Dealing with data

The operational challenges facing investors in an increasingly data-rich world

For years, structured credit and ABS investors have struggled to get access to comprehensive data for the assets in their portfolios. Now, driven by regulatory initiatives in Europe, the UK and US, there is far greater transparency of data on securitisations.

However, the job is far from complete. There are still gaps in the data set and, more importantly, investors need to work out how best to handle and make best use of the data now available to them.

The progress made in the availability of securitisation data generates three immediate challenges, according to Mark Hale, cio at the Prytania Group. "First is whether we can maintain progress and get data that is available across all jurisdictions."

Mark Hale

Second, he adds: "We need to ensure the data quality is of the required standard to enable investors to make well-informed judgments and fair comparisons. Third, is the issue that even if we are seeing signs of progress in the primary market, which is being driven by regulatory impulse, we are still a long way from addressing the challenge of data on a historic basis."

Hale says there are no easy solutions, however. "Frankly it is an ongoing struggle from cradle to grave in structured credit to meet those challenges. At a time when markets are evolving, regulations are continuing to change and accounting standards, for example, are shifting the need for market participants to continuously invest in infrastructure remains paramount."

Douglas Long

Hale continues: "The question that follows from improved access to data is can that data be assimilated easily? Can it therefore be standardised, can it be quality controlled before investors get it, so they are not forced to do so themselves? Also, can investors then use a variety of tools to make informed decisions, both about purchasing assets and monitoring the ongoing risk and, if necessary, selling assets?"

He says that thanks to the efforts made by a number of third-party providers in recent years, there has been a significant improvement in the quality and quantity of tools available for investors to utilise. Nevertheless, he adds: "It is extremely difficult for even the most experienced and well-resourced investors to meet that challenge right now."

Douglas Long, evp business strategy at Principia, says that for his firm this work has long been the focus. "What we are trying to do is to ensure that investors have the right infrastructure, the right tools and the right controls in place to make that data work for them and to run an efficient and effective business – drilling into information when they need to, rather than being awash in a sea of data."

The difficulties are exacerbated by the very nature of investors' often diverse holdings in the sector. A fixed income portfolio that includes structured credit, ABS and MBS products will have large numbers of different data components.

At the high level, getting a view across all exposures and portfolio positions is the first data challenge; beneath that detail on each different instrument type is required and below that comes ever changing deal-specific information – key performance metrics for the deals themselves and their collateral, combined with individual structural details such as the priority of payments, triggers levels and so on. Further, there is also pricing information for the investor to consider, not only in terms of where each deal's tranche is trading, but how liquid their pricing information actually is.

Consequently, Long notes: "Investors typically have a large variety of different data sources and types to contend with. Some of it is static, some of it is ongoing and very often it comes in very differently depending on the data partners they have."

He goes on to cite the example of results from Principia's new pricing survey, which indicates that 78% of investors use a combination of independent pricing services and at least one to two other pricing methods, such as broker-dealers, advisors or in-house calculations. So, even on the more straightforward question of 'what is the market price of my assets?' investors end up with more than three (and often many more) different sources of data and all, almost inevitably, with different formats, different timings and different assumptions attached.

With such a wide array of data now coming in, it is vital that investment firms develop the right infrastructure to cope. Fundamentally, Hale says: "You need a flexible platform that is able to take in multiple data types, sort them efficiently and use multiple cashflow models simultaneously at high speed."

To this end, he says that his firm's approach from its inception in 2003 has given it that flexibility. "From the outset, we set out to develop our own tools –such as software for assessing risk including cashflow models as well as data aggregation tools and bespoke credit models. We also developed products to enable the output of those analyses to be easily understood, whether they be web-based portfolio management tools that we can use for our funds or our advisory clients or graphical tools to make the complexities of path-dependant structures like CDOs readily accessible to non-expert users."

Hale concedes this is not necessarily an option for everyone. "We're fortunate that we were able to raise a great deal of money from our investors and JPMorgan to do that. To a degree, we have been much more focused on this issue than many for a long time and very fortunate in being able to hire specialist quants, programmers and portfolio experts to facilitate that."

He adds that Prytania has also used a range of third-party data sources and specialist tools. "We've taken in the best quality tools from the best providers in each of the different areas of structured credit to supplement our own efforts," he says.

Indeed, Hale believes that it is incumbent on investors to keep abreast of the latest developments in third-party services. "At Prytania, we continuously review whether it's appropriate to evolve our own tools or recognise that it is optimal to also use third-party tools going forward. In order to be on top of the risks you need to continually question whether you have the right mix and the economics of each service."

Long suggests that developments will move on apace in the months ahead. "With the issuers providing more of this data, we are getting closer to a commoditised platform for the data vendors and investors to utilise and disseminate the information in digestible formats."

He explains: "The ECB says that the data posted with the European Data Warehouse will have to be made available to all data providers, which means they will all have the same raw data. So, I anticipate that all the data vendors out there that used to source data themselves will look to provide value-added services to ease the burden in managing that richness of data. As an investor, you don't always need to get to the loan level data, and if a vendor can calculate performance statistics from the detailed loan information it will help streamline your processes."

Long continues: "It's about transferring issuer-provided, raw data into a usable format. One of the other things we've seen from our survey is the increasing degree to which the vendors are trying ramp up coverage in terms of asset class and geography in data they provide so investors in turn need to turn to fewer providers."

Notwithstanding such developments, there are still hurdles to overcome. As Long says: "Once you have the data in your system, that's when the operational challenges really start. Once an investor is on a level playing field in terms of the data it is getting in, the question is how to prove to regulators that you are doing the right things, can really understand each investment and are able to monitor the ongoing performance metrics tied to those securities."

To this end, Principia has been working with clients and developing its software offering to help firms bring in all the information required from multiple sources, perform detailed investment and bond analysis and then implement risk surveillance and compliance controls at a cross portfolio level. A risk or portfolio manager can query a portfolio to analyse all the deals matching any desired stratification. For example, an investor could specify that it wants to view all EU and US RMBS deals, issued before 2008, where delinquency has jumped by more than 40% over the past year. The system processes the universe of information available to the investor, integrating the pricing, performance data and cashflow models an investor may use, in a single operational environment.

Long explains: "The idea is to try and mine data more efficiently – highlighting the specific securities that need more time spent on them and looking at the fundamentals, rather than someone having to go through, say, a portfolio of 100 deals looking at every single one, tracking 25 different indicators and figuring out what action to take. Having internal guidelines to say in these situations you've really got to go the extra mile and drill down into a particular investment is one thing, but having a consolidated way to implement and actively manage compliance within those guidelines is where we help people."

Long adds that this approach speaks to another major aspect of investors' dealing with data. "One of the other most important pieces is that when you bring data into an operation, you really want to make sure it flows through the full lifecycle of a deal, adding and tagging all the information associated with that deal wherever it goes and layering on workflow and operational controls to manage that."

So, he says: "When you go from the quantitative analysis of a deal to flowing it through to operations, you need to maintain a history of what happened and control who does what – for example, where the people who value securities on a regular basis are not the people who perform the original trades. You need workflow controls to direct that deal through to the right people within an organisation. There is a flow of information that must accompany that and an audit trail that needs to be recorded. Again, the data is key – but without it sitting in an environment where you can control how that data is used and how it is manipulated, you lose sight of the controls and the checks that you need to have in place."

Hale is equally certain of the importance of focusing on data management. He says: "We can't stand still because data availability and volume continues to increase. Statistics will still emerge in raw format and problems such as a lack of common identifiers will remain. The ongoing challenge of assimilating data across a range of sources and producing a consolidated picture of risk remains critical for all investors and third party sources."

The issue may ultimately be even more fundamental, according to Long. He concludes: "If you really want to grow your business, you need to have a really strong grip on your portfolio. With so much data around, if you don't have the procedures and operational infrastructure in place to be efficient and scalable, and at the same time meet your due diligence requirements, it will be a struggle to grow a business that has a focus on ABS and structured credit investment." *MP*