The Future of Financial Intermediation

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Introduction

Cast backward two or three years, and a paper on this subject might not have been requested. And if it had, the context and conclusions would likely have been quite different. Few could have imagined the upheaval seen in global financial markets in the past 15 months, and even fewer could have predicted the extraordinary subsequent outcomes. The magnitude of the event was so great that no industry or region of the world was untouched. This financial crisis was no localized event, and it impacted not just banks and brokerage firms, but also the traditionally more stable insurance and pension industries.

This paper outlines the main trends that are expected to shape financial intermediation for the foreseeable future, and the implications of those trends for institutions in the industry. These trends are identified by mapping out the context and evolution of the current malaise in financial markets, the instant and more lasting responses to the crisis, and key structural features that will have a bearing on the ongoing development of the industry.

Context

In commenting on the global economy of the past 15 months, Winston Churchill may well have put it this way: "It has been said that capitalism is the worst form of economic system, except all those other forms that have been tried from time to time." The period was hardly capitalism's finest hour, although prior to the crisis, many felt just that way about the system. After all, the world had just witnessed roughly 16 years of economic growth with few interruptions, about twice as long as an average cycle and a rare occurrence in modern economic history. The unusually long expansion increased the prosperity of developed markets, but emerging markets also cashed in on the growth in a dramatic way. What we witnessed was a large rise in the tide, and it lifted all the boats in the process.

The explosion and profusion of technological progress over this period spurred the growth cycle on. Advances in technology were nothing less than revolutionary: we went from cumbersome mainframes through multiple generations of ever-cheaper personal PCs whose capacity, speed metrics and features have increased exponentially. As recently as 1994, most workers did not have web browsers on their computers; now, we could hardly fathom working any other way. Communication technology that not long ago was confined to science fiction is now commonplace. Business harnessed this technology to enhance productivity and in the process increased the growth capacity of the global economy.

Technology didn't stop there. In addition to radically increasing efficiency, advances in technology also increased the global reach of commerce. Over the past growth cycle, the growth of global trade was unprecedented. Trade intensity – the share of exports and imports in total GDP – rose dramatically, from a long-term average between 35% and 40% that persisted up to the early 1990s, to 65% and climbing in 2007. But this wasn't just an increase in international sales of raw and finished goods. Over this period, technology enabled firms of all sizes to expand their supply chains around the planet, sourcing or manufacturing intermediate products in a wide variety of countries in a way that maximizes efficiency while maintaining quality, and respecting just-in-time production requirements. Consequently, the share of imported content in exported goods is on the rise worldwide. This phenomenon has drawn a multitude of emerging markets into global commerce in a way that wasn't possible before, and many have seen sustained expansion at a pace far greater than growth in the world's largest economies. Although some would like us to think so, this growth has not come at the expense of, but in addition to growth in developed economies – the technology-enabled global spread of commerce has further increased the growth capacity of the global economy.

These two mega-shifts were instrumental in prolonging the last growth cycle. But the momentum of prosperity, the newness of this prosperity to many, the associated torrent of liquidity it produced and the relatively cheap cost of capital that prevailed in the latter part of the cycle combined to create a sense of invincibility. Many believed that we had reached a new state of perpetual global growth where recessions, if any, were shorter and shallower. This new attitude changed risk perceptions. Pools of capital scoured the globe in search of greater yield, bidding down the cost of capital, for even the most risky of ventures, to levels that were previously unthinkable. The new attitude also led Western consumers to increase their personal leverage, and among other things, to dabble in real estate ventures. Who would have thought that aggregate activity levels were unsustainable? First, heightened activity persisted for a long time – over 5 years. And second, most of the under-40 crowd had never seen or lived through a true economic recession on the job. Even for the over-40 set, the previous recession was a distant and fading memory.

Prosperity has a way of changing risk perceptions toward the end of any economic cycle, so in that sense, the recent growth cycle was no different. However, the significant structural changes that accompanied the cycle were enough to convince many market players that it was truly different this time – leading to the creation of one of the greatest bubbles of all time.

Each of these developments had a marked effect on the global financial system. Globalization led institutions to do business in less familiar parts of the world. Technology led to the development of ever more exotic financial instruments. Lowered risk perception led to a recalibration of risk calculations, and to what we can now see was excessive lending. Financial institutions spread themselves too thinly, and by the time the cycle began to unravel (early in 2006), it was already too late to turn back. But the system showed little desire to do so – the delusion was strong, and as it happened, the frenzy continued for almost three more years.

When bubbles burst, they do it so quickly that it can't be captured on film. Here in one frame, gone in the next. So went the collapse of the financial bubble in the fall of 2008. There was little warning, and suddenly with the collapse of Lehman, global capital markets froze up. Sure, there were signs of trouble earlier in the year, but no one expected a situation so bad that financial institutions would stop lending to each other. It's important to recall just how close to the brink the Western financial system was at that point. The inter-connectedness of institutions ensured that relatively stronger institutions were just as vulnerable as the weak ones. Canadian banks were much better off than most, but even one Canadian bank CEO mused at the time, "There was a possibility that the entire global banking system could go under."

Policymakers were quick to understand the increased structural fragility of the financial system, and the gravity of this key market failure. Faced with a broad loss of the general public's confidence in the system, the immediate need was for a patch on the system that would convince most onlookers that it was business-as-usual. Action was swift: sufficient liquidity was pumped into the system to break the logjam, and when institutions became convinced of the process, the freeze-up of inter-bank lending thawed. Measures were also substantial, a key part of the convincing process. From liquidity injections into the system to purchases of toxic assets to governments taking equity stakes in the most troubled institutions, the measures were far more substantial than could have been believed. Another unique feature of the measures was the intense and almost immediate international coordination effort that was undertaken. The success that the efforts have been met with thus far are all the more remarkable when one considers that the specific measures, while well known in theory, had never actually been implemented before on such a scale or under such circumstances as these.

Unfortunately, even with these significant efforts, and in spite of restored profitability in the sector, the financial system is not yet through the woods. Banks and insurance concerns in the Western world were brought to their knees early in the recession, but the strongest late-recession impacts are still to be felt. Given Western unemployment trends, the credit cycle (that is, default rates) on conventional borrowing is expected to peak in the first half of 2010. Defaults on commercial real estate also lag the economic cycle, and they are now mounting and will continue to do so through 2010. Concern will be elevated until default rates crest and then head downward.

The Ride vs. the Roller-Coaster

Roller-coasters are built to handle the huge ups and downs that the cars and riders have to take. The plunge that financial institutions took tested the integrity of global financial architecture, and revealed big cracks. The first priority was to keep the car and the passengers on the rails, which policymakers are doing successfully. The second key priority is the rapid repair of the structure. Speed is essential, both to create lasting confidence in the system and to harness political, business and public will while concerns remain high. The return to profitability in the sector together with the significant liquidity in the system has sparked concern that risk appetite has revived too quickly, and that questionable past practices are resurfacing. On January 6, the BIS indicated its concern by inviting major banks to confer on the issue at its next meeting, an unusual request for the organization, which typically keeps its meeting agendas under wraps. There is indeed urgency for structural reform, but the need for speedy remedies must be tempered with the need to put the best policies in place that fix the cracks while also accommodating the evolving financial paradigm.

Key Trends and Features

The financial market crisis will leave a lasting mark on the architecture of the industry. Certain aspects of the industry structure will be altered immediately, while others reflect the evolution of the industry and the need to keep pace with ongoing changes. The key features fall into five broad categories, and are as follows:

1. **Withdrawal of support** – Broadly speaking, a good number of the largest Western financial institutions are still very dependent on the policy support they are currently receiving. Governments are already discussing appropriate exit strategies, and with good cause. Early or rapid withdrawal could prove costly, and even undermine the success that current strategies have achieved. The industry has been able to capitalize on the wide spreads between short- and long-term interest rates, and advantage that would be eroded in the event of a run-up in short-term policy rates. Policymakers are focusing their efforts on an orderly withdrawal of the heavy support currently in place, and detailed plans are already being aired and discussed by central banks, government finance officials, IFIs and the private sector. It is safe to assume that the

withdrawal will be successful, and as coordinated as the initial measures themselves, given the co-dependence of financial institutions around the world.

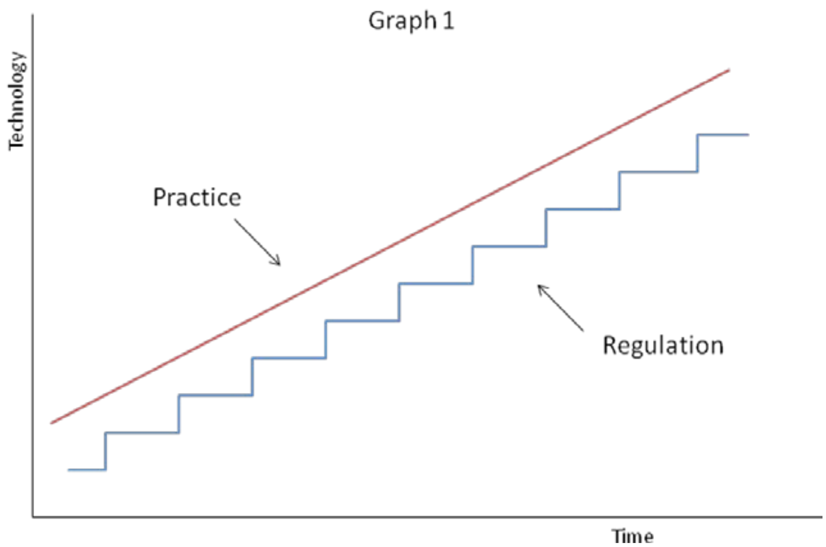
The support measures themselves pose a more lasting and oft-discussed problem. Concern about the problem of moral hazard initially led US officials to waffle on support measures, electing to pick winners and losers in the system. The collapse of Lehman was a rude awakening to the error of this strategy, as strong interdependencies and linkages in the industry were revealed. Certain institutions were deemed ‘too big to fail’ at the time, but it became apparent with the linkages that, generally speaking, the system itself was too big to fail, and as each player was a critical part of the system, they needed to be treated as a whole. Lesson learned.

But the moral hazard problem remains. If they weren’t before, all large institutions are now very aware of the vulnerability of the entire system to the failure of single organizations, and the fact that governments are loathe to let single institutions fail in a time of crisis. With the near-certainty of bailout, banks and insurance companies might be tempted, for the sake of enhancing return on capital, to take imprudent risks. Knowing this, policymakers, international financial institutions and oversight bodies, together with banks and insurers, are taking pains to erect safeguards against that possibility – our next key feature shaping financial intermediation in the coming years.

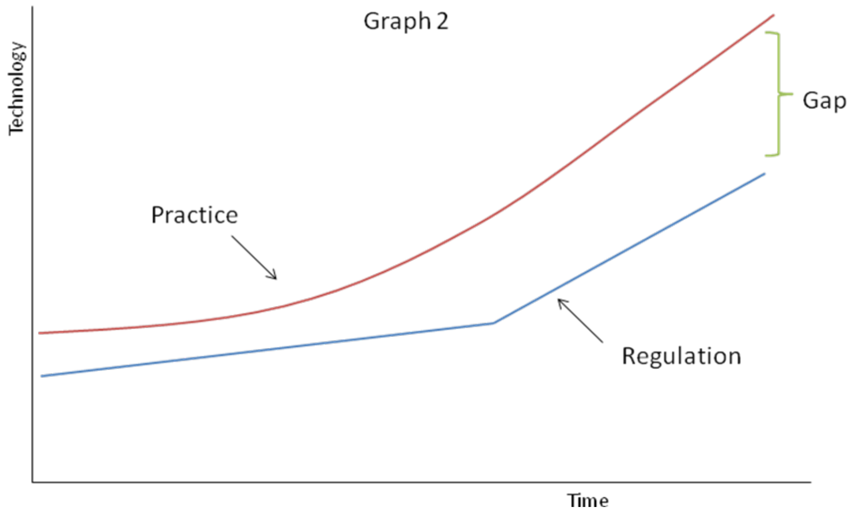
2. **Rules of the game** – the international community has wasted no time mobilizing on this issue. If the market failure that hit the financial world in the fall of 2008 revealed anything, it was that the rules of the game were insufficient to guard against a collapse or near-collapse of the system. Much coordinated work has been carried out, and recommendation lists are long and comprehensive. Implementation is also well underway, according to one of the latest fulsome studies on the issue. The following key observations can be made from the studies that have been conducted thus far:

    a. ***Increased scrutiny.*** Get used to it. Recommendations thus far strongly advocate a larger and more powerful role for institutions charged with oversight of the system. Reporting mechanisms are likely to be more frequent, more comprehensive, more restrictive, more standardized, and they will in all likelihood imply a higher cost of monitoring. There is broad acknowledgement that the speed and technical nature of today's financial intermediation has actually increased vulnerability to nasty events, and thus there is a large desire on the part of joint committees to increase transparency and the availability of standardized, up-to-date data to facilitate effectual monitoring.

b. ***Regulatory catch-up.*** Why the need for significantly greater scrutiny? A painful revelation of the financial crisis was the extent to which regulation and oversight had fallen behind industry practice. One might have thought that in the wake of the Enron affair and Sox legislation that gaps in the system would be fixed. It is probably fair to say that there remained a lack of awareness about the implementation of technology and the speed of technical change inside financial markets. Historically, we can imagine this technical change growing at a linear pace (see Graph 1).



Regulation of the industry can be imagined to also be growing at a linear pace, but more slowly than in the industry. Recessions, currency and financial crises and the like are typically 'learning moments' where the gaps between regulation and practice are revealed, and patched up – hence the step-function characterization. Now superimpose the exponential change in technology that we have witnessed in the past 20-25 years on this situation (see Graph 2).



Given the absence of a significant recession for a protracted period of time, there were few moments that offered the opportunity to catch up to the rapid change in industry practice. Even though there was a sense of a growing regulatory gap, the pace of regulatory change might have increased, but it was likely still linear. This construct implies a much more rapidly growing gap between regulation and practice, a paradigm that has become obvious in the wake of the crisis. If the roadmap for regulation incorporates this reality into action plans, the dynamic of regulation will be permanently different from what we have known to this point.

c. ***Progress to date.*** In a report released on December 9, 2009, the IIF together with Ernst and Young catalogued changes that the world's leading financial institutions are currently bringing to their organizations – self-imposed, internal regulation, it seems. The report claims that all the banks in the survey had completed internal reviews of their systems and processes post-crisis. Oversight of the implementation of needed changes was carried out from the highest levels of the organizations (senior executives and board members). A large number of reforms are already being implemented, and that the timeline for full implementation is short. Key attention was paid to risk management, including improvements to stress testing, liquidity management and risk measurement. Most firms have compensation policies that align or are close to aligning with compensation standards arising from regulators and international oversight bodies (notably the FSB), and most reforms are expected to be implemented by the end of this year.

d. ***International oversight.*** Expect more of this. The crisis has buttressed the role of the BIS and the re-cast Financial Stability Board, the latter now having a broadened mandate to promote financial stability. International coordination of policies is most intense as it concerns financial institutions with a significant cross-border presence. As ongoing globalization strongly suggests that this trend will only increase, the role of international supervision is quite likely to expand over time, with the further development and enhancement of international protocols on risk management, transparency, reporting standards and the like.

e. ***Effects on Insurance.*** An obvious learning from the financial crisis was that the insurance industry, generally thought to have been less affected by past short-term cyclical fluctuations is actually itself vulnerable to, and a potential cause of, systemic failure. Solvency II, the insurance industry's answer to Basel II, takes a more granular approach to determining valuation of technical provisions, using available detailed data where possible and calculating proxies for market data to fill in gaps. Recommendations by the European Commission regulator based on the Solvency II principles suggest a need to raise as much as 20-30% more capital to bring provisioning in line with new standards. The industry is still in discussions, but if broadly applied to cross-border insurers, the near-term costs of provisioning could be significant.

3. **Technology** – the financial services industry is estimated to be the global front-running sector in terms of information technology investment. This trend is expected to continue during the economic downturn and well into the long-term future. Some analysts have blamed this cycle's near-systemic-failure on technology, which is akin to blaming the car for speeding. Competition in the industry and the evolution of new financial products are together likely to continue spurring IT investment at a decent clip over the long-term horizon. Here are some observations about the nature of technology investments in the sector over the coming years:

   a. ***Product development.*** Technology has enabled the development of new and sophisticated financial services products at a furious pace. Certain banks are known to create 1,000 product variations in a year. While financial service firms may come under criticism for being able to risk-manage such a variety of products, as long as technology enables the creation of a large array of sensible, well-regulated product variations that customers are demanding, it is difficult to imagine this trend abating. In fact, failure to at least keep up to the status quo would likely be very damaging to a firm's long-term health.

b. ***Financial market Luddites.*** Like the famed British labourers who made a name for themselves by destroying technology (in this case, textile equipment) to retain jobs, there are those who advocate getting rid of sophisticated financial instruments because of their destructive powers. Warren Buffett has famously referred to derivatives as 'weapons of mass financial destruction'. Others have publicly refused to get involved with particular instruments because they simply do not understand them. There are varied opinions on this issue, but it is hard to imagine that such technology could actually disappear. There are those who do understand these instruments, and as long as they populate seats both in financial firms and in the bodies that regulate them, appropriate mechanisms for allowing them to function in a way that – as some advocate – actually smoothes out fluctuations in the economy seems reasonable. It is equally hard to imagine that quashing technology in any industry would actually be good for it.

c. ***Oversight.*** In the wake of the crisis, financial service firms have been criticized for spending a torrent of IT money on product development and delivery mechanisms, but relatively little on risk management. Risk management systems are in place, but there is concern about their veracity, relevance, speed and in certain cases, internal and external transparency – that is, what the outputs really mean. New regulation together with rules and protocols around disclosure should spur investment in oversight-related IT systems. Certain financial institutions do this well, and others clearly do not. Given the implied greater costs of post-crisis compliance, firms that make well-considered oversight-related investments are likely in the long run to have a cost advantage over firms that do not. The same logic applies to those responsible for external oversight. In fact, a more efficient solution would involve creation of an IT super-system of surveillance that applies equally for all institutions – simple in theory, but probably far too complex to be practicable, at least in the foreseeable future.

4. **Globalization** – some have speculated that the recession of 2008-09 will severely hinder the globalization process. The post-crisis increased role of government and the alarming increase in protectionist rhetoric fed that line of reasoning, but with growing signs that the worst of the crisis is over, and manifold indications of the resumption of growth, thankfully the rhetoric has died down. If anything, sharply lower economic activity is likely to spur innovative firms to seek international sales and production opportunities as a means of mitigating the risk of exposure to single markets and driving for greater efficiencies. Crisis is indeed the mother of this sort of transformation. Ongoing globalization has key implications for the future of the financial services industry.

    a. ***Presence.*** Financial firms will increasingly be asked to develop solutions to complex trans- and even multi-border transactions. Firms that have, or partner with those who have, a multi-country presence, will likely be best-suited to develop those solutions. True, much business can be done virtually, but being able to efficiently design, execute and administer these complex arrangements still implies a certain (large) scope of operation with the depth and creativity to pull it off.

    b. ***Scale.*** Firms in the financial sector that were deemed 'too big to fail' came under heavy criticism during the crisis. Some contended that any firm that was too big to fail was too big. The moral hazard dilemma suggests that there is merit to this argument. But under normal economic conditions, firms with a particular scale can generally operate at least as efficiently and with more competitive pricing than smaller operations. Global competition suggests that, all things being equal, the lower cost provider will be the preferred choice of financial institution. Larger scale enables insurers to underwrite business in a wider range of industries and markets, critical in an increasingly global world. In spite of the criticism, and calls for regulation of firm size, it seems that large-scale organizations have a key role to play in a globalized world, and as such, it is incumbent on them and their regulators to keep them solvent.

5. **Sovereign lending** – Solid, sustained economic growth over the past 16 years was accompanied by more prudent fiscal

management around the planet, and transactions involving sovereigns appeared to be waning fast. Debt settlements and prepayments were making things a lot quieter at Paris Club and OECD country debt discussions. The turn in the cycle is changing that, and once again the prospect of a heavier sovereign transaction load is quite realistic.

a. ***The government: back in the economy.*** The big surprise of 2008 was the instant return of Keynesianism. In a flash, the government was all over the economy, back by popular demand and bailing out this and that, taking equity positions in certain industries, making sure enough cash was in the system, and embarking on ambitious public spending programs to ensure that the economy was propped up during the darkest moments of the downturn. If history is any guide, for the most part it is unlikely that all of this involvement will unwind when economic times improve. First, debts will have to be repaid. But the nature of the new government projects is longer-term, and it is difficult to imagine a rapid withdrawal from the economy in the few years following the recession. As such, financial firms will be dusting off their sovereign lending know-how and preparing to do more deals in the future.

b. ***Infrastructure.*** As mentioned above, a flurry of government infrastructure projects has been announced as part of the ambitious stimulus plans for the recessionary period. These were a logical place to go, as infrastructure generally enhances long-term productivity, and as many Western nations, intent on controlling their fiscal finances more carefully, compromised infrastructure investment, leaving gaping infrastructure deficits. Governments are expected to continue these investments well beyond the crisis period, and as such, these will remain a key business opportunity over the long-term period. Deals may be solely public, although there is much interest in delivering this infrastructure through P3 arrangements.

c. ***Green infrastructure.*** Increased openness to government infrastructure has seen significant funding diverted to green infrastructure projects. This too is not expected to wane significantly in the aftermath of the crisis period, and the financial industry will no doubt be called on to continue developing creative means of facilitating this growing international business.

Implications

Here is a hit-list of implications that derive from the above observations:

1. **Account for the new costs of regulation; internal and external oversight will require significant investment in technology and personnel, and increased provisioning requirements are likely to eat up a greater share of capital.**

2. **Regulatory changes and oversight protocols suggest an increased role for senior management and the office of the Chief Risk Officer.**

3. **Embrace technology. Winning firms in the financial services industry will be ones that make a large commitment to enhancing product offering, smooth transaction flow and also efficient risk management and oversight.**

4. **Go big, or go with someone who is big.**

5. **With increased scale, it is likely that market gaps for small and medium-sized enterprises will be significant, and will need 'gap fillers' like ECAs for the foreseeable future.**

6. **Compensation will be more aligned to longer-term performance of institutions.**

7. **It will be necessary to build up the knowledge of sovereign lending and familiarity with Paris Club and OECD debt management procedures and protocols.**

Conclusions

Capitalism took a big drubbing in the past 15 months. The recession revealed huge cracks in the financial system. Gaps between oversight and current practice will be filled, and a new order of oversight is expected to ensue. Those worst hit by the malaise are the ones most motivated to make the requisite changes. But the changes affect all organizations, and even those less scathed by the events of the past months will be required to gear up for the 'new normal' in the industry. Those who don't will in all likelihood have to play a dangerous game of catch-up to the industry, or at worst will not be around to play the game.

Appendix 1: Background to Solvency II

Solvency I

The solvency margin is the amount of regulatory capital an insurance undertaking is obliged to hold against unforeseen events. Solvency margin requirements have been in place since the 1970s and it was acknowledged in the third generation Insurance Directives adopted in the 1990s that the EU solvency rules should be reviewed. The Directives required the Commission to conduct a review of the solvency requirements and following this review, a limited reform was agreed by the European Parliament and the Council in 2002. This reform is known as Solvency I.

Solvency II

It became clear during the Solvency I process that a more fundamental and wider ranging review of the overall financial position of an insurance undertaking was required, looking at the overall financial position of an insurance undertaking and taking into account current developments in insurance, risk management, finance techniques, international financial reporting and prudential standards, etc. This project became known as Solvency II.

During 2004 and 2005, the Commission issued three waves of Calls for Advice to CEIOPS, regarding different aspects of the new solvency system. The Commission set out some policy guidelines and principles to guide CEIOPS in its task in a document called the “Framework for Consultation”, which was published in July 2004. Following extensive internal discussions, interaction with many key stakeholders and subsequent public consultations, CEIOPS sent its final answers to the three waves for Calls for Advice on 30 June 2005, 1 November 2005 and 3 May 2006 respectively.

Following completion of the consultation process, the Commission adopted the Solvency II Proposal in July 2007.

The Commission also wrote to CEIOPS regarding the subsequent phases of the project.

In order to take account of the adoption of Directive 2007/44/EC of the European Parliament and of the Council of 5 September 2007 amending Council Directive 92/49/ EC and Directives 2002 83/EC, 2004/39/EC, 2005/68/EC and 2006/48/EC as regards procedural rules and evaluation criteria for the prudential assessment of acquisitions and increase of holdings in the financial sector as well as the adoption of the so-called Rome I Regulation on the law applicable on contractual obligations the Commission adopted an Amended Solvency II Proposal on 26 February 2008.

Work on Solvency II has been supported by series of Quantitative Impact Studies by CEIOPS. More information on the most recent QIS exercises.