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SUB-PRIME CREDIT CRISIS: IGNORE AT YOUR PERIL

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The sub-prime crisis has led to a rethink about deal information, risk profiles, and assumptions taken in the lending process. While the full ramifications are still being worked out by policy makers, regulators, analysts, investors and the institutions themselves, what is clear is that the fall out has not ended and that steps will need to be taken to restore profitability, balance sheets and reputations.

The US Mortgage sub-prime crisis has mass global implications on the Asset Backed Securities (ABS)[1] investment here in the UK and elsewhere. The credit crunch (linked by many commentators to a cyclical downturn in the US economy) has demonstrated to investors and to the banking industry overall that many assumptions made in ABS dealing and the flow of information are not necessarily transparent, reliable or objective.

The recent market crisis has identified the need for retail banks and building societies to revisit how they finance themselves and prepare for a liquidity crisis. This crisis has highlighted the inadequacy of some business models and business processes and the need for more integrated capture and modelling of timely, transparent risk information related to ABS and funding exposures.

Banks, building societies and investors do not have the appropriate information about the degree of exposure a counterpart or investor has to the sub-prime credit change. This uncertainty of information upon which decisions are made, has certainly led to increased volatility, lowered liquidity and has raised the cost of capital. The result is that global capital transfer has slowed considerably.

In the UK, we have seen a tangible example of the impact of the sub-prime crisis on the liquidity at Northern Rock. Northern Rock funded a portion of its mortgages and loans via commercial funding. During a credit crunch in the commercial markets, liquidity providers can, and in this case did, very quickly withdraw funding.

In this briefing note we focus on the implications of the crisis on ABS and liquidity. We make practical recommendations of the actions that banks and building societies need to take including:

- full integration and break down of information and measurement boundaries within risk processes;
- enhanced awareness of underlying customer behavioural assumptions with respect to the securities that they hold or are significantly exposed;
- develop a more integrated, dynamic and independent behavioural analysis that supports the timely update of customer credit, and non credit behavioural change
- improve economic capital, earnings, operational and liquidity modelling to consider all aspects of the ABS market
- undertake better liquidity planning identifying action and alternative funding prior to an emergency
- better evaluate their exposure to legal covenants and their related impact on balance sheet quality, financial performance, capital and risk
- consider increased reputation risk and model the performance of all on and off balance sheet assets
- consider at the time of pricing and loan approval their overall exposure to low credit rated customers as well as exposure to economic cycles
- review the implications of boundary risks and build effective policies and controls to demonstrate more accurate integrated risk measurements.

[1] The credit crisis in the US has led to significant implications on the Mortgage Backed Securities (MBS) and overall ABS market

Banks and building societies could take a positive approach to the sub-prime crisis by using it as an opportunity to fully integrate and break down information and measurement boundaries within their risk processes.

In reality, it is unlikely that banks, building societies and investors ever had transparent, integrated, time effective information on the positions and underlying liquidity, market, operational and credit exposures. A contributing factor for this lack of transparent information is the market mechanism for trading ABS securities. These securities are often traded with insurance via a trust whereby the insurer (normally a credit derivative counterpart) provides backing against the performance of the asset pools. The investor 'looks through' to the credit of the insurer or credit enhancer to assess the rating and in many instances to provide a higher rating. This enhances the trade of the notes issued by the trust as the rating becomes higher due to the insurance and diversification benefit provided and thus makes the instrument more tradable. This perception has in many instances masked the underlying assets supporting the securities.

Additionally, the banks and building societies have not considered the funding risk for ABS supported through Commercial Paper (CP) issuance. The CP market has withdrawn funding for ABS tranches almost overnight. With the exception of those institutions with effective dynamic credit processes, banks and building societies could better track their daily risk and liquidity exposure from credit derivatives, underlying asset pools and investments.

Banks and building societies could enhance their awareness of underlying customer behavioural assumptions through more frequent analysis on specific customer pools and financial specific to the securities that they hold or are significantly exposed to.

The underlying data pools of ABS can change and it is this fluidity that makes it difficult to find information or to track information. Most customer pool information is not readily available or if it is, it is likely to be out of date. Studies on the behaviour of these pools are not subject to regular update. Customer pool information is generally only completed at the outset of the issuance of a security and not updated through its life. If such information was available it would provide a better understanding of prepayment or other market or liquidity behavioural changes. While general data on prepayment is commonly used in practice as a basis of assumptions pool specific data could be quite different and provide valuation changes.

Banks and building societies could enhance product knowledge and customer value awareness by developing a more integrated, dynamic and independent behavioural analysis that supports the timely update of customer credit, and non credit behavioural change.

Customer analysis provided by originating banks often lacks objectivity. The banks and building societies do not have the information, product / statistical expertise to perform ongoing behavioural support on the underlying assets. Unless these characteristics are regularly reviewed it can lead to surprises regarding changes in customer performance and behaviour. The practice of providing only slow or infrequent updates can lead to a jump or diffusion price changes whereby the market reacts with extreme volatility to reported changes in behaviour. The reality is however, that customer behaviour rarely changes overnight. Behaviour change can generally be viewed as a process that builds up over time in response to cyclical, economic and competitive circumstances.

Banks and building societies understanding of profitability and financial conditions would benefit from a comprehensive capture of all the deal exposures from ABS issuance. Economic Capital, earnings, operational and liquidity modelling can be improved to consider all aspects of the ABS market.

Market liquidity is driven for the most part by profitability and perception. Since sub-prime loans offer higher spreads from the point of origination to investment of an ABS, the market is drawn to transact

business where the returns are higher but the risk is perceived to be low due to credit enhancement. However, legal, reputation and operational risks are not always fully considered and realised in risk models. These risks are significant as the ABS security issuance generally requires that certain operational aspects as well as covenants in the agreement be observed and that an originating bank does not let the security fail. Many existing risk processes and systems used in banks and building societies fail to capture the full implications that may transpire over the course of the ABS issuance.

Banks generally need better liquidity planning identifying action and alternative funding prior to an emergency.

While banks and building societies currently employ assumptions and forecasting to generate comprehensive scenarios with respect to its liquidity condition, the sub-prime crisis has highlighted the need to reconsider and question current funding assumptions and actions if the original source of the bank's liquidity were to disappear. It also highlights the point that banks and building societies should vigorously apply stress assumptions to identify severe liquidity threats. In applying these assumptions to stress scenarios, the bank will be more aware of the possible impact from a significant market adjustment or severe liquidity stress. If bank management is aware of the impact to its business, it may better manage its funding resources, funding relationships and take early action in its liquidity planning.

Banks and building societies should better evaluate their exposure to legal covenants and their related impact on balance sheet quality, financial performance, capital and risk by capturing and modelling the impact of these on credit, liquidity, operational and market risk.

Covenants within ABS securities and their issuance often stipulate how the originating bank, trustee, credit insurer, collateral agent must perform. Often items such as substitutability, pool credit performance, knock-in default payments are not captured or modelled by the banks or building societies systems. This can lead to an ineffective understanding and poor management of the institution's exposure to the legal covenants contained within the agreements.

Banks and building societies should consider increased reputation risk and model the performance of all on and off balance sheet assets with the appropriate credit performance and related implications to credit quality, liquidity and capital.

Banks and building societies may sell a portion of their credit in the form of ABS securities; however, in such a case the bank still retains a significant reputation risk on the performance of the ABS investments. One may be certain that if the original loans do not perform in the ABS investment pool and the bank allows the customer pool in the ABS to fail, the bank will incur a severe blow to its reputation. The market may have reservations about the credit quality of the originating bank and the market will likely further react by not providing usual funding or business with the bank. Obviously, an extreme liquidity situation may occur due to such a reputation crisis.

Banks would better withstand a credit crisis and resulting losses, if at the time of pricing and loan approval they considered (and continued to review) their overall exposure to low credit rated customers as well as exposure to economic cycles.

Credit decisions are made by banks and building societies in the interest of making money, as expected by investors or shareholders. However, the most profitable customer is often the customer with a low credit rating. But in reality, this low credited, potentially profitable customer may also represent the highest level of risk. The securities industry is able to sell this customer type on to investors at an attractive price. The higher price to the loan customer is supposed to be reflective of the higher risk taken by the bank. There are two items of note in this respect. First, the bank may increase its loan portfolio exposure on this higher credit risk group in the interest of making money. Secondly, the lower credit customers are not adequately evaluated

for the event of a downturn in the economy. Therefore the credit ratings or price charged to the customer does not necessarily reflect cyclical or dynamic risk (i.e. risk from future changes in assumptions, financial strategy and market conditions).

Banks and building societies should review the implications of boundary risk being whether a loss event is treated as an operational risk as compared to a credit risk for example and build effective policies and controls to demonstrate more accurate integrated risk measurements.

Most banks and building societies do not fully consider and have not properly integrated credit risk / market risk / operational risks (i.e. bank-wide perspective) and/or considered the crossover implications of complex structures. These boundary issues mean that monitoring and control processes are not established to manage banks and building societies control obligations (e.g. informing rating agencies). The market perception is that the integrated level of risk relating to ABS / CDO[2] / MBS and the like including the credit, liquidity and operational risk aspects are not modeled accurately.

Whilst the financial sector is significantly impacted by the effects of the fallout of the sub-prime credit crisis, corporate investing and funding activities have also been impacted. A lower supply of monies for funding has been a result of tightening of banking and corporate credit investment policies. This has led to more expensive short term funding for all industries which in turn impacts profitability and liquidity conditions. Large cash rich corporates are tightening their investment policies to avoid exposure to riskier credit and avoiding investment in relatively high grade structures that are backed up by CP. The general flight to quality is always a concern for Corporate Treasurers as well as Banks.

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avantage Capita is a consulting company that assists organisations with bringing a practical vision for integrated risk and financial performance management in a framework that creates shareholder value and economic profit.

[2] Collateralised Debt Obligation