Structured finance perspectives
Investor due diligence comes into focus

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"Changing regulations, the corresponding impact on deal complexity and whether to 'avoid' or 'innovate' around them will be a concern. Can systems handle the coming changes? Do we invest now or wait and see? These will be difficult decisions."

The challenges in structured finance investment over the next 12 months, as expressed by a US investor

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Industry insight

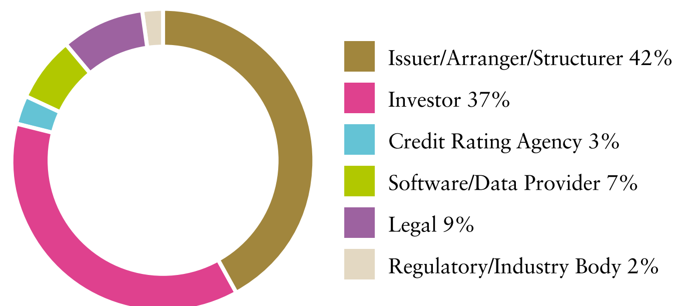
During the second quarter of 2010 over 500 structured finance market participants, from 200 financial organizations, provided their insights to Principia's Structured Finance Investor Due Diligence Survey. Results highlight respondents' plans to return to the structured finance markets and their timeframe for doing so. Those surveyed explained what they saw as the most important aspects of ensuring sound investment analysis and risk oversight practices in the management of structured finance portfolios. Crucially however, they also revealed how well their own organizations performed against those criteria.

Shortcomings in the fundamental practices, incentives and the market structure that led to the structured finance market's decline have been well documented. This study does not dwell further on those issues. Instead, those surveyed were asked to review the technical barriers associated with understanding and managing securitized investments as the market looks to return on a stable footing. This report explores the processes and day-to-day activities that have become integral to satisfying impending regulatory mandates, and critical to maintaining a sustainable future business centered on structured finance.

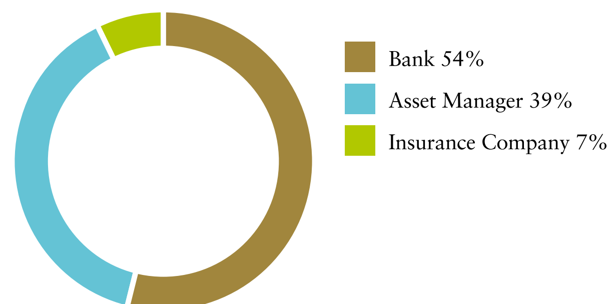
Analysis of the survey results shows signs that issuance and investment activity will rise over the next 12 months. However, investors communicated that analytical, risk management and operational challenges remain a concern. Investors are at a point where meeting due diligence requirements is rapidly becoming a reality. While there is continued uncertainty about the specific criteria regulators will judge investors by, the buy-side is under no illusion. There is work to be done and time is ticking.

Below shows a graphical breakdown of the parties that contributed to the survey, firstly by industry segment and secondly by investor type.

Responses by industry segment



Investor breakdown



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Present perspective

During the years leading up to the subprime crisis, investors often failed to examine subtleties regarding the performance, structure and dynamics of asset backed deals. Complexity, insufficient transparency and an over-reliance on rating agency analysis formed a perfect storm in which a comprehensive understanding of securitized transactions was difficult to achieve. In addition, inconsistencies in issuance disclosure upon origination, and on an ongoing basis, also contributed to information and analytical challenges for investors.

The incentives that drive the market and a lack of issuance standards and loan level data have been the primary concern of the industry working groups and regulatory bodies so far.

Broad financial regulation has targeted the improvement of the overall quality and quantity of bank capital, the need for better liquidity management and greater control over excessive leverage. As of January 2011, amendments to the EU Capital Requirements Directive will go live in Europe. Capital penalties will apply if specific operational requirements are not performed in the credit analysis and ongoing surveillance of newly issued asset securitizations and resecuritizations (see box out).

According to Basel: operational requirements for credit analysis

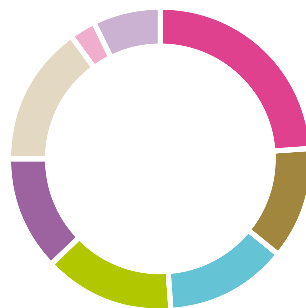
The Basel Committee has adopted additional operational requirements that banks must satisfy in order to qualify for the securitization framework. The new criteria require that bank investors perform their own due diligence on these exposures – they must not rely solely on external credit ratings. If a bank fails to do so, it will be required to deduct the exposure in question from capital. The EU Capital Requirements Directive (CRD) tackles the implementation of the Basel II Securitization Framework Enhancements. Article 122a enforces due diligence and operational requirements, including monitoring the performance of all securitizations. If operational requirements are not met, the CRD will impose a variable additional risk weight of no less than 250% (capped at 1,250%) on the infringing bank investor.

International regulators are committed to applying these measures, enforcing financial institutions to have properly established systems and controls in place to demonstrate that the proper level of due diligence has been carried out in relation to structured finance investments and portfolios. The tenor of the rules is clear – a "box-ticking" exercise will not be sufficient.

Changes to the Securities and Exchange Commission's (SEC) Reg AB and extensive disclosure criteria for funding eligibility being proposed by both the European Central Bank (ECB) and Bank of England (BoE) are ensuring that issuers and investors satisfy standard levels of disclosure and due diligence when structuring or investing in structured finance securities.

As coordinated global regulation enforces more prudent new issuance and greater public disclosure of structures and collateral underlying ABS and MBS, the attention is shifting to the buy-side. Many traditional investors remain on the sidelines. Buyers with the confidence to return will be those with the best ability to analyze issuance data in all its new 'standard' forms as full disclosure becomes the norm.

Structured finance investors' view on the biggest technical challenges over the next 12 months



- Access to and management of issuance / performance / cashflow data 24%
- Cashflow modeling, forecasting valuations and stress testing 12%
- Standardized industry loan level disclosure 13%
- Addressing international regulation and integrating changes into systems 14%
- Reducing the use of spreadsheet type systems for consolidated risk oversight and greater automation from front to back office 12%
- Inconsistent data sets across assets and portfolios hindering risk oversight/reporting 15%
- Access to data for legacy assets 3%
- Other 7%

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Positive outlook

International governments, through the G20 and the Financial Stability Board, have vocalized their commitment to restarting securitization markets. They are vital to the global economy, to efficient financial markets and for the provision of credit to consumers and businesses.

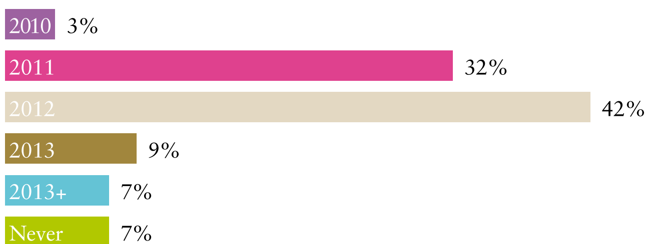
Encouragingly, the results of the survey show signs of growth. A large percentage of investors indicated they were scheduled to ramp up their activity in the ABS and MBS markets over the next six to 12 months. In Principia's study, 60% of investors said they planned to increase investment activity in structured finance within the next 12 months. An even higher percentage of issuers and originators said they would be increasing structuring and sales activity during this period too.

60%

of investors said they planned to increase investment activity in the ABS and MBS markets over the next 12 months

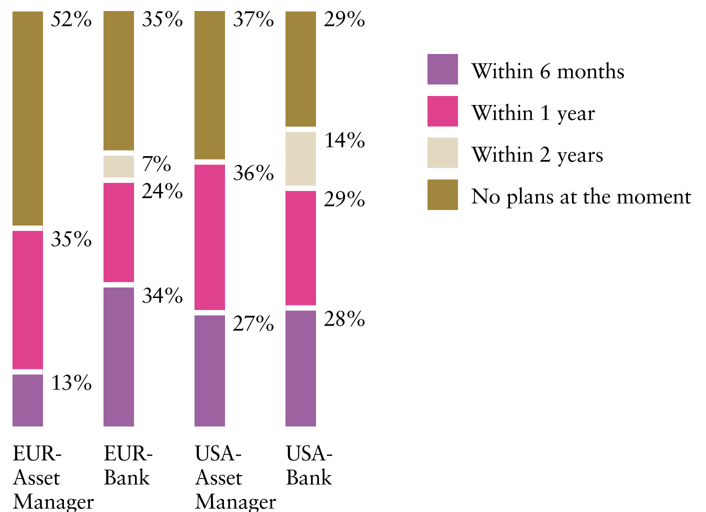
Below shows the industry view of when the mortgage and consumer asset securitization markets will return to "normal", taken from an American Securitization Forum (ASF) study released in February 2010. Feedback from Principia's survey highlights investors' actual plans to expand investment activity in the EU and USA. We can see that results from both of these indicate the return of functioning markets during 2011 and 2012.

When will mortgage and consumer asset securitization markets return to "normal"?



Source: American Securitization Forum, 2010

EU and US Banks' and Asset Managers' planned investment in securitization markets



Bank investors had more immediate plans to expand investment in structured finance, with 33% looking to invest before the end of 2010. Asset managers are less likely to increase activity in the near term, but do expect to see opportunities within the year.

While the outlook is increasingly positive, investors openly admitted to shortfalls in relation to the investment analysis, ongoing risk surveillance and operational processing of these assets.

Capital is king and continues to be a major business driver for financial institutions. But this conflicts with the pressure financial institutions are under to ensure that strong systems and operations are in place to effectively monitor and manage structured finance investments. The survey shows that many investors believe they must review their operations if they are to take advantage of new investment opportunities and adhere to regulation in the short term. Longer term, capital relief will depend on having the infrastructure and necessary oversight and controls in place to prevent the incurrence of "failure to comply" capital charges. Securitization can be a rewarding investment strategy but non-compliance with new legislation and failing to demonstrate adequate operational practices will be the difference between taking part in the market, or being priced out.

The funding of IT projects that facilitate the more transparent management of structured finance portfolios may have been difficult to source while portfolio restructuring and retaining value from pre-crisis assets was the priority. This is changing. Having a complete understanding of the structure and risk characteristics of any securitized investment has become a pre-requisite to investing in it.

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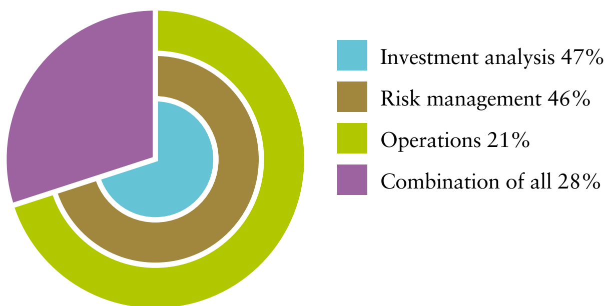
Positive outlook continued

92% of respondents said that technology was a key facilitator to a sustained market recovery and their continued participation in the market. Over 90% of investors surveyed stated that within the next two years they would invest in technology that enabled them to improve one or a combination of the following:

Investors' technology spend over the next two years



At its core investor due diligence demands that credit investment operations can:

- Perform deeper investment analysis, (e.g. capture and monitor issuance, performance and cashflow information for all transactions)
- Ensure diligent ongoing risk oversight (e.g. the ability to stress test, forecast and maintain compliance of individual securities and across global structured finance portfolios)
- Streamline operational processes (e.g. gaining consolidated management and a single view of investments from portfolio management, through risk control, and into accounting)

92%

of respondents believed that technology has an increasingly vital role to play in structured finance investment

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Coming into focus
Step one: deeper investment analysis

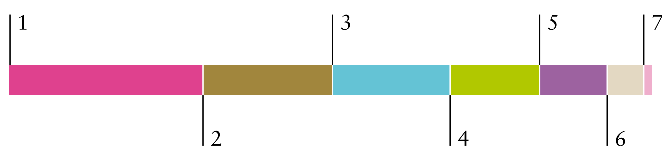
Pre-crisis, portfolio managers could look at their investments once a month, cross referencing assets with reports from trustees to look for any potential issues. Extracting granular data from the indenture was manually intensive, with deals often presented in multifarious formats. It was common practice to book and manage securities as vanilla fixed income assets on core treasury systems. Spreadsheet based systems were often used to store the basic data needed to support monthly cashflows. Even for investors with the capability and inclination to perform additional analysis, the variance in the level of issuer disclosure, or lack of it, and the difficulty in getting detailed loan level data meant that truly understanding a structure was often virtually impossible.

As the market returns, diligent investment analysis demands that investors have access to, and can consistently use all of the data relating to a deal's structure and credit enhancement, the individual tranches of that deal and the performance of its underlying collateral pools.

Having the sophistication to assess how a tranche relates to a deal to model the associated cashflows and interrogate investments by collateral performance metrics, is vital to understanding investments on an ongoing basis. Being able to model future performance based on assumptions of changing dynamics at the deal, tranche or collateral level will be a key aspect of an investor's work. Investors indentified the following activities as most important to the investment decision process:

Deeper investment analysis

Investor ranking of most important criteria for investment analysis and the proportion of investors choosing each



1. Access to ongoing collateral performance data
2. Modeling the full deal structure
3. Projecting cashflows based on forecast assumptions
4. Access and integration of issuance data
5. Integration of loan level data
6. Benchmarking your assets against those in the market
7. Managing associated hedging and funding products

1. Access to ongoing performance data

Investors overwhelmingly rated asset pool performance monitoring and access to ongoing performance data (either from internal credit analysis or through direct access to vendor provided performance data) as the most important requirement to diligent investment analysis and decision making.

Even though seen as critical to their business, 48% of investors conceded that they were ineffective at bringing in the performance data required to monitor the securities they invested in.

Ensuring comprehensive asset coverage and the comparability of performance measurements across asset classes, geographic regions and sectors is a major industry challenge. The difficulty of incorporating performance data for multiple deals and asset types, from multiple internal and external sources and normalizing it for consistent analysis can be operationally complex and resource intensive to setup and maintain.

The lack of comparable information across these datasets makes it harder to perform the qualitative performance measurement or cashflow projections that are now recognized as fundamental.

Standards being introduced by the SEC, ECB, BoE, ASF and AFME will ensure issuers make loan level information publicly available. This will increase data providers' and investors' ability to model new deals, monitor ongoing performance and forecast projected cashflows. We will see later that loan level data in itself is considered less important by investors in their day to day analytical work.

48%

of investors conceded that they were ineffective at accessing and integrating the performance data required to monitor all the securities they invested in

"Our priority at the moment is getting ready access to timely collateral performance data. Also, in the future getting good independent valuations on more esoteric assets (smaller tranches, more junior) will be important for us."

Head of Fixed Income Fund, UK Investment Manager

Straight from the rulebook

The Basel II Securitization Framework Enhancements states that in order to qualify for capital relief, institutions "must be able to access performance information on the underlying pools on an ongoing basis, in a timely manner. Such information may include, as appropriate: exposure type; percentage of loans 30, 60 and 90 days past due; default rates; prepayment rates; loans in foreclosure…"

Basel Committee on Banking Supervision,
Enhancements to the Basel II Framework, sections 565i-iv, July 2009

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Step one: deeper investment analysis continued

2. Modeling the full deal structure

The second most important factor identified by investors was the ability to capture and model the structure of a securitization in their systems when analyzing individual deals.

Over 50% of investors stated that they were not effective at modeling the full deal structure, either by independently interpreting issuer documentation or through the use of third party data providers.

The sheer variety in the presentation and delivery of deal documentation and collateral information in the past has led to ambiguity in the interpretation of deals, how they were modeled and the legal terms and rules processed in deal waterfall calculations.

Accessing this information within an integrated framework for investment analysis, ongoing risk surveillance and operations is now of paramount importance to investors. The ability to access detailed cashflow information throughout the deal lifecycle can help deliver the confidence levels now required prior to investment and in the ongoing management of structured finance assets.

> "In our experience almost no investors model a full structure themselves. Those that do, usually rely on the major performance and cashflow data providers who model the deals."
> Head of Structured Finance, EU-based Fund Administrator

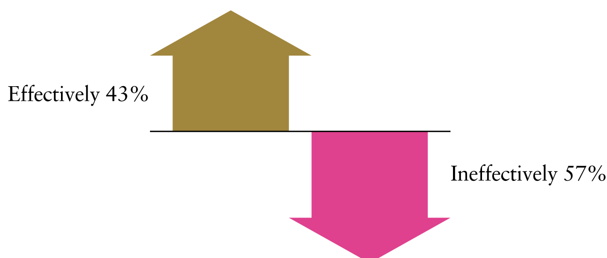
3. Projecting cashflows based on forecasting assumptions

Forecasting the future behavior of structured finance securities is reliant on the extent to which an investor can access sufficient performance data and have the ability to model the entire deal structure and its associated cashflow waterfall.

57% of investors said they were less than effective at performing deal cashflow forecasting or stress testing based on performance assumptions. These include for example, future delinquency, default, prepayment, interest or recovery rates and other dynamic performance measurements and triggers that drive collateral cashflows.

Investor effectiveness:

Assessing future cashflows and forecasting valuations



Without strong cashflow models and accurate, timely performance data, it is impossible to make informed assumptions about the future behavior of assets. While assessing historical and current performance is crucial to investment analysis, it is insufficient in the determination of future value.

This projected cashflow analysis is fundamental to establishing independent valuations.

Strong forecasting and valuation practices are key to making well informed investment decisions, effectively weighing up risks and for accounting purposes. Investors need to have the integrated cashflow models, performance data and analytical tools to forecast future performance for all the securities they hold, as well as for any potential investment.

> "In the next 12 months our success will be based on our ability to perform thorough analytics on any structured finance investment, combining cashflow modeling, collateral analysis and performance data."
> Financial Controller, Leading EU Investment Bank

4. Access and integration of bond issuance data

The drive in the US and Europe to standardize the type, frequency and delivery of information provided by issuers is a vital step to establishing confidence in future issuance. It delivers the key information that forms the structure of a securitization, including both static and dynamic issuance data.

Currently, standard templates do not exist for the disclosure of bond issuance information across asset classes, although industry bodies such as the ASF and AFME have progressed work on standard formats for RMBS.

To tackle this lack of standardization, investors must have the flexibility in their operations to specify and integrate the details of a structure alongside ongoing deal performance data. With a consolidated way to assess these deal attributes, investors can potentially perform very important qualitative assessments. Having the ability to review concentration risk associated with a particular servicer or swap counterparty could provide vital early warning signals – if a counterparty is in trouble, deals they are associated with could be downgraded, for example. Doing this requires a system which allows the user to define and control the way information is standardized and presented across the whole portfolio.

> "Expanding pool and loan-level disclosure to investors, both pre- and post-issuance, is critical to restoring confidence in securitization transactions. This new raw data in standard formats, **as well as the tools to analyze it**, gives investors the ability to better compare transactions, apples to apples."
> Tom Deutsch, Deputy Executive Director, ASF

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Step one: deeper investment analysis continued

5. Integration of loan level data

75% of investors said they were not effective at integrating loan level data but tellingly, also suggested that it was not a challenge they were prioritizing - 60% of investors did not rank loan level data in their top three priorities.

While loan level information is vital for the functioning of the market as a whole, investors have shown that, for day to day investment analysis they are more concerned with gaining aggregated views of asset pool performance than having direct access to copious loan by loan data.

New standards need to be agreed and adopted if the securitization market is to provide the necessary access to consistent loan level data. Loan level data for many legacy deals, particularly in Europe, remains unavailable.

75%

of investors said they were poor at integrating loan level data but that it wasn't a pressing concern

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The availability of initial and on going loan level data is absolutely key to providing investors with the building blocks to perform their highest priority investment activities. The industry also increasingly encourages the availability of more widely available cashflow waterfall models to ensure a robust market infrastructure is in place for investors.

"The important thing about loan level data to us is making sure it is integrated so it can be used in a meaningful way to see pool performance."
ABS & MBS Portfolio Manager, US Asset Manager

6 & 7. Benchmarking your assets against those in the market and managing associated hedging and funding products

In a liquidity starved market, where price discovery is challenging, being able to compare potential and existing positions with those being sold in the market is important to defining relative value.

Also, as part of an organization's investment guidelines, credit investment managers may need to maintain a market-neutral position to satisfy internal and external demands. This requires them to be able to see their assets alongside related hedging and funding products, both at the deal and portfolio level.

Both issues were recognized as ongoing challenges but only 20% of investors ranked them in the top four operational concerns relating to their investment analysis activities.

In summary

With increased industry standardization and the availability of data, portfolio managers need the flexibility and the infrastructure to integrate and analyze cashflow models and performance data in both its existing and future forms. Doing so will help to ensure investments are compliant with the organization's operating guidelines or a client's investment criteria, upfront and on an ongoing basis. More and more, third party providers and issuers will have their roles to play in providing investors with a full view of any given securitization's deal structure.

Gaining a full picture of the structural features of a deal gives investors the insight to monitor how tranches interrelate. Seeing how waterfall behavior affects cashflows and payments between tranches provides a solid basis for effective valuation. When assessing an individual position, seeing how senior or junior tranches are paying down and the impact this has on cashflows to the tranche under evaluation is key.

It is evident that a large proportion of investors still experience major operational barriers when trying to perform these fundamental analytical activities across their portfolios. They are still confronted by the limitations of inefficiently integrated, spreadsheet and legacy systems which lack the required level of industry specific functionality.

47% of investors stated they would invest in technology over the next two years to improve these investment analysis activities.

Without a way to standardize data and processes for investment analysis, in a dedicated portfolio management environment, it will continue to be difficult for investors to analyze and manipulate data to establish valuations with confidence, gain a full understanding of the asset, or assess the bearing of an asset's performance on a portfolio. From this foundation, best practices can be employed for an all encompassing view and the consistent analysis of collateral, deals and portfolios. It is central to being able to perform the additional analysis required to independently evaluate all the events that may affect a decision to invest or divest.

Performing these all important tasks is reliant on a unified operational approach focused on structured finance.

"A lack of consistency in definitions and performance monitoring will lead all but the best informed investors to potentially incorrectly compare deal metrics."
Director of Securitization at Major UK Bank Issuer

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Step two: proactive risk management

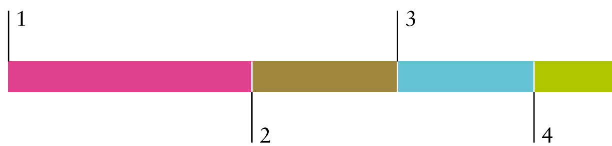
Pre-crisis, monthly front office reports were deemed sufficient to perform capital calculations and ensure credit investment portfolios were within investment guidelines. Combined global exposures and the impact of underperforming collateral across any given structured finance business was hard to monitor. For many, pulling the necessary data and systems together to really understand the underlying behavior of ABS, MBS and CDO investments was either impossible, or seemed too onerous or surplus to requirements for highly rated securities.

As fire fighting turns to rebuilding, portfolio and risk managers are making it clear they want to better automate risk and exposure analysis. The sheer amount of data now available for any given security creates a structuring headache for investors who need to model and manage their entire portfolio themselves. Doing so demands a means of looking at these assets in isolation and in combination, whilst also being able to integrate a view of the structured finance business into an enterprise wide view of the investment business.

Below, the core elements of ongoing risk surveillance were selected and ranked in order of importance by survey respondents:

Proactive risk management and compliance:

Investor ranking of most important criteria for risk analysis and the proportion of investors choosing each



1. Risk surveillance of deal, tranche and collateral pool performance
2. Managing portfolio exposures within established limits
3. Ability to stress test forecasting assumptions
4. Single database combining all issuance, performance, rating and pricing data

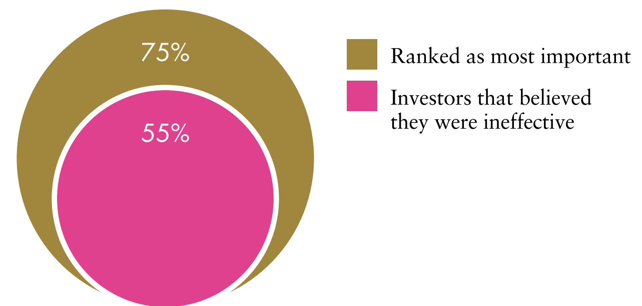
1. Risk surveillance of deal, tranche and collateral pool performance

Future investment activity will be dictated by portfolio managers' ability to access the necessary issuance and collateral performance information during the initial investment decision process. But this must tie into the risk surveillance function which needs to access the same systems and information to track, monitor and analyze structured finance performance attributes at multiple levels.

Over 75% of investors in banks and insurance companies ranked this level of risk surveillance as their first or second priority.

55% of respondents said their organizations were not effective in implementing this level of risk oversight.

Risk surveillance of deal, tranche and collateral pool performance



Establishing and monitoring performance characteristics at the deal level (e.g. cumulative losses), the tranche level (e.g. average life, principal payment or current credit support), the collateral level (e.g. foreclosure or delinquency rates), or the credit enhancement level, is seen as best practice by the market today.

Centralized performance analysis and surveillance is vital if investors are to obtain a full picture across diverse asset portfolios. Combining internal credit analysis with other sources of issuance and performance data is critical to doing so effectively. Investment rules related to performance metrics can then be layered in to proactively monitor deals and portfolios and triggers can be established and monitored to better flag early warning signals.

"Standardizing the credit risk process and streamlining our analysis to reduce lead time will be a big operations and business challenge next year."
Director, Fixed Income Products, EU Investment Bank with over 590Bn in AUM

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Step two: proactive risk management continued

2. Managing portfolio exposures within established limits

Maintaining compliance with the investment guidelines defined by the business, investors and supervisors demands a robust securities portfolio reporting infrastructure. Having a unified view across portfolio exposures is recognized as critical.

55% of investors felt that this was an area they needed to improve.

Investment policy may dictate that a given portfolio manager has guidelines in place, for example, that at least 90% of the credit portfolio is invested in securities rated A or above. Here, risk managers need the ability to see a snapshot view of the assets within the portfolio. They need to be confident that any ratings changes are reflected in this master view, along with early warning signs of potential compliance breaches.

Investors were also asked how effective their organization was at setting soft and hard triggers, or flags to act as early warning signals. Alarmingly, 72% of investors said they were not effective at implementing these kinds of compliance controls.

Portfolio exposure monitoring goes beyond just monitoring ratings. It should also take into account diversification and composition guidelines, market sensitivity exposures, capital adequacy and liquidity risk. In addition, the risk manager may require this consolidated view across multiple business operations with structured finance exposures.

Non-bank asset managers ranked this maintenance of deal and portfolio compliance as a slightly higher priority than banks. This appears to be influenced by their need to demonstrate due diligence to external investors. However, actively monitoring and reporting on these exposures in an ongoing way is a primary concern for any bank or asset manager going forward.

72%

of investors said their organizations were ineffective at establishing and monitoring hard and soft triggers related to structured finance assets

3. Ability to stress test forecasting assumptions

The stress testing of forecasting assumptions related to deal, tranche and collateral performance was ranked highly. Investors see it as an integral feature of risk management and surveillance, as well as in their initial analysis. It provides vital signs that a risk or portfolio manager needs when proactively monitoring structured finance assets over time. This is critical to business wide risk assessment and of growing importance for downstream accounting and reporting.

Stress testing forecasting assumptions

US vs Europe

One of the most telling statistics from the survey is that while seen as very important, over half of the investors that took part, and nearly 60% of the market as a whole, believed that investors could not effectively stress test forecasting assumptions for all the assets they held. We have seen through the crisis that this can lead to downstream information gaps and misinformed assumptions and valuations.

The difference between the US and Europe provides further clues. 48% of US investors said they were not effective in this area, compared with over 61% of European investors. This highlights the difference in the availability of good quality loan and issuance data in each region.

In practical terms, for investors to perform this stress testing, the maturity and availability of full cashflow models in the US has helped them to be slightly more effective in this discipline but there is still much work to be done in both regions.

Even with the data available, the integration and manipulation of it, within an environment that enables effective and consistent risk oversight and stress testing remains a major challenge.

Straight from the rulebook

"Firms must undertake their own stress testing. Where relying on ECAI models they must be able to demonstrate they validated assumptions methodology and results of the models. Where the FSA is not satisfied that the above requirements are met it will impose an additional risk weight of not less than 250% of the risk weight that would apply."

FSA, Strengthening Capital Standards 3, December 2009

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Step two: proactive risk management continued

4. Single database combining all issuance, performance, rating and pricing data

Respondents saw value in maintaining a single database to manage the combination of internal analysis and externally provided data linked to the investment portfolio.

83% of bank investors admitted that they were not able to harness a consolidated, flexible and dynamic underlying database for their structured finance investments.

The correlation with earlier responses regarding the inability to perform portfolio and risk management best practices is evident. By unifying all the data elements and processes in the structured finance business, investors can gain the consistency, efficiency and flexibility to perform many of the activities that market participants have earmarked as being most important to success.

In summary

The risk function is gaining more influence within financial organizations, large and small. The need for greater interoperability and cooperation with front office practices is increasingly recognized. A robust risk oversight infrastructure, particularly where structured finance is part of the investment strategy, must enable risk managers to be more proactive in their analysis of portfolios. Investing organizations require the flexibility, the unified operations, the tools and the data to specify, monitor and quickly react to risk factors which are unique to structured finance.

The notion of Enterprise Risk Management has long been promoted as the panacea for risk management. While important, it often skirts around how to address the risks inherent in esoteric and complex investment portfolios. Structured finance is dynamic, living and breathing and demands bespoke, dedicated risk management. Risk managers looking for clarity into these portfolios have often lacked the ability to interpret the ongoing behavior of these structures, or to monitor these positions alongside the institution's enterprise wide market and credit risk.

Fully integrated, ongoing risk and compliance management requires centralized and consistent access to, and use of, all the information pertaining to a structured finance portfolio – past, present and projected. This should go beyond just the asset structure and performance. It should include the ability to execute and analyze any hedging and funding instruments required to support and maintain the investment portfolio's performance. This provides the basis for effective, efficient and comprehensive performance monitoring, valuations and stress testing.

Risk managers require the control and infrastructure support to be able to slice and dice risk metrics on-demand and report on any combination of performance attributes affecting the cashflows from underlying pools. They need to have the functionality to apply and enforce investment guidelines within a single, robust environment that can integrate, analyze and report on all the nuances and moving parts of structured finance deals.

Visibility and control across the structured finance business is fundamental. Achieving this in a scalable and comprehensive manner demands that the structured finance business is streamlined in a dedicated, end-to-end investment management infrastructure.

46% of investors have budgeted to spend money on improving their risk oversight infrastructure over the next 24 months.

"It's hard to find consistency in terms of risk management decisioning across the entire portfolio with our current systems."
Managing Director, Structured Finance Investment, US Investment Bank with over 397Bn in AUM

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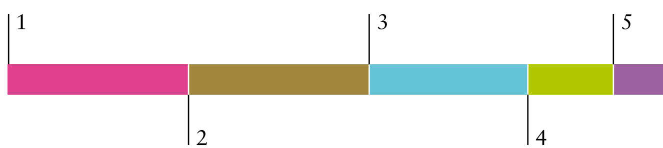
Step three: streamlined operations

As organizations expand and the number of structured finance deals being managed increases, spreadsheet based systems and the problems associated with decentralized portfolio management, risk oversight and accounting are exacerbated. The limitations, inefficiencies and inconsistencies between front and back office will only increase as the market returns and grows.

These operational concerns were selected and ranked by survey respondents in the following order:

Proportional ranking of operational challenges



1. Managing global structured finance exposures in a single integrated environment
2. Reducing manual entry and inconsistency between front office, risk and accounting
3. Reducing the use of siloed systems and spreadsheets
4. Implementing audited operational guidelines and workflow processes
5. Adapting to meet increased accounting disclosure requirements

When asked how well their organizations performed in each of these areas it is clear that investors still believe they have a lot of work to do. Only 35% thought they effectively managed their global structured finance exposures in a single integrated environment. This inability to streamline operational processes and systems is compounded by the proliferation of standalone spreadsheets and a patchwork of systems.

Over 70% of investors stated ranked their organizations as 'not effective' at implementing processes and systems that can reduce the reliance on spreadsheet solutions and analytical silos.

There is an obvious correlation between the use of multiple standalone systems and an inability to manage and monitor risks associated with structured finance portfolios in a consolidated way.

The survey revealed the different priorities and technology challenges banks and asset managers have around the operational control and processing of structured finance assets – from portfolio and risk management, through to accounting. Financial institutions are battling to introduce less siloed approaches to their end-to-end credit investment operations. Increasingly this is being influenced by additional disclosure requirements, for example with the introduction of revised international accounting standards.

Asset managers still place a lot of importance on establishing and maintaining streamlined operations, but are more focused on synergies between front office activities and risk oversight, with a view to satisfying investor reporting requirements.

35%

The number of investors that said they effectively managed their global structured finance exposures in a single integrated environment

Bank investors varied slightly from the market as a whole, on average ranking the reduction of siloed systems and spreadsheets as the second most important operational concern. Financial institutions recognize the value of turning to dedicated solutions that can streamline their operations. Reducing the proliferation of hard to audit, operationally risky processes between systems and business functions can deliver the efficiency, transparency and workflow control necessary for due diligence at every stage in the structured finance lifecycle.

The graph below shows investors' perception of the importance of operational control.

"As far as our company is concerned, streamlining trade information capture and getting rid of number of stand-alone spreadsheets will be a major IT priority in the next 12 months."
CIO, UK Bank Credit Investment Fund

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Step three: streamlined operations continued

In summary

For structured finance portfolios it has never been more important to be able to streamline the operational processes underlying the business - whether across multiple business groups or between front and back office departments. Throughout the study, survey respondents indicated that an overreliance on spreadsheets and a multitude of disparate systems inhibited the achievement of such operational control, making deeper investment analysis and proactive risk management at best inefficient and at worst ineffective.

The implementation of a single operational backbone across the structured finance business provides flexibility and the required basis from which to perform the best practice guidelines now being implemented by local regulators in response to pressure from the Financial Stability Board and the G20 leaders. Adopting an infrastructure and systems approach that unifies investment and risk management activities can enhance both transparency and data consistency. It increases accuracy, visibility and control from portfolio management, through risk surveillance and into financial reporting.

These issues are increasingly at the forefront of financial institutions. Over 80% of the survey respondents indicated that the importance of operational control had increased since the crisis.

Straight from the rulebook

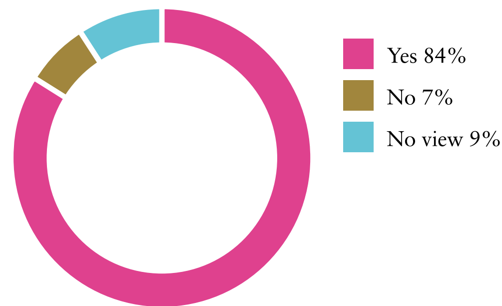
"To this end, during 2010, supervisors and regulators will implement the measures decided by the Basel Committee to strengthen the capital treatment of securitization and establish clear rules for banks' management and disclosure and IOSCO's proposals to strengthen practices in securitization markets."

Report of the Financial Stability Board to G20 Leaders, 25 September 2009

"The automation of trading process from front through middle and into trustee systems is our main area of focus."

Head of Fixed Income US Fund Manager

Has the crisis increased the importance of operational control from initial investment, through risk management and into accounting?



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In Vision

Conclusion

One finding is consistent throughout. The aspects of investment analysis and ongoing risk oversight, often treated as an afterthought in the past, are now key activities for structured finance investors. 92% of those surveyed stated that over the next two years they planned to invest in technology that improves upfront investment analysis, ongoing risk surveillance and streamlined operational processes and workflows.

Investors described gaps in their infrastructure at every stage of the deal lifecycle – from pre-investment analysis, initial investment, ongoing risk oversight and compliance, to accurate valuation and accounting.

The foundations are being laid to ensure investors have the relevant data, models and tools to perform diligent analysis and risk management. In reality, analysis of the survey has shown that many investors still need to embrace best practices within an infrastructure that allows them to make the most of new opportunities and achieve what regulators, clients and internal management expect. Investors can either paper over the cracks with a piecemeal approach and risk the consequences, or learn from the lessons of the past.

While there are continued uncertainties about exactly what regulators define within the remit of due diligence, investors are aware of what is required to comprehensively understand asset backed deals on an ongoing basis. Trying to meet minimum standards of due diligence with short term fixes risks falling short of the required levels of investment oversight. It creates further barriers to performing additional investment analysis, embracing disclosure and reporting standards and having the flexibility and scalability to grow the business.

A software and operational backbone, designed with structured finance at its core provides the environment to implement best practices and meet these expectations, now and in the future. With a single dedicated infrastructure investors can enhance end-to-end investment analysis to better inform investment decisions. Integrated risk management allows organizations to process and disseminate risk information for any stratification of the business, identify and signal risk factors, evaluate future cashflows and maintain internal, investor and regulatory compliance. Unifying these activities increases efficiency and transparency and helps to eliminate inconsistencies between front and back office. The result is a robust due diligence framework for structured finance that is in step with the entire investment business.

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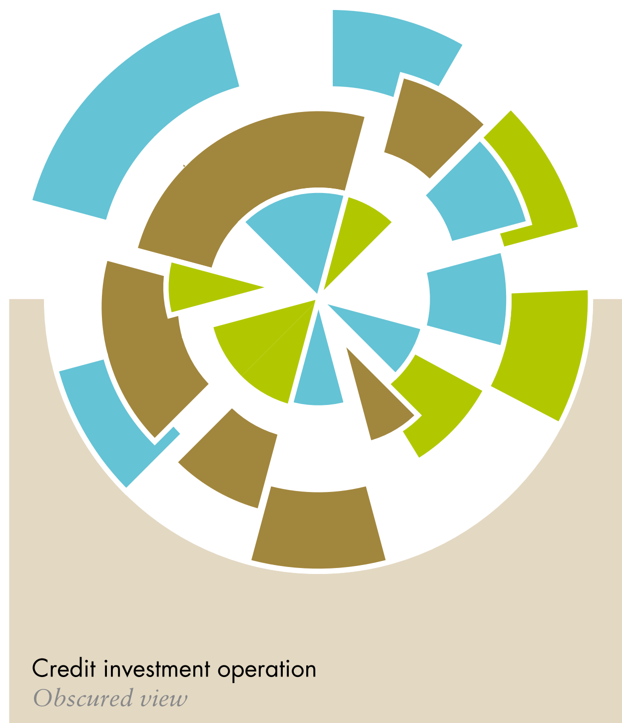
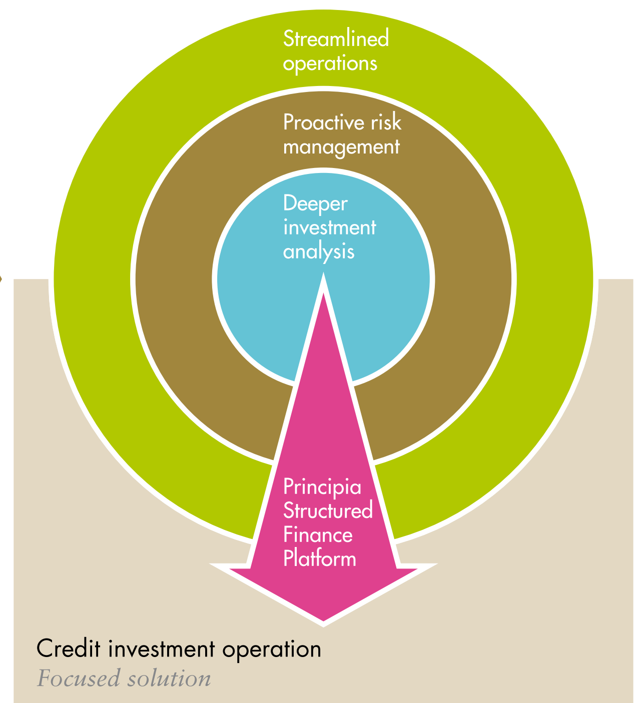
Know your investments: visibility, analysis and control





Incomplete investment analysis

- **Guess work:** fragmented information and ways to view standard data
- **Uncertainty:** difficulties projecting future cashflow performance
- **Gaps:** lack of integrated support for all structured finance asset classes or hedges
- **Opacity:** inconsistent assessment of collateral, deal and portfolio characteristics

Retroactive risk management

- **Hidden:** missing detail to identify and signal risks
- **No foresight:** inability to stress test
- **Discomfort:** painful to process and report on risk information across the business
- **Penalties:** inability to maintain internal, investor and regulatory compliance

Inefficient operations

- **Fragmented:** multiple, deals and portfolios managed in different places
- **Misaligned:** disconnect between portfolio management, risk control and accounting
- **Widespread:** proliferation of spreadsheets – redundant systems and processes
- **Chaos:** inconsistencies from front to back office with poor audit and workflow control

Deeper investment analysis

- **Knowledge:** unify performance and deal data for on demand analysis
- **Confidence:** more accurately assess future performance
- **Breadth:** support all assets, hedges and liabilities in one place
- **Visibility:** slice and dice by collateral, deal or portfolio characteristics for better informed decisions

Proactive risk management

- **Compliance:** accurately define, manage and report on risk parameters across deals and portfolios
- **Surveillance:** track and analyze any deal, tranche or collateral performance measure to identify and signal risks
- **Foresight:** stress test default, delinquency or prepayment rates
- **Disclosure:** report risk information for any stratification of the business on request

Streamlined operations

- **Consolidate:** centrally manage multiple portfolios for increased transparency and efficiency
- **Streamline:** integrate portfolio management, risk control and accounting
- **Integrate:** eliminate redundant systems and processes
- **Control:** avoid inconsistencies from front to back office with audit and workflow control

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About Principia

Principia Partners LLC (Principia) provides a comprehensive single platform solution for the end-to-end management of structured finance investments. Global financial institutions and independent asset managers have used the award winning Principia Structured Finance Platform since 1995 to unify investment analysis, portfolio management, risk surveillance, accounting and operational control across the breadth of structured credit assets, fixed income investments and complex derivatives.

For over 15 years Principia's mission has been to help investors independently address the deal specific investment and cashflow analysis, valuation, risk management, reporting and due diligence requirements of structured credit investments and portfolios.

Its dedicated support and continued development of functionality for structured finance instruments is accompanied by a proven and fully integrated derivative valuation framework. This consolidated credit investment and market risk solution delivers the backbone necessary to unify and perform deeper investment analysis, proactive risk surveillance and ensure operational control across the credit investment business.

Principia is based in New York, with an office in London and a technology center in Conshohocken, Pennsylvania. Principia SFP was awarded the Credit Technology Innovation award by Credit magazine in 2008, 2009 and 2010.

For more information please visit: www.ppllc.com

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