-time people, the right systems and so on," Lester estimates. "For a fund of €500 million or below, that's going to eat up a lot of your management fee. It's counter-balancing how you get that risk management process whilst being as efficient as possible. You have to be clever about how and what you hedge, and not hedge things you don't need to. Are there some risks you can offload to your investors through the structure of your fund perhaps?"

Vasvari argues that an in-house team, even a very experienced one, won't have the same breadth of knowledge of current trends as a third party advisor however. "Even if you have an in-house team – and that's assuming you can hire people with the requisite skillset, which is not easy – you still need that market intelligence which you get from an intermediary who sees a lot of transactions, and who can do benchmarking. An in-house team will only see a handful of deals and will work with only one or two banks so might not develop the most cost-efficient solutions."

Scheepers sets out some of the advantages to being independent. "We deal with all the big banks. After a while, they get to know and understand how you're seeking to risk manage your clients' exposure to various elements of the market. When you then approach them, it's easier to relay that message because from a benchmarking perspective they know you're running a successful programme and you can then transpose that to a new client. It takes a long time. Despite all the technology, it's still about personal interaction, looking the other guy in the eye and building trust. That credit risk isn't just about asking 'how strong is my balance sheet?', it's about giving the other guy a certificate of compliance that there'll be enough liquidity in the next quarter. That's just a trust issue. We seek to grease the wheels of the risk management process for our clients, and we strive to take as much of the strain and effort off them as possible so they can focus their energies somewhere else," he adds.

"WHEN YOU DEAL WITH OTHER COUNTERPARTIES AND YOU CONVINCE THEM YOU CAN HEDGE RISK, YOU BECOME A MORE RELIABLE PARTNER"

Professor Florin Vasvari

Simplifying risk management lies at the core of Validus' approach, Scheepers says. "Our methodology and ethos is very much about presenting risk simply. We want anybody to be able to look at a presentation and understand it immediately. We don't want to use blind science, we want to keep it simple. At the end of the day, risk is built into us, and it's fundamentally about judgement."

"You can go too far the other way though," Lester cautions. "You can argue that in conventional or theoretical risk management there's been an over-reliance on models and they've developed a bad reputation. In some cases the response in the private debt and private equity space has been to go too far in the other direction though, and rely purely on gut feeling and intuition. There's a happy medium that needs to be found.

"We do try and bring numbers and measures where we can. We do bring that rigour and structure. If we're designing a hedging programme for currency risk, let's say, we ask what are the key metrics? There's the cost, there's the potential liquidity impact that a hedging strategy could have. There's the impact of that risk on my return. You can put numbers to that. You can say, 'I'm willing to experience this much liquidity drag', 'I'm willing to pay this many basis points', 'I'm willing to risk up to 200bps of my return'. Then you can calibrate them and do a more rigorous cost / benefit analysis. It's so complex, you can't just rely on your gut. But you shouldn't go back to the other extreme where it's just a black box approach, crunching numbers."

That balance lies at the heart of effective risk management – finding an equilibrium between effective modelling of risks and using good judgment and human interaction to build trust. Whether a fund manager develops those skills in-house or looks for external support, one thing is certain: in a volatile economic climate and with increasingly risk-averse investors, it's a brave manager who doesn't invest in a comprehensive programme. ■

COMPANY PROFILE

Validus Risk Management is an independent advisory and technology company, specialising in risk management for the private debt and private equity sectors.

We work with investment managers and institutions to design and implement strategies and processes to measure, manage and monitor financial risk, using a market-tested combination of specialist consulting services and innovative risk technology. Our areas of focus include market risk (currency, interest rates and commodities), liquidity risk, counterparty risk and operational risk.

OUR APPROACH

Our financial risk management methodology has been designed to increase risk transparency, create customized risk management solutions, and facilitate the efficient execution of hedging transactions by minimising information asymmetry between clients and banking counterparties. Our service offering is comprised of three core components:

1. Strategy – Risk Measurement & Strategy Design
2. Implementation – Counterparty Selection, Hedge Arrangement & Price Regulation
3. Technology – Analytics & Risk Reporting

At Validus, we understand the key objectives and constraints that face fund managers and institutional investors when it comes to managing risk. Our practical experience of managing risk in the private equity and debt sectors, as well as our collaborations with the academic community, ensures that our clients are always aware of the latest developments and trends within the field of risk management.

While designing a customized risk management strategy which considers the unique risk profile, objectives and constraints of the fund manager is critical, at Validus we understand that any strategy is only ever as good as its execution. Our unique co-sourcing model means that we can be as involved with the practical details of strategy execution as we are with its initial design. Our independence, combined with our strong knowledge of, and relationships with, major international banks and financial institutions, means that we are able to effectively translate a customized risk strategy into meaningful and practical results. We are able to facilitate every step in the implementation of a hedging program, including counterparty identification and selection, establishment of hedging facilities and documentation, co-ordinating the execution of hedging transactions with full price transparency, and benchmarking versus peers.

OUR TECHNOLOGY

Our proprietary risk management technology has been developed with the specific requirements of the private equity and private debt market in mind. Our web-based multi-tenant application offers:

- Risk Analysis
- Risk and Regulatory Reporting
- Monitoring of risk KPIs and e-mail alert system

Our use of an agile development methodology enables rapid design and deployment of fully customized risk monitoring and analysis tools. This allows us to tailor our system to our client's unique requirements, which may include:

- Allocation of costs / benefits of hedging within a complex fund structure
- Quantification of financial risk on portfolio company valuation
- Compliance with specific investor / regulatory reporting requirements

In addition, the modular design of our technology means you get only what you need, rather than paying for a comprehensive off-the-shelf risk solution when you only require a small fraction of its total functionality.

RISK MANAGEMENT AS A COMPETITIVE ADVANTAGE

The Validus Risk Management advisory service gives our clients access to the latest risk management technology and independent expertise at a fraction of the cost of an in-house financial risk management function. We work with investment managers and their portfolio companies across the globe, and we advise on over $60 billion in risk exposure annually.

From our offices in Europe and North America, we currently service clients in the following sectors:

- Private Debt
- Private Equity (fund level and portfolio companies)
- Secondaries
- Real Estate
- Infrastructure
- Fund of Funds
- Sovereign Wealth Funds
- Pension Funds

VALIDUS

Debt funds spawn a new breed of risk manager

Funds are adapting more granular approaches to risk management, writes **David Rothnie**, whilst a better understanding of risk is also helping to shape the way private debt firms invest.

The emergence of private debt funds in Europe is one of the more positive consequences of the collapse of Lehman Brothers five years ago. Often launched by former bankers with a strong background in fixed income trading, these funds have a hawkish view of financial risk management.

This stems from the fact that – as well as wanting to protect their reputations and their investors' money – many of the new breed of debt investors have learned hard lessons from working in big investment banks in the years running up to and following the global financial crisis.

Heath Forusz, head of commercial real estate debt at Tyndaris, and the former head of commercial real estate capital markets for EMEA at Deutsche Bank, says: "Too often during the crisis, risk management systems were found wanting because they were not unified, making it difficult to calculate true exposure. We have learned the importance of developing proper risk systems from our experience managing multiple billions of risk on banks' balance sheets through the crisis."

Forusz was among a number of former Deutsche Bank employees who worked within its highly successful CMBS and CRE operations, which was deemed to have had a 'good crisis'.

Nevertheless, there are lessons from working in big global firms, where systems are often spread across the organisation and provide no central access.

Start-up debt funds have the opportunity to get risk management right in a way that investment banks, with their sprawling divisions and mixture of technology platforms do not. They also know it is crucial if they are to attract investors in the first place, and make sound investments in another. While traditional bank lenders had systems built around the assumption that the debt they were underwriting would be syndicated, debt funds must have the right processes to take a longer-term view.

"With debt investing it is about identifying the risks and building-in the appropriate structural protections prior to making an investment," Forusz continues. "Making the best investment decisions is about having the right processes and risk management systems in place. Having those systems in-place ensure the effective monitoring of the investment."

"During the last boom, when conditions were benign and credit widely available, many firms adopted a high level, top down view of risk management especially for granular portfolios. That is no longer sufficient in a more cautious environment where capital is more scarce."

Maddox advocates a 'bottom-up' approach to risk management which deals with each investment on a much more granular level and enables investors to mitigate risk during the bidding process for portfolios of residential mortgage assets. And says Maddox, as real estate investors stretch outside of their comfort zone and invest more in residential mortgages, they need partners to help them understand the asset they are dealing with.

The relatively small if growing size of the private debt market in Europe means that a granular approach to financial risk management is both necessary and possible. In the current cautious climate, underwriting debt packages for some mid-market deals is typically taking six months, where previously they would take three. This is a good thing, according to industry professionals, and it's down to the increased rigor of non-bank lenders.

Olivier Berment, head of private debt at French alternatives group AXA Private Equity, says: "Risk management is in our DNA and we have applied our expertise in risk management from our private equity to our debt business. We want to be seen as a partner rather than simply a lender." As such, AXA Private Equity has a role as a board observer on every company it invests in. It also double-checks its investments with AXA Private Equity's independent valuation committee.

The approach of Berment's team and the firm's private debt model has also been shaped by the financial crisis. In March, Berment's team arranged a €220 million unitranche facility for the acquisition of IPH by PAI Partners from Investcorp and Berment says the Unitranche approach is in keeping with risk management best practice.

"A lesson financial sponsors learned from

"TOO OFTEN DURING THE CRISIS, RISK MANAGEMENT SYSTEMS WERE FOUND WANTING BECAUSE THEY WERE NOT UNIFIED, MAKING IT DIFFICULT TO CALCULATE TRUE EXPOSURE"

Heath Forusz, Tyndaris

the financial crisis is that it is not good to manage numerous lenders. Being the sole lender on a deal is good for risk management for all stakeholders – management, the sponsor and the lender." It makes it easier for the lender to change documentation as much as it favours the borrower in getting quick decisions made when it comes to increasing capital expenditure.

One advantage of being a start-up debt fund is that it does not suffer the problems of legacy systems affecting big investment banks, making the importance of having scalable financial risk management systems from the outset essential because it means a debt investor can keep track of its exposure on a granular level even when it is managing many tens of billions of euros several years down the line. Forusz added: "You have to build the proper risk management system and processes from day one so it is engrained into the culture. If you try and build later or as you go along, it becomes exponentially harder to implement."

Investing in technology and risk management processes is costly but debt professionals argue it is essential to capturing alpha – and avoiding disaster. Having robust processes to judge credit risk on an individual level is essential, and the message from debt funds is that the more granularity, the better. That starts with developing a relationship with the management team of the company a fund is thinking of investing in, to having an in-depth knowledge of the company's operations, the sector it operates in and its geographic reach.

Berment adds: "One of the most important tools in risk management is applying the right leverage ratio at the point of entry, because that defines the risk level."

Following the financial crisis, some private equity firms began using derivatives to hedge currency risk and lock in gains but this practice is far from widespread. When raising a fund, managers argue the investor is aware of the currency that the fund is denominated in and that managing currency risk within a portfolio is not its raison d'etre. But as debt funds are sourced from an investor base that is increasingly global, some funds do manage redenomination risk.

When raising its $7.1bn AXA Secondary Fund V last year for example, AXA Private Equity received investments in sterling and euros as well as dollars, and has a dedicated hedging team to handle denomination risk. Although it wasn't a debt fund per se, the approach is applicable to the group's future debt vehicles. But that does not extend into the active management of currency fluctuations because of the buy-and-hold nature of the fund.

Acenden offers ongoing analytics for investors, which includes the scope for the use of derivatives in hedging.

Getting financial risk management right is one of the most fundamental areas for debt funds to address, although there are other areas too, such as operational risk management, which comprises the risk of losses stemming from inadequate or failed internal processes, people and systems or from external events. Operational risk management is at the top of big banks' agendas as they seek to meet the raft of new regulatory requirements in the wake of Lehman's collapse and the ensuing financial crisis, requiring them to hold more capital against assets and boost their level of equity to meet a new percent leverage ratio.

It also applies to 'conduct' risk, a phenomenon that has been on the rise since the financial crisis, where fraudulent or questionable activities have cost investors. The onus is on investors in funds to demand transparency over management responsibilities and investments before making a decision to invest in a fund.

Indeed investors, as well as managers, are becoming much more proactive in terms of risk management. Many LPs now conduct risk analysis not just of the fund for which the GP is soliciting

"ONE OF THE MOST IMPORTANT TOOLS IN RISK MANAGEMENT IS APPLYING THE RIGHT LEVERAGE RATIO AT THE POINT OF ENTRY, BECAUSE THAT DEFINES THE RISK LEVEL"

Olivier Berment, AXA Private Equity

commitments, but the firm as a whole. This is particularly true of private equity firms, but is also applicable to their debt counterpart. For the larger multi-asset managers, many of whom do both, it's even more relevant to LPs because what occurs in one part of the business may affect other areas (particularly if the management entity is listed).

In creating a risk profile for the entire firm, one must analyze the distribution of returns the firm has generated over a given time period. This type of research is done by GPs and LPs alike, but more typically to evaluate the return potential of a future fund, and not necessarily firm-wide risk, adds one investor who spoke to *Private Debt Investor*.

Recent research from academic Oliver Gottschalg of HEC Business School has paved the way for alternative asset managers and their investors to conduct a more effective risk profile analysis of firms by using a profit distributions method.

But by comparing the cumulative profits generated by a certain sub-set of the portfolio (to the size of the sub-set) you can create a risk profile for a private equity firm, according to Gottschalg.

What you end up with is plotting the percentage of a fund's investments on the x-axis and the percentage of profits from the fund on the y-axis – known as the PERACS Risk Curve. In other words, you can measure for example to what extent the worst 20 percent of all deals are responsible for contributing less than 20 percent of the profits of a firm.

LPs of course differ in their preference for different shapes of the risk curve, and the modelling for many types of debt fund will look very different to a typical buyout fund. Even across the debt spectrum though, there is a very wide distribution of risk / return profiles. Some limited partners may favour fund managers that appear to systematically generate moderate levels of return with little loss-making deals, whereas others may want to invest in managers who find big hits and may tolerate some losses at the same time.

That sort of analysis is relatively affordable for an LP, but from a GP's standpoint, investment in risk management tools and indeed personnel can seem expensive.

Some funds regard the cost of installing bespoke operational and financial risk management systems as prohibitive, but in the post-crisis world, risk management is becoming a welcome barrier to entry. Different funds have different needs depending on the type of assets they invest in and the length of time they are holding them for. But any risk management system must be able to run future scenarios, rather than simply focusing on the state of the market at the time an investment is made.

Managers can also take out some fairly esoteric types of insurance policy designed to mitigate risks. These include key man disability insurance (it's more typical to insure against the death of a key man, but disability is statistically more likely) and political insurance (particularly relevant for emerging markets-focused funds).

For most firms however, the key risks will be at an investment level. Successfully managing those differentiates the good managers from bad. The more forensic a firm's approach to risk, the higher the probability of it delivering strong returns.

One of the lessons Forusz learned from the crisis is that investment decisions were not made with a long-term view, so that when they ran into trouble, it was hard to identify true exposure. He adds: "We don't just take the 20,000 foot view, but use a ground up approach getting granular with the data and having the right systems in place to capture and analyse that data to identify upfront and ongoing risk." It's a prudent approach, and one which is becoming, thankfully, increasingly prevalent. ■