



13TH EDITION

INSURANCE INSIGHTS

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SURVEY BY ORIC INTERNATIONAL AND OLIVER WYMAN

INTRODUCTION

Welcome to the 13th edition of our EMEA Insurance Insights.

I am delighted to present an interview with Maria Bianca Farina, CEO of Poste Vita Group. Maria Bianca speaks about the impact insurers can have in the economic and social environment, the need to adapt to the advances of the digital revolution and the business priorities for Poste Vita over the next few years. In this interview Maria Bianca also shares her experiences from her own successful career. This insight is also echoed in our recent report *Women in Financial Services – From evolution to revolution: The time is now*.

Looking across the breadth of articles in this edition, two themes particularly stand out: change and opportunity. Now is one of the most exciting times to be part of the insurance industry. Insurers play a critical role in society and the broader economy and while they are facing an environment of tremendous change - pressures from regulators, a completely new wave and type of competition, rapidly evolving customer needs in a low interest rate, low growth environment – there is also no shortage of opportunity. For example, digitalization is offering a level of customer insight and interaction never thought possible. Insurers are at an inflection point where they are facing the necessity and the chance to transform not in specific segments but across all areas of the business from their value proposition, their ability to attract and retain top, diverse talent, on capturing and using data and analytics, on risk strategy – to name just a few!

We are working with leading clients who are actively engaging with this opportunity, responding ambitiously and reinventing themselves externally and internally. This takes courage and vision, and it is a privilege to be part of this.



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A CONVERSATION WITH
**MARIA BIANCA
FARINA**

CEO, Poste Vita Group



OLIVER WYMAN: *Maria Bianca, thank you for taking the time to be interviewed for our Insurance Insights. What role can insurance companies play in the current economic and social environment?*

MARIA BIANCA FARINA: I think nowadays and maybe even more so in the future, insurance companies will play a crucial role in the economic growth of all industrialized countries and especially in Italy in maintaining welfare.

In the past few years, we have witnessed a profound transformation of our society, with an ageing population, the economic and social crisis, ongoing deficit reduction. This change further emphasizes, in my opinion, the role that insurance companies should play in our modern society.

We cannot count anymore on many of the economic safety nets and safeguards we once had such as stable employment and confidence in savings or the public pension system. This has unfortunately fuelled uncertainty among our citizens, who are now personally taking on responsibilities to put their own provisions in place.

I think our challenge as insurance providers is to make the public aware that protection is indispensable. We as insurers can offer solutions to the Country's problems, which the market and our society can no longer afford to ignore.

Indeed insurers can actually play an active role in the "welfare mix" strategies, by offering coherent services and products, designed to provide answers to the problems of contemporary society in areas such as supplementary pensions, healthcare, savings, and economic stability. Italians must start – as many already have – to see the insurance sector in a different light.

Insurance companies can integrate public services, as far as welfare is concerned, by providing appropriate and innovative solutions, together with the new technologies and with the emerging needs of our customers.

“ I think our challenge as insurance providers, is to make the public aware that protection is indispensable. We can offer solutions to the Country's problems, which the market and our society can no longer afford to ignore. ”

“Living in a digital world we have to adapt to the advances of the digital.

We want to ensure our products continue to evolve to meet the market demands and the needs of our customers by providing application and services through the online environment and supported by digital devices.

OLIVER WYMAN: *What is the contribution that the Poste Italiane believes it can bring to the Italian insurance market?*

MARIA BIANCA FARINA: The Italian insurance market, given its size and evolution of the industry, shows low levels of insurance-coverage penetration (with the only notable exception given by the mandatory car insurance – RC Auto services). For example, according to recent ANIA¹¹ data, home insurance in Italy (given that houses are historically the most valuable assets of Italian families) is only present in 31% of households, compared to an EU average of about 70%. This is in spite of a yearly house-related out-of-pocket expense that is around €1,300 per family, not to mention healthcare.

Every year Italian families spend some €1,150 on healthcare (17.8% of total healthcare expenses compared to the EU average of 13%). But these costs will increase, given the ageing population and the reduction of government-sponsored medical care.

In other words, we are an extremely under-insured Country. Therefore Italy often has to use savings that could instead be used otherwise.

Nevertheless, I am convinced that with its strong homegrown roots and customer trust, Poste Italiane can raise awareness about the issue of insurance protection to its 30 million customers. We could really be the leader to drive this dramatic shift, and raise Italy up to the European standards for insurance coverage.

With this in mind, our Group is ready to tackle this growing demand for protection with the latest insurance products. We want to offer products that are capable of meeting our customers’ daily needs, in terms of income support, assistance and healthcare.

In fact, we have developed a program which we have been promoting for some time on supporting supplementary welfare, offering “social-security” products, assistance products, healthcare, and lifestyle protection.

Furthermore, all this is in line with the values of our company and the Group we belong to, in order to meet new insurance needs ever more so because of the economic crisis. We want to contribute to the spread of insurance coverage for Italian families and companies.

OLIVER WYMAN: *What impact is the reduction of interest rates having on the Group, and what actions did you undertake to respond to the situation?*

MARIA BIANCA FARINA: Yields on bond markets have set new lows according to an almost-unanimous consensus among economists, who predict these current levels will continue for some time. This is due to growing liquidity, to the long-awaited “Quantitative Easing” by the European Central Bank, and to the persistence of a more positive climate toward the debt of ‘peripheral’ European countries.

Our Group has made profitable investments in the past few years, and we are confident that our portfolio will be resilient against the inevitable dilution of the new financial flows.

1 Associazione Nazionale fra le Imprese Assicuratrici (National Association of Insurance Companies) – www.ania.it

However, for some time now, our Group has been diversifying its asset allocation into assets that are more suitable for the new market environment and have been selective in how we increase the exposure to the real estate market, to alternative investments, and, above all, on investing in multi-asset strategies. The latter are managed in a way that offers exposure to assets not present so far (or represented sporadically in our portfolio) but still granting the flexibility to redirect allocation choices efficiently.

Another initiative we have also put in place has been to reduce the guaranteed minimum rate on new policies, which is currently 0.5% to mitigate the effect of the fall in interest rates. I believe the results from all these initiatives will provide our customers with stable returns over time.

OLIVER WYMAN: *What are your business priorities in the medium term?*

MARIA BIANCA FARINA: As far as life insurance is concerned, we will keep promoting traditional products that, in a difficult time like this, prove to be particularly appreciated by all our customers who want minimum guarantees.

At the same time, we are enriching our product range in order to offer appropriate solutions to those customers who can afford to take on slightly greater risks. We have just launched a new multi-target product in collaboration with specialised financial partners.

As far as the non-life insurance market is concerned, we have several initiatives underway aimed at developing a market that, as I mentioned before, is almost non-existent.

In recent months, we have started new projects that involve distribution, promotion and new services for customers and network. We focus on our network's specialisation and training. We look at the evolution of our clients' needs when developing a new offer.

For example, the "Posteprotezione Dal Mondo" is an accident and assistance insurance policy we have designed for foreigners residing in Italy.

We also have new products in the pipeline aimed to serve the families, who are our main customer group, which will focus on two primary assets: home and healthcare.

Living in a digital world we have to adapt to the advances of the digital. We want to ensure our products continue to evolve to meet the market demands and the needs of our customers by providing application and services through the online environment and supported by digital devices.

OLIVER WYMAN: *Conduct and mis-selling issues are a priority for all European regulators. How do you relate with the large network of the Italian Post Office on themes such as sales quality?*

MARIA BIANCA FARINA: The training of our staff and the quality of the sales we provide are two areas of focus we have invested with time and resources in. This attention has also grown fast subsequently to industry

“The passion for my job and a good dose of determination have always supported me, and led me to put forward innovative ideas and create new boundaries.”

regulations on the topic². We have the strong support of our Group leader and we have created an educational training program in the insurance and technical-operation fields. This training program is aimed at knowledge development and effective (constantly evolving) customer-communication skills and thousands of employees at Poste Italiane, across all levels, regularly undertake this training. We also have a hotline that is fully dedicated to the assistance of our employees.

OLIVER WYMAN: *The insurance world is still largely dominated by men. Was it difficult for you to grow professionally in this environment as a woman?*

MARIA BIANCA FARINA: This may come as a surprise but, contrary to what many might think, I have never actually had to overcome great obstacles or anything different from what my male colleagues have to deal with. The passion for my job and a good dose of determination have always supported me and led me to put forward innovative ideas and create new boundaries. I was able to overcome the difficulties I encountered and sometimes even with very encouraging outcomes, because I have always firmly believed in my work.

It takes tenacity and determination to move forward without hesitation even during difficult times and to find the courage to accept great challenges – which I always saw as opportunities – to strive for innovation and to be able to keep believing in the goals that I had set for myself.

I have never had any gender-related problems and I am lucky in my personal life because my family have always supported me in my choices; this has certainly helped me in my career.

Women should be more trusting of their own decisions and intuition and shouldn't be afraid to be out of their comfort zone. Also, people should embrace the power of diversity: different perspectives and opinions are an effective means of fostering cohesiveness.

OLIVER WYMAN: *The projects that you have presented have been both innovative and challenging. How do you find the time and energy to play your role as a leader?*

MARIA BIANCA FARINA: I really believe in the power of determination driven by passion and commitment.

I have always considered the insurance business as one that can have significant impact on social values and that is why I like to think that my work can make a difference, making the lives of Italian families better.

I believe this strong motivation is what pushes me to perform the best interpretation of my role, every single day.

² See "Regolamento 5" of ISVAP, 2006



POSTE VITA S.p.A.

Founded in 1999, Poste Vita S.p.A., the life insurance company of Gruppo Poste Italiane, became No.1 Italian insurance company in terms of GWP (EUR15.4 billion in 2014) in 2010, confirming this top position in the following years.

In 2010, with the creation of Poste Assicura, the non-life insurance company, Gruppo Assicurativo Poste Vita was born.

Poste Vita manages more than 77 billion euro in technical provisions, it has 3.1 million clients and has sold 5.9 million insurance covers (data as of December 31, 2014).

In 2014, with more than 710,000 subscribers to the individual pension plan, Poste Vita beats all its competitors to become the absolute Italian leader on retirement plans.

MANAGING COMPLEXITY

THE STATE OF THE FINANCIAL SERVICES INDUSTRY 2015

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EXECUTIVE SUMMARY

During the nearly two decade bull run in financial services, from the 1988 peak in interest rates until 2006, banks and insurers became larger and more complex. They increased the number and sophistication of products they offered, added new channels (such as phone and internet) and often expanded internationally. This increased their revenues. But their costs increased at the same rate. Although absolute profits grew, the productivity of financial sector firms has not improved since 2001. And, as we now know, risk grew too.

Since the crisis, ultra-low interest rates and new regulations aimed at limiting risk have reduced the revenue accruing to the increased scale, scope and sophistication of financial firms. But the elevated costs remain. Average returns of large financial firms have fallen from over 20% in the early 2000s to 7% in 2013, the level of utilities companies.

The post-crisis “efficiency imperative” is well recognised. But financial firms are failing to turn themselves around, apparently overwhelmed by their own complexity. Market valuations and analysts’ forecasts reflect scepticism about the prospect of profit growth at banks and insurers.

We surveyed our clients, asking them to rank sources of complexity in their businesses. They identified five important sources: regulation, channel proliferation, systems fragmentation, product proliferation and geographic expansion. These factors do more than drive up operational costs. They cause opacity which undermines decision making and dilutes the influence that managers can exert over the various parts of their firms.

Some financial institutions have reduced their complexity, for example, by shutting down unprofitable foreign operations. But eliminating complexity completely is not an option. Economies of scale, risk diversification, technological advance and ongoing globalisation require financial firms to sustain a large number of diverse customers, to whom they offer many products through a range of channels. To restore profitability, banks and insurers must become better at managing complexity.

Five measures can reduce the costs of complexity while retaining its benefits:

1. Use common metrics, available to all decision makers, to develop **self-knowledge** of the financial institution and its customers
2. Use **advanced statistical analysis** to make tactical decisions involving increasingly complex trade-offs, drawing on the explosive growth of information created by in-house data systems and social media
3. Automate or **standardise** core processes, taking advantage of rapid advances in technology
4. **Delegate** decision making to those closest to the subject matter who therefore have the best information
5. Build a strong **corporate culture** that supports consistent conduct standards without the need for micro-management.

These changes will take several years and (at least) tens of millions of dollars of investment and senior executives’ time. But it must be done to increase the institutional bandwidth and flexibility. Risk-taking firms that depend on private capital cannot survive while returning 7% per annum.

1. INTRODUCTION

Financial institutions are huge and complex organisations. Even a “tiny” bank or insurer has assets worth hundreds of millions of US dollars. Many have assets in the hundreds of billions. They commonly have tens of thousands of employees, working in hundreds or thousands of locations, often spread across many countries. They can have millions of customers to whom they provide hundreds of products and services through a growing variety of channels.

Supervisory agencies are concerned about this complexity because it obscures the risks being taken by individual institutions and their potential to create systemic instability. They doubt executives’ ability to manage risks in the face of such complexity.

Shareholders should also be concerned. Since the financial crisis, the average return of large financial institutions in Europe and the US has fallen to about 7%, the level of utilities companies. New regulatory burdens are part of the reason – higher capital and liquidity requirements and more stringent customer protection rules. But a failure to manage complexity is another reason.

During the nearly two decade bull run for financial services, from the 1988 peak in US interest rates to 2006, financial firms increased revenues by increasing the scale, scope and sophistication of their businesses. But this also added complexity and the risks and operating costs that come with it. The post-crisis regulatory and business environment has reduced the benefits of this complexity but left financial firms with the costs.

Despite advances in technology that firms in other industries have used to improve efficiency dramatically, financial firms have made no productivity gains since 2001. The complexity of financial firms means that senior managers cannot “get a grip” on them. They cannot understand them well enough to make the right decisions, and their influence over outcomes is diluted.

Some are working to simplify their business models, most obviously by withdrawing from certain lines of business or foreign markets. But simplification cannot provide the whole answer. A large bank or insurer will always be a complex business, with many customers, products, channels and staff. Economies of scale, risk diversification and continuing globalisation require it.

Complexity is an unavoidable fact of life for financial firms. They must get better at managing it.

And they can. Financial services firms are not alone in dealing with this challenge. For example, supermarkets, energy firms and airlines face many of the same sources of complexity. Over recent years they have made great progress in managing them successfully. Financial firms can learn from their counterparts in these industries. By using data better, standardising processes and delegating within a strong corporate culture, they can reduce the costs of complexity while reaping its benefits.

2. THE PROBLEM

Over the two decades prior to the global financial crisis (GFC), returns in the financial services industry were similar to returns in other industries and often higher. Since collapsing in the GFC, the returns of financial firms have recovered, but not to pre-crisis levels, nor to the level of other industries (see Exhibit 1). Returns in the healthcare sector average 16%; in technology, they average 18%. Financial services returns now hover around the 7% average of utilities.

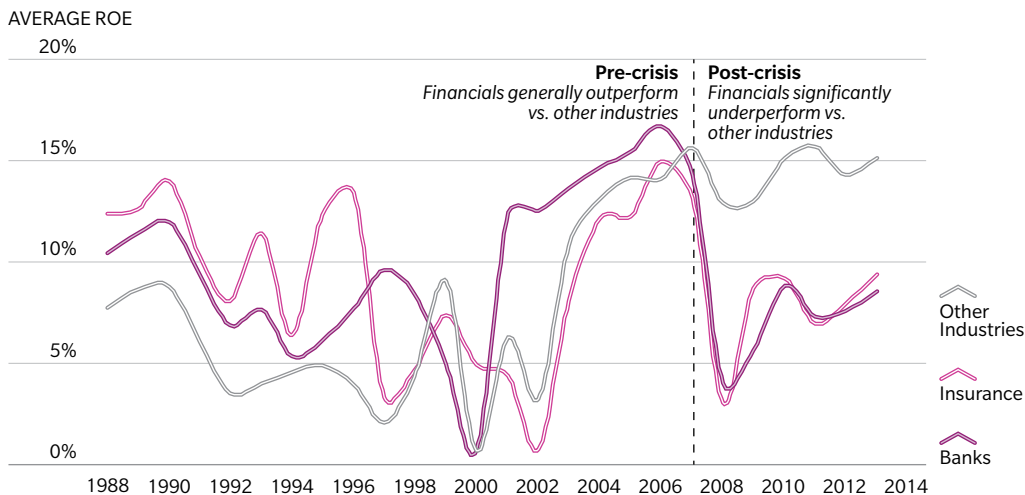
The largest banks have suffered most. Returns of the 8 American and 16 European banks designated GSIBs (global systemically important banks) have declined by 70% since 2006. Increased capital requirements are part of the reason but more important is margin compression caused by ultra-low

interest rates in the US, UK and Eurozone. These low rates have also caused a sharp decline in the returns of life insurers, with their structural exposure to long-dated government and corporate securities.

Prior to the crisis, scale gave an apparently huge advantage, with these large banks returning 31% on tier one equity in 2006 compared with 19% at smaller banks. Now the GSIBs are returning 6% while the rest are averaging 7%.

With capital and liquidity regulations and interest rate policies working against financial firms, management are under pressure to improve operational efficiency. Companies in many industries have made large efficiency gains by taking advantage

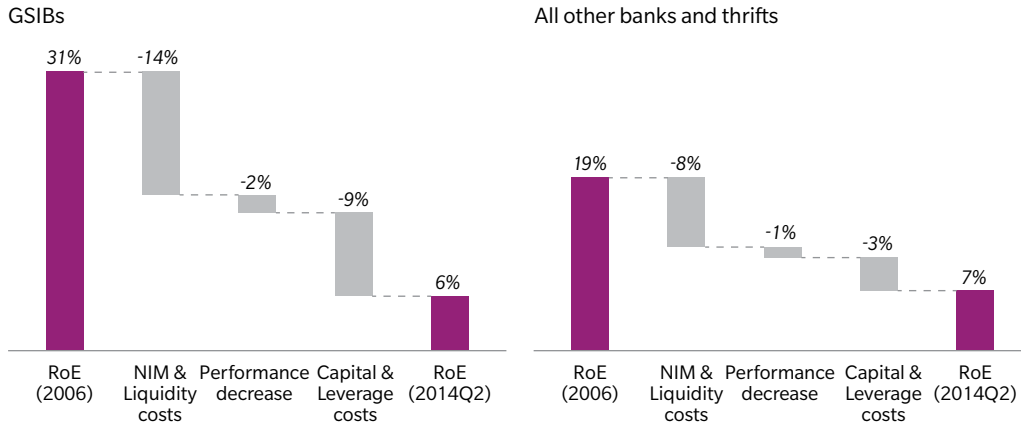
Exhibit 1: Return on Equity (RoE) – Financial Services vs. non-financial sectors, 1988-2013



Source: Thomson Reuters Datastream, Oliver Wyman analysis.

Note: Return on Equity (RoE) is defined as total earnings from continued operations divided by average total equity for the year, where average total equity is estimated taking year-end total equity values for year of reference and previous year. All firms in our sample are drawn from the S&P 1200 index. Other industries sector includes Automotive, Industrials, IT/Tech and Telecoms firms and excludes Energy and Materials, Consumer Goods, Utilities and Real Estate companies.

Exhibit 2: Breakdown of RoE decline, 2006-2014Q2



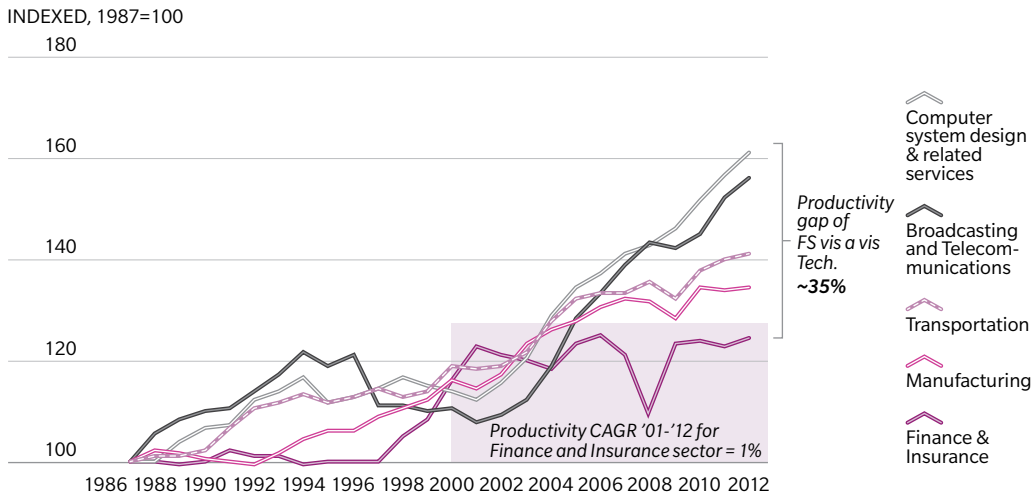
Source: SNL, Oliver Wyman analysis.

Note: RoE is measured as Return on Average Tangible Common Equity to provide accurate breakdown of the decline. Bank returns have been adjusted ceteris paribus and then applied proportionally to the overall decline. Global systemically important banks (GSIBs) consists of the 8 US & 16 EU GSIBs and their key predecessors. All other banks and thrifts consists of >1000 banks. Where 2014Q2 data is unavailable, YE13 results have been used.

of advances in information technology to reduce labour and energy costs. By contrast, the financial sector has made almost no efficiency gains since 2001 (see Exhibit 3).

As financial services revenues exploded from the late 1990s to 2006, so did their operating costs – primarily their labour costs and purchased business services.

Exhibit 3: US multifactor productivity by sector, 1987-2012



Source: Bureau of Labor Statistics (US Department of Labor), Oliver Wyman analysis.

Note: US multifactor productivity is calculated using a Tornqvist chain index where labour costs, capital costs, energy, materials & purchased business services are used to calculate value added output. Financial value-added output measures are adjusted upward by ~10% to ensure conservatism within estimates.

Investors now doubt financial firms' ability to meet their own targets. We compared the 2016 RoE targets of 25 large banks with equity analysts' forecasts. The banks' targets imply aggregate earnings of US\$250 BN. The analysts' forecasts imply earnings of US\$220 BN. Drilling down, the US\$30 BN difference hinges on expectations about operating cost reductions: The analysts expect 15% while the banks promise 20%.¹ Given banks' recent performance on operational efficiency, even the analysts may be optimistic.

Similarly, analysts and investors doubt insurers' ability to lift earnings above their cost of capital. Following the crisis, many insurers saw their market-to-book ratios decline sharply, from around 2 to 1 or even lower.

Why are the senior managers of financial institutions failing to improve efficiency? One important explanation is complexity.

Banks and insurers are typically vast enterprises with many and varied parts. They have assets and liabilities in the hundreds of billions or even trillions of dollars. They have hundreds of thousands or even millions of customers – young, old, men, women, rich, poor, corner stores, multi-national corporations, and everything in between. They have hundreds or even thousands of products, which they sell and service through a variety of channels. They have tens of thousands of staff, with very different roles and backgrounds. And they operate over large geographic areas, often in many countries and, hence, under many jurisdictions and regulatory agencies.

The financial services boom that ran from roughly the late 1980s through to 2006 (with occasional disruptions) was achieved in part by expanding in ways that made financial firms more complex, especially in their jurisdictional scope, product offerings and risk exposures. And the response to the crisis has done little to reduce this complexity, making many banks yet bigger (via the government sponsored takeovers) and further complicating the regulatory environment.

This complexity creates opacity that impedes decision making. Central managers cannot understand all of the products their firm offers, what all the staff do, how much the firm is earning and spending on what, or what risks they are taking where. So they cannot know the best uses of scarce resources, such as capital, operating budget and staff.

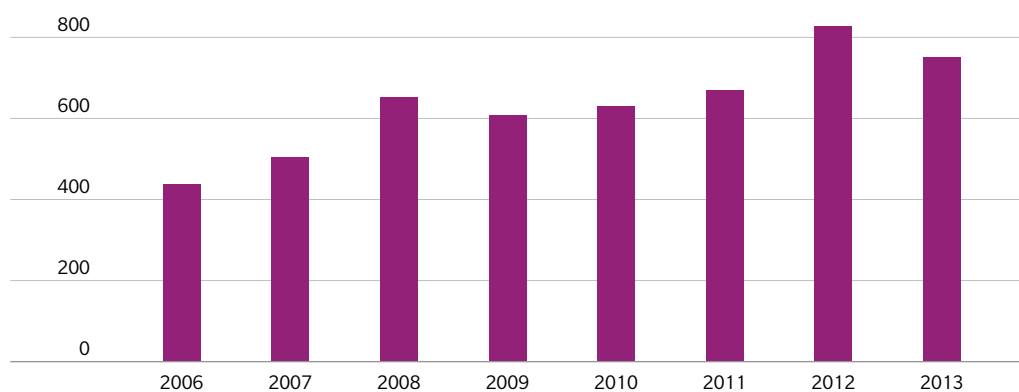
Complexity also hinders central managers' ability to control their firms. The farther employees are from central managers – in location, hierarchy or culture – the more difficult it becomes to manage them and the more time and money must be devoted to internal monitoring and coordination. The growing complexity of banks has been accompanied by an expensive growth of middle management. Since 2000, the number of US bank customers has hardly grown but the average number of bank employees per institution has increased by approximately 50%².

1. The 15% cost reduction figure from analysts is the average of stated expectations. The 20% figure attributed to banks is derived by assuming agreement with the analysts about risk-weighted asset (RWA) growth and attributing the difference in expected earnings to additional cost reduction.

2. FDIC, Oliver Wyman analysis.

Exhibit 4: Number of operational losses >US\$20,000 (Major Global Financial Institutions), 2006-2013

AVERAGE NUMBER OF EVENTS
PER BANK
1,000



Source: 2014 ORX Report on Operational Risk Loss Data.

Note: 67 member companies in 2013, primarily banks but also some asset managers, clearing houses and others.

Regulators seeking to reduce systemic risk are concerned about senior managers' ability to manage financial firms. According to the Liikanen Report, for example, "the difficulties of governance and control have been exacerbated by the shift of bank activity towards more trading and market-related activities. This has made banks more complex and opaque and, by extension, more difficult to manage." The UK's Walker Review, Tim Geithner of the US Financial Stability Board, Sheila Bair of the FDIC and Andrew Bailey of the Prudential Regulation Authority have all expressed similar concerns about the way in which the complexity and opacity of financial firms contributes to systemic risk.

The scope of a firm is determined, in part, by the cost of performing transactions internally rather than externally: for example, the cost of having employees rather than with using contractors, or building components in-house rather than buying them from a third party supplier.³ A firm can reach a size and complexity where management (internal transactions) becomes more expensive than external transactions. At that point it is too big not to fail, regulatory protection aside. This is where large financial firms now stand. If they cannot find ways of reducing the cost of their complexity, they will eventually either reconfigure, shedding lines of business or functions more efficiently done by others, or fail altogether.

3. See Ronald Coase, "The Nature of the Firm". *Economica* 4 (1936). The theory of the firm has advanced since Coase's seminal work but transaction costs are still considered an important part of what explains the scope of firms.

3. SOURCES OF COMPLEXITY

Before looking at ways of managing complexity better, it is useful to understand the sources of complexity at financial institutions. We surveyed our clients, asking them to rank sources of complexity in their businesses and to tell us how well they are now managed. Below we discuss the five of greatest concern to our respondents.

A. Regulation

The regulation of financial services has been evolving for more than 25 years. In 1988, the Basel I framework was imposed on banks. Basel I assigned the same risk weights to borrowers with very different likelihoods of defaulting. This encouraged banks to lend to the high risk borrowers of any given risk weight, since they could charge these borrowers higher rates than safe borrowers while incurring no greater capital charge. Basel I thereby increased systemic risk and encouraged the misallocation of capital.

To remedy this, a transition to Basel II was initiated in the early 2000s. No sooner did its 2007 deadline for compliance arrive than the financial crisis occurred, prompting another wave of regulatory reform, including the replacement of Basel II with Basel III (and, in 2017, “Basel IV” rules for the trading books of European banks).

Nor are these latest reforms settled. About half of the new US regulations expected under Dodd-Frank and a quarter of EU measures, such as new capital requirements for interest rate risk in the banking book and intra-day liquidity requirements, are yet to be finalised. Indeed, with the idea of “light touch regulation” no longer in fashion, regulatory change is likely to persist, with new rules continually required to correct unintended consequences of the previous changes.

Insurers are also facing waves of new regulation covering capital, conduct, distribution and governance. The most

Exhibit 5: Top 5 future sources of complexity in financial institutions

RANK	SOURCES OF COMPLEXITY	% THAT INDICATE IT IS WELL MANAGED TODAY
1	Heightened regulatory scrutiny & compliance requirements	
2	Provision of electronic platforms & multi-channel interaction with customers	
3	Customer demands for wider more bespoke product offerings	
4	Increasingly fragmented core infrastructure	
5	Expanding geographical footprint	

Well managed
 Not well managed

Source: Oliver Wyman State of Financial Services survey 2015.

Note: “Well managed” is defined as “incremental organisational complexities from meeting these challenges have been kept to a minimum”.

significant is the European Union's Solvency II, which specifies capital minima for insurers (as Basel III does for banks). Although Solvency II is nearly agreed and finalised, other areas, such as conduct regulation, remain uncertain and continue to evolve.

Post-crisis regulatory reforms have reduced banks' returns by around 6 percentage points, primarily by increasing the capital and liquidity they must hold. However, they are also suppressing returns by adding to the complexity that financial firms face.

Regulatory compliance now requires much more from banks and insurers: more data collection, more risk analysis, and more monitoring and reporting. The average bank in the US and Europe now has five board committees overseeing risk, whereas before the crisis the average was less than three⁴. Management committees dealing with compliance, risk and conduct have also proliferated, and scores of new compliance and oversight positions have been created. US studies have estimated that even small banks with around US\$10 BN of assets have added 8 to 15 new permanent middle office positions⁵. We estimate that between 2.5% and 3.5% of North American, European and Australian financial institutions' total costs come from meeting the elaborate new regulatory guidelines, equates to US\$0.7-1.5 BN per annum for the coming 2-3 years for large financial firms.⁶

Regulatory developments are also increasing the challenges involved in managing an international portfolio of businesses. National regulators now insist that international financial firms operating in their jurisdiction have local balance sheets that satisfy capital and liquidity rules, and they are demanding accountability from local boards. This is having a "balkanising" effect that makes managing a multinational

portfolio of businesses more complex and less profitable. Indeed, many firms are now withdrawing from foreign markets, thereby reducing diversification and increasing risk.

B. Multi-channel customer interaction

Not very long ago, retail customers interacted with banks and insurers only face-to-face and usually in a branch or office and sometimes through 3rd party brokers. Today they can also interact over the phone, through an ATM or via the internet (perhaps using a mobile device), effectively communicating directly with the back office of the financial institution.

The profusion of channels has greatly improved convenience for customers. But it has generally increased operating expense for large financial firms, because new lower cost channels have usually been an addition to their higher cost predecessors rather than a replacement.

Channel profusion has also added to management complexity. Preference for the growing variety of channels varies not only with the characteristics of the customer, such as age and income, but with the type of transaction (*see Exhibit 6*). And the channel through which a product is sold can make a difference to its value, even after accounting for operational costs. For example, mortgages sold through brokers tend to be higher risk than those sold through a branch.

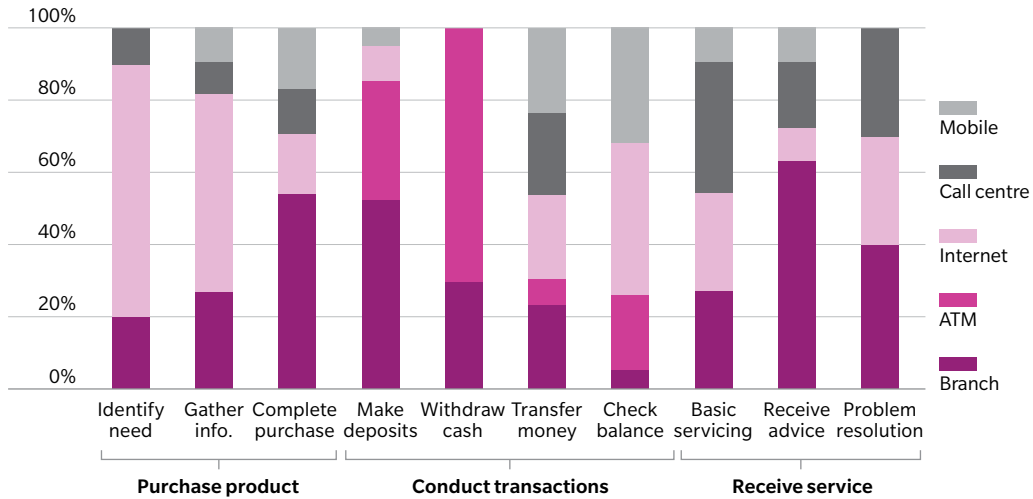
This makes decisions about which products to promote to which customers via which channels extraordinarily complex trade-offs between marginal operating costs, the value of products sold and the likelihood of making sales, not only now but in the future. Channel management, and its interaction

4. Annual reports, Oliver Wyman analysis.

5. Peirce, Robinson & Stratmann: "How are small banks faring under Dodd-Frank?" – February 2014.

6. Investor presentations, Oliver Wyman analysis.

Exhibit 6: US checking account channel preferences by activity, 2013



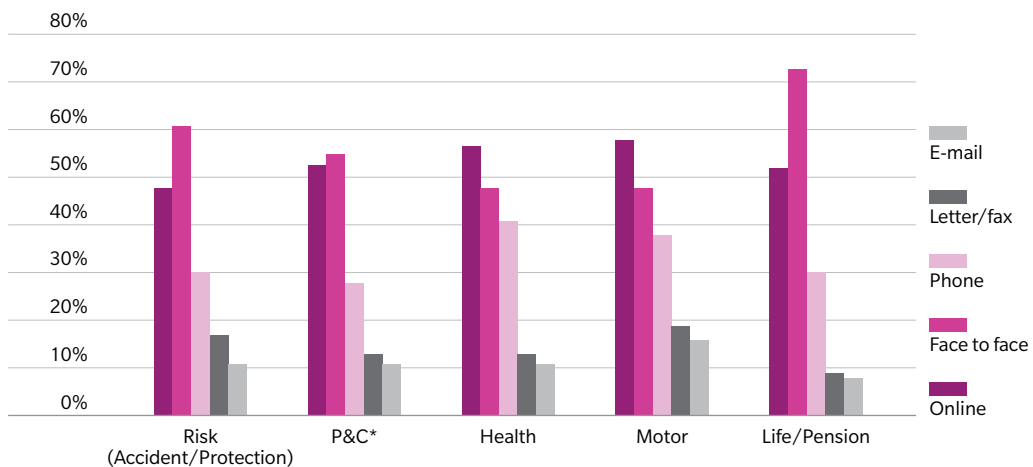
Source: Client example – mass market, Oliver Wyman analysis.

with product design, marketing and pricing, has become a much more difficult task.

Similarly, wholesale banking has been made more complex by the proliferation of execution venues. Besides traditional exchanges, securities can now be traded via Multilateral Trading Facilities (MTFs),

Electronic Communication Networks and Dark Pools. In 2007, over 90% of trades were executed via exchanges; today, more than half of all trades go through alternative venues.⁷ The landscape is even more complex for over-the-counter (OTC) instruments where new reporting mechanisms, execution venues and pricing

Exhibit 7: Customer pathways to insurers in Germany



Source: Versicherungsforen-Themendossier Nr. 4/2014, 28. February 2014.

* Excluding motor insurance.

7. Thomson Reuters Monthly Market Reports, Oliver Wyman analysis.

mechanisms for uncleared OTC instruments are being created. Many banks are contemplating an exit from these products.

Insurance channels have also proliferated over recent years as a result of broadening customer needs, more sophisticated channel management and the emergence of direct channels, such as phone and internet (see Exhibit 7). The same customer will increasingly use multiple channel touch-points in a sales journey. Each pathway requires parallel support from the insurer, driving up the complexity and costs of back office systems and customer servicing.

C. Fragmented systems

The IT infrastructure of most financial firms is fragmented and inconsistent. Data about the same customer or about costs relating to the same product or about revenues attributable to a single relationship are often divided between systems that cannot easily talk to each other. Similarly, the models that measure various risks or customers' values or break-even prices and so on may be spread

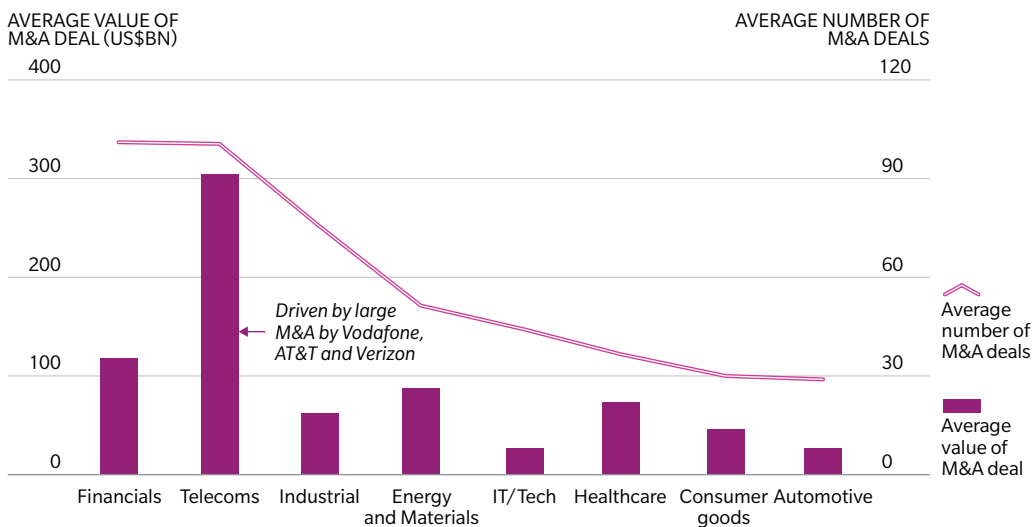
around separate systems within the firm. Sometimes they live in Excel spreadsheets on an employee's desktop.

This fragmentation drives up operating costs, slows the development of new products and hinders managers making decisions that require them to understand the contributions of customers, products and lines of business to the firm's overall performance.

IT fragmentation is sometimes the result of systems having been built separately within the individual business units of the firm. During the pre-crisis boom, this was often the quickest way to capture new business opportunities. Revenues were boosted but at the expense of creating operational complexity.

This "organic" source of IT fragmentation has been exacerbated by mergers and acquisitions (M&A). Over the last 15 years, within the top 100 global corporates, there have been more M&A deals on average in the financial industry than in any other (see Exhibit 8). Integrating the systems of the newly joined institutions is a massive,

Exhibit 8: M&A activity of top 100 corporates by sector, 2001-2013



Source: Dealogic, Thomson Reuters Datastream, Oliver Wyman analysis.

Note: Top 100 corporates by market cap as of 31 July 2014. Only includes deals greater than or equal to \$50 MM in value.

multi-year task. However, many merged entities delayed embarking on this long-term integration effort. Under quarterly earnings pressure to make the M&A deal “deliver”, they instead cut IT and integration budgets.

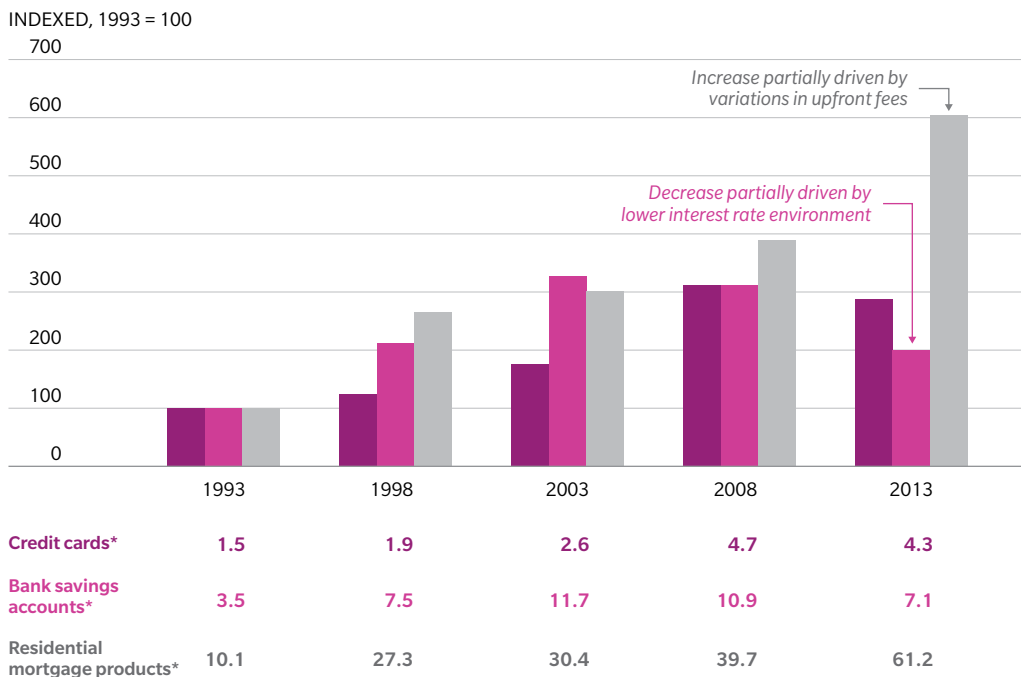
D. Product proliferation

Over the last 20 years, the number of products offered by financial firms has increased dramatically. For example, the average number of mortgage products offered by the top 20 UK banks has grown from 10 in 1993 to 61 today (see Exhibit 9). The number of investment certificates traded in Germany has grown from 113 in 2006 to 1,096 in 2014.⁸ Similar stories could be told in most areas of the financial services.

Pension and life insurance product portfolios are especially likely to contain a large tail of legacy products due to the long-term nature of contractual obligations and the regulatory protection of these commitments. Firms must continue to service “discontinued” product lines over many years until they have run off. Nor is the problem of insurance product proliferation limited to Life. P&C insurers must also track many policy variants and features. This creates complexity without necessarily providing anything distinctive or even visible to the end customer.

Product proliferation creates knock-on complexity in systems, staff training, risk control, marketing and other areas. The cost of this complexity is now being increased

Exhibit 9: Average number of products offered by top 20 UK banks, 1993-2013



Source: Moneyfacts magazine, Oliver Wyman analysis.

* Absolute average, not indexed.

Note: 2013 residential mortgage products have been adjusted for Lloyds – HBOS merger. Top 20 by assets at YE2013.

8. Deutscher Derivate Verband.

by “conduct” regulation which drives up the process costs of selling and servicing financial products.

Not only are product portfolios larger than they were 20 years ago but many financial products are more sophisticated. The use of derivatives, such as collateralised debt obligations (CDO) and credit default swaps (CDS), grew dramatically in the years prior to the financial crisis. Their use has since declined but remains well ahead of where it was 20 years ago. Even retail financial products, such as fixed rate mortgages, often include optionality features that make the risks they entail difficult to understand.

of transactions that cross borders has increased and many financial firms have expanded operations internationally. The share of revenue derived from customers outside of their home markets has been steadily increasing.

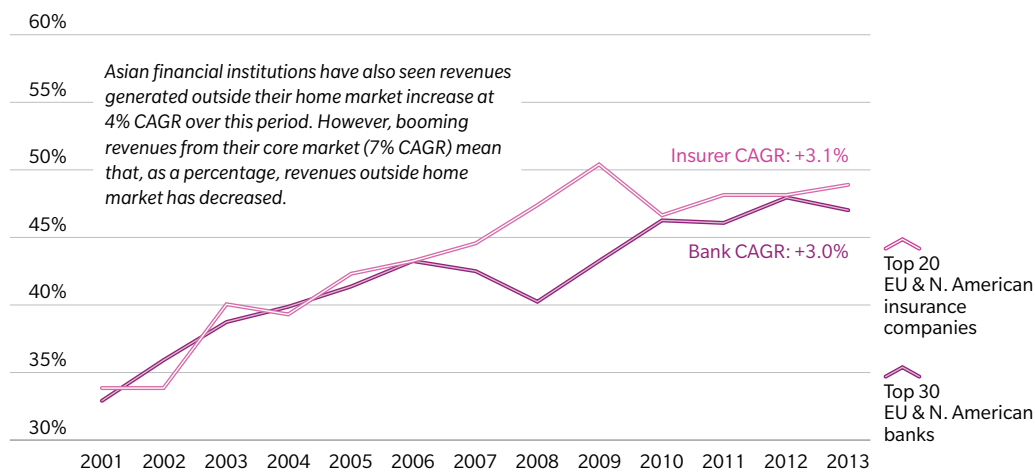
International expansion creates opportunities for new revenues and for risk diversification. But it also makes financial firms more complex. They must deal with a greater variety of customer behaviours and preferences, a greater variety of cultures and educations among employees, a greater variety of economic and competitive environments, and a greater variety of legal systems.

E. Geographic expansion

Since the mid-1980s trade barriers have been consistently lowered and restrictions on the flow of capital across borders have been relaxed. As a consequence, financial markets have globalised. The number

The move to a 24/7 global trading environment has created unforeseen challenges for financial firms. To coordinate global business processes, financial firms need systems that can work across borders and time zones and process the expanded range of transactions and documentation.

Exhibit 10: Average percentage of revenues earned outside home market, 2001-2013



Source: Thomson Reuters Datastream, annual reports, Banker Top 1000 World Banks, Oliver Wyman analysis.

Note: Core market chosen based on geographic segments reported in annual reports; for some banks this represents a country and for others it is a region (e.g. N. America). Corporate charges are excluded. Asian financial institutions are defined as the top 10 banks by YE13 assets where data is available.

4. MANAGING COMPLEXITY BETTER

Simplification is the obvious solution to problems caused by complexity. Some financial firms are taking on the monumental task of harmonising their fragmented IT systems. And some have simplified their business portfolios, selling-off divisions or assets that added to their complexity without making a significant contribution to their core business.

Such simplifications can be valuable beyond any immediate lift in profits. They can free up management and operational bandwidth being squeezed by regulatory burdens “at home”. They can also help firms re-evaluate the core offerings and markets around which they want to build. Where new regulations damage the fundamentals of a current business, firms that would need to invest too much to adapt must exit the affected products or regions.

But simplification cannot provide the whole answer. Complexity is unavoidable for a successful financial firm because it arises out of desirable features of their business models. For example, diversification reduces risk. But diversification entails variety, for example, of customers and jurisdictions. Catering to customers’ needs is also desirable. Since customers have different needs, however, this entails a wide range of products and channels.

Rather than seeking to eliminate complexity, financial firms should seek to manage it better. More specifically, firms must find ways of reducing the costs that arise from complexity. These costs are not only operational. Complexity also causes opacity which undermines decision making

and dilutes the influence that central managers can exert over the various parts of the firm. In other words, complexity makes a firm harder to manage.

But the difficulties are not insuperable. The advanced use of information and of management techniques tailored to large, dispersed entities can significantly reduce the costs of complexity.

A. Self-knowledge

The complexity of financial firms makes them opaque to their managers, owners, creditors and regulators. It is difficult to observe the contributions of customers, products, channels or even entire lines of business to the firm’s revenues, costs and risks. What looks like a highly profitable line of business may in fact involve risks that will result in major losses. Or a product that seems unprofitable may play an important role in retaining customers who then buy other products with wider margins.

The opacity created by the underlying complexity of financial firms is exacerbated by the typical multiplicity of metrics. Many financial firms now use a hodgepodge of different risk and performance measures that reflect their creation in geographic or business “silos”. Performance measurement is ultimately harmonised in central reporting of the group’s position and performance. But these “top of the house” numbers cannot be disaggregated in a way that allows a comparison of the firm’s parts that can properly support decision making.

To overcome this opacity, financial firms need to adopt metrics that allow its various parts to be meaningfully compared. Despite two decades of progress on risk-adjusted performance measures, such as Risk Adjusted Return on Capital (RAROC) and Economic Value Added (EVA), few firms have settled on measures that can properly play this role. If senior executives are to properly understand and direct their institutions, they must do so.

These measures should permeate the firm. For example, the financial controller in head office, the head of a business unit and her sales staff should all have the same view of their performance. Such a common view makes it easier for senior managers to influence their staff, if only by making it easier to communicate with them.

Financial firms have an understandable tendency to focus on the financial drivers of performance, such as interest rates, loss ratios and so on. They have been less interested in the operational drivers of performance. This is a mistake. Financial firms should identify and monitor operational variables that are important to their effectiveness, such as the number of committees and senior executives' time allocated to various tasks, processing error rates and customer complaints. Without this information, it is almost impossible to improve the efficiency of large, complex operations.

However, institutional self-knowledge is not a matter of numbers alone. No metric can capture everything relevant to decision making, such as likely changes in market conditions. To provide a complete picture, numbers expressed in common metrics should be supplemented with a commentary about their significance. This commentary should reflect the best informed opinion available within the organisation, usually combining the view from the top (or centre) with the views of those on the frontline (*see 4.D*).

B. Analytics

The greater the number of products, channels and types of customer, the more difficult it is to decide what to offer which customer through which channel and at what price. Not only do the decisions become more expensive to make but they are more prone to error. Financial firms have developed sophisticated modelling of risk, which they sometimes use to vary terms and conditions, including price. But they are less advanced in the analysis of other factors relevant to making optimal business decisions, such as customers' likely purchases and channel usage.

The data available for such analysis has exploded over recent years, primarily on account of the "data footprint" consumers create by their use of the internet. At the same time, the cost of storing data has collapsed and computational speed has dramatically increased. To take advantage of these developments, financial firms must change the way they approach data analysis and its use.

First, most firms should establish an enterprise-wide analytics team as a centre of excellence in pattern recognition technology and artificial intelligence (AI), because the relevant skills are scarce. This team should be distinct from any capabilities within Risk, Finance and the business lines. Its role is to provide cutting edge analysis and data-based tools to support business decisions in the line or, sometimes, higher up.

Second, data collection and cleaning should no longer be seen as a back-office support function but as an integral part of the business that can provide an advantage over peers. This requires front office staff to understand what data is useful to the organisation and why. Few employees today understand that financial firms are essentially information businesses.

Third, the incentive structure for the businesses should encourage them to use analytics wherever they can improve decision making. When possible, decisions should be based not on “gut-feel” but on an assessment of hard facts. Managers should be wary of accepting argumentation without the appropriate underlying analytics and fact base. This will improve not only transactional or tactical decisions but strategic decisions, helping to direct investment toward its most valuable uses.

Adopting this analytical approach has already transformed the productivity of firms in some competitive parts of the financial industry (see *Case Study 1*). The techniques they employ are equally applicable across all of financial services.

C. Standardisation

Standardising processes is a simple but often overlooked way of creating consistency in large, diverse financial services organisations.

Standardised procedures cut costs by reducing the amount of day-to-day micro-management required; they decrease the chance of errors and operational losses; and they provide templates that facilitate expansion and outsourcing. They allow senior managers of large organisations to say, “just do this”.

Shared services have been heralded as a way to achieve standardisation. However, without a prior effort to harmonise processes, sharing services will not on its own reduce complexity. Complexity will simply be shifted into the shared service provider or into other areas of the firm as they develop processes to compensate.

Rather, standardisation can be achieved in one or both of two ways. First is the old-fashioned expedient of specifying desired roles and procedures in writing.

CASE STUDY 1

The “intelligent insurer”: using smarter analytics in insurance

As in most other parts of the financial services industry, insurance requires significant capital and cash outlays to capture relatively low and volatile margins. On top of this permanent challenge, insurers now face new customer habits (such as their increasing tendency to “shop around”, often online) and new competition from non-insurers with attractive brands and deep customer understanding.

This is placing a premium on heavy duty, high speed analytics and on the ability to make effective decisions using it. Leading players are building “new model” analytics capabilities, processes and organisations:

- **“Point of sale” analytics** to screen out fraudulent applications and to predict the customer’s likelihood of renewing, their price sensitivity and their likelihood of buying more than one product
- **Third party “live” data flows** to pinpoint where models of claims outcomes deviate from actual outcomes and rapidly adapt underwriting and pricing
- **Telematics data** to measure actual customer driving behaviour rather than just broad statistical proxies for it
- **Big data performance testing** of pricing and segmentation models based on new customer data for all customers to detect requirements to consider re-pricing specific customer segments
- **Live sales support tools** for agents and brokers that increase productivity in the field while allowing management to optimise commission and rebate structures.

P&C insurers who have built advanced analytics and worked out how to use them to make day-to-day customer value decisions have seen major performance improvements. For example, a leading direct P&C insurer built a dynamic technical pricing capability based on big data technology that identified about US\$30 MM of extra profit from the pilot programme alone, with the potential to lift firm wide profits by more than 10% in the coming years as the full programme gets implemented. Payback on the investment was achieved in less than 6 months.

Bank supervisors are pushing banks to do this. Many are unhappy about the number of complex processes, such as foreign exchange and OTC derivative trading, for which banks cannot provide documentation. Banks are now scrambling to provide the desired documentation of processes and controls to their supervisors.

But the big prize lies in automation. Advances in artificial intelligence (AI) mean that machines will be able to perform many of the cognitive tasks now done by humans. Much of the credit assessment and fraud detection work once performed by humans is now done by computers using various pattern recognition techniques. Other data-based work now usually performed by humans can progressively be replaced by intelligent machines, leaving staff to do the ever-decreasing range of things that only humans can do. The more that financial firms do with machines, the more standardised and manageable their processes will become and the lower their operating costs will be.

Technological advance will be the main driver of progress in financial services over the coming years. Yet few senior executives or board members are tech-savvy. Technology has been regarded as a mere execution issue, a matter for the techies in the back office. In fact, it is a matter of the greatest strategic significance. Senior executives must take an active interest in technology and the transformational possibilities it creates for their businesses.

In other industries, such as IT implementation and air travel (see *Case Study 2*), where firms have dispersed workforces and face major operational risks, relentless process engineering and standardisation has improved service quality and reduced costs and risks. For example, a leading technology company cut their cost base by 10 percent over a 5 year period by identifying 12 core processes and then standardising them globally.

CASE STUDY 2

Standardisation in the Airline industry

Airlines require significant customer trust. Operational incidents can have catastrophic consequences for both the passengers and the business. Non-standardised processes create too many unknowns, raising the cost of monitoring and putting safety and punctuality at risk. Airlines have thus developed rigorous techniques to ensure high-quality, standardised procedures, including:

- Documenting all processes and roles
- Recording and analysing all operational events using advanced software tools
- Employing “safety and standards” representatives in each function
- Creating employee collaboration tools, such as:
 - Internal blogs and Facebook-type sites that enable employees to solve unforeseen problems, such as how to fix a trolley. Employees also provide real-time information about incidents to the centre
 - Standardised customer experience dashboards for all managers to relay daily results to central customer experience teams
- Outsourcing to reduce management complexity rather than costs. 3rd party suppliers are provided with brand standards, such as airline uniforms, and use the same systems and processes, managed through contracts with clear KPIs and financial penalties
- Undertaking business continuity planning with at least annual “fire drill” exercises in which executive, mid-management and floor-level staff enact responses to a major crisis or unforeseen event, such as a volcanic eruption or heavy snow
- Consistent customer service across all channels. For example, a US airline upgraded their phone, mobile and social media channels to provide enhanced and consistent information to customers regarding cancellations and delays. Customer experience scores shot up as a result and they realised \$80 MM in cost savings due to fewer defects in operations.¹

¹ Forrester Research, Customer Experience Index 2014.

We have observed similar exercises at some of our financial services clients. They have identified and standardised 10 common and scalable processes, cutting costs and increasing the speed of product launches. However, most financial firms have not yet moved, and instead are seeking profit growth by adding products and markets while relying on informal staff behaviour. This has created unnecessary inconsistency, expense and risk.

D. Delegation

The standardisation or automation of important, repeatable processes does not mean that financial institutions can be run from the centre. Like an economy, a large complex organisation cannot be well managed on a centralised model. The information on which decisions must be based is widely dispersed across the organisation, much of it unavailable to central managers.

Even when central data is used optimally (see 4.A and 4.B), any CRM or similar system will fail to capture much relevant information, such as the expression on the face of a customer at the counter or the level of support for a local sports team that might be sponsored. Even with the best decision-support analytics, local decision discretion is indispensable.

Rules issued from the centre must protect the brand and manage risks, including the risk of misconduct. But they should provide enough latitude for staff with superior knowledge of the customer, product or local market to make decisions based on that knowledge. Provided they have imbued the culture of the firm (see 4.E), the bank has invested in the appropriate oversight and employees have incentives based on the right performance measures, then decentralised decision-making in a complex organisation should deliver better

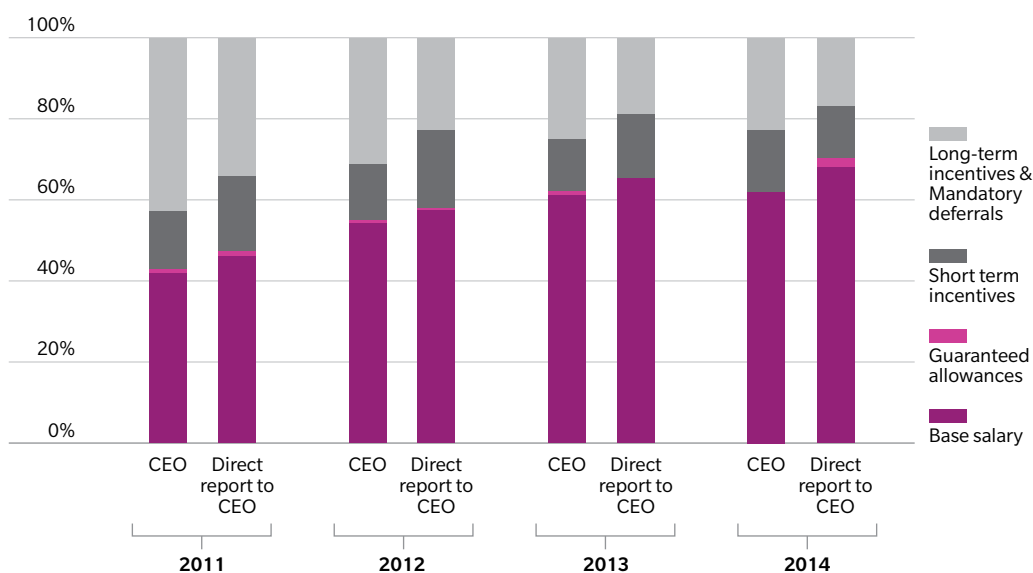
results than the corporate equivalent of a command economy. For example, the common post-crisis practice of reducing both the pay of branch staff and their opportunities for rewarding customer interaction while increasing central oversight is not working, as illustrated by the repeated cases of fraud involving branch employees in all major banks in New York City in 2011, 2013 and 2014.

Staff empowerment not only improves decision making but increases the enthusiasm and entrepreneurial spirit of junior management and other staff. It saves managers from the “tyranny of committees” and liberates senior managers from the chore of micro-management, allowing them to devote themselves to the strategic decisions that should concern them. A firm with performance transparency, automated surveillance, a sound culture and properly empowered staff can succeed with far less hands-on management, allowing it to cut costs by stripping out layers of middle managers and operating officers.

Although regulators seek better managed financial firms, new rules restricting bonus payments relative to base pay unintentionally impede the allocation of decision-making to those with the best information. Staff who do not face a material portion of the costs and benefits of their decisions have little incentive to make optimal trade-offs. If central managers are not allowed to pay informationally privileged staff in a way that creates the right incentives, they will be reluctant to give them decision-making discretion. The firm will instead have to rely on decisions made by central staff who lack important local information.

Indeed, these new compensation rules may deter senior management from making any serious efforts to tackle complexity management. The changes required will take many years to make and to bear fruit (see Section 5). But the new compensation

Exhibit 11: Compensation structure of CEOs & Direct reports



Source: Mercer, "Pan European Financial Services Survey" 2014. Includes European operations of global financial institutions.

rules mean that long-term performance plays an ever smaller part in senior executives' compensation, most of which is now made up by their base salary (see Exhibit 11). Compensation rules aimed at making financial firms safer may ultimately damage the way they are managed and thereby add to systemic risk.

E. Culture

With processes automated or standardised and decision making distributed to those with the best information, the management culture must shift away from the old command and control model. Senior executives must direct the organisation by making large strategic decisions, by communicating and inspiring, and by creating a healthy corporate culture.

Corporate culture is crucially important to the success of any enterprise. If every member of a group is inculcated with common values and habits, the cost of managing them drops dramatically. They

will do on their own initiative what would otherwise require constant management intervention to achieve. Indeed, no feasible amount of micro-management can avoid the unwanted consequences of a broken corporate culture.

Prior to the financial crisis, many financial firms failed to create a healthy corporate culture. A series of scandals, from mis-selling mortgages and pensions to Libor price manipulation, testify to this failure. Even after the crisis, the elevated rate of operational loss events (see Exhibit 3) indicates an ongoing problem.

A strong culture is relatively easy to produce in small groups, such as families or sports teams. In vast corporations comprising tens of thousands of staff with different roles and backgrounds, distributed across many divisions and locations, the job is much harder. It requires the clear statement of goals and values, and their visible application in practice. Senior executives must not only enforce the values; they must personify them.

Hiring and training must reinforce the culture. So must promotion and other incentive schemes. Specified penalties for transgression must be applied, regardless of the personal productivity of the transgressor. The corporate culture is more valuable than any individual employee.

Alas, corporate culture initiatives at many financial firms do little more than articulate values and intent. Few have programmes that incorporate the hiring, training, performance management and reporting that will promote the desired values.

Senior leaders must focus on creating the right environment rather than continuing with the command and control approach of the past. This requires a shift in the “competency model” of leadership, with a greater emphasis on empathy and on understanding the potential of each member of the team. This empathy must not be misunderstood as a culture of harmony at any price. Employees must feel the need to do the right thing and speak if they see standards not adhered to.

Given the increased amount of change required at financial institutions, we expect a shift towards temporary, team-based work. Transient leadership roles for temporary but important lines of work, such as transformation projects, will need to be made more rewarding than today. These changes will require the career development and remuneration of the top 200 to 500 executives to be approached on a longer term basis than they are today, with rewards based on joint commercial success where individuals feel rewarded by accepting transient leadership roles that can be “retired” – e.g. leadership of major change initiatives.

CASE STUDY 3

Corporate culture in the Oil and Gas industry

Oil and Gas is another industry vulnerable to perceptions of malpractice, especially around health and safety, in which corporate culture is therefore important. The number of fatalities and injuries in the Oil and Gas industry has fallen significantly over the last decade. This has been achieved by a safety-first, zero-fatalities culture with some of the following elements:

- **Safety prioritised over efficiency:** All employees are entitled to “pull the cord” and stop operations for safety-related concerns with no repercussions, even if it results in millions of dollars of operating losses. Management try to instil a “chronic sense of unease” in employees, even on sites where no accident has occurred for a long time, in part by making unannounced site visits. All risk events, from driving a pick-up truck in remote areas to entering a new geography, must be classified, documented and assessed.
- **Safety incentives:** Incentive schemes are designed to reward safety improvements and adherence to safety standards. Top-performing employees are recognised with prizes and sites are given awards for “silent running”: that is, for the absence of accidents over some specified period of time, such as three years. On the flip side, penalties are dispensed for breaking the safety rules. To ensure that such penalties are perceived as fair, employees are surveyed to find out if they understand what is expected of them, feel they can speak up to identify problems and consider the penalties proportionate to the wrongdoings. Having said this, there are mandatory “life-saving rules” set from the top which all employees must abide by. Breaking of these rules can result in termination of employment, while contractors will be barred from any future work with the company.
- **Continuous improvement:** To ensure that safety is continually improved, processes are subject to meticulous detailing and gap assessment. Priority change initiatives are given budgets, actionable targets, owners and KPIs. This process is repeated on a regular basis, typically annually.

5. GETTING THERE

The measures described above will require major programmes of work, especially the first two, which involve systems upgrades. Depending on the systems starting point, we expect the hard elements of this “complexity management programme” would take most financial firms at least three years to execute, and cultural change will take even longer.

Many financial institutions are suffering from “reform fatigue” and their budgets are being strained by work required to comply with new regulations. Nevertheless, senior management must rally the troops, find the budget and make the changes now as the pre-crisis “golden era of banking” is over with low and rising interest rates and increasing capital requirements over the coming years. If they continue to deliver utility-like returns, capital will flow out of financial services and into more dynamic sectors.

Most financial firms can profitably simplify their business models, jettisoning some products, customers or even entire lines of business. Identifying such opportunities and selling off assets should be the first step in the “complexity programme”. It will force senior executives to clarify their firm’s strategy – its core markets, customer segments, products and channels. And it will free up capital to invest in the hard part of the programme.

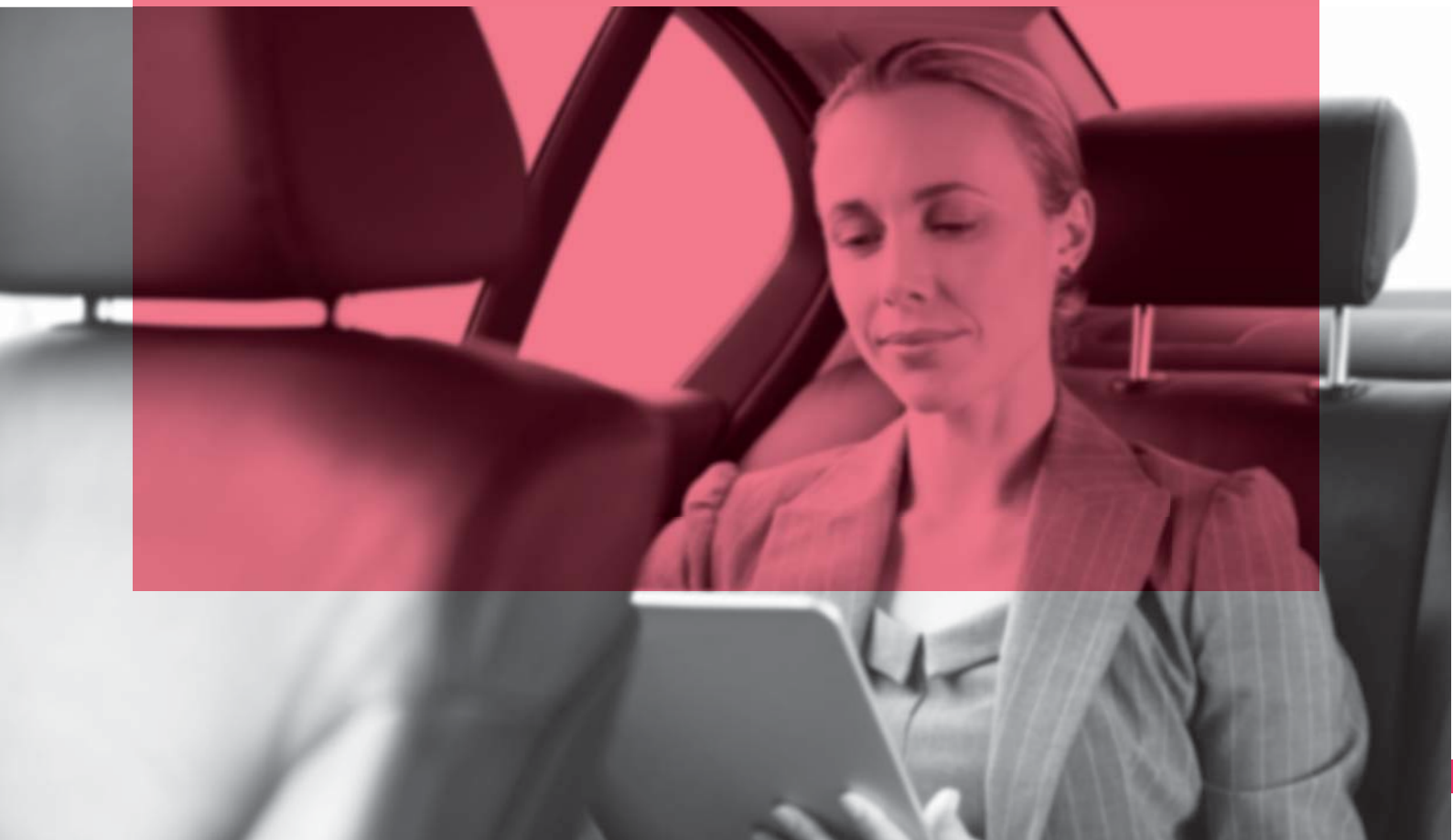
But it is only the first step. Most large, established financial firms will still need to make the difficult changes described above.

Financial firms have struggled to successfully execute major transformation programmes over recent years. To give the complexity management programme every chance of success, it needs more commitment and endurance from the very top. Our sense from investors is that they are ready to back management in committing the required resources. They realise that only a significant overhaul can change the fortunes of financial institutions.

WOMEN IN FINANCIAL SERVICES

PICKING THE RIGHT BATTLE: LESSONS FROM THE GENDER DEBATE IN MOTOR INSURANCE

ARTHUR WHITE
RUPAL KANTARIA



WOMEN IN FINANCIAL SERVICES

In 2011 the EU surprised many in the insurance industry by severely restricting the use of gender in insurance rating models. Insurers were forced to revise their pricing and sales practices in motor, life and pensions.

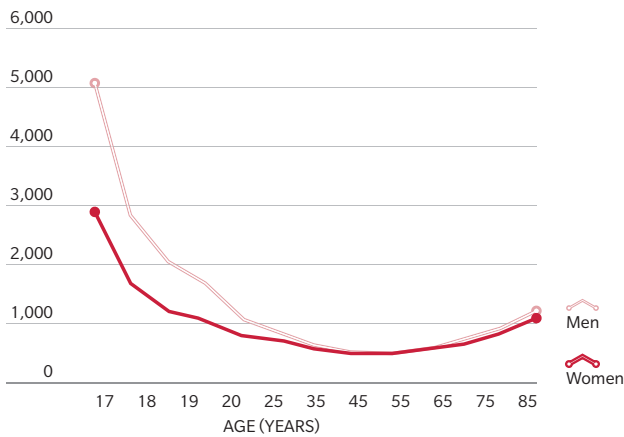
The effect was most pronounced in motor, where gender had been such an important risk factor in pricing and underwriting that some firms had built brands around it, such as Sheila's Wheels and Diamond in the UK and 1st for Women in Australia. The ruling triggered shock and considerable resistance – some of the more intemperate reactions describing it as statistically illiterate.

This accusation contained a grain of truth but it also missed the real point.

Motor insurers are in the business of predicting behavior – specifically, the driving behavior that causes damage. Like some other socio-demographic categorizations, gender is a predictor of driving behavior. Women are generally safer drivers than men. If you knew nothing else about an individual, gender would help you predict for the expected frequency of claims, particularly for young drivers. But it is an imperfect predictor. The spread within the gender groups still exceeds the difference between the averages of the groups.

EXHIBIT 1: DIFFERENT AVERAGE OUTCOMES CAN CONCEAL A BIG SPREAD

ESTIMATED AVERAGE PREMIUM BY GENDER (ABI 2011)



FREQUENCY OF TOTAL CLAIMS OUTCOME BY SIZE OF CLAIM (STYLISED)



It is a sign of how little insurers have historically known about their customers that they have relied so heavily on relatively crude proxies such as age, job and gender for predicting behavior. As better data and analysis become available, the importance of

these old risk factors is waning. Insurers have already discovered better predictors for behavior. For example, it turns out that credit scores can help to predict behavior unrelated to borrowing. How people manage a credit line is a very good predictor of how they will

drive or manage their household security. Indeed, when rescoring models in the light of the new data and modelling environment, one of our clients found that (adjusting for other factors) gender dropped a long way down the list of most significant factors.

“Risk technology” is also developing rapidly. For example, telematics allows insurers to observe customers’ actual driving behavior – most importantly, the speed they drive and the rates at which they accelerate and brake (which can also be linked to driving conditions and location). If this technology comes into widespread use, insurers will no longer have to rely on predictors of driving behavior, and hence proxies such as gender will become increasingly irrelevant.

Organizations thinking about issues of gender diversity can learn from this episode in Insurance.

Initiatives aimed at increasing gender diversity in the workplace have triggered significant controversy and resistance in some quarters. Changes to recruitment procedures to encourage female applicants, gender targets and quotas for Board composition, changes to career progression expectations aimed at not disadvantaging women who choose to have children, or changes to working practices aimed at accommodating staff with family commitments (of which women still bear a greater share than men): all have attracted complaints about undermining meritocracy or being costly distractions from getting on with business.

We believe these complaints also miss the point. In the business of recruitment and retention, companies are interested in finding and keeping the widest possible pool of suitably talented staff. But it is not easy to “see through” to the underlying level of talent of prospective recruits, nor to know whether today’s pool of talent in the firm is as good as it could be.

In the absence of a perfect metric of talent (or a technology-based fix as in motor insurance), firms must instead rely on predictors. We believe that a firm’s ability to maintain gender diversity at all levels is exactly this: a key indicator for whether the firm is doing enough to recruit and keep a broad spectrum of talent of all types (not only women). A firm that can do better at finding and keeping talented women will become a more attractive workplace for its entire staff.

Organizations that work out how to avoid recruiting only “people like us”, and avoid inadvertently selecting against women, will be better places to work and will have access to better talent. They will be more open to new ideas; they will expand the range of ways to be productive beyond the old template of “9 to 5 at a desk”; and they will not promote people only on the basis of their willingness to work 100 hour weeks. These firms will have a broader mix of talented and motivated staff, both male and female. Study after study has demonstrated this supports business performance, and will be increasingly important in the future.

In summary, in motor insurance gender has historically had some value as a scoring factor but only as a predictor of actual driving behavior. Despite some adjustment costs, the industry is now moving towards measuring this behavior directly, supported by new technology.

Unfortunately, in the business of recruiting and retaining high quality talent, there is no such technology based “quick fix”. So predictors are still useful when building a firm’s workforce. Gender diversity is a predictor of an effective workforce. Companies with little gender diversity should not be worried about gender per se. They should be worried because a lack of diversity is a strong indicator that they are failing to select, nurture and promote the best available talent – of any gender.

POINT OF VIEW

OPERATIONAL RISK MANAGEMENT & MEASUREMENT

SURVEY BY ORIC INTERNATIONAL AND OLIVER WYMAN
– SUMMARY OF RESULTS

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This is a joint report from Oliver Wyman and
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ACKNOWLEDGEMENTS

The authors would like to thank the ORIC International
members who participated in this survey for their time
and the thoughtfulness of their contributions.

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FOREWORD

We conducted a survey of 30 ORIC International members to understand their current operational risk management and measurement practices and priority areas for future enhancements. Participants covered a broad representation of the global insurance industry, including life insurers, general insurers and composites.

This report summarises our findings from the survey. A more detailed version of the report will be made available exclusively to the firms that participated in the survey.

We hope that you find the report useful for understanding current insurer practices and priority areas for future development.

CAROLINE COOMBE
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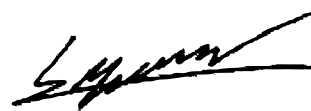


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EXECUTIVE SUMMARY

Over recent years ORIC International members have made substantial progress in enhancing their operational risk management and measurement capabilities. Despite the progress made, there remain areas of operational risk showing a significant lack of convergence across the industry. Now is the opportunity for the industry to act, before regulators act for them.

State of the industry and firms' priorities for 2015

Across the members surveyed, embedding operational risk management in decision making is the top priority for further improvement in the operational risk space going into 2015. Improving risk measurement capabilities is also cited as a priority, which should be seen in the context of the timing of many firms' internal model applications, which are imminent or currently under regulatory review.

Improving the articulation and use of risk tolerance is an important priority for smaller insurers, who were also dissatisfied with the effectiveness of their Key Risk and Control Indicators. Larger institutions state the enhancement of their risk identification and assessment approach as a priority for development, highlighting the complexity of this activity in a large firm.

Organisation and Governance

Firms operate a range of organisational models for managing and measuring operational risk, including locating resources almost entirely within business units, or centralised at group level. We found that, as firm size increases, incremental resource is more likely to be added at business unit level than at group. The role of the 2nd line of defence (Risk Function) expands significantly with increasing size of firm, while the role of the 3rd line (Internal Audit) tends to decrease with size of firm as the 1st and 2nd lines play a stronger role in assurance activity.

Culture and Conduct

The proportion of participants performing risk culture assessments is significant and increases with firm size. In the majority of firms surveyed, the operational risk framework includes conduct risk (or a link to it).

Risk identification and assessment

Risk and Control Self-Assessments and Scenario Analysis are the two main tools used across the industry. There are substantial differences in how the processes are managed, ranging from purely "bottom-up" identification of risks to "comply or explain" approaches tightly managed by the central risk function. There are also substantial differences in how scenarios are parameterised.

Risk event data capture

The loss history captured at most institutions is now in excess of 5 years (6.4 years on average). "Lessons learnt" processes typically remain informal, however.

Internal controls

A majority of firms identify and (self-assess) the effectiveness of controls, but often not to a common standard and/or not well coordinated across business areas and lines of defence. This area will likely be subject to further focus going forwards, in light of various new regulatory requirements coming into force.

Monitoring

Risk monitoring is often perceived as weak especially among smaller firms. In this context, clearer ownership of metrics was identified as a development objective.

Use of Operational Risk in business decision making

Operational risk is now considered in a broad set of business processes. It is mostly the 1st line (Business) providing this input – the 2nd line “independent” operational risk management teams tend to play a comparatively minor role in business decisions.

Recognising that the embedding of operational risk relies both on defined rules and on organisational culture, compensation linkages to operational risk performance have been put in place by a majority of firms. The Board was least likely to see its compensation tied to operational risk performance, whereas business and support functions were the most likely. Senior management were the most likely to see it linked objectively (rather than more subjectively).

Risk measurement

The capital models in use span a broad range of approaches. Hybrid models combining Scenario Analysis with loss event data analysis are the most popular category, but even within this, designs vary. Other features also differ across firms, such as the diversification benefit between operational risk and other risk types, which ranges between 0% and 79%. Half of the firms surveyed make deductions for insurance recoveries.

Systems

Vended systems are common among internal model firms for housing some operational risk management processes (e.g. loss data collection, Risk and Control Self-Assessments); however they are not as widely used for Scenario Analysis or capital calculations.

1. INTRODUCTION

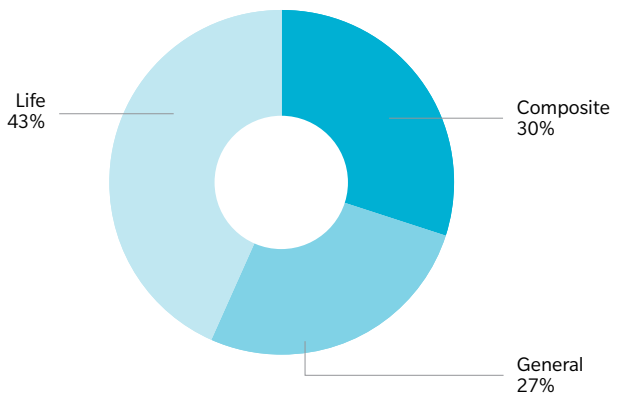
In December 2014, ORIC International and Oliver Wyman jointly conducted a survey on operational risk management and measurement. The 97 survey questions were informed by the recent CRO Forum¹ white paper, “Principles of Operational Risk Management and Measurement” (September 2014)². The objective of the survey was to understand the current practices in operational risk management in the insurance industry, along with the development priorities going forward.

The survey was completed by the firms’ Operational Risk teams and their colleagues. 30 out of 40 ORIC International members from across the globe participated in the survey.

Of the firms taking part in the survey, 43% were pure life insurers, 27% were general insurers and the remaining 30% were composites.

A mix of different sized insurers took part in the survey. In this report we define “small” insurers as those with annual Gross Written Premiums (GWPs) in 2013 of less than £1 BN (28% of participants), “medium” where GWPs is £1 to 5 BN (28% of participants) and “large” where GWPs is greater than £5 BN (44% of participants).

Exhibit 1: Percentage of respondents by Insurer type



Most EU insurers in the survey (68%) are applying for use of an internal model to calculate operational risk capital under Solvency II (where relevant), with the remaining EU insurers planning on using a standard formula approach (32%). Of those using the standard formula approach a number are planning on using an internal model at a later stage.

The remainder of this report presents a summary of the findings of the survey. A more detailed version of the report will be made available exclusively to the survey participants.

¹ The CRO Forum is a group of professional risk managers from the insurance industry that focuses on developing and promoting industry best practices in risk management. The Forum consists of Chief Risk Officers from large multi-national insurance companies (<http://www.thecroforum.org/>).

² http://www.thecroforum.org/wp-content/uploads/2014/07/Principles-of-Operational-Risk-Management-and-Measurement_Final.pdf.

2. STATE OF THE INDUSTRY AND FIRMS' PRIORITIES FOR 2015

The state of the insurance industry with respect to operational risk management and measurement has evolved fast. Many firms subject to the European Solvency II regime will be undergoing increased regulatory scrutiny of their frameworks and measurement approaches this year and much preparatory work has already taken place.

Unsurprisingly, some firms are further progressed in their operational risk management and measurement than others and there is strong positive correlation between those firms that are most progressed and those that intend to use an internal model based framework for their Solvency II operational risk capital calculations (where relevant). Independently of this, there is also a broad spectrum of practices in terms of how well the operational risk framework has been embedded in the business, both with respect to business decision making and internal controls, but also conduct and culture.

We asked survey participants about their top priorities for 2015 in terms of further developing their operational risk management approaches³. We found that internal control and embedding of operational risk in business decision making processes represent firms' top priorities for development in operational risk for 2015. Improving operational risk measurement capabilities is cited as another important priority for many firms, which should be seen in the context of the timing of internal model applications, which are either imminent or already under review from regulators. While firms surveyed scored well on operational risk governance generally, improving the articulation and use of risk tolerances is a key priority and some firms stated dissatisfaction with the effectiveness of their Key Risk and Control Indicators. We found that larger institutions state enhancement of risk identification and assessment as a priority for further development, potentially reflecting the complexity of operating such processes in large and diverse groups.

Exhibit 2: Ranking of themes across the 30 institutions surveyed

Q: PLEASE RANK THE FOLLOWING IN TERMS OF PRIORITY FOR DEVELOPMENT WITHIN YOUR FIRM OVER THE COMING 12-18 MONTHS	
1. Embedding more robust Operational Risk practices in taking key decision-making across the organization's value chain	Number 1 priority across the firms surveyed – does not vary with internal model status
2. Embedding more robust measurement process	
3. Improving the implementation of risk tolerances for Operational Risk	A development priority for smaller institutions
4. Embedding more robust risk monitoring process	Smaller institutions found their KRIs to be particularly ineffective
5. Embedding robust risk identification and assessment processes	A development priority for larger institutions, reflecting the complexity of achieving coverage and prioritisation
6. Implementing a more robust internal control system	
7. Defining clearer roles and responsibilities for Operational Risk management capabilities	A development priority for smaller institutions
8. Strengthening the tone at the top	
9. Adopting a broader scope for the management of Operational Risk	
10. Embedding more robust business resiliency and continuity processes	

³ We asked participants to score the CRO Forum operational risk principles on a scale of 1-10 and then averaged these scores to obtain an overall ranking of priority areas for development across the participants.

3. ORGANISATION AND GOVERNANCE

Operational risk resourcing levels continue to vary significantly both on an absolute basis but also when adjusted for firm size, e.g. by premiums written or assets under management. As overall resourcing increases, incremental resource is more likely to be added at the business unit than at the central risk function. Operational risk is explicitly mentioned in the terms of reference of the board risk committee for a minority of firms, but is only implicitly captured for almost all other insurers through the committee’s broader remit, covering all material risks to the firm. The most senior dedicated operational risk committee in the majority of firms is chaired by either the CRO or CEO.

The three lines of defence concept has seen broad adoption across firms, and there is a fair amount of consistency in how core operational risk management activities have been assigned across the three lines of defence. The mandate of the 2nd line of defence (risk function) increases with firm size, covering a variety of tasks including managing the regulatory dialogue and advising on control design. The role of the 3rd line (internal audit) also varies with firm size. In addition

to independent framework verification, which all respondents listed as an activity performed by the 3rd line of defence, smaller firms also reported a strong role for internal audit in control assurance. There remains potential for further alignment between the risk function and internal audit on matters of testing, methodology, process and timing.

Operational risk appetite (or risk tolerance) statements continue to be a priority for further development, especially among smaller firms. Most firms report having explicit operational risk tolerance statements in place, often cascaded to the Business Unit or legal entity level. The dimensions used to express operational risk tolerance vary considerably, however, with realised losses being the most popular approach among participants. Realised internal operational risk loss events are a “backward-looking” measure of risk and so insurers are increasingly looking at complementing such measures with more “forward looking” measures of operational risk exposure, such as external loss data, Key Risk Indicators, control testing results and operational risk capital requirements.

Exhibit 3: What metric(s) are used to express Operational Risk tolerance?

N=30



4. CULTURE AND CONDUCT

Effective risk management requires formal processes and controls as well as a “good” risk culture. This is because pre-defined controls by definition will not address unknown risks and therefore staff must work in line with principles and values which guide their actions and decision making in unforeseen circumstances.

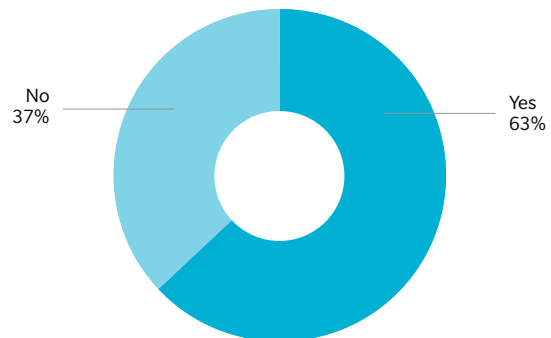
Risk culture is commonly framed through a code of conduct, which a majority of survey participants have in place. Only a minority of these explicitly mention the contribution which operational risk management can make to good conduct. A majority of participants also assessed their firm’s risk culture through formal risk culture surveys.

Operational risk management can be an important contributor to good conduct. For this purpose it can be useful to adopt a broad definition of operational risk. However the majority of institutions surveyed have preferred to adopt the de facto industry standard definition as stated in the banking industry’s Basel II Accord⁴.

A majority of firms surveyed indicate that their operational risk framework provides inputs into conduct management.

Exhibit 4: Is the operational risk framework used in conduct management?

N=25



- ” Conduct is included in the operational risk register
- ” We combine conduct and operational risk management together in our framework diagram and reporting
- ” Both the corporate top risk assessment and individual divisional Risk and Control Self-Assessments explicitly assess conduct risk and the associated control environment
- ” Fraud and compliance frameworks which are components of our operational risk management framework are used to manage conduct risk
- ” There is a link and close relationship between our operational risk management framework and compliance framework

⁴ Basel II Accord defines operational risk as the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. This definition includes legal risk, but excludes strategic and reputational risk.

5. RISK IDENTIFICATION AND ASSESSMENT

Risk and Control Self-Assessments and Scenario Analysis are the two most common approaches used by participants to identify and assess operational risks. Both are used by a large majority of participants. Commonly, they serve different purposes, with Scenario Analysis typically being an important capital model input. It follows that Scenario Analysis is therefore often tied closely to the risk calibration cycle, while Risk and Control Self-Assessments may be performed more frequently. Risk identification and assessment leverages a broad array of inputs, as illustrated in the figure below.

However, despite the alignment on purpose and inputs, there remains considerable variation on how these processes are performed in practice. 6 of the 30 firms responding described their approach to risk

identification as being a combination of a top-down (i.e. led by the Group or central risk function) and a bottom-up process (i.e. led by the different business units or business areas). The remaining 24 firms were split equally between those who use the former versus the latter approach.

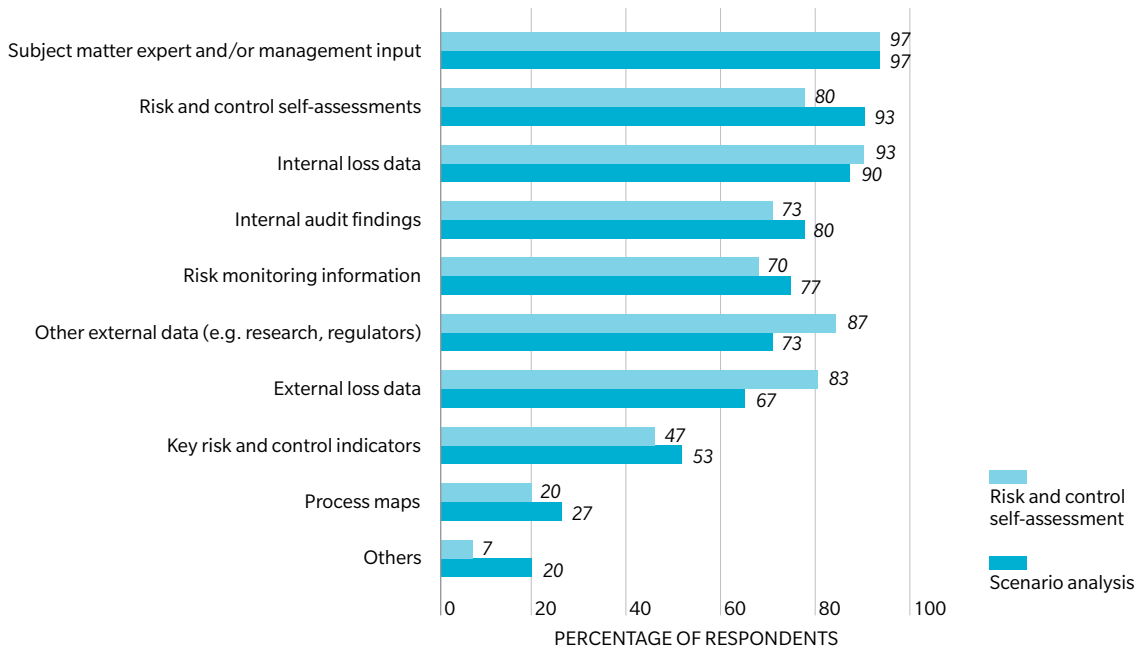
Business process analysis is carried out by a sizeable minority of firms.

Scenario parameterisation varies substantially across participants, in all likelihood reflecting the variation in capital model design also observed in this survey.

A majority of institutions have triggers in place to prompt out-of-cycle risk assessments when certain events occur (e.g. following a substantial loss incident).

Exhibit 5: What are the data sources/inputs considered for risk identification and assessment?

N=29



6. RISK EVENT DATA CAPTURE

The importance of an accurate and long history of internal risk event data (i.e. loss events and near misses) is widely recognised as a crucial source of information that can inform both internal control enhancements and also forward looking risk assessment and measurement.

Compared to the banking sector, insurers have long suffered from a relative lack of internal risk event data. This has substantially influenced thinking on capital model design as well as prompting initiatives for industry loss event and near miss data sharing, such as through ORIC International.

As our survey shows, the loss event data collected at many firms now spans in excess of 5 years and in one case covers 14 years. For reference, 5 years is the minimum requirement for banks to apply for the

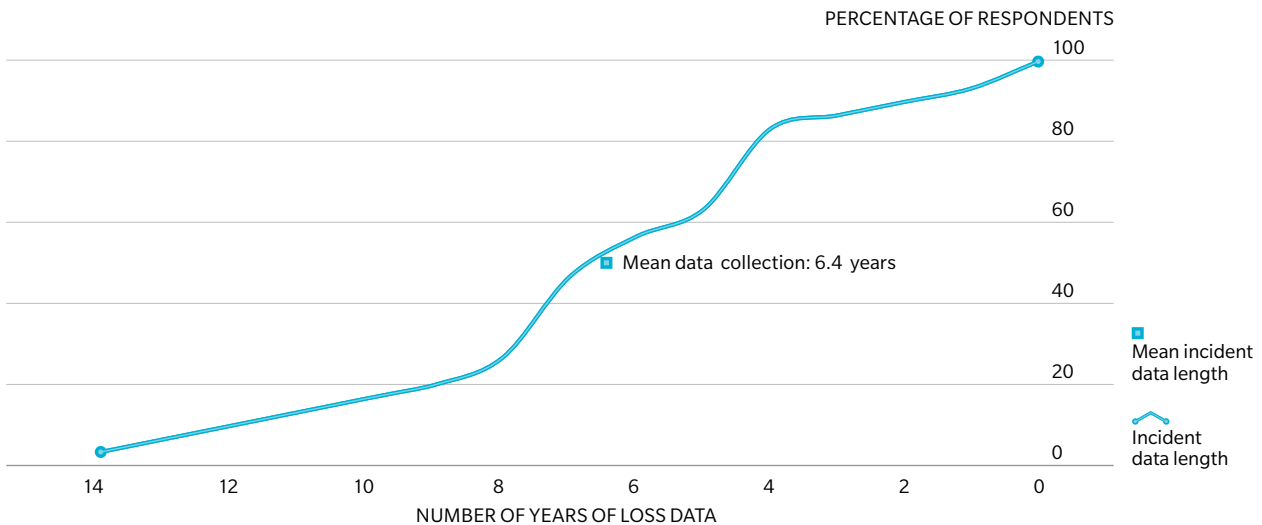
Advanced Measurement Approach under Basel II. It is likely that as the insurance industry reaches this level of loss history, additional capital model design options will open up.

Minimum thresholds are not applied for loss event data capture at a majority of participants; in addition many firms continue to report problems in relation to collecting data on boundary events reliably. Initial capture is a business responsibility at most firms, while the risk function assumes a quality control role.

“Lessons learnt” processes are popular in principle, but formal follow up remains rare, with only a few larger firms reporting systematic, regular communication and follow-up.

Exhibit 6: How many number of years have you collected internal loss data?

N=30



7. INTERNAL CONTROL

Internal control has become an industry priority given the many national and supranational regulations that require senior management to attest to a robust and comprehensive system of risk controls.

Identifying and assessing controls is a core feature of most operational risk frameworks. For example, Risk and Control Self-Assessments usually involve the identification of key controls and an assessment of their design and/or operating effectiveness.

Our survey shows that, indeed, the operational risk framework at a majority of participants is set up to handle initial identification and (self-) assessment of controls. It is notable that this applies also to Scenario Analysis, a process often attributed with a strong measurement focus.

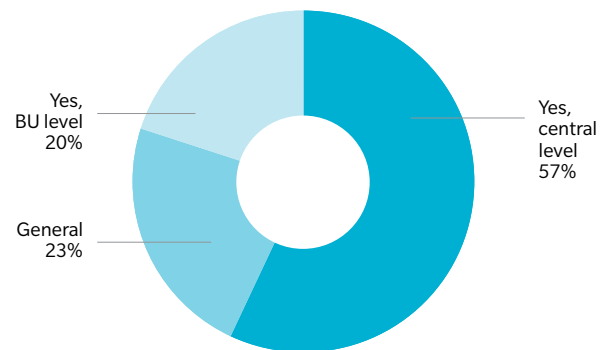
A majority of institutions also set central standards for the design and/or evaluation of those controls.

There is considerable variation on what follows. A majority of firms operate a central controls register, but it a sizeable minority do not.

While some firms have achieved good coordination of assurance activities between 1st and 2nd lines of defence, this does not appear to be the industry norm. This suggests room for improvement in many organisations, in particular in light of recent regulatory requirements on internal controls, such as the UK senior managers' regime.

Exhibit 7: Does your firm have a controls repository and at what level?

N=30



8. MONITORING

A good risk monitoring and control framework enables a firm to quickly respond to changes in the business, the market environment and to emerging risks.

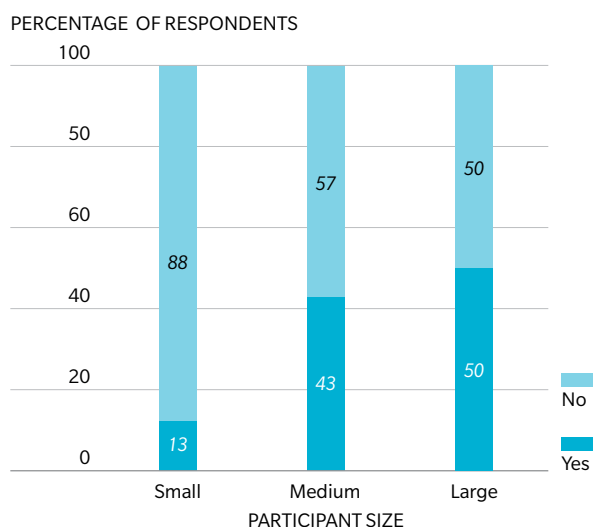
However in our survey, a majority of participants considered their key monitoring indicators (Key Risk Indicators, Key Control Indicators) to be ineffective. This was more pronounced in smaller firms and correlates with smaller firms also wishing to enhance their approach to operational risk tolerance setting.

A majority of participating firms collect firm-wide Key Risk and Control Indicators. Larger firms had also defined ownership for each of their indicators.

A majority of firms had also put in place internal policies governing threshold breaches on Key Risk and Control Indicators – however only a minority of firms were able to articulate pre-defined actions upon breaching such thresholds. As risk tolerance frameworks become more developed, we expect to see further enhancements in the use and governance of risk and control indicators.

Exhibit 8: Do you think KRIs/KCIs in place at your firm are effective indicators of operational risks?

N=30



9. BUSINESS DECISION MAKING

Embedding of operational risk management, such that both the formal framework and its underlying principles are applied in day to day business decision making is a key priority for all participating firms in this survey.

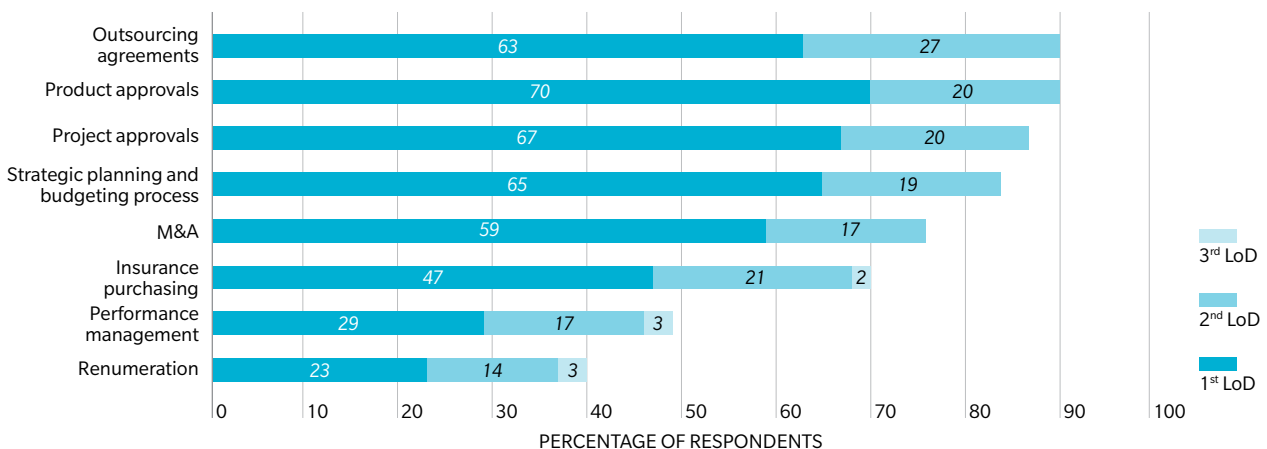
Embedding operational risk management in the business relies on alignment of training and compensation as well as formal decision making processes. For the latter, operational risk considerations are taken into account in most of the business processes we asked about, by the majority of the firms surveyed, as shown in the figure below. We note that this is mainly executed through the 1st Line of Defence (LoD).

Training is equally important to ensure the principles and aims of the operational risk management framework are applied by staff appropriately in situations arising outside of the defined processes listed above. Internal model firms had progressed significantly further in tailoring this training to specific audiences.

Finally, remuneration is an important driver of embedding the operational risk framework. The majority of participants reflected operational risk in compensation setting, mostly to reflect adherence to the operational risk or broader risk management framework.

Exhibit 9: How do you use operational risk in business decisions and responsibilities?

N=30



10. BUSINESS RESILIENCY

Business resiliency reflects the likelihood and impact of disruptive events that may result in service outages.

The challenge to firms is therefore to identify and measure those operational risks which could result in service disruption through events such as building, staff or system unavailability.

All firms participating in this survey had business continuity and disaster recovery plans in place.

In any disaster recovery plan, trade-offs need to be made as to what constitutes a critical business process. There appears to be little convergence on what method or metric to use for determining criticality.

A majority of firms use business impact analysis to rank individual business processes for criticality. A majority of firms also tailored their business continuity training to different employee groups.

Exhibit 10: Which process is used for categorising the criticality of business functions?

N=10

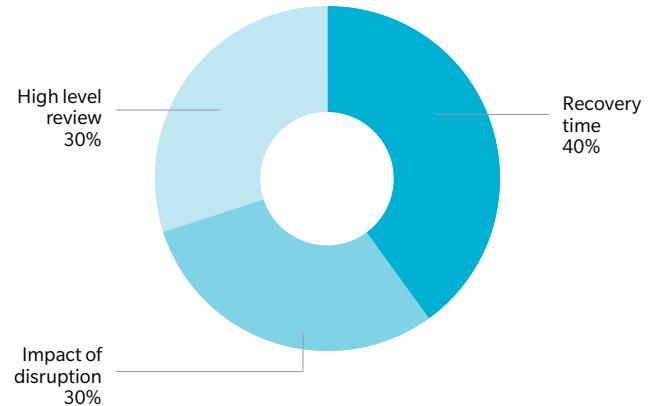
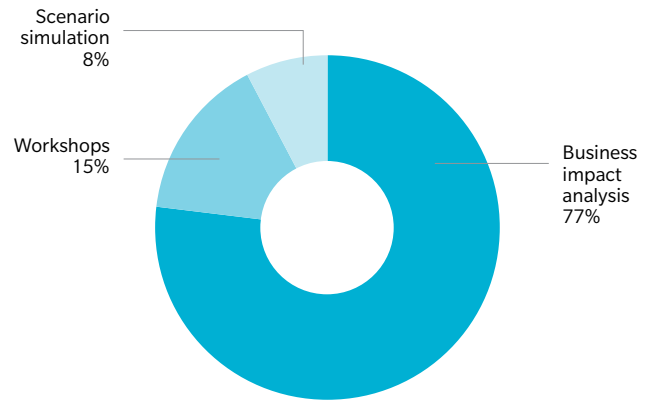


Exhibit 11: Which process is used for assessing disruption impact?

N=13



11. RISK MEASUREMENT

The majority of firms in our sample were internal model firms, either aiming for a full internal model for the calculation of capital requirements or for a partial internal model where operational risk falls under the risk types in scope for the internal model. The design of operational risk capital models varied substantially across participants. The most popular category identified by participants was a hybrid in which Scenario Analysis is combined with loss data analysis to form a combined capital estimate. However, even within this category, the specific approaches varied substantially.

In the majority of firms frequency and severity are modelled separately and half of participants deduct expected insurance recoveries. The functional form

of risk aggregation varies widely across firms, with a Var-CoVar matrix being the most popular choice. Diversification benefits (when aggregating operational risk with other risk types) were on average around 33% across firms, but this varied widely for individual firms from 0% up to 79% in one case. Operational risk capital requirements average approximately 8% of total capital requirements for internal model firms and 12% of total capital requirements for standard formula firms (on a group diversified basis).

The majority of firms allocate the final capital charge to business units and/or legal entities using a scalar based allocation key (e.g. based on premiums written).

Exhibit 12: How is operational risk quantified?

N=29

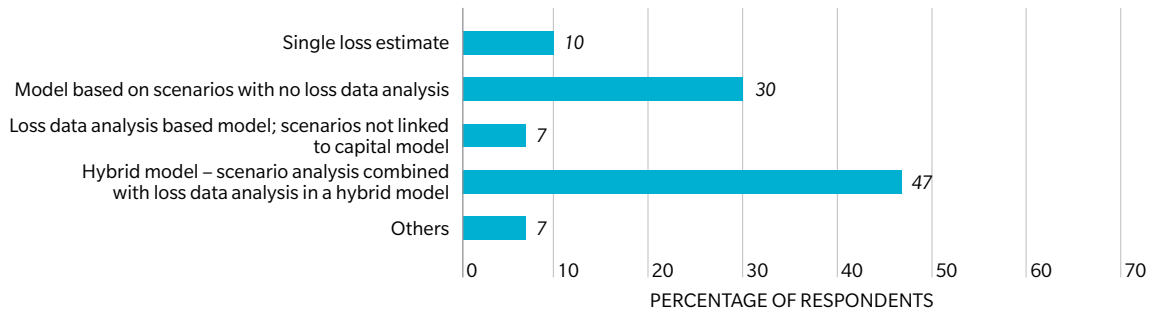
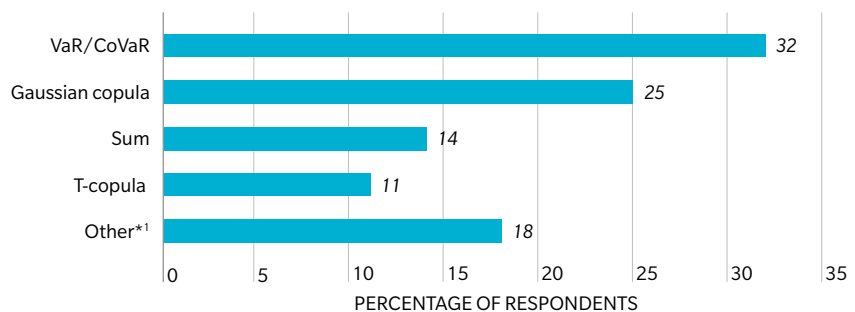


Exhibit 13: How do you aggregate operational risk with the total capital requirements?

N=28



*1 Other includes hybrid methods with expert judgement

12. SYSTEMS

Operational risk systems can aid the consistent capture of operational risk event data, including internal and external loss events and near misses, Risk and Control Self-Assessments, Scenario Analysis, risk and control indicators and action items. Systems are often built in-house, but a variety of vended solutions are on offer that may represent an attractive alternative to lengthy in-house developments. In our survey, we noted significantly greater popularity of vended systems among internal model firms compared to firms intending to use the standard formula.

Vended systems are most likely used to support operational risk management, while measurement (i.e. capital modelling and Scenario Analysis) systems were more likely to be housed outside of them.

Exhibit 14: Do you use a vendor-based system to support operational risk management?

N=25

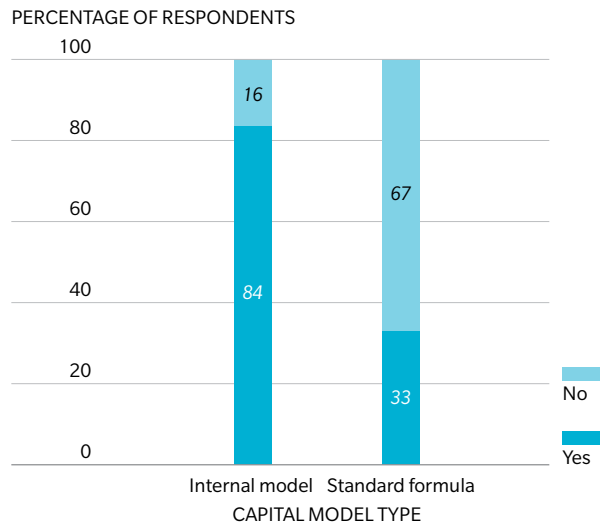
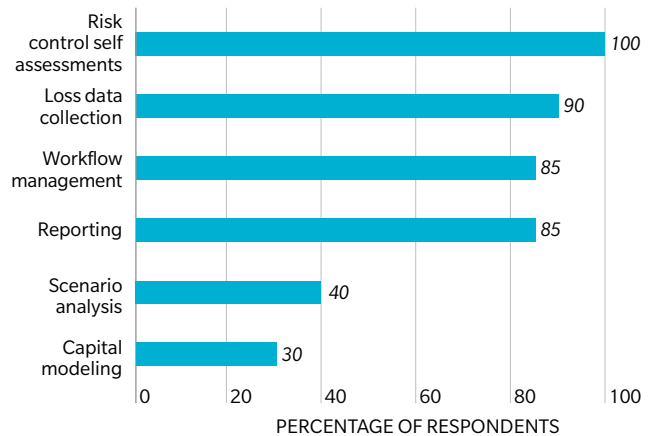


Exhibit 15: What activities are vendor based systems used for?

N=20



CONCLUDING REMARKS

Operational risk management plays a crucial role in the success of all financial institutions, including insurers. The survey results indicate the insurance industry is making good progress, but many firms are intending to further enhance their approaches to operational risk management and measurement.

Several recent events in the broader financial services industry have brought operational risk, and, in particular, conduct risk to the forefront of the regulatory agenda. These events have also shown that the impact of operational risk can be broader than direct financial losses, suggesting that practitioners and risk managers may wish to consider broadening the definition of operational risk identification, assessment, measurement and management to include indirect operational risk losses, for example falls in share price or opportunity costs. A broader definition could include all such second order losses beyond the immediate financial impact of the loss event.

In closing, we would like to draw attention to two key themes from the survey:

1. Lack of convergence

This survey shows substantial variability in the methodologies employed for core operational risk tools such as Scenario Analysis and capital modelling.

Each member firm's practitioners must be able to explain the modelling choices, and their relevance to the firm's specificities such as products, consumers, operational complexities (or lack of) as well as regulation that would mandate or justify the internal model approach taken.

We believe the industry must continue to look to examples of leading practices amongst peers and continually strive to converge on these approaches. Otherwise, there may be a risk that regulators step in and force convergence to more rigid, simplistic practices – which would end the healthy competition of new ideas and practices now observed across participants.

2. Measurement vs. Management

While operational risk measurement continues to evolve (with diverse approaches), our survey results show that the management of operational risk needs considerable attention to remain aligned with upgrades to measurement approaches. Specific areas of focus for enhancement include:

Organisation and governance: Those participants that don't already should consider explicitly including operational risk in the terms of reference for relevant committees.

Internal controls: Centralisation of control repositories and a defined process for monitoring control effectiveness would be of benefit to a sizeable portion of participants, also in light of recent regulatory changes such as the UK's senior managers' regime.

Monitoring: Smaller firms could improve Key Risk and Control Indicator effectiveness by broadening their scope, more clearly assigning ownership, and defining formal policies with escalation paths for breaches.

Business use: Use of the operational risk framework in business decision making is limited largely to the 1st line (business), with the 2nd (risk function) and 3rd (internal audit) lines of defence lacking involvement.

Culture and conduct: Many firms would benefit from carrying out risk culture assessments and ensuring that there is a clear integration of conduct risk management within their broader ORM framework.

As insurers respond to regulatory and competitive challenges, they will need to continue to set higher standards and enhance their operational risk management frameworks and capabilities to meet heightened regulatory expectations, as well as those of consumers. In doing so, they should actively support industry convergence where appropriate.

APPENDIX A – PARTICIPANT PROFILE

30 Insurers took part in the survey. A majority of the insurers were predominantly life and general insurers. Health and re-insurance represented only 5% of the gross written premiums of the survey participants.

Exhibit 16: Percentage of respondents by Insurer type

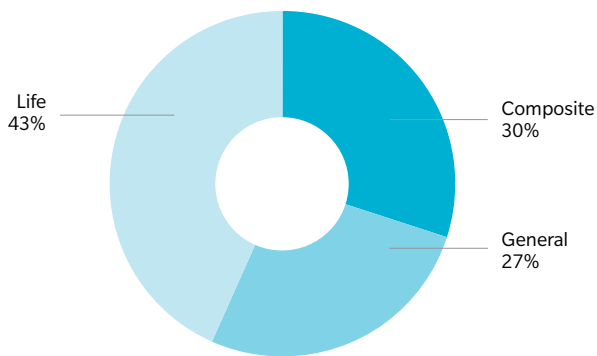
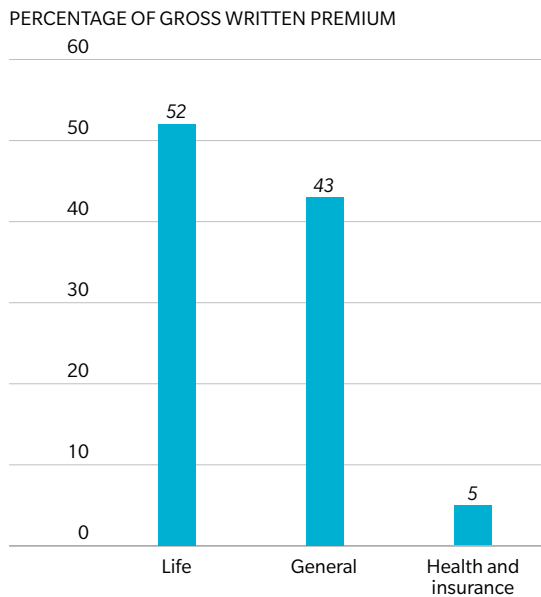
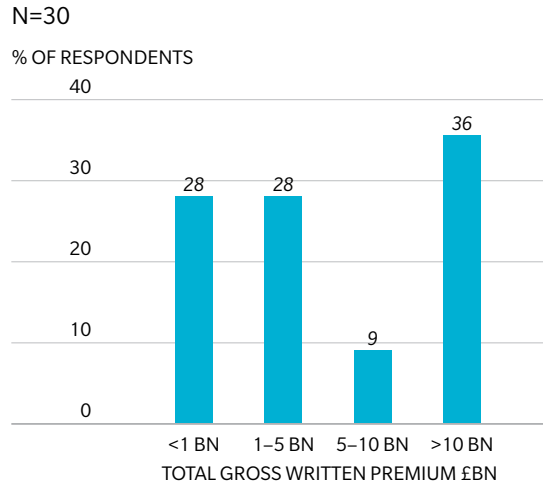


Exhibit 17: Proportion of gross written premiums by product type



Providers of all sizes were represented in the survey as shown in the figure below.

Exhibit 18: Participant by size



APPENDIX B – SURVEY PARTICIPANTS

Ageas	Lloyds Banking Group Insurance
AIG	Just Retirement
Allianz	Legal and General
Amlin	LV=
AMP	Pension Corporation
Aspen	Phoenix Group
Aviva	Prudential
Beazley	Rothesay Life
Delta Lloyd	Royal London Group
Direct Line Group	RSA
Ecclesiastical	Standard Life
Friends Life	Sun Life Financial of Canada
Hiscox Insurance	Tesco Underwriting
HSBC Insurance	UNUM
Insurance Australia Group	Wesleyan

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