

Basel III: The Implications for Asset Finance.





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The recent global financial crisis highlighted problems in the regulatory framework covering major financial institutions, with even very large institutions finding themselves at risk of failing.

While the original Basel accord and its subsequent revision in Basel II provided some protection against a downturn in the economy, the depth of the crisis in itself showed that more is necessary to ensure that such crises do not occur again.

This paper explains the key changes brought about by Basel III, its background, structure and practical impact on asset finance businesses and their IT systems. The knock-on effects on financiers not covered by Basel III, and the opportunities that can be seized by those who are ready for the changes, are also discussed.

Introduction

Basel I and Basel II – A Potted History

The original 1988 Basel accord laid out a framework for ensuring capital adequacy in times of financial stress. This aimed to ensure that financial institutions had sufficient reserves to remain solvent, even if they were to suffer a significant default on their assets. Basel I classified assets into five groups according to their credit risk, and assigned a risk weighting to each group. It then required Internationally Active Banks (IABs) to risk-weight each of their assets, and to hold capital equal to 8% of the total risk-weighted assets.

In 2004, the BCBS issued its second accord, commonly referred to as Basel II. This went significantly further than Basel I in defining a set of more accurate risk-weightings for calculating the minimum capital requirements. This “first pillar” of Basel II involved taking into account credit risk, operational risk and market risk, rather than the Basel I approach of considering only market risk and a simplified view of credit risk. Basel II also introduced guidance on supervisory review and market discipline (labelled pillars II and III), that aimed to ensure that banks and supervisory bodies monitored risk and capital carefully, and that sufficient information was disclosed to allow the markets also to monitor each bank.

Basel II allowed banks to select the level of detail used for the calculation of minimum capital, such that each institution could determine the level of effort that was appropriate to its business. The most basic approach (Standardised Approach) involved taking risk weightings from a standardised table created using credit scores from an external agency. Under the most advanced approach (Advanced IRB Approach), the bank created its own risk weightings by determining the Probability of Default (PD), Loss Given Default (LGD) and Exposure at Default (EAD), based on its own historic data and using a published formula to derive the weighting. In between there was an intermediate approach (Foundation IRB Approach) which required the bank to determine the PD, but use LGD and EAD figures supplied by the regulators.

The Justification for Basel III

Basel II clearly represented a step forward from the broad-brush approach of Basel I, bringing the minimum capital requirements far more closely into line with the level of risk. However, there were still significant areas in which the approach could be improved. The 2008 credit crunch brought this into sharp focus, and under pressure to introduce regulation to prevent recurrence, the G20 summit in February 2009 approved the process of preparing and implementing Basel III.

The key issues identified centred around the fact that even where banks were meeting the requirements of Basel II, the capital being held did not necessarily prevent insolvency. Furthermore, the credit crunch - as with most financial crises - was not a crisis only of solvency, but also liquidity. Consequently, Basel III centres on providing increased protection from these issues by increasing the minimum capital level and bringing in minimum liquidity levels. This is aimed particularly at those systemically important banks (SIBs) where financial problems cause deep ripples across the rest of the banking community.

BASEL III

In December 2010, the Basel Committee on Banking Supervision (BCBS) issued the new Basel III accord, detailing a range of additional regulatory requirements. These aim to give enhanced protection to investors and prevent regulated financial entities from taking imprudent risks with other people's money.

THE BASEL III ACCORD COVERS A RANGE OF AREAS:

- *Enhanced minimum capital requirements, both in terms of quantity and quality*
- *Improved risk coverage*
- *Introduction of a leverage ratio*
- *Introduction of minimum liquidity requirements*

Each of these areas may require significant changes by affected banks, which will directly impact their asset finance business.

Asset financiers not covered by Basel will also be affected indirectly, through their sources of funding and the changes in the marketplace.

All asset financiers need to be aware of these potential impacts, and the effects they will have on their business and IT systems.

How Basel III Will Be Implemented

01 SCOPE – WHO NEEDS REGULATION?

As with the previous accords, Basel III applies to Internationally Active Banks (IABs) – that is, those active in multiple jurisdictions. This therefore covers major global players as well as banks which are based primarily in a single country but have branched into neighbouring ones. This represents an attempt to ensure that the regulation applies to all banks which would have a impact on global markets should they face difficulties or failure.

IABs are often aligned with systemically important banks (SIBs). These are banks which are adjudged to have such importance within the financial sector that, due to the interconnectedness of their banking operations with other banks and sovereign states, failure would have far-reaching and significant consequences.

It is of course possible to be one without being the other (such as a relatively small bank that has some operations in neighbouring countries, or a large bank that has no overseas operations). Further, neither category is accompanied by a precise definition to allow a categorical statement of which banks are included. Nevertheless, it is these large banks that Basel III targets, in order to maximise protection against the domino effect of failure and to ensure a level global playing field.

Capital Requirements Directive (CRD) IV, published In July by the European Banking Agency on behalf of the EC, states that there is no discretion in the implementation. Unless the directive is changed, national regulators will therefore not be able to draw up their own interpretations, even though the UK and others were planning to do so.

02 ACCORD GLOBALLY, ENFORCE LOCALLY

Although Basel III is an international accord, it carries no weight of law in itself. Members of G20 countries are in support of the Basel accords, and over 100 jurisdictions comply with the accords. However, each jurisdiction is responsible for implementing the accords into its law in the appropriate manner. As far as BCBS is concerned, each jurisdiction has discretion to go further than Basel III if desired, although this may lead to a less level playing field and businesses may choose to base themselves in alternative jurisdictions if the requirements are too high.

In the US, Basel III will be implemented by the OCC for federally chartered banks. State chartered banks will be covered by a range of other regulators. Each regulator is currently working on its implementation of Basel III, and this is complicated by the simultaneous need to implement the Dodd-Frank requirements.

In Europe, there has been a two-level system whereby both the EU and the individual state are involved in implementing the accord: the EU sets its minimum requirements within a directive and each nation then amends its national law to enforce the directive, including additional requirements if it sees fit. However, Capital Requirements Directive (CRD) IV, published in July by the European Banking Agency on behalf of the EC, states that there is no discretion in the implementation. Unless the directive is changed, national regulators will therefore not be able to draw up their own interpretations, even though the UK and others were planning to do so.

Similarly, all other countries that have agreed to comply with the accords will look to implement them in local law, all with a view to doing so before the deadlines for Basel III are reached. For instance, in Australia, the Australian Prudential Regulation Authority (APRA) will create the legislation, whereas in China, the regulations will be implemented by the China Banking Regulatory Commission (CBRC). The level of progress varies between territories, although unsurprisingly it is Europe that is leading the way.

Basel III Structure

01 PRINCIPAL CAPITAL REQUIREMENTS

Quality

Basel III does not change the basic minimum capital level of 8% (although it does address the composition of this). It also does not attempt to make further changes to the way that banks assess the risk weightings of their assets – the Basel II options of using the Standardised approach, the Foundation IRB approach or the Advanced IRB approach still stand. However, Basel III does introduce additional capital buffers over and above the basic 8% requirement.

Basel II built significantly on the original Basel accord in terms of calculating the appropriate minimum capital that should be held, based on the risk profile of an institution's assets. However, it did not address the quality of this capital, leaving in place the Basel I requirement that of the baseline (undifferentiated) 8% minimum capital, at least 4% should be made up of Tier 1 capital and at least 2% of the Tier 1 should be Common Equity Tier 1 (CET1).

However, the global financial crisis highlighted that this breakdown of capital was not sufficiently loss-absorbing, as the lower-grade capital could not be relied upon in times of significant financial stress. Basel III therefore looks to increase the proportion of high-quality capital held, within the total capital:

- A higher minimum proportion of CET1
- A higher minimum proportion of Tier 1
- Disallowance of Tier 3 from the capital permitted to make up the total 8%

In addition, a number of regulatory adjustments are required, deducting certain sums such as goodwill and other intangibles from the CET1 figure before determining whether it reaches the minimum level. Further, some capital instruments are removed from those categories that are permitted in the calculation of minimum capital.

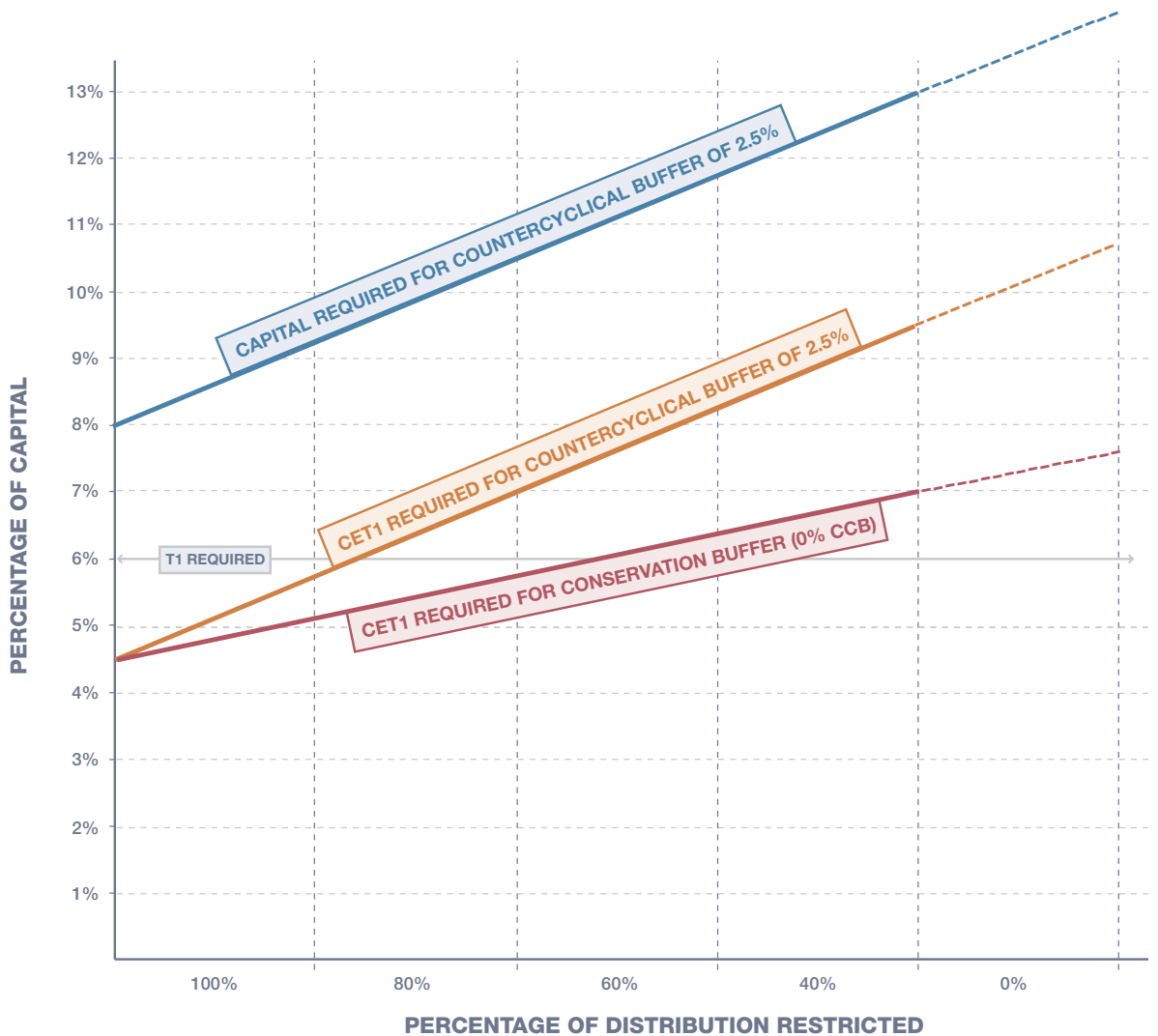
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The Capital Conservation Buffer requires each bank to attempt to hold an additional 2.5% of CET1 capital. If this cannot be achieved, a sliding scale of constraints will be imposed on the bank, such that the level of discretionary distributions (i.e. bonuses or dividends) that can be made is reduced. The savings made by reducing these distributions are fed into retained earnings, thus increasing the level of CET1 capital held and hopefully achieving the target 2.5% buffer level in future periods.

In addition to the fixed Capital Conservation Buffer, the regulator for a jurisdiction may choose to also implement a Countercyclical Buffer. This will be employed if it is judged that credit growth is too rapid and therefore risk is elevated. The Countercyclical Buffer may be set at any percentage up to 2.5%, and again must be made up of CET1 capital.

DISTRIBUTION RESTRICTIONS WHEN CAPITAL BUFFERS ARE PARTIALLY MET



02 CAPITAL REQUIREMENTS - RISK COVERAGE

Basel III strengthens the risk coverage of the capital framework in a number of areas, adding in CVA (Credit Valuation Adjustments) risk and encouraging banks to manage their risk more effectively. In the main, these measures will not affect the asset finance market and are aimed more specifically at the banks' trading books. However, in the area of counterparty credit risk, it is worth noting that risk weightings for lending to unregulated financial institutions will be increased.

This is achieved by adding an extra multiplier of 1.25 to the correlation parameter, which is used in the calculation of the risk weighted assets. As leasing companies will often be classed as unregulated financial institutions, this will immediately raise the minimum capital required to provide funding for a leasing company, which is likely to make obtaining this funding either more difficult or more expensive.

03 CAPITAL REQUIREMENTS - LEVERAGE RATIO

In addition to the minimum capital levels required based on risk-weighted assets, Basel III introduces a "backstop" ratio that does not vary with the risk profile. This requires the bank to keep Tier 1 capital at a minimum level of 3% of total exposure.

The aim of this requirement is to restrict the growth of leverage in the banking sector, as even essentially risk-free assets such as sovereign debt can still cause issues if the bank becomes over-exposed. By including all assets in the calculation of the leverage ratio, an overall floor is created. As an aside, this also produces a safety net for incorrect calculation of risk-weighted assets.

04 LIQUIDITY REQUIREMENTS

While the first two Basel accords provided coverage for capital adequacy, built upon in Basel III, the liquidity requirements are entirely new and are in response to the issues highlighted by the credit crunch. Banks which have sufficient capital to prevent insolvency can still suffer liquidity issues should too high a proportion of their assets be illiquid, or should they rely too heavily on unstable sources of funding. In order to protect against these risks, Basel III introduces two new ratios to ensure sufficient short-term and long-term liquidity.

Banks which have sufficient capital to prevent insolvency can still suffer liquidity issues should too high a proportion of their assets be illiquid, or should they rely too heavily on unstable sources of funding.

Liquidity Coverage Ratio

The short-term Liquidity Coverage Ratio (LCR) aims to ensure that banks can cover their required short-term outflows by having sufficient liquid assets to convert to cash when liquidity conditions become stressed.

$$\frac{\text{Total High-Quality Liquid Assets}}{\text{Total Net Cash Outflows for 30 Days}} \geq 100\%$$

Here, the definition of liquid assets under Basel III requires them to be free from any pledges to secure transactions, able to be valued easily, and listed on a sizeable, recognised exchange market. Two tiers of liquid assets are defined, with a minimum of 60% coming from the higher tier (including cash and central bank reserves).

The total net cash outflows are measured as the total expected outflows less the total expected inflows. The expected outflows are determined by calculating the balances of various groups of liabilities, and multiplying each by an assumed roll-off percentage. The expected inflows are calculated in similar fashion by multiplying amounts receivable by a percentage reflecting expected inflow in a stress scenario.

Net Stable Funding Ratio

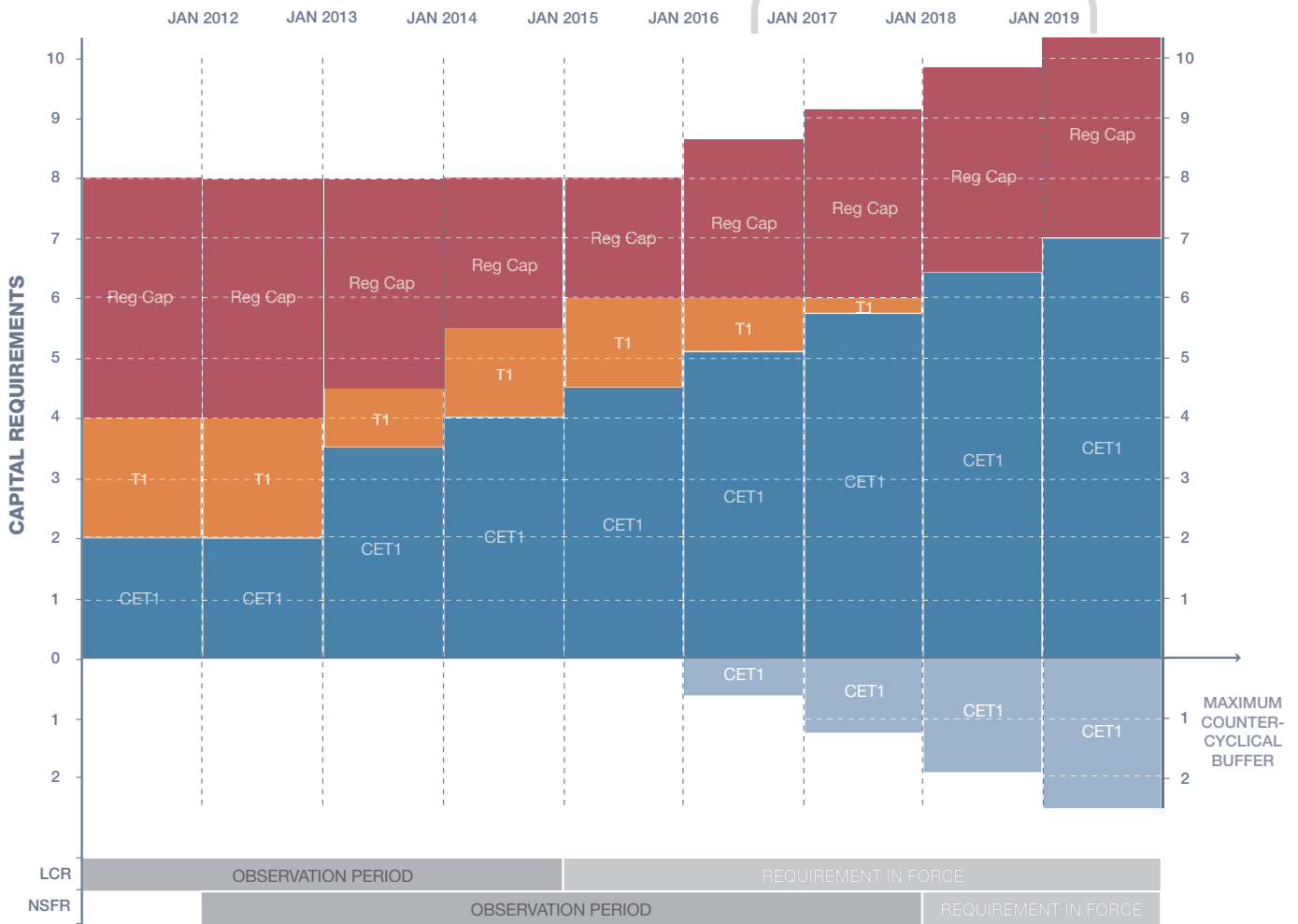
The short-term LCR is underpinned by the longer-term Net Stable Funding Ratio (NSFR). The aim is to ensure that long-term (over one year) assets are not funded exclusively by short-term instruments (i.e. short-term wholesale funding).

$$\frac{\text{Available Amount of Stable Funding}}{\text{Required Amount of Stable Funding}} \geq 100\%$$

Here, the available amount of stable funding is determined by multiplying amounts of available funding in various categories by published percentages for each category. Similarly, the required amount of stable funding is determined by multiplying total of assets in various categories by published percentages for each category. From a leasing perspective, it is worth noting that contract receivables, including residual values, are included in the required amount at 100%.

PHASED IMPLEMENTATION OF CAPITAL AND LIQUIDITY REQUIREMENTS

ASSUMING FULL COMPLIANCE WITH CONSERVATION BUFFER



KEY

Reg Cap = Regulatory Capital

T1 = Tier 1 Capital

CET1 = Common Equity Tier 1 Capital

LCR = Liquidity Coverage Ratio

NSFR = Net Stable Funding Ratio

Potential Impacts on Asset Finance

01 DIRECT IMPACTS

For asset finance institutions that fall within the remit of Basel III, there are a number of obvious and less obvious consequences. While not all consequences are negative, some are likely to be onerous on the institution, potentially even causing it to reconsider its asset finance offering. However, the underlying demand for asset finance remains strong and, with effective processes and systems, the negative impacts may be minimised.

Additional Capital

The addition of the Capital Conservation Buffer and the potential Countercyclical Buffer will clearly result in the reality that banks must hold additional capital in order to cover their asset finance portfolios. Furthermore, the quality of this capital will need to be enhanced, with the total CET1 capital requirement rising from 2% to a possible 7% (if the maximum Countercyclical Buffer is implemented).

These measures will require banks to examine their balance sheets and make potentially significant adjustments if current levels of capital do not meet these requirements. Raising extra capital will be required in many cases, and in order to attract investment it will be important to be seen as a well run institution. An effective and robust IT system to manage the asset finance portfolio, along with strong corporate governance and efficient operations, will be essential in winning the “battle for capital” and showing potential backers that investing will be beneficial for both parties.

It is of course critical that banks are able correctly to assess the level of capital required, in order that they neither run the risk of being found to be holding too little, nor hold an unnecessary surplus. Systems must provide accurate financial and operational data to facilitate the calculations, with a proven, reliable accounting engine that would ideally be integrated with the contract management system.

Both the foundation and advanced IRB calculations are by definition more accurate than the standard approach, and therefore tend to produce lower risk weightings. This in turn results in a lower minimum capital threshold for banks that can meet the more demanding data requirements. With the increase of capital required being so marked, there is a clear incentive for banks to attain one of the IRB statuses, but this will require increased information gathering and the implementation of an automated system to perform the calculation. Contract management systems that can hold the required data and provide an integrated calculation or easily extract to a data warehouse will be most useful in meeting these needs.

Additional Liquidity

Many of the headlines around Basel III have centred on the increase in minimum capital, but it may well be that the liquidity requirements, particularly the NSFR, prove to be the most impacting of all the regulations.

Clearly the LCR will require banks to reduce the amount of financing they can provide to customers, as a higher proportion of assets will need to be held as cash or other liquid items. This has the capacity to affect the types of contract that financiers want to write, aiming to achieve either a higher return on the contracts held or a less risky profile. Alternatively, financiers may attempt to position their business to minimise the calculated net capital outflows and therefore minimise the amount of liquidity required to satisfy the LCR.

While the first two Basel accords provided coverage for capital adequacy, built upon in Basel III, the liquidity requirements are entirely new and are in response to the issues highlighted by the credit crunch. Banks which have sufficient capital to prevent insolvency can still suffer liquidity issues should too high a proportion of their assets be illiquid, or should they rely too heavily on unstable sources of funding.

HOW USING THE RIGHT SYSTEMS CAN HELP YOUR BUSINESS TACKLE BASEL III

- *In order to attract investment it will be important to be seen as a well run institution. An effective and robust IT system to manage the asset finance portfolio will be essential in winning the “battle for capital”.*

- *Systems must provide accurate financial and operational data, with a proven, reliable accounting engine that integrates with the contract management system.*

- *To attain one of the IRB statuses, banks will require increased information gathering and an automated system. Contract management systems that can hold the required data and provide an integrated calculation or easily extract to a data warehouse will be most useful in meeting these needs.*

- *Instant access to data will be key. Additional liquidity requirements will require a system that keep accurate and reliable financial information, in order to facilitate the calculation of net cash outflows. Systems with an integrated treasury function will also allow the financier to keep track of the stability of the funding, particularly across multiple jurisdictions and in multiple currencies.*

- *A decision engine or business rules engine that allows the financier to update rules simply and quickly - without the need for development - allows the most efficient adjustment to new business strategies.*

With regard to the NSFR, banks will need to ensure that their funding sources are sufficiently long-term to cover their long-term assets (which will encompass most asset finance contracts). For those financiers who currently rely on short-term wholesale funding, this will require a significant rethink. In particular, as residual values on leases are included at the 100% rate in the denominator of the NSFR, this may require such a large repositioning that banks no longer wish to finance assets with a residual value position.

As with the capital requirements, the additional liquidity requirements will require the contract management system to keep accurate and reliable financial information, in order to facilitate the calculation of the net cash outflows. Systems with an integrated treasury function will also allow the financier to keep track of the stability of the funding in order to meet the NSFR requirements. Instant access to data will be key, as the reporting of the liquidity measures will need to be on-demand.

Change in Business Model

Changes in both the minimum capital and the minimum liquidity could lead regulated financiers to change the nature of finance contracts that they are willing to write. Some financiers may choose to amend their new business acceptance criteria to exclude certain types of agreement, while others may decide that existing contracts no longer meet their requirements and need to be sold. On the flip side, those financiers that meet the conditions of Basel III may be perceived as safer than unregulated financiers, which could lead to an increase in business volumes.

Flexibility in the implementation of acceptance criteria will help to ease the transition between business models, and therefore financiers should look to systems with maximum configuration capacity in this area. A decision engine or business rules engine that allows the financier to update rules simply and quickly - without the need for development - would allow the most efficient adjustment to the new business strategy; either changing the underwriting rules or initial contract acceptance criteria.

Where a financier chooses to sell a group of contracts, the flexibility of the system to deal with this change will be paramount in ensuring the sale is effected quickly and efficiently. The experience of the system provider in this kind of transaction will also be key, as such a sale generally requires deep understanding of both the technical and financial aspects.

02 INDIRECT IMPACTS

Although not all asset finance providers will fall within the remit of Basel III, even those that do not are likely to feel its impacts, both positive and negative. Again, effective processes and systems will allow astute financiers to maximise the benefits while minimising the drawbacks.

Funding

The most obvious effect of the introduction of Basel III on unregulated asset financiers will be on the availability and cost of funding. In order to maintain the target return on equity, banks will need either to lift the interest rate on loans to asset financiers or, potentially, to move out of this market and focus instead on more capital-efficient investments.

While a rise in funding rates can be covered simply by increasing the rates at which assets are financed, those asset financiers that can keep rates lower will find themselves at a competitive advantage. Operational efficiency - implementing streamlined processes and increasing systems automation where possible - is key to achieving this. Automated workflow engines, decisioning tools and interfaces with third party systems will be target areas for the financier who seeks to remain ahead of the game.

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- *Bringing a new product to market can be a time-consuming task, so financiers whose systems allow this to be achieved quickly and easily will be able to focus on the marketing of the new product.*

- *The additional requirements surrounding the tracking and management of an asset that must be retrieved at the end of the lease should not be underestimated. Systems can help by offering integrated asset management functionality, allowing the lessor to keep a close eye on its assets in the field.*

As some funding sources are removed from the field of play, asset financiers may look further afield in order to fund their asset purchases. The local enforcement of Basel III by individual countries is likely to introduce inconsistencies in the funding available, as those banks not required to comply according to their local law may remain able to provide funding at more competitive rates. Therefore, systems with an integrated treasury management function will again be useful, particularly where this can work across multiple jurisdictions and in multiple currencies. Alternatively, if different funding channels are employed, maximum flexibility in the tracking of funding instruments will be required.

Opportunity

Although the increase in funding will present challenges for unregulated financiers, Basel III will also introduce significant opportunities. The potential changes in the business strategy of Basel III-compliant banks will mean that new growth areas open up for those lessors that are not subject to Basel III.

The likely strategies employed to meet the additional requirements of Basel III, particularly around additional capital and the NSFR, remain to be seen. Therefore, in order to be able to maximise the benefits to be taken, financiers must be alert to the changes in the market and swift to move when an opportunity is spotted. Bringing a new product to market can be a time-consuming task, so financiers whose systems allow this to be achieved quickly and easily will be able to focus on the marketing of the new product – rather than being held back in the implementation.

Similarly, as regulated banks change their lending criteria to bring down the risk in their portfolio, and therefore their capital requirements, unregulated financiers may choose to widen their lending criteria, albeit at higher rates. Again, as described in the “Direct Impacts” section, the use of an easily configurable engine for making underwriting decisions will facilitate the quick implementation of different lending rules.

As described above, one area in which banks are most likely to make changes is in leases with residual values due to the demands of the NSFR. With the leasing market already moving towards operating leasing, this may well offer significant opportunity for unregulated lessors. However, the additional requirements surrounding the tracking and management of an asset that must be retrieved at the end of the lease should not be underestimated. Here again, systems can help by offering integrated asset management functionality, allowing the lessor to keep a close eye on its assets in the field.

Conclusion

It is hoped that the Basel III accord will provide greater protection in the future from the issues seen in the recent global financial crisis, ensuring that banks operate from a more solid and stable platform than has previously been the case. By necessity, this will require some far-reaching changes in the way such banks conduct asset finance business, with knock-on effects also reaching financiers not covered by Basel III.

However, amongst all the turmoil, there are opportunities to be seized for those financiers who are ready for the changes, and who can move quickly to take advantage of the movements in the industry.

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