



CRO INSIGHTS JOURNAL

RISKMINDS 2015 SPECIAL ISSUE



EDITORIAL





Freddy Gielen Partner

Freddy Gielen is a Founding Partner of Avantage Reply. Freddy has over 20 years' experience in Prudential Risk, Finance and Regulation. Prior to establishing Avantage Reply in 2004, he has worked as a consultant for systemically important institutions, The World Bank and global financial regulators. He holds a Master's degree in Finance and in Engineering. He is also a Certified Public Accountant (U.S. CPA).

Email: f.gielen@reply.com

About Avantage Reply

Established in 2004, Avantage Reply (a member firm of Reply) is a pan-European specialised management consultancy delivering change initiatives in the areas of Compliance, Finance, Risk and Treasury.

Website: www.avantagereply.com

22 years of RiskMinds - a chance to reflect

The 2015 RiskMinds International conference in Amsterdam is the 22nd edition of this prestigious event. Avantage Reply is delighted to be a sponsor for the second consecutive year. We have marked the occasion with the launch of the third edition of our CRO Insights Journal. Since 2014, the journal has provided a forum for knowledge sharing of risk practices across the industry, drawing on the perspectives of leading executives and Heads of Risk.

This issue features four distinguished interviewees discussing key themes from this year's conference.

Firstly, **Hedwige Nuyens**, Managing Director of the London-based International Banking Federation (IBFed), will touch on the critical nexus between regulation and business strategy. Another important area featured is stress-testing. **Ulrik Lackschewitz**, Chief Risk Officer of HSH Nordbank, describes the challenges and prospects for the industry on this very timely issue. Thirdly, **Vincent Maagdenberg**, the Chief Risk Officer of ING Nederland, gives us an overview on an issue that will likely dominate discussions at this year's event – the Single Supervisory Mechanism (SSM). He will walk us through some of the lessons learnt by his bank as we mark the first anniversary of the SSM.

Last but not least, the third edition of the CRO Insight Journal will discuss the challenges and opportunities for risk information technology (IT) amid an increasingly demanding regulatory environment. We scrutinise the impact of these demands in the areas of IT systems and data as well as explore opportunities presented by latest technological developments. Examples of such opportunities are the use of Big Data and the blockchain. We speak with **Filipe Teixeira**, Head of Financial Risk Factory for Unicredit Business Integration Solutions (UBIS), for insights into this next-frontier topic.

We sincerely hope you find these interviews instructive and look forward to continuing the conversation with you.

Freddy Gielen

Partner Avantage Reply

CONTENTS



One Year of the ECB SSM: What's next?

Hedwige Nuyens

Managing Director of the International Banking Federation (IBFed)

One year after the European Central Bank Single Supervisory Mechanism (ECB SSM) became operational, it has exceeded expectations in many areas. The mechanism is seen as a giant leap towards ensuring consistent banking supervision in the euro area. Still, industry insiders say that it has much room for improvement. In this interview, Hedwige Nuyens takes us through the major milestones as well as the challenges that lie ahead for the ECB SSM.



Stress Tests: Can one size fit all?

Ulrik Lackschewitz

Chief Risk Officer, HSH Nordbank AG

Emphasis on stringent banking stress tests have heightened as global regulators seek to minimise the impact of financial crises following the lessons from 2008-2009. Some have advocated for a standardised 'one-size-fits-all' for all credit institutions. Is this feasible in a banking world comprised of institutions of different orientations and scale? Ulrik Lackschewitz, chief risk officer at HSH Nordbank AG, shares his views on this issue in this interview.



Being prepared: incorporating Regulation within an integrated risk management framework

Vincent Maagdenberg

Chief Risk Officer, ING Netherlands

The past two years have been an intense period of regulatory change, with the introduction of the Single Supervisory Mechanism (SSM), asset quality review (AQR) and ECB stress testing regime. This regulatory framework has created fresh demands and requirements – which some banks have failed to meet. Reply speaks to Vincent Maagdenberg, Chief Risk Officer at ING Netherlands, about how investing in robust credit risk systems prior to the financial crisis has paid off for ING, and how the organisation continues to successfully embed new regimes within its integrated risk management scheme.



Risk IT in a brave new world

Filipe Teixeira

Head of Financial Risk Factory, Unicredit Business Integrated Solutions

Risk information technology (Risk IT) has become a key cog in 21st century banking, regardless of geographic location or institutional size. The pressures on banks' Risk IT teams are tremendous as they deal with fast-changing regulatory and business demands. It is critical that financial institutions have the necessary risk infrastructure in place to accommodate their business strategy.







Managing Director, International Banking Federation

Hedwige Nuyens is Managing Director of the London-based International Banking Federation (IBFed), the representative body for the banking associations of the main G20 nations. The group advocates on legislative, regulatory and other key issues on behalf of the global banking industry. Hedwige has a 30-year track record at the senior international level in the finance industry, with experience working in different institutions in positions including Chief Risk Officer and Chief Financial Officer. She has also worked in compliance, project management as well as public and regulatory affairs.

ONE YEAR AFTER THE EUROPEAN CENTRAL BANK SINGLE SUPERVISORY MECHANISM (ECB SSM) BECAME OPERATIONAL, IT HAS EXCEEDED EXPECTATIONS IN MANY AREAS. THE MECHANISM IS SEEN AS A GIANT LEAP TOWARDS ENSURING CONSISTENT BANKING SUPERVISION IN THE EURO AREA. STILL, INDUSTRY INSIDERS SAY THAT IT HAS MUCH ROOM FOR IMPROVEMENT. IN THIS INTERVIEW, HEDWIGE NUYENS TAKES US THROUGH THE MAJOR MILESTONES AS WELL AS THE CHALLENGES THAT LIE AHEAD FOR THE ECB SSM.

What would you say would be the biggest surprises the industry encountered with ECB SSM in the past twelve months?

Expectations were mixed when the ECB SSM was first announced. The optimists in the industry envisioned this new structure to be the silver bullet for efficient and harmonised banking supervision, with few obstacles to implementation. The more pessimistic observers, on the other hand, characterised it as yet another well-intended European political initiative doomed to encounter delays and potential failure. Therefore, it was certainly a surprise to all of us that the November 2014 deadline was achieved without a notable reduction of the scope or ambition of the ECB SSM. We can probably say it was the result of the herculean task, with many external firms supporting the ECB in going through some 60 percent of all risk-weighted assets (RWA) held by European banks. An enormous amount of review and overall challenging work was completed within a tight timeframe.

What can we expect from the 2015/2016 ECB SSM roadmap?

We are now seeing a more iterative approach being taken to move the ECB SSM forward. The drive and ambition among stakeholders remains high and there has been an increased level of consultation taking place to set out a balanced roadmap that includes additional reinforcement of the supervisory framework. We expect the ECB SSM to gradually become more incisive and all encompassing.

To what extent have the Financial Stability Board (FSB) or Basel initiatives 'interfered' with the ECB SSM roadmap?

Most of us in the industry have wondered about the interplay between the total loss-absorbing capacity (TLAC) and the

ONE YEAR OF THE ECB SSM: WHAT'S NEXT?

minimum requirement for own fund and eligible liabilities (MREL) frameworks while Europe was establishing the Single Resolution Board (SRB) and our Recovery and Resolution Plans. We are now seeing the split between the twin peaks of the SRB and ECB becoming increasingly operationalised in day-to-day supervisory reporting. We have however yet to see how it will work in practice. The European regulatory structure remains fairly nascent and concentrated compared with the United States, which has a handful of supervisory bodies as well as the Department of Justice. The European Banking Authority is continuing to deal with the transposition challenges of FSB initiatives within ECB supervisory regulations.

Looking to the future, would you encourage an increasingly granular supervisory process, or do you see benefits in returning to a more consolidated and generalist 'helicopter view" model of supervision?

The granular regulatory supervision by the SSM and SRB on an entity level is a continuing trend in Europe, with some convergence with the supervision framework in the United States. Overall, I think it is preferable for the banking supervision sector to acknowledge that financial markets are inherently complex rather than to seek unwarranted simplicity. We are seeing a clear trend of increasing data demands in the ECB SSM Anacredit / ECB Datawarehouse projects. The ECB has been demanding data governance standards following BCBS239 and is increasingly expecting banks to be investing in adequate technology infrastructures to meet granular risk data consistency demands.

In that respect, would you encourage the further integration of risk and finance data?

While we understand the need to have risk data reconciled with the general ledger on a granular level, it can also be said that we have a regulator in Europe that is somewhat "accelerating" its ambitions. The ECB SSM at present tends to ask for detailed data breakdown in scenarios where rules and templates have not yet been finalised, and that are pending European Banking Authority, European Commission or parliamentary processes. We have seen this in the 2014 Asset Quality Review and also in the 2015 ECB Short Term Exercise. It is certainly a challenge for large institutions to be ahead of schedule in this area, especially with the need to build and test their respective integrated granular reporting systems.

Do you support the continuing focus by ECB SSM on removing National Discretions to achieve a supervisory Level Playing Field?

As the market continues to grow and integrate, we are seeing more harmonisation between the risk profiles of markets in the various countries. Nonetheless, from the outset of Capital Requirement Directive IV (CRD IV), it was acknowledged that national differences do exist and this was catered for in the CRD/CRR framework. There have been good reasons for national competent authorities (NCAs) to exercise their discretions. Recently, the ECB has been seeking industry dialogue on this subject. In particular, the European Banking Federation (EBF) has been instrumental in coordinating consistent industry responses. The ECB does however have powers to impose Pillar 2 add-ons to offset any national discretion.

Do you see the ECB Internal Models Review as one of the next steps?

The ECB has made a courageous decision to review all 7,000 Internal Models under its supervision and previously approved by NCAs. Instead of an initial two-year timeline, the ECB is now planning to take up to four years to complete this task. This is not unexpected. Recently, we have seen a number of Standard Approach model revisions come through as a result of Basel. In some cases, the revisions have increased the complexity or sophistication of the models; in others, the models have been oversimplified.

With the Fundamental Review of the Trading Book, there remains a role for the Internal Model Approach against the Standard Approach as a floor. The Internal rating-based approach in Credit Risk will hopefully remain for the bulk of the portfolios.

Following the reviews and calibration in the coming years, we can expect to see the emergence of a middle ground level between the current or historic Internal Model weightings and the recalibrated Standard Models

ECB Stress Testing – do you see is it as a regulatory top down task?

Regulatory stress testing forms an integral part of supervision. Processes are improved every year to incorporate lessons learnt in the previous exercise. Most banks have no issues with incorporating the regulatory scenarios in their ongoing stress-testing programmes. In the United States, the process is slightly different: banks merely supply transactional data and the supervisor runs its own stress tests as well as concentration and sensitivity analyses.

Finally, what do you think the ECB SSM landscape will look like in the next three to five years?

Following the establishment of Basel III as well as the CRR and CRD enforced by the ECB SSM, the focus should now turn towards achieving consistency and calibration within a revised global framework (Basel IV). This framework could tackle unintended consequences in several areas including market making, liquidity, emerging markets and systemic risk. Projects such as the Capital Markets Union may start forming a counterbalance to the increasing volumes of financial markets regulation. It is important to note that the ECB SSM is merely one of many flagships on the European agenda. In the next few years, we will likely see an increased focus on Conduct and Governance developments, in line with a similar trend within the United Kingdom.







Chief Risk Officer, HSH Nordbank

Ulrik Lackschewitz

Ulrik Lackschewitz joined the German regional bank HSH Nordbank AG as Chief Risk Officer in October 2015. He previously held senior positions in various companies, including as Chief Operating Officer at Macquarie Securities Group as well as Head of Risk Management at Sal Oppenheim jr. & Cie and BFG Bank. He started his career at Citibank, and prior to his move to HSH Nordbank, was Group Head Financial and Risk Control at Nord/LB in Hanover. Ulrik completed his tertiary education at Sweden's University of Uppsala, graduating with an MSc in Business Studies and Economics.



EMPHASIS ON STRINGENT BANKING STRESS TESTS HAVE HEIGHTENED AS GLOBAL REGULATORS SEEK TO MINIMISE THE IMPACT OF FINANCIAL CRISES FOLLOWING THE LESSONS FROM 2008-2009. SOME HAVE ADVOCATED FOR A STANDARDISED 'ONE-SIZE-FITS-ALL' FOR ALL CREDIT INSTITUTIONS. IS THIS FEASIBLE IN A BANKING WORLD COMPRISED OF INSTITUTIONS OF DIFFERENT ORIENTATIONS AND SCALE? ULRIK LACKSCHEWITZ, CHIEF RISK OFFICER AT HSH NORDBANK AG, SHARES HIS VIEWS ON THIS ISSUE IN THIS INTERVIEW.

What is your view on regulatory stress tests in the United States, Europe and Asia? Is there a 'one-size-fits-all approach' for the different regions?

Every effort by banks and regulators to prevent a repeat of the 2008-2009 global financial crisis is crucial, regardless of where it occurs in the world.

These efforts include examining the stress resistance of banks and removing weaknesses that are detected. The structure of these stress tests do pose a formidable challenge. In this regard, a 'one-size-fits-all' approach which sets similar standards for all banks in a country or across the world seems inappropriate. The stress test conducted by the European Central Bank (ECB) in 2014 illustrates this. Large differences in underlying conditions among countries complicated a sensible interpretation and comparison of the test results.

Of greater significance, however, are the different banking business models. This cannot be properly taken into account under a highly standardised stress test regime. The 'one-size-fits-all' approach cannot adequately reflect differences in strategic focus, such as whether banks have a wholesale or retail orientation, as well as whether they have a greater orientation to the capital market, certain geographic regions or asset classes. The worst case scenario would be banks becoming inclined to adapt their market positioning to suit the 'one-size' stress test. This would inevitably lead to an assumption of increased system risk.

These constraints lend support to a stress test approach that caters to different business models, or in its widest form, tests

are tailored to individual banks. This would make it simpler for the regulator as well as the public to make an objective appraisal of the results while also preventing the misconception that a particular conclusion applies to all credit institutions. A conceivable idea would be a two-stage process. The first stage could consist of a carefully designed basic stress test by the regulator to assess banks' resistance to stress. This basic test can then be supplemented with bank-specific scenarios, resulting in a more accurate assessment of the particular institution.

Would you support the US stress test approach in the eurozone, where tests are conducted centrally by the regulator and banks only provide data?

It is impossible now to stem the trend towards central data pooling that we are seeing in the United States. In principle, I do support an approach where banks submit data to the regulator in a uniform manner. This method is prevalent not only in the US but also in Europe, to a varying extent. In southern Europe, traditionally more data than results are submitted to the regulator, which then analyses the information. There has been a similar trend in Austria recently, with the AuRep (Austrian Reporting Service). The system allows banks to supply and process data at the single transaction level. It also allows for greater flexibility in data delivery formats as well as ad-hoc analyses.

It would be prudent to ask if this can also be implemented in Germany, with banks sending data to the regulator for regulatory reporting rather than independently processing and interpreting it. In other words, it is quite possible to dispense with the self-generated regulatory reporting by banks under Pillar 1 and to replace it with this model. Traditional regulatory reporting requirements, however, are insufficient. The ECB stress tests go much further than what the national regulators have looked into so far. The ECB's Analytical Credit Datasets Project (AnaCredit), for example, shows how evaluation for business area and risk evaluation could be far more detailed and in-depth in the future. The basis for this would be the provision of granular credit data by the banks to the ECB.

In principle, the regulatory stress test can also be carried out centrally by the ECB based on banks' actual data requirements. Banks should be able to adhere to this as they move towards greater professionalisation of their stress testing capabilities – whether it is in uploading data or making their own calculations.

STRESS TESTS: CAN ONE SIZE FIT ALL?

Either way, Either way, it is important that the results reached by the ECB and the individual banks are interpreted in tandem, taking into consideration specific business models and banks' underlying model applications. Solely focusing on ECB-stipulated top-down or 'challenger' stress test models to obtain a quantitative assessment of a bank's liquidity position and capital base would be inadequate.

Do you subscribe to the opinion that a 'simple' Leverage Ratio and Stress Testing Framework can replace all the Basel I, II and III frameworks on capital requirements?

The answer is: definitely not! Naturally we are familiar with criticisms of the Basel framework, particularly its steadily growing complexity. However, criticism of the simplicity of the Leverage Ratio is also not diminishing. The Leverage Ratio is not risk-sensitive and if used in isolation could even lead to mismanagement. This is because risky transactions would require insufficient equity capital compared with low-risk transactions. The Leverage Ratio should therefore be treated as a minimum compliance standard rather than a wholesale replacement for risk-oriented rules. In this regard, the Basel efforts to dimension capital requirements adequately to cater for risk are to be welcomed and should be regarded as the target function, with the Leverage Ratio as a secondary condition.

The answer to the additional question of whether a set of stress tests could replace the Basel framework is not as simple, but ought basically also to be answered with a negative. The parameters set for the stress tests will always be arbitrary to a certain extent, which means their meaningfulness can be questioned. Even with the most stringent stress tests, there can be no guarantee that they will cover the most impactful events in a serious real-life crisis.

Even when the stress tests are suitably structured to be sensitive to risk, they are unsuitable for use as an isolated measure of regulatory capital backing. This means that banks and regulators can only have a comprehensive understanding of potential risks and determine appropriate levels of capital backing when there is a combination of various measures of risk and scenario analyses.

In stress tests on your shipping clients, do you consider force majeure events such as earthquakes, armed conflict or sudden commodity shortages that could have knock-on effects on the shipping industry and the global economy? The mentioned risks are taken into account in setting parameters in the specific stress tests, focusing on extensive past experiences. The potential impact in the aftermath of such events is reflected in both the forecasts as well as in the stress scenarios. These generally refer to macroeconomic parameters such as currency exchange rates, interest rates and oil prices. Industry-specific parameters such as ship prices and others that directly affect supply and demand are also taken into account.

For instance, armed conflict in the Persian Gulf or the Gulf of Aden could have a negative impact on important global trade routes used by international shipping. In contrast, there are examples of natural disasters that have had a positive effect on shipping. The devastating 2011 earthquake in Japan that saw the temporary phase-out of the use of nuclear energy resulted in considerable demand growth for the transportation of natural gas.

The growing scarcity or lack of raw materials tends to be politically motivated and does not constitute a shock event in the narrower sense. Estimates of this are regularly entered in the stress scenarios.

At what point do Stress Testing results become too sensitive to share with competitors in the public domain?

Confidence is the greatest asset to have in the money and capital markets. Regulators are often of the opinion that the transparency of undergoing stress tests can restore confidence lost by institutions during financial crises. While this may be true in principle, in some cases it may worsen the situation for crisis-hit institutions.

Publication of stress test results can harm a bank's future when they expose it to external market activities. A significant part of this impact would be future access or lack thereof to capital and liquidity in the markets. One example of this was the confusion surrounding the last stress test on the Franco-Belgian bank Dexia in the wake of a liquidation plan it had already adopted.

What can we expect from Liquidity Stress Testing by the ECB?

With the Liquidity Coverage Ratio (LCR), the regulator has already established a measure which focuses on the short-term liquidity risk of banks during the next 30 days and is to be determined as a stress scenario under the Basel III/Capital Requirements Regulation.

This provides the ECB, in the first instance, with information to enable it to compare the stress resistance of various banks. The Supervisory Review and Evaluation Process (SREP) however goes one step further. In what is probably the most important of the stress tests, it requires banks to take into account LCR requirements in their internal liquidity stress tests. The regulator is thus establishing a minimum standard while also taking into account special factors unique to various business models and banks.

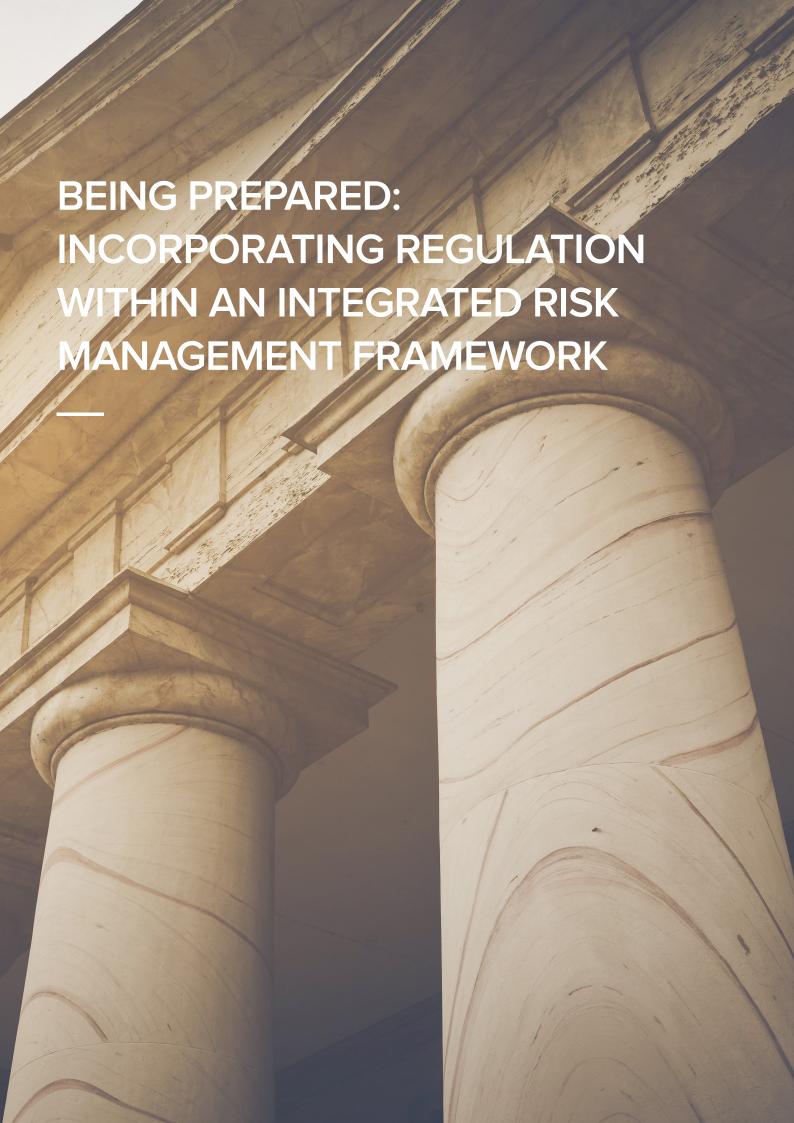
This essentially means that apart from the outcome of a standardised process, the test will also produce analyses specific to each bank. It is already evident that the regulator is including the results of the standardised LCR approach and of the individual bank's test in the SREP evaluation process. Looking ahead, we assume other standardised requirements will be developed, culminating in a regulatory liquidity stress test. It remains unclear whether the evaluation will be able to take into account bank-specific characteristics derived from its particular business model.

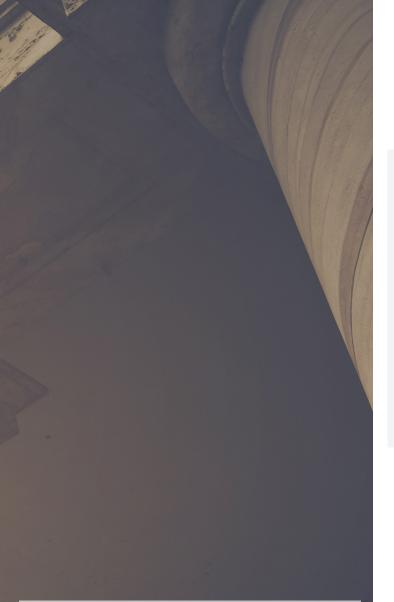
What are the main challenges in data gathering and usage in your approach to Internal Stress Testing?

Today, the framework for internal stress tests is concentrated on the economic management of the bank and encompasses every type of risk and aggregations across risk types. It provides the basis for business management measures. The challenges for further development in this area are substantial. This applies particularly to the requirement of having the most timely and valid management information. It is also challenging to comply fully with the supervisory claims resulting from the Supervisory Review and Evaluation Process (SREP) as well as to orientate the overall bank management and stress test framework to Pillar 1+. Very important extensions of this affect the reconciliation statements of risk and financial data linked to impact analyses of the stress tests on balance sheet, capital and P&L.

The timeliness and frequency of available stress test information are crucial conditions for the improvement of management capabilities both from a risk and financial perspective. This can be best achieved through automation. HSH Nordbank AG's own business administration requirements are actually identical to the expectations of the regulator. The Basel Committee for Banking Supervision formulates this requirement for data governance, data architecture, accuracy, completeness, timeliness, adaptability and

frequency in its paper "Principles for effective risk data aggregation and risk reporting" (BCBS 239). To achieve this stringent requirement, we are for example overhauling its heterogeneous IT infrastructure, orientating the bank to a central data platform that will significantly improve and expand its reporting, simulation and stress testing capabilities.







THE PAST TWO YEARS HAVE BEEN AN INTENSE PERIOD OF REGULATORY CHANGE, WITH THE INTRODUCTION OF THE SINGLE SUPERVISORY MECHANISM (SSM), ASSET QUALITY REVIEW (AQR) AND ECB STRESS TESTING REGIME. THIS REGULATORY FRAMEWORK HAS CREATED FRESH DEMANDS AND REQUIREMENTS — WHICH SOME BANKS HAVE FAILED TO MEET. REPLY SPEAKS TO VINCENT MAAGDENBERG, CHIEF RISK OFFICER AT ING NETHERLANDS, ABOUT HOW INVESTING IN ROBUST CREDIT RISK SYSTEMS PRIOR TO THE FINANCIAL CRISIS HAS PAID OFF FOR ING, AND HOW THE ORGANISATION CONTINUES TO SUCCESSFULLY EMBED NEW REGIMES WITHIN ITS INTEGRATED RISK MANAGEMENT SCHEME.

Looking back over the past two years, how would you describe the first experiences with the SSM?

Since 2014, the ECB SSM has presented a new method of supervision. The Banking Union was newly formed and we needed a new starting point from which to measure risk. The asset quality review (AQR) provided a data driven snapshot in time. This is now followed up with onsite inspections and increased data reporting requirements – the only way the 130 SSM banks can be supervised in a uniform manner.

In The Netherlands we used to have a culture of offsite supervision whereas, for example, a country like Spain employed onsite regulatory supervision. The mix of cultures and nationalities in the ECB teams has started to build a new regulatory *modus operandi* — of course, the ECB SSM is only a year old and its processes will need a longer period to mature. For most banks, this means that more time and effort is being invested in developing products, processes and portfolios.

To what extent is the data driven supervision a challenge? Can we integrate granular Risk and Finance data?

The ECB supervision is more 'top down' compared to the dialogue model that we were familiar with in the previous national regime. With the ECB supervising 130 institutions, this is a consequence of scale. Previously in The Netherlands, we had a national culture of open consultative dialogue (called the Dutch *poldermodel*), which is also commonly used when forming national collective labour



Vincent Maagdenberg

Chief Risk Officer, ING Netherlands

Vincent Maagdenberg took over as ING Netherlands Chief Risk Officer in November 2015, overseeing credit risk, market risk, operational risk, compliance and legal affairs. He was previously head of Risk and Capital Integration. Vincent has spent a great deal of his career in the ING Group, first starting in Amsterdam and Brussels working on credit risk modeling and portfolio management. He subsequently moved to ING Bank Structured Finance, and was based in Amsterdam, New York and London for this role. He returned to the Netherlands in 2009 to helm the credit risk operations of ING Insurance's Asian business. He also completed the Global Executive OneMBA Programme at the Rotterdam School of Management during this period. Vincent completed his tertiary education at the Erasmus University, reading econometrics.

BEING PREPARED: INCORPORATING REGULATION WITHIN AN INTEGRATED RISK MANAGEMENT FRAMEWORK



agreements. In The Netherlands, and at ING, we always want to understand the deeper issues and concerns behind the questions being asked and data requested. What are the underlying worries here? How can we address these?

Can we integrate granular Risk and Finance data?

The Finance-Risk integration process in banks is progressing through projects such as BCBS 239 and IFRS 9 – this is a positive development. ING invested in granular credit risk systems prior to the global financial crisis and this has now paid off. We were able to address the AQR questions and complete the stress test without any help from external parties. Our credit risk system is able to 'slice and dice' through all business unit layers. However, the financial ledger is organised from the bottom up through layers of consolidation, while within Risk that data comes directly from the source to the consolidated level.

With the rapid rate of change and increased focus on supervisory data reporting, could the ECB perhaps be 'crowding out' internal risk management innovations?

Despite the increase in ECB supervision there is still the need for internally-driven risk management innovation. This can go hand-in-hand with new regulatory developments. The way we manage risks is changing — stress testing is the new risk management. In this way, we are seeing greater synchronicity between regulation and companies' internal approaches to risk management. For example, our 'what ifs' are much more important now than static historical indicators, and we need to act on those potential outcomes now rather than defer decisions until a later date.

Looking back at the ECB Stress Test, how challenging was it to comply with the expectations?

At ING, we have spent time over a number of years educating and consulting the various senior managers. We need to understand the nature of the underlying concern in order to truly address it. Internally, we ask 50 of our senior managers each year what their main concerns are in our Risk Assessment – is it the euro? Greece? Interest rates, or maybe oil? We assess likelihood and impact and use a boilerplate technique to test these. Within our Risk Committee we agree on the best scenarios that measure the impacts of these concerns. This takes place in the year, making the

stress tests a management feedback loop for the rest of the year. This forms a full circle embedded... stress test regime rather than ad-hoc industry wide scenarios.

After the various Comprehensive Capital Analysis Review (CCAR), Prudential Regulatory Authority (PRA), European Banking Authority (EBA) and European Central Bank (ECB) efforts at various intervals, is there such a thing now as industry fatigue for regulatory stress tests?

Not really. At ING we simply added regulatory stress tests to our integrated framework. It is good to include peer analysis in the exercise. The impacts of last ECB stress tests were relatively small for ING, which helps to demonstrate that we can better absorb a shock within our portfolio than many of our peers.

Is there a one-size-fits-all data mould for all banks in all countries?

Expert judgement continues to be required in internal governance and supervision – we cannot solely rely on data. At times there are not enough data points when it comes to modelling. Expertise is also needed when interpreting the data produced by the banks under supervision. There is always a story behind the numbers. We understand that National Discretion is high on the ECB's agenda; however, this will need more time to be addressed, especially in the retail markets. The ECB SSM has been in place for just under one year now, and a true level playing field process will need to follow from a multi-year plan.

How have you taken the ECB AQR experiences across to your role as CRO of ING Netherlands?

When moving on to become the CRO of ING Netherlands, we applied many of the lessons learnt through our ECB relationships – for example, the manner of interactions and the onsite inspections. There has been a cultural shift there. One of the key lessons learnt is to proactively share news and updates with the Joint Supervisory Team (JST). For example, ING has invested considerably in our relationship with the Dutch Authority for the Financial Markets (AFM), and this dialogue is working well now. We are trying to transpose that model of openness and transparency to the ECB relationship. Building up a track record like we have done with AFM will undoubtedly take time before it can come to fruition. We still have to prove ourselves here.

Management of Conduct Risk is such a crucial element in regaining trust in the sector. However, there should be clarity on who will provide the regulatory guidance: the ECB or the AFM? The recent Volkswagen case demonstrates that this topic is not straight forward and affects industries beyond the financial sector. Merely deploying capital requirements to address Conduct Risk is not the answer.

With such a rapidly changing world economy, are we focusing too much on historical data?

At the moment a lot of data is being requested. We are not always sure how the dots are connected, what type of analysis is run on the data, and so on. To avoid overload we need to agree on uniform reporting in agreed templates. The receivers of the data have to be able to process it in order for it to be of value.

With 2014 having been such an intensive year of AQR and SSM start-up, do we see any chance of a slowdown now and more of a dialogue forming?

Not really, no. I do not see a slowdown at the regulatory front — we are now facing total loss-absorbing capacity (TLAC), leverage ratio, SA capital floors, interest rate risk in the banking book (IRRBB) and the Fundamental Review of the Trading Book (FRTB), to name a few. We do wonder where the 'regulator of the regulators' is here. Who is adding all these initiatives up? In the end, the G20, Basel, European Commission, Dutch MinFin and Financial Stability Board should be pursuing the same objectives. We would perhaps need another consultation process — to assess whether we have achieved the goals here, and whether new requirements are simply addressing old concerns.

Also, in the ECB SSM Model Quality Review (MQR), we see no slowdown. We understand that 7,000 models will need to be assessed in a large stocktake exercise. It has to happen though, or else there will be too much doubt about Risk Weighted Assets being used as the Common Equity Tier 1 denominator. The Standardised Approach for all would be a deterioration as the assessment needs to remain risk sensitive.









RISK INFORMATION TECHNOLOGY (RISK IT) HAS BECOME A KEY COG IN 21ST CENTURY BANKING, REGARDLESS OF GEOGRAPHIC LOCATION OR INSTITUTIONAL SIZE. THE PRESSURES ON BANKS' RISK IT TEAMS ARE TREMENDOUS AS THEY DEAL WITH FAST-CHANGING REGULATORY AND BUSINESS DEMANDS. IT IS CRITICAL THAT FINANCIAL INSTITUTIONS HAVE THE NECESSARY RISK INFRASTRUCTURE IN PLACE TO ACCOMMODATE THEIR BUSINESS STRATEGY.

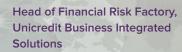
INDUSTRY VETERAN FILIPE TEIXEIRA DRAWS ON YEARS OF EXPERIENCE IN THE RISK INFRASTRUCTURE FIELD. HE IS NOW HEAD OF FINANCIAL RISK FACTORY FOR UNICREDIT BUSINESS INTEGRATED SOLUTIONS (UBIS), WHERE HE IS RESPONSIBLE FOR MARKET RISK, COUNTERPARTY CREDIT RISK, STRESS TESTING IT TOOLS AND IT SOLUTIONS. PREVIOUSLY, HE WAS A CONSULTANT IN THIS AREA AT AVANTAGE REPLY. IN THIS INTERVIEW, FILIPE SHARES HOW HE IS FACING UP TO THE CURRENT CHALLENGES AND SEIZING NEW OPPORTUNITIES ON THE HORIZON.

What do you think are the key challenges that Risk IT has to respond to?

Banks in general are currently facing a number of simultaneous challenges that risk systems need to address. The first is the very market in which we operate. The low interest rate environment affects both the industry and the real economy, not least in terms of profitability.

The other big issue, which should be familiar to your readers, is the 'continuous wave' of regulation. New regulatory requirements are being driven at every level — by the Basel Committee internationally, and by the European Commission, the European Banking Authority and the European Central Bank in Europe. Meanwhile at the national level, domestic regulators are continuing their supervisory roles in the areas of prudence and conduct. The demands of these regulators are also not stable. As we have seen in some of the regulatory reporting requirements — such as stress testing — the specifics can fluctuate and become increasingly demanding.





Filipe Teixeira is Head of Financial Risk Factory for Unicredit Business Integrated Solutions (UBIS). In this role, Filipe is responsible for financial risk information technology (IT) solutions for the Unicredit Group. He has nine years of experience in risk management and Risk IT solutions in British and continental European financial markets. In addition to these areas, Filipe specialises in Risk IT architecture, high performance computing solutions, risk management, capital management as well as the implementation of regulatory processes.

RISK IT IN A BRAVE NEW WORLD



The third big challenge, in many ways specific to our sector, is the expectation from the industry to cover a greater range of asset classes.

Overall, this trio of challenges is putting immense demands on the Risk IT function.

How have you dealt with these challenges at Unicredit?

Like the rest of the industry, Unicredit has significantly invested in our risk infrastructure capabilities over the last four to five years – this includes a significant budget and human resource effort. At this juncture, the industry as a whole is trying to find the equilibrium between two equally important objectives. The first is the faster response time of solution delivery to business requests – we are trying to improve the 'time to market' from a Risk IT point of view. Secondly, we are trying to ensure that our solutions support the bank's overall business strategy, while also remaining cost effective.

In my view, the best way to achieve this equilibrium is to work closely with both the business and the risk sections of the Bank. We need to define our IT strategy to be highly responsive to the needs of both functions. Being a part of these strategic decision-making conversations reduces the likelihood that we will have to 'firefight' unexpected situations later on. It enables us to be well prepared and a lot more agile and responsive. We are now better able to deliver cost-efficient solutions, and be an integral part of the macro vision of the bank.

This key involvement of the Risk IT function in the central decision-making process represents a sea change in our organisational standing. We have become key partners in the shaping of business and risk strategy. This is emblematic of a greater maturity within the organisation and signifies the value we bring both to the business and to risk.

Unicredit has been lauded for its adoption of cutting edge technologies, including in areas like high performance computing and the management of Big Data. Could you comment on the opportunities that exist in this space?

I will answer your question in two parts. Firstly on high computing technology – it is now an essential capability in Risk IT. In this way, we are greatly supported by the solutions that providers have brought to us. Some of these solutions were not designed with the banking industry in mind, but the providers are adapting them for our needs while also taking industry-specific legal constraints into account. Cloud computing is one such example. There are certainly limitations in these technologies – such as legal constraints – but overall we can leverage on them to achieve better performance in a more cost-efficient manner.

Secondly, on the use of Big Data. We are increasingly using Big Data technologies to handle some of our market risk and counterparty credit risk-related stress-testing challenges. We are not working with Big Data per se, but we are using related technologies for our own purposes amid the ever-rising amount of data that the business and regulators are expecting us to handle.

One form of technology that seems to be on the ascendance is the blockchain, which underpins digital cryptocurrencies like Bitcoin. The Economist recently published a detailed article about this technology, discussing its potency as a public ledger that "everyone can inspect, but which no single user controls". For instance, Bitcoin's participants collectively keep its blockchain ledger up to date, and can only make changes according to strict rules and by consensus. The article notes that Bitcoin's blockchain system prevents double spending and continuously keeps track of transactions. Essentially, it allows for a currency to exist without a central bank.

We are now seeing a much wider interest in the technology beyond Bitcoin – as they satisfy the need for a trustworthy record, blockchains have the potential to be used "for transactions of every sort". The Economist described this as 'bad' for anyone in the 'trust business', including banks, governments and clearing houses. It also mentioned that 25 banks have joined a start-up called R3-CEV to develop common standards so as to use blockchain technology widely in the industry. What are your views on this development? Is this technology welcomed by those within the IT Risk space?

.

You certainly have done your homework! In fact, Unicredit is one of the 25 banks that have joined the start-up you mentioned. The consortium is working on a framework for using blockchain technology in markets. As we know, Bitcoin has previously had something of a shoddy image that has caused people to overlook the extraordinary potential of the technology that underpins it. We can see this image rapidly changing. In fact, in the article you mentioned, blockchains were described as "a machine for creating trust".

The fact that the technology was front-page news in *The Economist* urges that it needs to be taken seriously and explored. The French financial publication *L'Agefi*, also recently featured as the front-page story: 'Blockchain: the next revolution'. So on the Continent, as well as in the UK and the USA, we are seeing prominent media coverage of this technology. The topic certainly has traction at the moment.

Of course, the blockchain is not the only new area we should keep an eye on. But it is clearly a potential innovation that we should look into to be able to better service our clients as a risk IT function. It is a very interesting development for our industry indeed.





Avantage Reply (Amsterdam)

The Atrium | Strawinskylaan 3051 1077 ZX Amsterdam Netherlands

Tel: +31 (0) 20 301 2123 E-mail: avantage@reply.com

Avantage Reply (Brussels)

5, rue du Congrès/Congresstraat 1000 Brussels Belgium

Tel: +32 (0) 2 88 00 32 0 E-mail: avantage@reply.com

Avantage Reply (London)

38 Grosvenor Gardens London SW1W 0EB United Kingdom

Tel: +44 (0) 207 730 6000 E-mail: avantage@reply.com

Avantage Reply (Luxembourg)

46A, avenue J.F. Kennedy 1855 Luxembourg Luxembourg

Tel: +352 26 00 52 64 E-mail: avantage@reply.com

Avantage Reply (Milan)

Via Castellanza, 11 20151 Milano Italy

Tel: +39 02 535761 E-mail: avantage@reply.it

Avantage Reply (Paris)

5, rue des Colonnes 75002 Paris France

Tel: +33 (0) 1 71 24 12 25 E-mail: avantage@reply.com

Avantage Reply (Rome)

V.le Regina Margherita, 8 00198 Roma Italy

Tel: +39 06 844341 E-mail: avantage@reply.it

Avantage Reply (Turin)

Via Cardinale Massaia, 83 10147 Torino Italy

Tel: +39 011 29101 E-mail: avantage@reply.it

Leadvise Reply (Darmstadt)

Rheinstrasse 19-21 64283 Darmstadt Germany

Tel: +49 6151 6274 118 E-mails: xuccess@reply.de

Xuccess Reply (Frankfurt)

Hanauer Landstrasse 184 60314 Frankfurt am Main

Germany

Tel: +49 (0) 69 669 643-25 E-mail: xuccess@reply.de

Xuccess Reply (Hamburg)

Brook 1 20457 Hamburg Germany

Tel: +49 (40) 890 0988-0 E-mail: xuccess@reply.de

Xucess Reply (Munich)

Arnulfstrasse 27 80335 München Germany

Tel: +49 (0) 89 - 411142-0 E-mail: xuccess@reply.de

The BCBS 239 (Is There A Glide Path?) - Monday 7th December, 17:45. Conference speakers:



Oleg Lebedev, Partner, Avantage Reply



Stéphan de Prins, Associate Partner, Avantage Reply



Stefan Weiss, Senior Manager, Xuccess Reply

We hope to see you also on the stand n°12!

Key Contacts:



Frederic Gielen, Partner, Avantage Reply



Oleg Lebedev, Partner, Avantage Reply



Paolo Fabris, Partner, Avantage Reply



Sebastian Fritz-Morgenthal, Partner, Leadvise Reply



Stéphan de Prins, Associate Partner, Avantage Reply



Nicolas Pavlovitch, Associate Partner, Avantage Reply



Arnold Veldhoen, Associate Partner, Avantage Reply



Stefan Weiss, Senior Manager, Xuccess Reply

Editor disclaimer: The information and views set out in this journal are those of the authors and do not necessarily reflect the official opinion of Avantage Reply. Avantage Reply does not guarantee the accuracy of the data included in this journal. Neither Avantage Reply nor any person acting on its behalf may be held responsible for the use which may be made of the information contained therein.

