

ADAPTIV AND INTEDELTA SURVEY

*A survey of banks' preparedness for
Incremental Risk Charge*



About Intedelta

Intedelta is a risk management consultancy whose mission is to help financial institutions better manage their risk. Through our range of consulting and associated products we provide assistance in areas such as advising on policies and methodologies, systems implementations and conducting market intelligence.

Our areas of expertise cover the major risks faced by institutions: credit, market and operational risk, and we also have a number of more niche specialisms such as collateral management.

Our clients range from some of the world's largest banks and asset managers to medium sized banks in developing markets, hedge funds, risk software vendors and other consultancies.

To find out more:

Web: www.intedelta.com

Email: contact@intedelta.com

Telephone: +44 20 7153 1037



About Sungard Adaptiv

SunGard's Adaptiv provides enterprise-wide credit and market risk management and operations solutions for financial services institutions. Adaptiv assists institutions of varying size and complexity to deploy technology to meet both internal and regulatory requirements for risk management and operational control.

To find out more:

Web: www.sungard.com/enterpriserisk

Email: adaptiv.marketing@sungard.com

Telephone: +44 20 8081 2779



INTRODUCTION

Incremental Risk Charge (IRC) traces its roots back to 2005 when the Basel Committee first considered the need for a new requirement for banks to model and hold capital against risk for credit risky assets held on the trading book. This risk is incremental to the default risk captured under the banks' value-at-risk (VaR) framework. The first guidelines for Incremental Default Risk (IDCR) were issued for comment in October 2007. At this point the proposal was to model defaults but not rating transitions. At its meeting in March 2008, the Committee decided to expand the scope to include transitions. This decision was taken in light of the prevailing credit market turmoil in which many institutions had sustained major losses which were not captured in their 10 day 99% VaR but which were due to credit migrations and the widening of spreads. The final BIS guidelines were issued in July 2009.

BASICS OF THE IRC APPROACH

The IRC guidelines require banks to hold capital to a one year time horizon to a confidence level of 99.9%. This is a considerably longer horizon and higher confidence level than the 10 day 99% VaR used for day to day market risk management purposes.

The IRC guidelines make a constant risk assumption which assumes that banks will maintain their risk positions throughout the one year horizon. It is assumed that the proceeds of any assets which are liquidated will be reinvested to maintain the constant level of risk. The guidelines contain a minimum liquidity horizon of three months, thus assuming that no asset can be sold within this period. The calculation of the IRC must include the effect of both defaults and rating transitions.

The IRC guidelines also have specific provisions relating to:

- Correlations and diversifications
- Concentration
- Risk mitigation and diversification effects
- Optionality.

ISSUES RAISED DURING CONSULTATION PERIOD

The BIS guidelines provoked a lively exchange of views and during the consultation period the BIS received comments from many industry organisations such as ISDA, individual banks and other service providers. Whilst most were supportive of the principle of IRC, many specific concerns were raised.

Many commentators argued that the one year time horizon was too long, especially when coupled with the constant level of risk assumption. Arguments were made that faced with large trading losses a bank can choose to close down or at least reduce activity and this could be achieved well within a period of one year. Alternatively, it may choose to raise additional capital and continue with the original activities. Whichever option prevailed, it was argued that requiring banks to hold capital in advance over a one year horizon and under a constant level of risk is unrealistic and would require an excessive amount of capital.

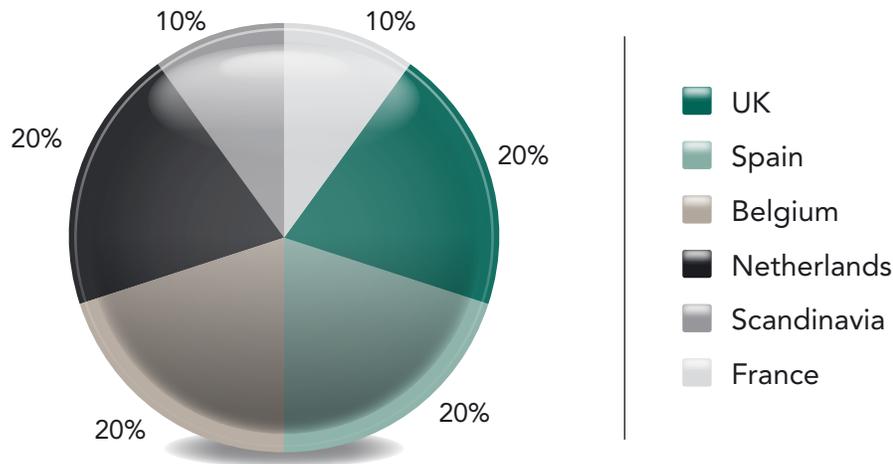
A second common theme highlighted in much of the feedback to the BIS was that a minimum liquidity period of three months was considered to be excessively long. Commentators argued that whilst it may not be possible to liquidate some assets within a three month period, such assets are in the minority and a lower floor should be set.

Other issues raised in the BIS feedback included:

- Double counting between IRC and VaR
- Summing IRC and VaR is adding “apples and pears”
- Difficulty in validating the IRC models.

THE INTEDELTA SURVEY

The survey looked at the preparedness of eleven major European banks for IRC. These were primarily the major players in their home market and all had substantial international operations. The geographical spread was as follows:



The survey was conducted over summer/autumn 2009 by conference call or face to face meeting. The individuals interviewed all had direct responsibility for the development, implementation and/or validation of IRC models.

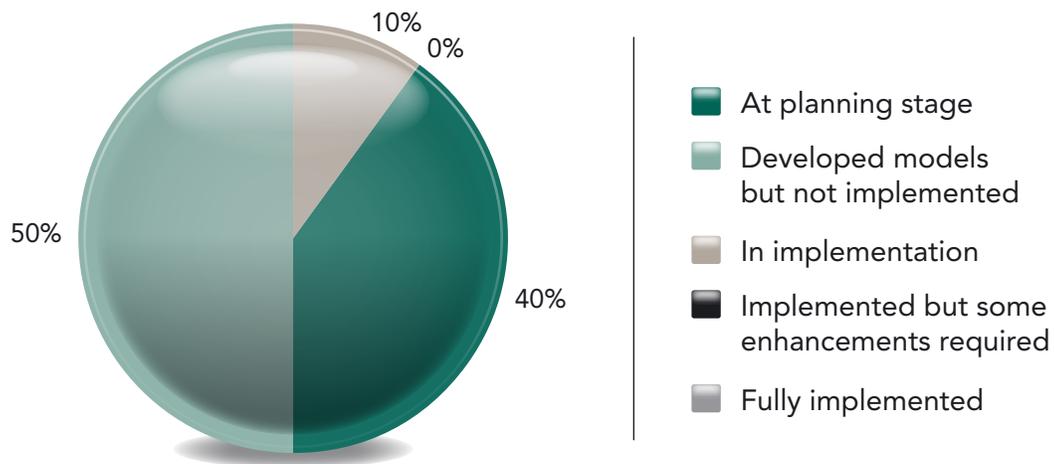
VIEWS OF SURVEY PARTICIPANTS ON IRC REQUIREMENTS

The views of the survey participants towards the IRC guidelines echoed the wider feedback that had been highlighted by the industry over the consultation period. Whilst all survey respondents agreed with the need for an IRC framework, there were a number of commonly repeated criticisms:

- “Constant level of risk assumption is inappropriate
- Insufficient guidance given on derivation of correlations
- Addition of market risk (VaR) and IRC is meaningless
- One year capital horizon is inappropriate
- Rules are overly conservative and an over-reaction to the crisis
- Earlier draft was too inflexible. Final guidelines are better”

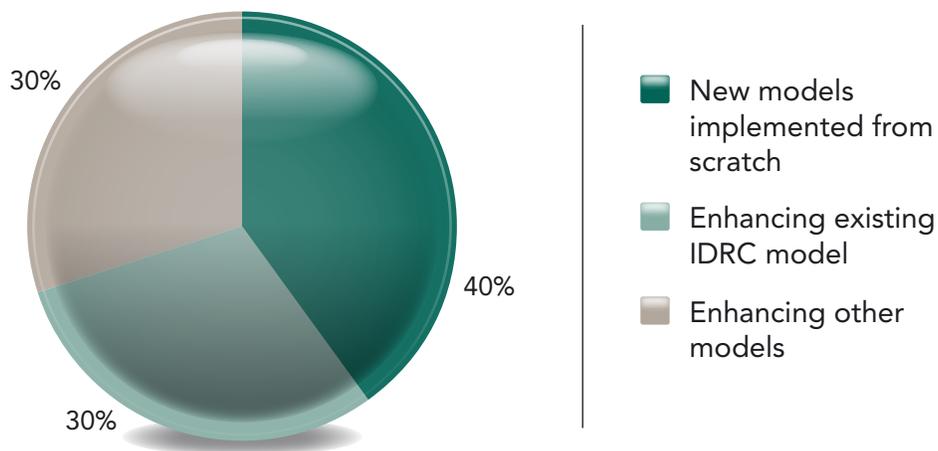
HOW PREPARED ARE BANKS FOR IRC?

The survey revealed a wide variation in the preparedness for IRC. As at the end of summer 2009 no institution in the survey had fully implemented IRC and a surprising number were still at the planning stage. The institutions that were most advanced had already implemented a default model and were in the process of incorporating transitions. In a number of institutions separate models were under development in different parts of the organisation and these were progressing at different speeds. All banks were confident of being able to meet the regulatory deadline.



HOW ARE BANKS APPROACHING IRC?

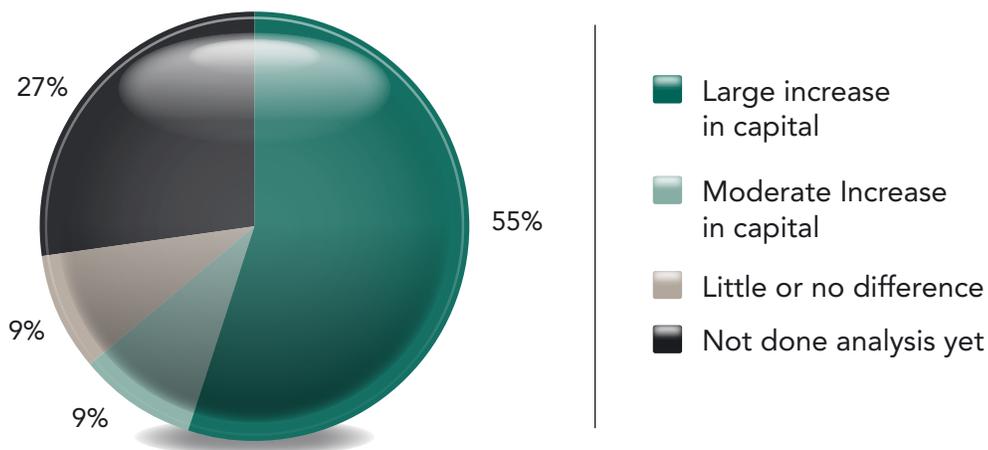
The approach to the development on models was fairly evenly spread between implementing new models from first principles, enhancing existing IDRC models and enhancing other models such as economic capital.



The BIS guidelines allow two options for the incorporation of supervisory principles. The approach favoured by the BIS is for models to be developed which directly incorporate the supervisory principles. As an alternative the BIS permits banks to use existing internal models which do not map directly to the regulatory principles (e.g. in terms of capital horizon, constant level of risk, rollover assumptions) providing the bank can demonstrate that the resulting internal capital charge would be at least as high the charge produced by a model that directly applies the supervisory principles. In our survey all of the respondents had adopted the former approach.

The choice of whether to enhance existing models or to develop new models from first principles was in all cases made on the grounds of practicality and modelling accuracy.

IMPACT OF IMPLEMENTING IRC

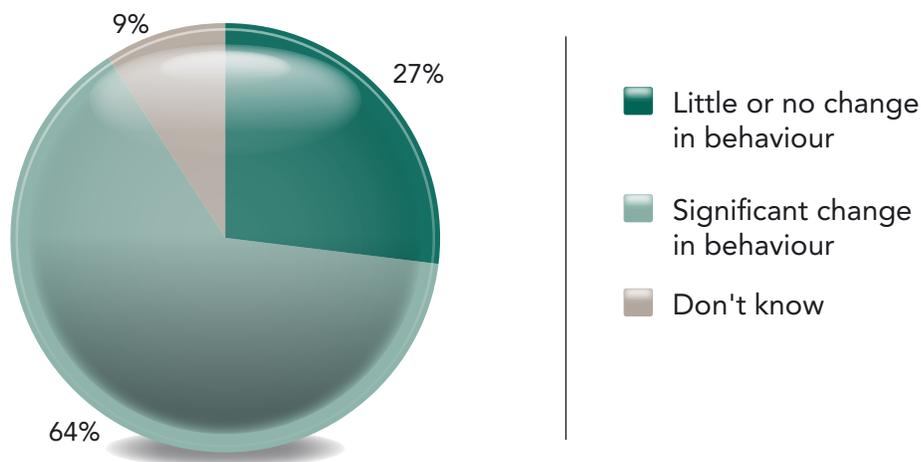


The implementation of IRC will have tangible effects on banks' businesses. Just over 50% of banks surveyed expect the implementation of IRC to lead to a significant increase in capital. The remainder expect only a moderate increase, little or no difference or have yet to perform an analysis. The following comments were received from the respondents who do not expect a large increase:

- "We are primarily a retail bank and implementing IRC will make little difference in the context of our overall regulatory capital"
- "We have already implemented IDRC and moving to IRC is not expected to make a significant difference"

HOW WILL THE IMPLEMENTATION OF IRC CHANGE BEHAVIOUR?

The implementation of IRC has implications beyond the world of the risk modelers. Over two thirds of respondents believed that the implementation of IRC will have a significant impact on business within their organisations with IRC being a major disincentive to holding credit risky assets on the trading book.



A number of respondents highlighted certain products whose profitability and even viability may be threatened by the implementation of IRC. These included structured credit, corporate CDOs and correlation trading.

MODELLING AND IMPLEMENTATION ISSUES

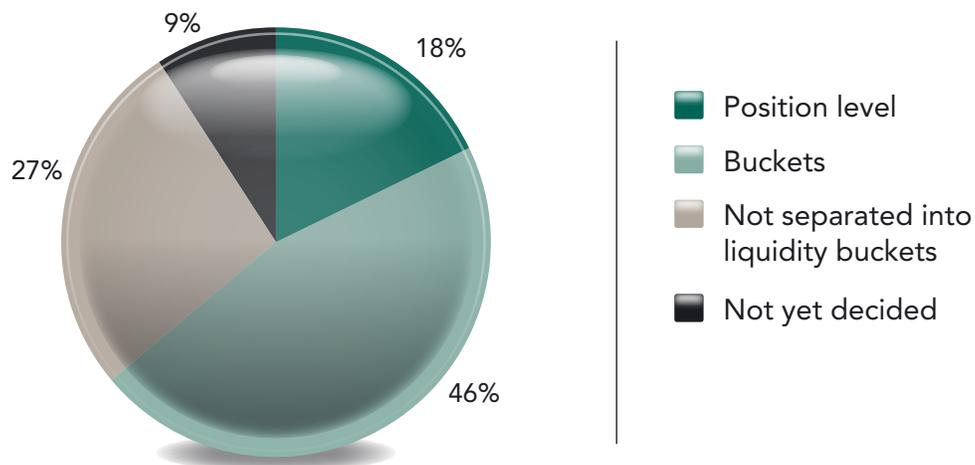
The most commonly cited issues banks were facing in modelling and implementing IRC were:

- Obtaining reliable data. Specifically, PDs, transition probabilities and correlations
- The treatment of the liquidity horizon and the reinvestment assumptions
- Insufficient time available to move from IDRC to IRC.

The sourcing of reliable PDs and LGDs is one of the most important data aspects. Through the cycle PDs, usually harmonised with those used for Basel II, were used by 71% of respondents. The remainder used point in time PDs derived, for example, from credit spreads. Through the cycle PDs are likely to give an IRC that is less pro-cyclical and volatile than using point in time PDs. Most institutions clearly favour IRC with such features.

LGDs are often not specifically modelled and are supplied directly by the front office system. Some banks have a more simplistic approach, for example, applying a standard 40% LGD across all issues.

One of the key modelling challenges is the treatment of the liquidity horizon. The BIS guidelines allow liquidity to be calculated at either the position level or by applying liquidity buckets.



The liquidity bucket approach was the most commonly applied technique. 27% of respondents did not apply separate liquidity periods and apply a one year horizon, i.e. the same as the capital horizon. The choice of liquidity approach appears to be made on the grounds of institutions' differing approaches to the required level of granularity and the availability of data within the organisation as opposed to differences in the institutions' portfolios.

VALIDATION

During the BIS consultation period a number of commentators highlighted the difficulties in validating IRC models. Our survey revealed that the majority of banks have yet to fully consider validation. It therefore remains to be seen the extent to which difficulties will be encountered.

www.sungard.com/adaptiv

©2009 SunGard

SunGard, SunGard Adaptiv and the SunGard logo are trademarks or registered trademarks of SunGard Data Systems Inc. or its subsidiaries in the U.S. and other countries. All other trade names are trademarks or registered trademarks of their respective holders.