The Changing Face of Regulation



Welcome to our second Global Risk update for 2010. In this issue we have eight original articles which deal with many of the current issues that are impacting financial services risk management worldwide. The Bank for International Settlements (BIS) is still developing their revised framework (the so-called Basel 3) and we can expect to see the output from this in November 2010. In the meantime there are many new rules and regulations being developed globally by regulators and these are all making major changes to the way in which risk management is considered within the banking field.

In our lead article we discuss the changing face of regulation and what are the likely outcomes from the current process. The limited global vision is particularly highlighted and the changing roles that are required. I remain hopeful that new organisational responsibilities will be implemented which will significantly reduce the level of risk in the system — what cannot be appropriate is for the capital levels within firms to be distributed at stress levels globally.

A major change to the UK regulatory structure is the Bribery Act, whose implementation has been delayed by six months. This places significant additional responsibilities on firms which they need to be aware of. David Blackmore's article considers the impact of this important legislation. Solvency 2 for the insurance industry has many parallels to Basel 2 for the banking industry. It is a major change programme which impacts both risk management and consequently internal audit as discussed by John Webb. Developing a programme to efficiently deal with these issues while adding value to your firm will remain a prime issue for insurers.

The BIS are not waiting for Basel 3 before producing new rules, one set of which relates to the management of operational risk in market related activities. We set out the principles but in summary note that they really restate much of what already existed in regulation. The issue is completed by two articles relating to credit risk (Preparing for Restructuring by Simon Ling-Locke and Corporate Loan Portfolios After The Crisis by Tracy E. Williams), an update on Islamic Banking issues from Mark Andrews and an article considering the US views on International Financial Reporting Standards from Rohan Badenhorst.

I do hope that you find the articles of interest and welcome your comments on any of the issues raised. 2010 will continue to be a difficult year for risk managers. The changing rules themselves create a level of uncertainty which when combined with the political imperatives could easily lead to damaging

regulation which results in adverse market conditions.

Risk managers need to be able to stay ahead of the game and see what is happening. I invite you to the Linkedin Risk Reward Global Risk Forum in which such issues are increasingly being discussed and where you can participate directly in these developments.

With best wishes

Dennis Cox BSc, FSI, FCA Chief Executive Officer

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THE CRISIS

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TO THE EDITOR

Do you have risk issues in your organisation or region you would like to

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THE CHANGING FACE OF REGULATION

Dennis Cox is the Chief Executive of Risk Reward Ltd, the LinkedIn Global Risk Forum and chairs the Chartered Institute of Securities and investment Risk Forum based in London. In this second in a series of articles on this subject he discusses the changing face of regulation and what are the likely outcomes from the current process. The limited global vision is particularly highlighted and the changing roles that are required.

Let us remember what has happened and how we are where we are. Basel 2 was intended to be a more risk sensitive version of Basel 1 incorporating capital requirements for operational risk and recalibrating the capital requirements for credit risk. Drafted originally in 1999 its implementation has been globally rather slow so that we are still in the position ten years later that implementation in many countries is still at an early stage.

In developed markets we may well be discussing stress testing and pillar 2 disclosures, whereas in other markets the actual requirements have not event been published at this time.

Then we had the liquidity crisis which led to a credit crisis as bank liquidity

forced a reduction in available credit. Of course Basel 2 did not deal with liquidity; indeed it was not addressed at all. Separate papers have subsequently been produced to develop thoughts and ideas for the management of liquidity risk, many of which are little more than a retread of older papers.

So we are now looking to make major changes to Basel 2 in terms of what people are calling incorrectly Basel 3. The changes are unlikely to be published as a new Accord; rather they are likely to represent a revision to the existing Accord. A consolidated revised final Basel 2 Accord will be published – just as there was a Basel 1 Accord with and without market risk.

The real question is what is really

required? We can see that the commentators and central banks are debating what were the actual causes of the crisis, although this is also biased by public opinion. The resulting general view is that banks took on an inappropriate level of risk and that they were inadequately capitalised to deal with the stress events that occurred.

As I will seek to explain in this article, I take the view that the entire debate at the present time is missing the point and could result in sub-opt5imal solutions which have the effect of damaging the global economy.

The Cause of the Crisis

In my opinion the real heart of the crisis was government debt causing mispricing of assets in the global



THE CHANGING FACE OF REGULATION CONTINUED

market. An unsustainable government borrowing requirement enforced a higher level of bank activity and policies globally encouraged the consequent activity.

Given that profligate governments are certainly one of the prime culprits, this would suggest we need better regulation of governments and to avoid stress based losses at a 99.9% confidence level? What that would mean is that the bank would need to maintain capital that would not be needed 999 times out of a 1,000. This would have the effect of building up global pockets of excess capital which increase the cost of borrowing and decrease global business activity. Insurance has the basic idea that the

losses of the few are picked up by the many — what is being suggested here is that each firm has sufficient capital to pick up its own few and irregular losses. This is a major change in the original basis that the intention of capital was to prevent contagion rather than the failure of a single institution.

Since you cannot maintain sufficient capital for stress without causing major damage to the global economy and there is no logic in having capital for

expected loss the result is that capital ends up being rather odd. It is neither expected, not unexpected. Since it cannot cover plausible events it really ends up addressing the expected unbudgeted losses. Whether this makes any sense is another matter.

So the real problem is that we do not know what should be the level of capital since we do not really know what it is trying to address. Is it just a picture on a wall or is it to be used for a rainy day? Well it may well be raining already.

So Where do we go from Here? Basel 2 has much in it that is logical and

helpful. It recommends improvements to risk management and modelling, to risk governance and reporting. All of this is welcome and, with some reservations, appropriate. What is really needs now is a detailed debate as to the purpose and requirements of capital, which would then lead to its calculation.

If we need the system to maintain capital to deal with stress events then some form of bank levy sounds appropriate globally. Such funds should not then be used to defray normal government expenditure; instead they should be transferred to a supranational agency to manage. The real alternative would be some form of insurance supported by requirements for living wills.

Otherwise all that we manage to achieve is a reduction in global activity and an increase in unemployment. Capital needs to have a real purpose. If you have a calculation that so much capital is required to meet a particular type of event and the vent happens the bank will not be able to use its capital. Using it would result in it breaching the capital criteria. It would bizarrely have to raise additional capital at exactly the time when it neither has the funds available or the ability to raise additional capital.

What we need is vision leading to action and a proper debate that will result in an optimal solution, not knee jerk reactions to perceived issues which are actually spurious.



banks holding the debt of their own country. Of course the entire debate is currently suggesting the contrary.

Are Banks under Capitalised?

In many ways this is the real question — yet it is difficult to answer. The original capital values set within Basel 1 really have very little intellectual underpin. Of course Basel 2 enables this guesstimate to be better calibrated without dealing with the issue.

If capital is for expected losses then this can make little sense – product pricing deals with such matters much more effectively. Could bank capital be set at a sufficient level to deal with



THE BRIBERY ACT 2010, CORPORATE OFFENCES AND THE "ADEQUATE PROCEDURES" DEFENCE

This article, contributed by David Blackmore, Director of Financial Crime, Risk Reward Ltd, is a "call to action" to all UK firms which are covered by this legislation. The Act will be in force from April 2011, and whilst Ministry of Justice and Serious Fraud Office Guidance notes are expected later this year/early next, firms would be ill-advised to wait that long before reviewing and updating their systems and controls.

Background to the Act

Bribery and corruption have been with us for centuries, but there is now recognition that these practices present serious risks to all involved. Political corruption is not a victimless crime; it has real effects on real people. It causes untold material hardship to the poorest and most disadvantaged. Corruption means that many countries do not have an independent or competent police or judicial system. The sheer size of some corrupt payments has the potential to destabilise emerging economies and saddle donor countries with losses of billions. Basic values of fairness, honesty and integrity are at stake from the impact of both these pernicious forms of financial crime.

The UK is a signatory to the UN Convention against Bribery and Corruption. However, it has been under sustained international pressure for years to update its legal framework, much of it over 80 years old. The Bribery Act, 2010 is the resulting response and arguably is the most formidable legislative attack on bribery and corruption anywhere in the world. Every part of corporate UK is affected along with the Act's extra-territorial impact on all non-UK entities operating in the UK.

This article tries to highlight what the international and UK response are seeking to achieve and how individual firms can protect themselves against an increasingly coordinated and potent international legal and regulatory framework against bribery and corruption. Non-compliant firms risk exclusion from domestic and EU procurement contracts, regulatory penalties and fines, whilst individuals risk fines, imprisonment and regulatory sanctions. The article points firms to ways of developing systems and controls which constitute the "adequate procedures" defence to the corporate offence of failure to prevent bribery under the new Bribery Act.

What is the Bribery Act?

The Act creates four bribery offences:

- Active bribery, i.e. bribing someone else;
- Passive bribery, i.e. receiving a bribe;
- Bribery of a foreign public official; and
- Corporate failure to prevent bribery.

There are three possible defences, namely:

- "adequate procedures" by a corporate entity;
- Bribery specifically authorised by written law, and

If firms fall foul of the corporate offence they face an

 Conduct necessary for the proper exercise of any function of an intelligence service or the armed services when engaged on active service.

unlimited fine, plus the prospect of regulatory action and exclusion from EU procurement, as described above. Individuals face an unlimited fine and/or up to 10 years imprisonment. For FSA-regulated firms those individuals could be banned from the industry, possibly on a permanent basis. Directors are personally-liable and they must ensure all their firms' third-party contacts get the message loud and clear This is because the Act has extra-territorial effect, too, as it applies not only to all UK-

THE BRIBERY ACT 2010, CORPORATE OFFENCES AND THE "ADEQUATE PROCEDURES" DEFENCE CONTINUED

incorporated entities, their branches and subsidiaries wherever located but also to foreign registered entities doing business in the UK. UK nationals are covered wherever in the world they are located. These aspects significantly widen the scope of the Act and local custom or culture does not provide a defence.



What can firms do?

The Act makes provision for guidance to be drawn up before it comes fully into force, now confirmed for April 2011. This guidance will be drawn up by the Ministry of Justice but is likely to be quite high-level, focusing on:

- Visible "Top-down" commitment;
- A risk assessment of the whole business on a global basis;
- Clear, practical policies and procedures with actual performance to match;
- Effective implementation of the firm's regime;
- Appropriate due diligence;
- Monitoring, assurance and review.

The lead enforcement agency, the SFO, is also providing guidance on its enforcement policy. However, it would be unwise to await both offerings and do nothing! Clear pointers have been available for some time, ranging from the very public "settlement" between UK and US authorities and BAE Systems Plc and the regulatory action taken by the FSA. This has ranged from the $\pounds 5.25$ million fine imposed on Aon Plc in January, 2009 for serious failings in this area, to the final report (May 2010) on "Anti-bribery and corruption in commercial insurance broking". Some of the findings are damming and should be read-across by all FSA-authorised

firms. The findings replicate many of those in its "Small firms Financial Crime Review", also published in May, 2010.

With this evidence it seems clear that, as in sanctions compliance, the FSA (and its successor?) will again focus on breaches of the Principles and SYSC (systems and control) Sourcebook as an additional enforcement area to any action by the SFO on the predicate bribery offences.

Specifics

Action is needed now along the following lines:

- Board / Senior Management to lead a risk assessment, establish an action plan with clear roles and responsibilities and nominate an officer for overseeing the whole process;
- Risk assessment needs to be within and without, i.e. cover supply-chains, procurement as well as outsourcers, intermediaries, joint-ventures, associates and businessintroducers;
- Procedures need to cover operational risk management, including financial controls and an escalation procedure for higher-risk situations;
- Internal reporting lines, similar to AML / CTF, need to be clearly laid down and cover where reports may need to be copied across to SOCA as well as the SFO. In extreme cases the FSA might need to know, as per Principle 11 covering communication with FSA "in an open and cooperative manner";
- An enhanced staff training and awareness programme may need to be put together, so that training is relevant to staff roles and responsibilities; testing to demonstrate understanding is crucial;
- Clearly whilst the above affects all UK firms, financial sector firms and especially banks will need to pay ever-closer attention to Customer Due Diligence (CDD), particularly for high-risk jurisdictions and vulnerable industry sectors such as construction, mineral exploration, transport infra-structure, energy, pharma and defence. There are clear overlaps here with counter-proliferation financing and PEPs and sanctions screening, especially in jurisdictions where the state has a major role in both the economy and enterprises;
- Coupled with enhanced CDD financial firms may well need to establish enhanced monitoring in areas such as payments processing, accounting and correspondent banking.

As if this were not enough, it is understood that the intergovernmental body, the Financial Action Task Force (FATF) is closely examining the prospect of incorporating the UN Anti-bribery Convention into its 40 Recommendations, thus globalising still further the reach of coordinated action in the financial crime space. **We have all been warned!**



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The EU's Solvency II capital adequacy and risk management regime will apply (from 1st November 2012) to insurers and reinsurers who, when measured gross, exceed premium income of €5 million or technical provisions of €25 million. The Solvency II Directive will aim to simultaneously reduce the likelihood of corporate failure, significant customer loss and disruption of the insurance market.

Much level 2 key guidance on implementation was published throughout 2009 by the Committee of European Insurance and Occupational Pensions Supervisors (CEIOPS) and draft level 3 guidance, on pre-applying for internal capital models, followed in January of this year. Amongst the questions likely to arise in the minds of internal auditors and Non Executive Directors is: -

"What does this vast body of regulation & guidance mean to a thoughtful and pro-active insurance auditor?"

The evolving risks and regulatory expectations inherent in the Solvency II Directive and the FSA's interpretation of it are intertwined

around the framework that is built upon the three pillars.



Underpinning the above is a clear and pressing need for strong documentation and audit trails.



(framework, implementing measures, guidance and enforcement) that we saw in building the EU implemention of the Basel 2 regime for banks, directs the various regulatory bodies, including the Financial Services Authority (FSA) and their co-operation across Europe.

This FSA Discussion Paper 08/4 comments that "the use of an economic/realistic balance sheet and internally-modelled individual capital assessments based on a defined level of confidence, share some similarities with the Solvency II framework. Firms should note that while

Pinancial Services Authority
Insurance Risk
Management:
The Path To Solvency II

September 2008

FSA.

the essential concepts and objectives driving the Individual Capital Adequacy Standards (ICAS) regime are similar to those underlying Solvency II, many detailed requirements will differ from those with which they are familiar".

Ahead of implementation in November 2012, a quick review of the CEIOPS Level 2 Consultation Papers will indicate both the urgency and the Board level expectation of the role to be played by we internal auditors.

In 08/4 'Insurance Risk Management: The Path to Solvency II' and their Feedback Statement 09/1 on it, the FSA expect internal audit (listed chapter by chapter under 'key stakeholders') to "contribute" to their companies' implementation of Pillars 2 and 3, whilst being aware of their Pillar 1 issues. They also expect internal audit to "be aware" generally of the supervision implications for insurance firms.

In their Solvency II – IMAP Update the FSA say that they are undertaking thematic reviews on risk management, use test, data management and model validation, including valuation of assets and liabilities, which will assist in

carrying out Internal Model Approval Process related work.

So a review of the consultation papers mentioned above, from an internal audit perspective, very quickly proves to be enlightening:-

CP33 "System of Governance"

Solvency II allows firms to use full or partial internal models for the calculation of their Solvency Capital Requirement, as an alternative to using the standard formula. The internal modelling activity needs to be integrated into the firm's risk management activities. (DP 08/4). Firms intending to seek approval for their internal model must demonstrate compliance with mandated tests and requirements, including use, statistical quality, data, documentation, calibration and profit and loss attribution. Activities such as sensitivity, stress and scenario testing will also need to be evidenced.

The FSA's DP 08/4 says, that "to aid their transition from the ICAS regime, we suggest that firms should be undertaking gap analyses now to identify any shortfalls in expected compliance with the emerging Solvency II requirements."

Regarding Internal Audit Governance, Article 47 of the Level 1 (framework) text states that "Insurance and reinsurance undertakings shall provide for an effective internal audit function"; objective and independent from the operational functions. It shall evaluate the adequacy and effectiveness of the internal control system and other elements of the system of governance. Data auditing should not be performed by the actuarial function but by the

internal audit function. Interestingly, the management body is ultimately responsible for the reliable and adequate calculation of the technical provisions and needs to form its own opinion. It seems likely that they will want an opinion from the internal audit function, having done both the data and system auditing. Also relevant to this is the expectation that internal audit "shall at least annually produce a written report on its findings to be submitted to the administrative or management body. The report shall cover at least any deficiencies with regard to the efficiency and suitability of the internal control system as well as major shortcomings with regard to the compliance with internal policies, procedures and processes. It shall include recommendations on how to remedy inadequacies and also specifically address, how past points of criticism and past recommendations have been followed up."

Supervisors have the ability to set a capital add-on where the supervisor believes a firm is not holding adequate capital (DP 08/4). In addition, Article 37 provides for a capital add-on in situations where the system of governance within a firm does not meet the standards required. It is a short-term measure to give the firm an incentive to remedy governance deficiencies and help protect policyholders.

CP56 "Tests and Standards for Internal Model Approval"

Use test training: Article 120 (Level 1 framework) governing the Use Test says that the internal model will play an important role in the system of governance particularly the riskmanagement system and the economic and solvency capital assessment and allocation processes. In addition,"the administrative, management or supervisory body shall be responsible for ensuring the on-going appropriateness of the design and operations of the internal model, and that the internal model continues to appropriately reflect the risk profile of the insurance and reinsurance undertakings concerned."

The Internal Model Foundation Principle, is that "the undertaking's use of the internal model shall be sufficiently material to result in pressure to improve the quality of the internal model." Following this is the

Principle 1 requirement that "senior management and the administrative, management or supervisory body shall be able to demonstrate understanding of the internal model." Then "CEIOPS considers that this understanding may be gained from training provided by the undertaking. Each member of the senior management shall have an overall understanding of the internal model as well as a detailed understanding in the areas where they use the internal model." Six examples for which "The administrative, management or supervisory body shall give evidence of an overall understanding of the internal model" are stated as follows:-

- structure of the internal model and fit with their business model and risk-management framework;
- 2. methodology;
- 3. dynamics of the model;
- 4. the limitations of the model;
- 5. diversification effects and dependencies;
- 6. scope and purpose and the risks covered and those not covered.

They "shall not manipulate the internal model in order to obtain outputs that do not appropriately reflect its risk profile." It will be for Internal Audit department to confirm that training has been conducted. Note that CP advises that "decision makers shall be aware of the shortcomings of the internal model and tailor their decisions accordingly" and envisages that "results are communicated to the board members in a way that allows them to take responsibility for the results."

Model governance: The application for approval to use the internal model to calculate the SCR must be approved internally before submission to the FSA. This key responsibility includes the whole process from the undertaking starting to consider whether to apply for internal model approval. "The high-level governance for the internal model shall therefore include appropriate controls and documentation of this process. A key part of the internal model governance processes shall also be the controls and documentation around development of the internal model change policy." This will tend to require internal audit to review on the internal model governance, controls and documentation.

The review of the internal model validation policy is also important "The validation does not only apply to the calculation kernel to calculate the SCR, but shall encompass the qualitative and quantitative processes of the model." Parts of the validation activity potentially may be carried out by internal audit. This will vary from organisation to organisation as "the risk management function shall be tasked with the validation of the internal model. Nevertheless, certain parts of the validation process may be carried out by other parts of the undertaking, as long as there are clear lines of reporting and the risk management function retains overall responsibility for the validation process."

Generally the model should not be validated by any function responsible for its development

Regarding data directory and quality;

population and accuracy control over data will always be of paramount concern to internal audit. The "undertaking shall compile a directory of any data used to operate, validate and develop their internal model. In doing so, they shall specify in detail the data source, its characteristics and usage"; also to "further specify its own concept of data quality" and "define the abstract concept of data quality in relation to the various types of data in use". Clarity of the impact of contractual options & guarantees and documentation on both the internal model and data management are also key. The need "to identify, collect and model the risk of all relevant financial guarantees and contractual options, taking into account the key features these guarantees and options possess." "The documentation shall contain explicit information about data management" which may include databases and data flows through the internal model. Furthermore, "the documentation of the internal model shall provide an audit trail to enable effective audit work to be conducted."

Apparently, most FS 09/1 respondents identified data quality as a real challenge in the transition to Solvency II and therefore a source of significant

costs. They also felt that developing documentation for actuarial models would be particularly challenging and costly. It was a consensus view that the other main areas that could generate additional costs are the ORSA and internal models (including the link to risk management and the use test).

Documentation

The documentation of an internal model needs to be thorough, sufficiently detailed and sufficiently complete to satisfy the criterion that an independent knowledgeable third party could form a sound judgment as to the reliability of the internal model. The documentation should include an overview of the historical development



of the internal model, documented policies, controls and procedures, written responsibilities and accountabilities, to be clearly understood by all incumbents and reviewed at least annually; together with a description of technology and software tools and how data flows through the internal model and much more.

CP 80: Draft CEIOPS Level 3 guidance on Solvency II: 'Preapplication process for Internal Models,' is helpful here. It states that some of the most useful evidence that the internal model meets the requirements will include:-

- 1. senior management understanding of the internal model;
- 2. how the internal model is used in decision-making processes;
- 3. techniques used in the calculation of parameters and model distributions

- and how risks are aggregated;
- how profit and loss attribution is a tool for validating the internal model, managing the business and improving the internal model;
- 5. validation policy;
- 6. documentation;
- 7. use of any external model and data.

Aggregation, diversification and fat tails: Particular areas of difficulty for internal audit arise with regard to risk aggregation and diversification effects. The well known fat tail phenomena of the "normal distribution" curve, the greater actual frequency of extreme events than was predicted by historical modelling techniques and the inter-play between extreme events challenges us (and everyone else).

The use of Auditors' judgement is vital where the scarcity of information available makes it more challenging to demonstrate compliance of the aggregation mechanism and the resulting model outputs. If, for example, the aggregation mechanism results in increased uncertainty regarding the calculated SCR, it may be necessary to take additional measures to ensure that it is still equivalent to the level of protection set out in Article 101 (Solvency Capital Requirement - which corresponds to 99.5% Value at Risk). Will this be readily auditable given that we are considering giving positive

that negative events will not be worse than pre-set parameters suggest, in any more than one year in two hundred?

CP58 "Supervisory Reporting and Public Disclosure Requirements"

The Solvency and Financial Condition Report has to be consistent with the Report to Supervisors sent to the Financial Services Authority; another area for suitable internal audit

The SFCR is to be a public report showing information to "enable the public to analyse their solvency and financial condition." The SFCR must be "appropriate and consistent with the information provided under the Report to Supervisors." CEIOPS say they are developing quantitative reporting templates and intend to specify at Level 3, the detail on these templates, all of which will be included in the RTS and some of which will also be disclosed in the SFCR.

The Solvency and Financial Condition Report disclosure policy, as set out in Article 55(1), should have "appropriate governance procedures and practices in place so that the information publicly disclosed is complete, consistent and accurate."

Own Risk and Solvency Assessment (ORSA)

This becomes a key part of the risk management process and of great interest to internal audit. It requires, inter alia, "a description of how the ORSA process and outcome is appropriately evidenced and internally documented as well as independently reviewed."

Under Article 45, firms are required to undertake an assessment of the risks they have within their business and the level of solvency required to mitigate them. CEIOPS defines it as "the entirety of the processes and procedures employed to identify, assess, monitor, manage and report the short and long term risks a (re)insurance undertaking faces or may face and to determine the own funds necessary to ensure that the undertaking's overall solvency needs are met at all times".

The FSA advise that the ORSA will "provide supervisors with an early indicator of the firm's solvency position, as the insurer may breach its economic capital target level before it breaches its regulatory capital requirement." The ORSA is an assessment of firms' own risk appetite, thus "a drop in economic capital may trigger discussions around the possibility of derisking."



annually in the Solvency and Financial Condition Report. Thus, consistent with the SFCR, "an undertaking shall provide a description, separately for each category of risk, of the risk exposure, concentration, mitigation and sensitivity":

- C.I Underwriting risk;
- C.2 Market risk;
- C.3 Credit risk;
- C.4 Liquidity risk;
- C.5 Operational risk;
- C.6 Other risks;
- C.7 Any other disclosures.

It requires further details, to explain to the supervisor the undertaking's risk exposure, concentration, mitigations and sensitivity for the above risk categories. "This information should include any material future anticipated risks." Also important are financial instruments, derivatives and off balance sheet transactions or similar arrangements.

In Conclusion

CEIOPS expects internal audit to report annually on its findings. The Financial Services Authority expects internal audit, a key stakeholder, to "contribute" to Pillar 2 and 3 risk management and report compliance, while being aware of Pillar 1 capital adequacy quantitative requirements. I do not see this awareness as being passive. Internal audit will recognise the importance of its determining, gaining comfort over and later testing, the information in the key

reconciliations between the risk management system, the internal model, the Own Risk and Solvency Assessment, the Solvency and Financial Condition Report and the Report to Supervisors. This should cover both hard numbers calculated and also variables such as risk exposure, concentration, mitigation and sensitivity. The capital requirement split, analysed by risk category reflecting asset classification and analysis will, in my view, be particularly important.

Solvency II allows firms to use internal models to calculate their Solvency Capital Requirement, as an alternative to using the standard formula. This internal modelling needs integration into the firm's risk management activities. Evidence of people's understanding of the internal model and how it links into business models and the risk-management framework, specifically, the scope and purpose of the risks covered, will become key across the organisation. Back in 2008, firms were encouraged to perform gap analyses to identify any shortfalls in expected compliance with the emerging Solvency II requirements. Clear communication of the rectification steps is implicit.

The Head of Internal Audit may wish to anticipate, sooner rather than later, the reporting of internal audit's Solvency II compliance concerns and how they are being addressed, prior to

the various stages of management sign off. The application for approval to calculate the Solvency Capital Requirement using the internal model is best done after any use of any external models and their data have been documented and explained and the Use Test shows that the internal model will play an important role in corporate governance.

I feel that particular areas of attention for internal audit relate to risk aggregation and diversification effects, the greater actual frequency of extreme events than normal distribution curves often predict and the inter-relationship of extreme events. As well as worrying over fraud patterns and the likelihood of control circumvention, data auditing standards should be re-reviewed and let us not forget the clear need throughout for strong documentation and audit trails.

In my next article I will consider, inter alia, auditing the Solvency II project, control over out-sourcing and reliance on third parties, as well as challenging the key areas for effective change management.



THE MANAGEMENT OF OPERATIONAL RISK IN MARKET RELATED ACTIVITIES

Dennis Cox is the former Director of Global Operational Risk HSBC. He is the Chief Executive of Risk Reward Ltd, the LinkedIn Global Risk Forum and chairs the Chartered Institute of Securities and Investment Risk Forum based in London.

Background

On 23 June 2010 the Committee of European Banking Supervisors (CEBS) issued a revised consultation paper on the management of operational risk in market related activities (CP35 revised). This has as its precedent Article 22 if Directive

2006/48/EC (CRD) which states that "home Member States shall require that every credit institution have robust governance arrangements which include a clear organisational structure with well defined transparent and consistent lines of responsibility, effective processes to

identify and manage, monitor and report the risk it is or might be exposed to, and adequate internal control mechanisms, including administrative and accounting procedures. These arrangements, processes and mechanisms shall be comprehensive and proportionate to the nature, scale and complexity of the credit institution's activities.'

CEBS then state that "Past and present cases show that when institutions do not adhere to basic principles of sound internal governance, the severity of

operational risk events in market-related activities can be very high, jeopardising the institution's earnings, the existence of the particular business area, or even the existence of the whole institution."



That there is a requirement for effective risk governance and operational risk management in all areas of the business is clearly evident and inherent in many of the recent Basel papers. In this article we look at CP35 revised and highlight a

few of the key elements which complement the framework as set out by the Bank for International Settlements (BIS) in Basel 2 and its supporting papers.

Principle 1 The management body should be aware of the operational risks, actual or potential, affecting market-related activities. It should develop and maintain an organisational structure, internal controls and a reporting system suitable for the identification, assessment, control and monitoring of operational risks in market-related activities.

The supporting analysis provides guidance on the operation of control functions and roles, albeit there is very little that is new here.

Principle 2 The management body should promote, particularly in the front office, a culture designed to mitigate operational risks in market-related activities.

This principle takes the existing corporate governance requirements and explicitly aims them at the front office. CEBS are seeking professional and responsible behaviour, which is probably code for a reduction in the level of risk taken. The guidance emphasises traders requiring at least two consecutive weeks of holiday, with staff changing role between front, middle and back office and IT to be properly tracked. Clearly staff changing role is particularly high risk and could jeopardise the segregation of duties applied.

Principle 3 Senior management should ensure that they, and the staff in the control functions, have the appropriate understanding, skill, authority and incentive to provide an effective challenge to traders' activity.



THE MANAGEMENT OF OPERATIONAL RISK IN MARKET RELATED ACTIVITIES CONTINUED

It is perhaps the focus on control functions which is an issue here. They are asking for the salaries of such staff to have different drivers to those of the traders, but at present there is a major divergence between these salary levels. It is hard for a control function to be effective when the pay differential could be as much as 80% - the level of authority is often not there. This tome needs to be set from the top to be effective.

Principle 4 Operational risk should be taken into account in setting objectives for, and in the assessment of, an individual's or business unit's performance in market-related activities

The narrative focuses on risk tolerance, which is in the process of being systematically implemented in many firms. Clearly operational risk should be taken into account since to do otherwise could lead to a sub-optimal solution.

Principle 5 The proactive behaviour against fraudulent actions in market-related activities should be a key element of internal controls and reporting systems.

This is new in being an explicit requirement here. The narrative considers the use of fraud and scenario testing, although training and warning systems also need to be implemented. Modelling behaviour to identify the propensity of a person to commit fraud could also be appropriate.

Principle 6 Traders should initiate transactions only when these are compliant with the set terms of reference. Minimum standards for the initiation and conclusion of transactions should be followed.

CEBS explicitly add a voice recording requirement, but the focus here is on terms of reference. Clearly this reiterates existing guidance in terms of dealing with deviations.

Principle 7 Documentation requirements for trading activities should be properly defined. Legal uncertainties should be minimised, so that the contracts are enforceable as far as possible.

The background to this principle is rather weak and actually does not get to the heart of the issue. The variety of documentation and the linkage of the agreements and confirmations should be an important issue, but is not well dealt with here. All that is actually stated is really a reiteration of existing rules.

Principle 8 As a general rule, transactions should be initiated and concluded in the trading room and during trading hours.

The issue here is how to deal with out of hours trading which might be transacted from the traders home. The lack of detail in the background should not mask the general view that this should be avoided at all costs. If there is a telephone call in system after the trade has been conducted, then this only has the effect of providing a "confirmation" of the trade entered into. The original transaction and contract will not have been recorded.

Principle 9 Each position and cash flow associated with a

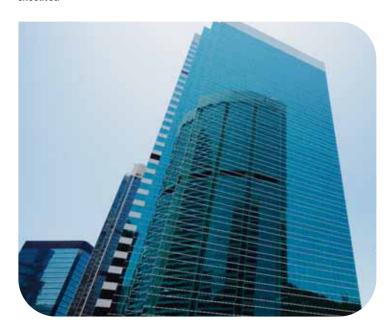
transaction should be clearly recorded in the institution's accounting system, with a documented audit trail

The only additional requirement here is that CEBS want the responsible manager to be identifiable from the audit trail

Principle 10 Institutions should ensure that they have an appropriate framework of controls concerning the relationships between traders and their market counterparts.

The requirement extends to internal trades, dormant accounts and dummy counterparts that are pending allocation. It makes clear that pricing issues, legal issues, trade and settlement queries as well as error and claims management should be directed to and carried out by the control functions.

Principle 11 Confirmation, settlement and reconciliation processes should be appropriately designed and properly executed



There is little that is either new or surprising here. CEBS state that the use of over-the-counter (OTC) contracts should be as standardised as possible – which may give some firms a problem. The standard break clause provisions may actually inhibit the use of the instrument for efficient hedging purposes. CEBS are looking for clauses that deviate from the model contract to trigger intervention, which is probably what would generally happen anyway.

Principle 12 Institutions should ensure that their margining processes are working properly and that any changes are reconciled with the relevant positions on their books.

This principle also addresses collateral calls. CEBS are seeking real-time credit systems able to calculate credit lines and usage information as trades are initiated, to aggregate exposures globally across all trading desks and to accurately reflect the effect of netted transactions. This is all quite demanding, not least given that the credit risk in an instrument is likely to change in respect of OTC

THE MANAGEMENT OF OPERATIONAL RISK IN MARKET RELATED ACTIVITIES CONTINUED

transactions intraday. For the credit system to appropriately address netting requires a close link between the documentation systems and the credit systems – which is often not the strongest part of the credit system.

Principle 13 Sources of operational risks in market-related activities should be properly identified and monitored with the appropriate level of scrutiny, intensity and timeliness.

There is nothing new here.

Principle 14 The nominal value of transactions/positions should be kept under strict control for monitoring operational and counterparty risks, through the definition of pertinent limits and/or participation in initiatives for the novation of contracts.

Basically CEBS want nominal and net limits with the concern being that net limits may not capture all counterparty and operational risks. Of course what they actually want are gross and net limits (somewhat different) to9gether with some form of stress limit based on value at risk, but that is not what is stated here.

Principle 15 Information systems in the trading area should be appropriately designed, implemented and maintained so as to ensure a high level of protection in market-related activities.

Nothing new here either.

Principle 16 The operational risk reporting system for market-related activities should be designed to generate appropriate warnings and should alert management when suspicious operations or material incidents are detected.

Of course the key issue really is whether the right issues are detected and this will depend on the nature of the software solutions implemented. Tight limit management will clearly help, but alone is unlikely to be sufficient. The rules here really replicate the existing BIS rules and have not mandated pattern recognition software, for example.

Principle 17 Institutions should ensure the quality and consistency of their internal reports and that they are appropriate to the needs of the recipients for which they are intended

Again little new here except the requirement for internal audit to follow up on corrective actions required as a result of reporting – which actually makes little sense as an explicit request.

So there we have a new 14 page guidance document which is applicable to all institutions and supposed to provide greater detail than is present in the BIS reports, but actually does not appear to achieve very much in terms of additional information or requirements. There is much that could have been included – so we view this as an opportunity missed and wonder why these principles were really considered necessary.



ARE BANKS BUILDING UP A DEADLY PORTFOLIO OF UNDERPERFORMING LOANS? PART 2 – PREPARING FOR SIGNIFICANT LEVELS OF RESTRUCTURING

In the last paper in this series, banker Simon Ling-Locke, MBA, FCIB, DIPFS Director of Credit Risk Services at Risk Reward Ltd, outlined a picture of expected increasing levels of distressed debt in the market over the coming years. Whilst many market participants had not positioned themselves to be protected against the liquidity and subsequent economic turmoil of 2008 and 2009, there does, Simon believes, still remain a narrow window of opportunity for players in the market to sit up and prepare themselves for the impending significant build up of distressed debt and subsequent restructurings.

Some people may ask 'so what, we have dealt with major levels of restructurings during past recessions and will continue to deal with them now'. In a sense that is partly correct but there is also a whole range of new issues which will need to be faced and fewer lenders and restructurers have had to deal with those matters in the past. That is because of the nature of the more complex business and financial environment we operate in today than during previous cycles. This can most notably be seen in the leveraged loan market which had grown exponentially and had metamorphosised during the boom years.

This and the following paper in the series will seek to address the problems by considering some of the common themes seen in distressed credits as well as the key newer type issues restructurers will have to face (and which will be covered in the 3rd paper):

- impact from delaying a restructuring
- disconnect and lack of trust between management, owners and lenders (and indeed between different categories of lenders)
- the sheer volume of work and due diligence to be undertaken
- complexity of transactions with various different debt layers and differing agendas of the players

cross-border nature of many transactions.

Impact from Delaying a Restructuring

At the present time, we are hearing of many cases where facilities have had covenant resets or debt has been reprofiled (i.e. extended) but there have been fewer cases of

comprehensive debt and operational restructuring. Does that mean we are in the nirvana of well run companies setting great strategies and pursuing objectives with vigour but just facing some short term financial issue? I expect not. The reality is often that management, or the systems



ARE BANKS BUILDING UP A DEADLY PORTFOLIO OF UNDERPERFORMING LOANS? CONTINUED

management are using, are weak or deficient in some way. If that is true, then for a lender it is particularly important to understand how far a company has actually slipped down the performance ladder because if that is not understood how can one know whether just a financial restructuring will be sufficient? It would be like putting a sticking plaster on a patient who has just fallen down the stairs, grazed their forehead and broken their arm. I will therefore look at the periods a company goes through as it slips down into greater and greater distress. There are four periods which can be roughly identified as:

internal management information systems do not break down data in a fashion which highlights the problem and this can be as much a problem for large companies as for SMEs². It can also be because management are in rejection and believe the problem is temporary. At this stage it is very unlikely that any covenant triggers would have been breached (especially when we consider the covenant 'loose'3 and covenant 'lite'4 leveraged transactions in the last 2-3 years of the noughties bull run) and thus lenders would not be able to take any formal action (except to sell their exposure in the secondary market), even if they were aware of the build up of

an impending problem.

The second stage is where the quantity of income starts to decrease, perhaps 6-9 months out from a crisis. By now the borrower is likely to be facing more frequent periods of cash outflows and deterioration in its profit and leverage matrices. Depending on how 'loose' loan covenants had been set at the outset of an agreement, lenders might or might not have documentation

rights to take some formal action. At this stage there is still cash in the business and time to undertake due diligence to identify the key issues and to create strategies to deal with the problem. This could include disposals of part or all of the business. Also, the wider market might still be blissfully unaware of the problem, or at least the extent of the problem, so any disposals might be achieved on 'normal' rather than 'distressed' terms and hence likely to achieve higher prices. If lenders do not have any formal documentation trigger, they might possibly still be

able, through private discussions and persuasion, to encourage the company's management to take action. At this point lenders though do not have anything other than carrots to persuade the borrower of the need for change since no covenant breach has occurred. The reality unfortunately is that banks are rarely this proactive (and indeed their own monitoring systems might not even pick up the significance of the growing problem at this stage) and thus miss an opportunity to try to stabilise a situation and protect the value of their loans.

The third stage is when there is a cash shortfall. During this phase the borrower will be exhausting unused commitments under its credit lines (if still available for drawings) and taking longer to pay its trade and other creditors, very probably including tax (VAT, PAYE, corporation tax etc). Lenders should by now be sitting down and negotiating with the borrower, but have loose covenants meant that there is still no breach of covenant vet? Or has the focus been on just amending covenants and possibly re-profiling debt maturities rather than addressing the wider fundamental issues leading to so-called 'zombie companies'? The reality is that rarely will a financial restructuring work unless accompanied by an operational restructuring as well.

The final stage is cash crunch. The problem can no longer be put off and is immediate. This is the most critical period since businesses generally do not cease trading for lack of profitability but through lack of cash. Cash is king and like a car without fuel, the business comes to a grinding halt without it. At this point trade creditors have stopped providing credit and are now demanding cash upon delivery, overdraft and credit lines have either been fully utilised or pulled, wages and salaries might be overdue, factoring or invoice discounting lines are being scaled back or terminated for new business, commercial insurance is being



The first period is when the quality of income starts to decrease (perhaps seen in a deteriorating trend in customer orders, more sale discounts being given, a declining EBITDA¹ trend), perhaps 9-18 months out from crisis. At this stage good management would be able to identify the problem and start to implement new strategies to try to correct or ameliorate the declining trend. So why don't weaker management take corrective action at this stage? It can be because they are not aware of the problem as their

¹ EBITDA – Earnings before Interest, Tax, Depreciation and Amortisation

² SME – Small and Medium Sized Enterprises

³ During the period 2005-2007 in particular, the headroom of where financial covenants were set to base case operating assumptions became weaker and weaker, perhaps with a headroom of 40%, sponsors' might have been allowed a 'Mulligan' (where one covenant breach would be ignored so long as it fell back within covenant by the next test date) or permitted to inject new equity with that equity being treated as quasi income for covenant test purposes. Any of these documentation issues would tend to reduce the ability of lenders to act on a financial breach until a much later date.

⁴ Covenant Lite transactions started to be used in a few transactions, firstly in the US and then Europe at the peak of the market in late 2006 and early 2007. Covenant lite referred to two different types of transactions, a) those with just one financial covenant incorporated into the loan agreement and b) those with no financial covenants but with just an incurrence covenant test, i.e. an event of default or loan acceleration could only be called if there had been non-payment by the borrower.

ARE BANKS BUILDING UP A DEADLY PORTFOLIO OF UNDERPERFORMING LOANS? CONTINUED

withdrawn, etc. The scope to rescue a business has now become very limited indeed without some degree of fresh cash being injected into the business to at least keep the patient alive whilst a diagnosis is being carried out. The life of the company will now become entirely dependent on:

- i) its immediate day to day cashflow (even the 13 week cashflow typically used by company restructurers will be too long by this phase); and
- ii) the directors, who will be particularly concerned about potential personal liability of allowing a company to trade whilst insolvent (and it should be remembered that in some jurisdictions there is not just a cashflow test but also a balance sheet solvency test).

The simple truth is that the earlier proper action is taken, the better the chance for recovery or at least the preservation of value for lenders. If I am indeed correct in my analysis, then financial institutions which put problem credits on the 'back burner' through covenant resets whilst fire fighting and dealing with the more pressing companies heading for cash crunch, are actually missing a significant opportunity to prevent them from heading to cash crunch in the first place!

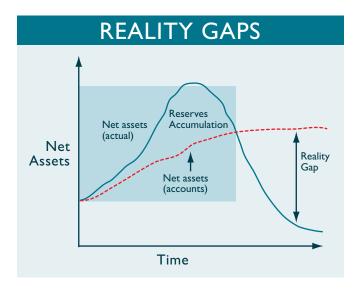
Disconnect between Management, Owners and Lenders

The other significant factor affecting the potential success or otherwise of a restructuring is the danger from differing groups not appreciating the severity of the problem until a fairly late stage leading to a blame game culture rather than one of trying to work together to find a solution. This is a very common theme, especially with players who have not previously experienced defaults and problem credits. There can also be the added complication that some creditors may have quite different agendas to the

more traditional lenders (I will be discussing that in the next paper in this series).

As perhaps you might have realised from the earlier discussion, there can be quite a difference between reported historical performance and actual current trading and this is known as the reality gap.

crisis is magnified due to the downside reality gap. Creditors face the shock of a sudden change in the paradigm and lose faith in the management's capabilities. At the same time, though, it is vital that the main stakeholders understand: i) the key issues being faced, ii) the steps which need to be taken, and iii) the probable time to



During the good times, a company may well perform stronger than the audited accounts might suggest. This is because performance has been on an upward trajectory, time differences between current position and historical accounts, possible massaging of sales into the next period if budgets have already been achieved so enabling a stronger start towards attainment of targets during the following period. During bad times the opposite happens with hidden reserves being depleted. At first this will just show up as a flattening of the upward trend. Senior management may be unaware of the deterioration or be in denial of the crisis leading to delay in taking action and to the possible use of creative accounting. Eventually something will show through (a drop in sales or profit margins, breach of covenants, cash shortfalls) and it is at this point that the

remedy the situation. However, people often base decisions on perception and not necessarily reality so if the perception is one of lack of trust in the capability of management (and indeed in some cases management might need to be replaced or augmented) an adversarial approach quickly develops between owners, managers and lenders and precious time is lost as the borrower slips ever closer to cash crunch from cash shortfall.

This though is not the end of the story as organisational structures, positioning in the capital structure, documentation issues, asset values, location and quality of title, other stakeholder claims, negotiating leverage, are all factors which have to be understood and brought into the equation. I will be exploring these factors in the next issue.



ISLAMIC FINANCE – CURRENT DEVELOPMENTS

Mark Andrews ACISI IFQ, is Risk Reward 's Director of Islamic Banking and Finance. He has been an investment and retail banker for over 25 years and a qualified specialist in Islamic banking and finance. Since 2007 Mark has worked in most countries in the Gulf and Egypt and the Far East advising on Islamic banking products and risk. In this fourth article in a series, he considers some topical issues, looks at Murabaha in detail and explains why this is a staple product.

In this fourth article we will look at some interesting current Islamic developments, we will continue to consider how an Islamic Bank "raises" its funds, or in old fashioned banking terms, where it "gets its money from". We will look again at the Murabaha, which still accounts for the lion's share of most Islamic banks "lending" or more correctly, investment activities – but will concentrate on Commodity Murabaha at one time a controversial product, now widely accepted.

Summary of Source of Islamic Bank Funds

It might first be helpful to summarise the source of the Islamic Banks funds (their liabilities) which are all mainly short term and are usually a mixture of current accounts (Amanab, Wakala and Wadia — Amana is rare despite being the name of HSBC's impressive Islamic operation) and deposit or term account equivalents, mainly Mudaraba with some Musharaka.

A Mudaraba is an investment for profit where the investors entrust their money to a professional manager, in this case the Islamic Bank. Under a Mudaraba the investors take an agreed share of the profits but bear all the losses unless the manager is negligent. Most Islamic bank investors probably do not realise that the bank normally bears ALL the losses and understandably it is not the first item on an Islamic promotional brochure!

Safety and Islamic Banks

However, before you withdraw your money you need to recognise that Islamic banks have proved to be far safer and far more conservative than conventional banks because their activities are restricted, allowing them to build up impressive reserves, including profit equalisation reserves. Equalisation reserves are available to make up any shortfalls in indicative profit returns on Mudaraba investments, which to the writer's knowledge, have never been negative or even nil. This is combined with the bank not taking high levels of risk and avoiding gearing.

In practice, it is almost inconceivable (but not impossible!) that an Islamic bank would make such huge losses that it had to pass these on entirely to investors in the form of negative returns and that it would actually do so. The reputational risk consequences are obvious and most commentators believe the regulatory bodies would step in long before this happened. Money invested in an Islamic bank in a stable country is probably as safe as an investment anywhere.



ISLAMIC FINANCE - CURRENT DEVELOPMENTS CONTINUED

Restricted v Unrestricted Mudaraba

The interesting features of Mudaraba vehicles is that they are short term, usually repayable quickly or on demand and are unique to Islamic banks. Customers are neither depositors nor shareholders and the regulation of the products has challenged some authorities. This is because they can be "restricted" investment account holders (RIAH), or "unrestricted" (UIAH). A RIAH defines the range of Sharia compliant investments that can be acquired. This investment

Islamic players is a move towards the goal everyone wishes for but cannot yet see how to achieve. Namely a supreme Sharia "college" so the variations and contradictions in Fatwa rulings, even in the same country, can be either eliminated or better managed.

Insiders say the Fatwa contradictions make Islamic Banking "challenging & interesting". To an outsider at the very least, it looks unhelpful.



Islamic Bank outlooks

The Dubai Islamic Bank, the oldest Islamic Bank established in 1975 recently disclosed that 8.7% of its assets (loans) are non-performing. This is an exceptionally high figure but is less surprising given its 35% shareholder, the Emirate of Dubai itself, will have expected the Bank to pioneer many of the prestigious and flagship developments in the Emirate, especially during the recent boom.

What an outsider cannot tell is how many loans are either in the "delay and re-issue" category or are "Zombie" loans – already dead but the bank dares not crystallise them yet.

First Gulf Bank on the other hand, the Abu Dhabi based Islamic bank, which has significant links with the

ruling Zayed family, continues to announce spectacularly impressive figures. First quarter returns for 2010 are up across the board and with only 2% of assets (loans) provisioned but not all considered lost.

by the bank on behalf the investors can be separated easily from other Bank funds and usually has a clear and definable audit trail

On the other hand, UIAH allow the bank to invest the funds as it sees fit in ANY Sharia compliant scheme so the risk profile is usually much higher and is not clearly defined. Worse still from a regulatory viewpoint, client's money is comingled with the Bank's own money and auditing or identifying the funds in a separate "bucket" is usually not possible. This is prohibited in many jurisdictions including Saudi Arabia

However at the risk of labouring the point ANY investment in an Islamic bank is probably safer than in a conventional counterpart because they do not engage in such risky activities and as an industry have not made significant losses.

Current Islamic Developments

Dubai still hits the headlines with worries about the timing of the property recovery although perhaps the bottom of the markets has still not been reached. The market probably will recover eventually as Dubai has established itself successfully as a "playground" and does indeed potentially have a long term future. When, is the real issue, plus who can survive the necessary wait!

On the regulatory front, there is some encouraging evidence of a coming together between the GCC, dominated by Saudi Arabia and the Far East, especially Malaysia with several recent high level meetings taking place. The almost universal adoption of the IFSB (a Malaysian initiative) by the leading

New Products

To the astonishment of some, Dubai Islamic Bank (DIB), which has a reputation for being very strict in its Sharia Compliance where new products are concerned, has just launched a Salam product using salt to provide finance to personal individuals. Basically with some clever but Sharia compliant manoeuvring the client gets unencumbered money now in return for an agreed future liability using salt as the Shariah vehicle to accommodate this. More information is available on their web site.

Two consequences flow from this. Firstly other banks are surprised that the DIB Sharia board has agreed the product is Sharia compliant. Secondly, that DIB is targeting high ticket personal lending, presumably to replace property and construction where its books must be all but closed in practice if not publicly. Personal finance to HNW borrowers is not especially risk free.

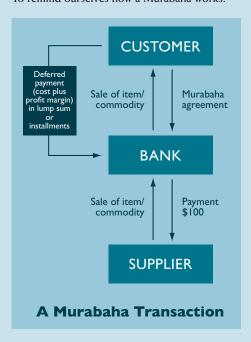
Murabaha - The Islah Product Briefing

Dealt with in the last article but in summary it is a cost plus contract with all elements disclosed, Shariah compliant, with no uncertainty etc. A Murabaha can be for almost any amount and in theory any time period although the range is usually 6 months to 10 years depending on the bank which will also set minimum and maximum loan amounts.

ISLAMIC FINANCE - CURRENT DEVELOPMENTS CONTINUED

The attraction for Islamic Banks who provide Murabaha facilities is the returns are high, it is a relatively simple product to market and sell and the risk profile is low. The main drawback is rates are fixed at the outset and the average term is 5 years. This creates an immediate mismatch with funding sources (nearly all short term) and leaves the bank vulnerable to increases in the cost of funds (interest rates). A large portfolio of well spread and maturing Murabaha protects partially against interest rate fluctuations as new, higher return products replace maturing lower return deals, but not completely. In addition a Murabaha cannot be turned quickly into cash in a crisis.

To remind ourselves how a Murabaha works:



Tawarruq

Means to "monetise" and is also called "Commodity", "Reverse" or "Two Tier" Murabaha although each has a slightly different construction in different jurisdictions.

In most cases two separate Murabaha contracts are used to create cash and a loan liability.

In simple terms, imagine you bought a car on a Murabaha for \$20,000 from a bank on one year terms. The bank would complete the deal by creating a "loan" or Murabaha liability of say \$22,000, if the rate of the return (profit) required by the bank is 10%).

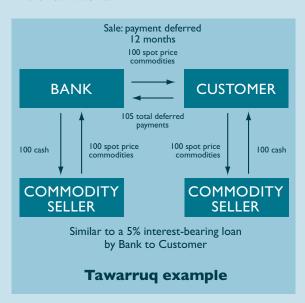
At this point you have the vehicle and a \$22,000 loan. All very normal.

Imagine you simultaneously sold the car to another dealer for \$20,000 or something very close as it is a still brand new and unused, using a Murabaha contract with payment on delivery.

You now have \$20,000 cash and a 1 year liability of \$22,000 (the loan amount). By using two separate Shariah compliant contracts you have created a cash loan.

When they were first introduced, these transactions met with strong resistance in some quarters with scholars condemning them. The grounds are it is Riba, no real trade taking place, no intention to take delivery or ownership of the goods and nothing beneficial to the community has occurred. The objections were even stronger if the buyer and seller of the goods was the same party – especially if it was the Islamic Bank.

This is how it works:



This form of funding has become a vital component of short term investment operations by Islamic Banks using permitted commodities (Gold and Silver forbidden as they were once "money"), to invest or acquire funds in a similar fashion to conventional inter-bank markets.

Sharia objections are beginning to fall away as the practice becomes established and many scholars approve them on the basis that some trading benefit accrues and as long as there are two separate parties on the buy and sell side. However, not all banks agree.

Next Article

In the next article, as well as debating topical Islamic issues, we will consider Ijara and the ways banks avoid being locked in to long term fixed rentals by using a two contract system.



SHOULD THE U.S. BE CONCERNED **ABOUT IFRS?**

There are two real issues for US companies – firstly should they choose to move to IFRS and secondly would it make any difference? Generally a single set of global accounting standards must be an appropriate response to some of the problems that are being faced and therefore a move to Internationally Recognised IFRS standards must make sense. Rohan Badenhorst, CIMA, offers his views.

A brief synopsis

For many companies there will be limited change to the existing appearance of their accounts and consequently limited investor concerns. However there are some types of institution which will have significant changes. The largest issue is that under IFRS investment, properties no longer need to be depreciated if they are maintained to adequate standard and accounted for under fair value. Companies may be more inclined to own their property on this basis since there would only be a financing stream and not an expense stream. Secondly, any contract that runs over the year end will have a proportion of its income included

in the profit and loss

account.

Consequently any contracting firm that is undertaking shorter contracts will initially receive a profit burst and also show unrealised profits. Thirdly, there will be no requirement for goodwill to be amortised if it is maintained. Since goodwill is at the heart of the real asset value of many enterprises this will significantly change the results for acquisitive companies. Finally for financial institutions there are the rather surprising "held to maturity" rules which could result in the banking book being marked to market for three years.

These changes in composite will make a major change for many firms and are just a small sample of the type of issues to consider. Will they make the results of the firm more "true and

fair"?



Actually while we are producing accounts which fail to address the key intangibles issues effectively - that of intellectual property, branding and the value of management, staff, customers and relationships - then the accounts will still not achieve their real objectives.

So for non financial companies that have no material contracts, property or goodwill, there is likely to be no real change. For the rest, your accounts will start to look rather different and the ratios used by analysts will change.

Drivers of change

Over the past few years the FASB (Financial Accounting Standards Board - the US Financial Accounting Regulator) and the IASB (International Accounting Standards Board) have been working on a joint project to harmonise accounting standards and regulations to a similar

> Over the last few months between January –

project timeframe.

SHOULD THE U.S. BE CONCERNED **ABOUT IFRS CONTINUED**

March 2010, it has become apparent that the time table for harmonisation is slipping and that the two organisations won't meet the time table commitments, however the underlying harmonisation objective is still very much in play.

The biggest areas of change currently hinge around Financial Instruments, both as far as financial assets, liabilities, hedge accounting and impairment of assets and liabilities are concerned. This has mainly been driven by the financial crisis and the higher profile the G20 has attached by adding global financial regulation to its agenda.

Work on IFRS 9 - Financial Instruments (the replacement to IAS39 Financial Instruments - Recognition & Measurement) commenced in November 2008 and was added to the FASB's agenda in December 2008. The project is split into three distinct areas namely part 1, dealing with classification and measurement, part 2 with amortised cost and impairment and part 3 with hedge accounting. Delivery of the final version of the standard is likely to be towards the end of 2010, provided there are no delays to the published IASB time table.

IFRS 7 Financial Instruments – Disclosures is also impacted and being amended in line with the IFRS 9 requirements. IFRS 7 deals with and requires in the main enhanced disclosures related to both quantitative and qualitative measures in addition to market, credit and liquidity risks.

What is impacted?

The following areas are specifically affected by the potential transition from US GAAP to IFRS, as per the Securities and Exchange Commission's (SEC) work plan published recently:

Characteristics of IFRS

- 1. Sufficient development and application of IFRS for the U.S. domestic reporting system
- 2. The independence of standard setting for the benefit of investors

Transitional issues around IFRS

- 1 Investor understanding and education regarding IFRS
- 2. Examination of the U.S. regulatory environment that would be affected by a change in accounting standards
- 3. The impact on issuers, both large and small, including changes to accounting systems, changes to



contractual arrangements, corporate governance considerations, and litigation contingencies

4. Human capital readiness

The opportunities and concerns The opportunities IFRS conversion

presents:

- To take a new look at old processes
- Cost reduction possibilities (after implementation) - efficiencies built into processes
- Global scale
- Overhaul accounting and governance systems

Some of the concerns raised by conversion to IFRS:

- SEC raised issues around:
 - Common control transactions
 - Recapitalisation transactions
 - Reorganisations and
 - o acquisitions of minority interests
- Cost of conversion
- Tax implications for organisations with inventory (LIFO not allowed under IFRS)
- Accounting, recognition and measurement of Financial Instruments
- Accounting for hedge transactions
- Contractual arrangements

The table opposite presents some of the issues to consider and areas within the business that will be affected by the conversion to IFRS.

What next?

Proverbially speaking the IFRS train has left the station, the only major uncertainties with regard to the US adoption of IFRS is around:

- The timetable
- Any special provisions and amendments to bring the two codes in alignment

Therefore the SEC holds the interests of U.S. investors and markets, users and issuers of financial reports.

The most likely dates to keep an eye on in terms of conversion are around the beginning to middle of 2014. However, in our experience it takes around 18 months before the switchover date in order to start the planning, education, implementation and embedding phases of a conversion project.

A further driver of change from US GAAP to IFRS is the fact that ongoing foreign investment in the United States continues to grow and mostly these are organisations and entities that have already adopted IFRS and will add further impetus to the move and switch towards IFRS in the US.

Getting Started

Finally, Human Capital Readiness, as identified by the SEC requires to ensure that US organisations are prepared to meet the transitional

SHOULD THE U.S. BE CONCERNED ABOUT IFRS CONTINUED

Martix of IFRS impact to consider

 $Source: \ http://ifrsusa.wordpress.com/prepare-now-to-smoothly-transition-to-ifrs/$

Accounting & Finance	Valuations of assets/liabilites	Accounting calculations	Supporting documentation	Policies and procedures	Financial Statements	Footnotes	Regulatory requirements
Internal Audit & Controls	Scoping methodologies	Internal controls for new procedures	Control documentation	Testing approaches professional standards utilized (use US stadards or international standards)			
Information Technology	Accounts and chart of account structure	IT controls for IFRS data conversions	Controls around new applications	Data privacy controls			
Tax	Review of current processes for gathering tax data	Uncertain tax position processes (since these will change)	Change in the starting point for all tax positions (IFRS financials vs US GAAP financials)	Changes related to FAS 109, FIN 48, FAS 123R			
Treasury	Debt covenants	Hedging agreements	Legal agreements that require audited financial statements				
Planning & Budgeting	Strategic plans and initiatives	New approach to budgeting and planning	Inclusion in accounting an financial planning	Research and analysis of competitors			
Management Reporting	Impact on key performance indicators and similar metrics	Management report impact	Impact on competitiveness				
Investor Relations	Planning and timing of external communications	Communicating the financial impact with shareholders, analysts and the public		•			
Human Resources	Incentive compensation plans	Training	Development of talent	Management of contractors & consultants needs to assist with the transaction			

challenges that the switch to IFRS will entail.

The two main areas of Human Capital Readiness focus on

- Education and training and
- Auditor capacity

Arguably the biggest challenge is insuring that both existing and future practitioner are brought up to speed on

the framework and detail of IFRS, as it is less rules-based and therefore less prescriptive than US GAAP and demands a greater appreciation and utilisation of judgment as far as the understanding of the economic substance of transactions are concerned.

Auditors will also have to ensure that within their own systems of quality control, which encompasses their

hiring practices, assignment of personnel to engagements, professional development and advancement activities, they address the implications that IFRS will necessitate.



CORPORATE LOAN PORTFOLIOS: AFTER THE CRISIS

Tracy E. Williams, former Managing Director at JPMorgan Chase, spent most of his 27 years there in a senior risk-manager role in the investment bank, says as the dust settles from the global economic crisis, even it stirs in certain pockets and regions around the world. Meanwhile, bank risk managers continue to patch up pummeled corporate loan portfolios by assessing loan-loss reserves, taking all the charge-offs they can stomach, restructuring bad loans, working out others, and using detective tactics to find out where the next collapse might occur.

It's the right time for self-reflection—the time to evaluate where loan portfolios got into trouble, what lessons can be learned from the past two years, and what banks can do going forward to insulate portfolios from the inevitable next crisis. It's the right time, too, to size up the benefits of diversification, redefine what that means, and deploy methods to ensure portfolios don't suffer substantial blows in the future because of imprudent concentration or careless risk management.

Corporate loan portfolios don't sit still; they aren't static. They grow, evolve, and change. They are reviewed, managed, hedged, argued over, pared down or allowed to blossom. Business managers focus on growth, hot industries, favorite clientborrowers and revenue possibilities. Risk managers focus on concentration, vulnerabilities, unforeseen risks, trends, and downturns. The dynamics between the two help shape the overall portfolio and explain why it evolves.

Nobody argues about the benefits of portfolio diversification. There are theory-based proponents, who can prove how diversified portfolios reduce overall risks. There are history-based proponents, who can show how banks without obvious concentration issues survived

downturns or crises in the past. How is it, then, that time and again, when a crisis fades, banks are caught with enormous loan losses and portfolios that require a work-out, wind-down or sell-off, due in part to concentration?

Notwithstanding their awareness of the benefits of diversification, what gets banks in trouble? What got them in trouble this time when they winked and

realized too late they had extraordinary levels of risks in loans tied to commercial real estate, leveraged buyouts, or consumer companies?

Some of the reasons are the same from downturn to downturn, from crisis to crisis:

 Banks succumb to aggressive business goals and pressures to



generate increasing returns on equity within an organization where risk managers may not have authority, will power, or expertise to instill discipline.

- Risk managers, who may have had authority and expertise, were blinded by business growth and profits, ignored creeping concentration and became careless about reviewing risks frequently and carefully.
- 3. Business and risk managers were too confident in their ability to hedge risks at any point in time or their ability to sell down loan assets in secondary markets when they thought they would need to. When they needed to, it was too costly or too late.
- 4. Risk managers established limits, benchmarks and guidelines, but may have been casual in allowing them to be ignored, broken or disrespected. They rationalized too many exceptions. And soon, exceptions-based approvals became the norm.
- 5. Risk managers, distracted by bustling business, gushing profits, or non-stop demands to approve new loans, may not have taken proper amounts of time to redefine risks in the portfolio. Nor did they allot time to review risks over and over and reformulate risk strategies.
- Some risk managers may not have had the ability, information flow, or staff assistance to interpret vulnerability signs, downward trends, unexplained turning points, or risk correlation among industries or other factors.
- 7. Sometimes there was a tendency among risk managers to exaggerate the strengths of portfolio industries or geographies because they rode the momentum. What goes up will continue to rise

indefinitely, they presumed. They may have allowed themselves to believe the positive tones of equity researchers or the investment-grade ratings from ratings agencies.

- 8. At some banks, risk managers may have had expertise, information, and perception, but were undermined by an organization structure where they had little voice and minimal authority. They might have felt threatened when they raised a hand that might slow business momentum.
- 9. And in many cases, there was a refusal among business and risk managers to understand, conceptualize, prepare for or assess worst-case scenarios, because history or statistics suggested that the probability of such was negligible.

Let's turn the page and go forward: From these portfolio experiences, shake-outs and upheavals, were there long-term lessons learned in managing corporate risk? What are ongoing issues and challenges that confront risk managers, who want to be shrewd the next time or at all times.

Lessons Learned

Many risk officers agree portfolio benchmarks and standards worked, if they were astutely set and strictly adhered to. If there existed portfolio limits for certain industries or limits on long-term committed exposures or limits on unsecured risks, then they work and help minimize risk, if they are enforced.

Portfolio limits, standards and benchmarks are implemented for a

reason and with an appreciation that the worst case can indeed happen. Nonetheless, in the middle of economic growth, soaring loan demand, profit waves, and strong loan performance, limits and standards begin to fade. They aren't ignored; business and risk managers find ways to justify exceeding them and approving exceptions. Suddenly a disciplined risk culture turns into an environment where bankers become confident that exceeding limits will be brushed over or swiftly rationalized.

Bank risk officers likely learned that while diversity minimizes overall risks, portfolio diversification needs to be tweaked, redefined, and realigned regularly. Not semi-annually. Not occasionally, but regularly (quarterly or perhaps monthly).

perhaps monthly). Just as quickly economic conditions, loan demand, and business forecasts change, the loan portfolio changes. Borrowers in some industries pay down: others turn to bank loans when other sources dry up. Rates and restrictive terms change the face of loan portfolios. Concentration and risks that didn't exist in a previous examination of the portfolio creep up. Suddenly they stand out sorely in subsequent reviews. A portfolio with 10% realestate risk one week could have 15%

the next. One with 30% unsecured exposure could have 35% the next. Or one with 25% long-term tenors (beyond five years, say) could have 30-40% the next week, as short-term borrowers pay down.

Risk managers, aware the portfolios they oversee can change materially from day to day, will need to anticipate those changes and prepare for downturns. They will need to be ready to redefine concentration risks to impose different limits or standards.

Banks learned they must define carefully and clearly what constitutes an "industry" and what factors impact ongoing borrowings. They learned they must understand when to combine sub-industry groups that on the surface may seem to have little in common, but are both susceptible to the same super-industry forces.

Furthermore, diversification and concentration risks don't apply just to industries. They apply to countries, currencies, corporate families, and loan structures: tenors, contractual commitments, collateral, and interest rates. The best benefits come from being able to implement portfolio diversification on all fronts.

It gets more complex. The bigger banks have an even broader array of risk exposures to a corporate family. They know it doesn't make sense to disregard exposures beyond loan portfolios. Thus, managing portfolios and concentration risks must include an awareness of non-loan exposures: counterparty-trading risks and operating and processing risks.

Banks learned it helped to have a well-defined, well-policed game plan for risk strategy for vulnerable segments of the portfolio. The game plan must be implemented early, revised as often as necessary, and articulated widely, loudly. The plan must include a program to reduce, hedge, phase out, collateralize or minimize exposures and potential risks.

Ongoing Issues and Challenges

As they go forward, risk managers understand there'll be ongoing challenges and issues in managing the corporate portfolio the right way.

Reporting, information updates, and systems have always been an issue and will continue to be, although improvements the past decade have been enormous. Most banks don't need several days to add up portfolio exposures, as they might have back in the 1990s. Updated data are not as much an issue as erroneous data or blatant bad information.

Another issue has been how to define exposure. If banks want to assess corporate loan portfolios and address industry and structural risks, then what constitutes loan exposure for risk-management purposes? Would it include the bank's purchases of the borrower's commercial paper or corporate bonds?

Banks use a variety of definitions of loan risk or "corporate credit risk." They may use definitions prescribed by regulators or accountants, or they may modify those and include other exposures that appear to be loans, but are not formally classified as such

("accounts receivable," "deposits," etc.). They may choose to include contingent and indirect exposures or exposures that are not outstanding, but fall under contractual commitments or will likely be drawn down in certain scenarios.

An examination of bank risks to other financial institutions shows the complexity of the exercise. FI portfolio exposure may include loans to other banks, broker/dealers, securities firms, and hedge funds—all of which have traditionally been large users of short-term loans to support activities. For large banks, this may also include banks' prime-brokerage or correspondent-clearing business or, for example, loans to hedge funds for "margin lending" purposes.

This simply suggests that industry sectors should capture all the exposure tied to that industry—no matter what the actual direct exposure is called from day to day ("corporate loans," "margin loans," "reverse-repo loan").

Whatever they choose, the definition of loan exposure within the portfolio should encompass:

- 1. a conservative assessment of exposures
- 2. a consistent, clear approach
- 3. exposures that are readily measurable and data easily accessed.

For loan portfolio-review purposes, "corporate credit risk" should at least incorporate the following set of risks:



Uncommitted (discretionary and demand) loan outstandings: secured and unsecured

- Committed loan outstandings: secured and unsecured legal commitments
- Loan commitments not outstanding, but subject to drawdowns at any time
- 3. Letters of credit: standby, performance, secured, unsecured
- 4. Other similar contractual contingencies
- 5. Other

"Other" is a plug and serves to capture exposures and risks that may not be called "loans," but look, act, and feel like loan exposures. In crisis situations, they will certainly be lumped into creditor risk and treated as obligations from the problem borrower. Thus, for review purposes, they should be included or considered for inclusion.

They may include some of the risks in the categories below:

- 1. Overdrafts
- 2. Reverse-Repurchase agreements ("reverse-repos")
- 3. Receivables from securities-borrowing activity ("sec-lending")
- 4. Federal Funds sold (overnight loans to other banks)
- 5. Deposits
- 6. Accounts receivables
- 7. Pledged collateral
- 8. Unreimbursed payments (in trading or processing)
- 9. Commercial paper
- 10. Corporate bonds

Why combine corporate bonds with loan exposure? Bonds should be excluded, some might argue, because banks can sell off the exposure, hedge it, value it and price it. But in more recent years in advanced markets, they can do the same with certain loans. As well, major banks are engaged in both bond and lending activity and may in certain transactions be involved in both with a single borrower.

Bond and lending activities are, therefore, interrelated. Often the activities within a bank complement each other or go hand in hand. In many large, high-profile transactions over the past decade, deals will include a loan tranche and a bond tranche. The lending groups or investors and the documents all differ, but the exposure looks the same and often relies on the same payback sources. Or there are

cases where bond-offering proceeds pay down loan outstandings, or viceversa.

A prominent example is the prudence in including CMBS (commercial mortgage-backed securities) securities held with real-estate loan exposure to the same obligor.

Going forward: Allocation Principles

Nowadays, banks managing loan portfolios likely have an after-crisis game plan. Imbedded in that plan will be basic principles—which will help define allocations, concentrations, strategies, reviews, and routine portfolio tweaking.

- Conduct thorough, frequent, and more disciplined reviews of industry allocations and industry risks.
- 2. Continue to work down exposures in over-exposed industries by selling off or reassigning exposures (if they can), allowing loans to expire, and not approving new loans for new business.
- 3. Acknowledge and consider non-loan exposures as much as possible in the overall assessment of industry risks, since banks' risk managers are also charged with managing all forms of risk, not just loan risk.
- Evaluate portfolios within the context of industries, countries, currencies, geographies and structures (tenors, collateral).
- Evaluate frequently hedging policies and procedures and methods to reduce, minimize, sell off or eliminate unwanted exposures.
- Attempt to manage these risks and allocations within conditions and capital requirements that will be imposed by new regulation or closer scrutiny from equity analysts and shareholders.

Major corporate banks have substantial businesses beyond loans with corporate clients. Thus, all risk reviews (including industry allocations) should include a risk strategy for three major categories of risk:

- 1. Loan risk, as described above
- 2. Trading risk, including counterparty and market risk arising from FX, derivatives, and equity trading (collateralized and unsecured)
- 3. Intraday risk, including exposures arising from cash management, money-transfer, and securities-processing activities

This makes loan portfolio management complex. There could be times when it's necessary to reduce total loan risk or restrict loan growth, if risks in other categories can't be similarly contained or decreased. But including or addressing risks in the other categories is necessary. An overall assessment of



loan risk can't be divorced from an assessment of the other risks. The three categories of risk are not typically aggregated, because they arise in different ways and differ in scope. But banks will continue to evaluate all three when they set out to approve an incremental amount of risk for a particular client or for a particular industry.

Country Risks

For banks with cross-border activities, country risks must be incorporated. Many major financial institutions have special risk-management groups that assess the risk of doing business in different countries. They will have set "country limits" for loan exposures and for total risks.

Those limits will be based an ongoing review of substantive country-related

risks: economics, politics, regulation, currency, legal, etc. The review may be enhanced by ratings from external rating organizations.

All loan activity booked in that country would presumably fall within preestablished country limits. Or if they exceed limits, they would have been specially approved by senior managers.

Industry Allocations: Approaches

After having gone through some turmoil and large-scale efforts to clean up balance sheets, banks have likely gone through extensive reviews of industry risks and have reallocated portfolio allocations (among those industries), based on losses, defaults, non-performing loans and risks in recent years. This would be similar to banks scaling down technology exposures substantially after the dotcom crisis in the early 2000's or Asia exposures after the 1998 crisis (or oil-industry exposures and international sovereign exposures in the 1980's).

With 2009 a year of expunging risks and banks surviving write-downs, raising capital, and cleaning up balance sheets, 2009 yearend portfolios may not necessarily be indicative of banks' risk posture going forward.

On the other hand, risk managers are mindful that business managers will still want to have input. For some banks, allocations within the portfolio are based entirely on risk perception, risk strategy and risk tolerance. At most banks, allocations also reflect a bank's client penetration in that industry.

Banks with a big presence and strategy for technology industries will likely allocate more for technology; banks with a known competence and substantial energy business will likely commit more (allocations via capital or absolute loan amounts) for energy. They would commit, of course, all within the scope and guidelines of proper portfolio management.

There is always a stinging, lingering memory of write-downs and defaults from a particular industry: technology companies in the early 2000's, commercial real-estate exposures in many an era. These memories will influence risk behavior going forward. Banks suffering large losses in a single industry, in a single country, or from a particular loan structure (unsecured, long-term risks) will initially hesitate to permit significant allocations in these segments going forward. Memories, indeed, sometimes fade away when potential profits rebound in magnitude. That's why real-estate loans revive or loans to technology start-ups return.

Let's review a basic approach to loanportfolio allocations, which might be unfair or inappropriate for complex portfolio management at large banks. But it helps to show the discipline necessary to set allocations, limits and benchmarks and demonstrate the perseverance necessary to review them, revise them, and adjust them.

A general approach to industry allocation is summarized in the table below.

- 1. Industry categories must be defined carefully and explicitly. Guidelines must be set for companies (with risk exposures) that overlap several industries or could be interpreted differently by different people. (Is Apple a technology company or a consumer-products/retail enterprise?)
- Some industries should include subcategories. Financial institutions include such subsets as banks, hedge funds, insurance companies, and asset-management companies.
- 3. Risk ratings (for these purposes) are based on a traditional 1-10 scale (1 being negligible risk, 10 being bankruptcy risk).

External ratings agency ratings can be used as input, but should not determine the rating. Ratings agencies historically are slow to reflect downgrades in a deteriorating environment. Although ratings agencies will refine and improve their practices going forward, downgrades will continue to be slower than what markets and creditors expect.

Banks' industry ratings here would be a weighted-average obligor risk rating from all borrower ratings within the industry. Years ago, that would have been a week-long chore to compile and compute. Bank systems should be able to compute that swiftly today.

The industry rating should be based partly on historical default rates in the industry (information provided by ratings agencies and called "estimated default frequency") and partly based on inherent characteristics of an industry (both qualitative and quantitative) (growth prospects, regulation, balance-sheet leverage, profitability dynamics, globalization, etc.). Most of all, it must be forward-looking.

4. The rating of the industry determines the priority of allocating risk capital to that industry (as a proportion of total capital a bank allocates to the loan business).

The better-rated industries might arguably attract the most capital allocated. But here is where discipline and restraint come into play: There should still be concentration limits. For example,

Industry	Risk Rating	Bank Risk Capital	l year Loan Equivalent	Loan Category I (3 year limit)	Loan Category 2 (5 year limit)	Loan Category 3 (7 year limit)	Loan Category 4 Committed limit	Loan Category 5 Unsecured limit
Financial Institutions								
Technology								
Energy								
Consumer								
Real Estate								
Healthcare								
Autos								
Other								

- an industry rated "2" may deserve 50% of the total, but the bank should still impose lower limits for concentration, regardless of what it may deserve on a credit-rating basis.
- A risk-rating for an industry is dynamic and can be subject to change from quarter to quarter. Hence, ratings and allocations must be reviewed quarterly and assessed carefully.
- 6. The risk-capital amount is "translated" into a total one-year loan equivalent, the total amount of loans for that industry group, if all loans were one-year, unsecured, committed arrangements. Capital-allocation methodology, used by most banks and required in the current regulatory environment everywhere, can expedite those translations.
- The risk amounts above would also be subject to limits and thresholds set on geographical basis by country ("country limits").
- 8. Systems and technology improvements over the past decade—including banks' willingness to devote resources to risk systems—make it possible for banks to monitor exposures, limits, and thresholds substantially better—if the data are right.

Thus, if banks want to have disciplined allocation approaches, they can do so. At large banks, exposure information is available either in real time or on an overnight basis. Banks also use systems to ensure that those with proper authority approve incremental risk exposures.

Since all loans are not one-year loans, the one-year loan equivalent will subsequently need to be "translated" into limits for several categories (tenors, collateral, legal commitments to lend) of loans. Loans exist in different forms and structures all with varying risks. For risk-equivalent purposes, a U.S. Dollar 10 million one-year, unsecured loan limit might translate, for example, into a U.S. Dollar 100 million secured, overnight loan limit or a U.S. Dollar 1 million five-year limit.

(Banks acknowledge the fact that a borrower may default, but the loan risk can be minimized or salvaged if there is (a) sufficient collateral, (b) a senior claim (in a liquidation scenario), (c) short tenor, and/or (d) no legal commitment to lend. This salvaging effort is sometimes linked to banks' "loss-given-default" calculations.)

Ideally, in sum, industry limits would be set for:

- Total Loans Outstandings
- Total Unsecured Loan Outstandings (Committed, Uncommitted)
- Total Committed Term Loans (Outstandings and Undrawn Amounts, R/C, T/L)
- Total Secured, Uncommitted Outstandings
- Total Letters of Credit Outstanding
- Total Loan Outstandings and Commitments with a tenor < 1 year
- Total Loan Outstandings and Commitments with a tenor 1-3 years
- Total Loan Outstandings and Commitments with a tenor 3-5 years
- Total Loan Outstandings and Commitments with a tenor 5-10 years
- Total Revolving Credit Commitments with "Term-outs"
- Total Subordinate Loans
 Outstandings and Commitments
- All limits would be subject to country-risk limits.

The basic approach now seems complex. It can be done, and it provides a way to manage industry risks, as well as structural risks and country risks. And banks are better off when a looming downturn approaches.

Thresholds, Industry Limits, and Policing

Banks should enhance the allocation process by setting overall portfolio policies for thresholds and industry limits before establishing them. For example:

- No industry should comprise more than a certain amount of the total at all times (say, 25%)
- There may be times when exposures will exceed thresholds because of reductions in other industry groups or when there is a sufficient business rationale
- Exposures that exceed thresholds should be specially approved and reported
- 4. Exposures that exceed thresholds

- should be subject to higher pricing (risk vs. reward)
- Exposures that exceed thresholds should be subject to a welldelineated reduction plan (sell off or reassign loan exposure, reduce outstandings, require collateral, etc.)

Process and Review: Getting it right

After establishing allocation methodology, guidelines, and limits based on ratings, statistics, history, intuition and judgment, how do we make it work and get it right?

The biggest challenges or the factors that most frequently undermine meeting portfolio objectives? A lack of or slippage in the following:

- 1. Frequent, disciplined review of company and industry ratings.
- Frequent, disciplined review and revisions of allocations including business input from loan-product experts, syndicated market bankers, and client bankers.
- 3. Realistic, conservative outlook of specific industries.
- 4. Keen observation and measurement of factors that signal decline, downturns, or vulnerability.
- 5. Management of exposures within defined limits.
- 6. Strict special approvals of exposure beyond thresholds or limits.

What can banks and risk managers (especially those who have been granted proper and adequate authority to act) do?

- Review the portfolio, allocations, and limits regularly. And when doing so, focus on 3-5 important topics, objectives, issues, or vulnerabilities.
- Be willing and ready to make changes, adjustments and revisions in portfolio allocations.
- Enforce limits, guidelines, allocations, and benchmarks. Make them mean something. Approve exceptions rarely.
- Review, update and alter, as necessary, definitions of industries, overlapping industries, and corporate credit risks.

- Understand how industries tie to each other. Recognize
 interdependence or correlation (past or in anticipation),
 between/among industries, regions, geographies.
 Understand when it's necessary to combine industries for
 allocation purposes or separate larger ones into smaller
 sectors.
- Perform and be pragmatic about stress tests applied to the portfolio. Analyze worst-case, what-if scenarios. Let the stress tests be guides on how to act before the crisis overwhelms.
 - If certain industries incur an unforeseen downturn or collapse, what will happen to the portfolio? Where will losses occur first? What will the likely losses be if no action is taken? What action must be taken now?
- 7. Manage, discuss and debate the ongoing tension between business goals vs. risk-management objectives. Use riskreward methods, guidelines and principles as tools to manage these discussions and make the right decisions.
- Conduct formal industry portfolio reviews, as appropriate (quarterly for low-rated, vulnerable industries). Design the reviews to be based more on scenarios, based less on routine review of old data.
- 9. At all portfolio-review sessions, articulate, define and communicate broadly an overall risk strategy, one that will be understood and heard by business managers and client relationship managers, who in fact should be willing participants in the sessions.
- 10.Go through scenarios (growth, decline, unforeseen deterioration). But don't disregard extreme risks and worst cases.
- 11. Highlight, measure and observe potential domino effects and ripples. Something that occurs in one industry could send waves of impact into another.
- 12. At all portfolio sessions, always ask the following:
 - a. How high is high?
 - b. How much is too much?
 - c. What can be done to reduce, minimize, hedge or eliminate?
 - d. What can be done to sell off or re-assign exposure within rules?
 - e. What doesn't make sense?
 - f. Is it right? What would be the regulatory view?

- g. Would the maximum loss be debilitating to the business, to shareholders?
- h. Where can unsecured exposures be collateralized? What are acceptable forms of collateral in a downturn?
- i. What would restructuring, recovery, and exposure reduction entail? What is that impact on capital and employees, and what are opportunity costs?
- j. What is the probability of loss? What is loss given default? What is the worst case?
- k. What is the tolerance for loss?
- When is it okay to avoid risks (where reward = 0) to avoid worst loss (where reward = max gain or reward = max loss)?
- 13. Develop meaningful, useful and serious "credit watch" lists—for specific borrowers, regions, and for specific industries or sub-industries. Accompany them with practical, clear risk strategies
- 14. For limits, allocations and benchmarks, watch out for potential loopholes that can be exploited by others outside risk-management circles.
 - a. Secured vs. unsecured
 - b. Interpreting industry exposures
 - c. Overlapping industries
 - d. Companies with diversified interests
 - e. New industries outside existing industry segments
- Update portfolio data, and keep an eye on errors, misinformation, incomplete data, or discrepancies.
- 16. Update limits and allocations at all times.

In the end, use history, past defaults, non-performing loan trends, and analysis as tools to set limits and define strategy. But rely on judgment, insight and an informed view of future risks. Acknowledge crudely that the worst can happen.





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