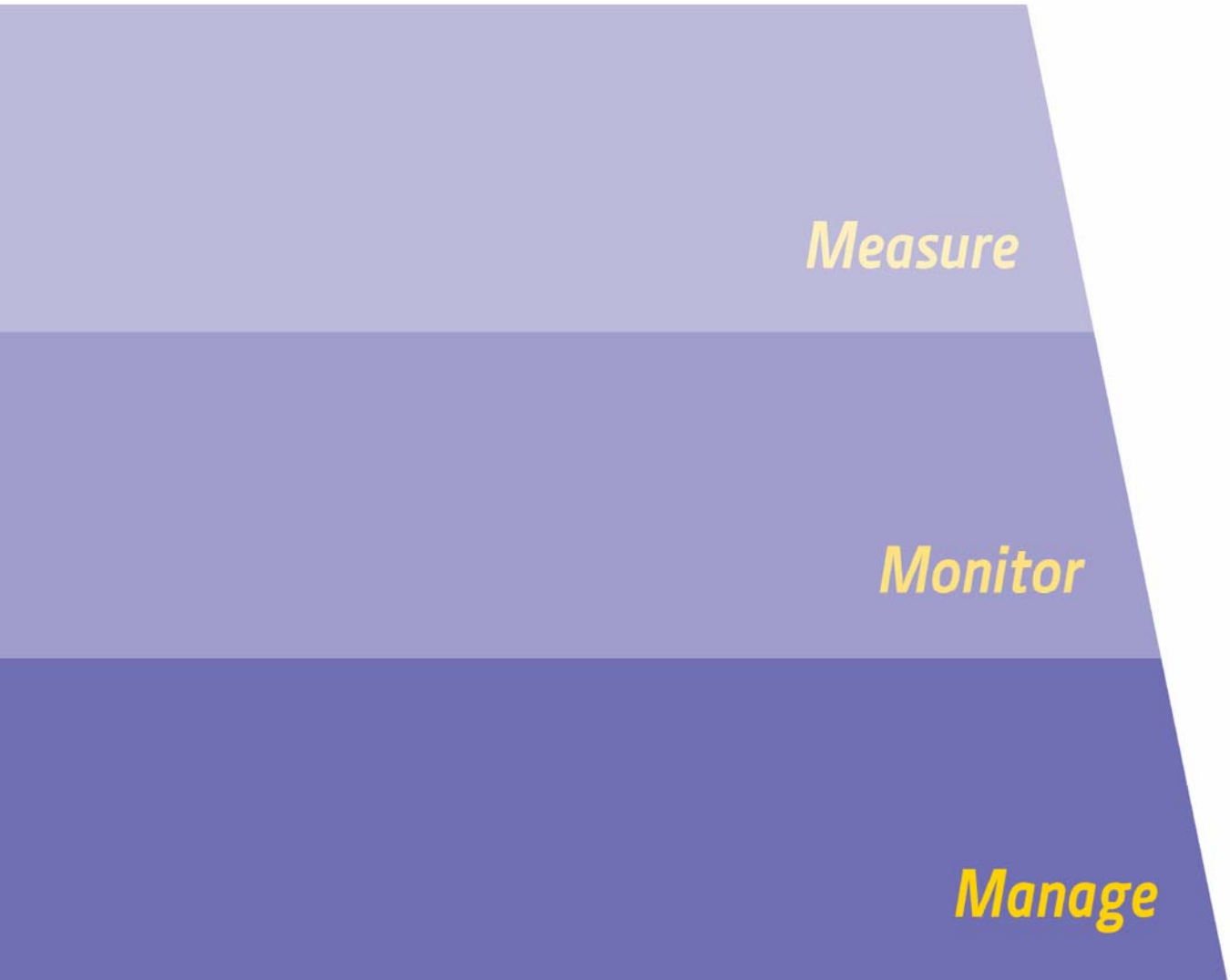
CCH
a Wolters Kluwer business

CCH® SWORD

Vision for Financial Services Regulation

Richard Pike, CCH SWORD



Abstract

From 2008 onwards, senior executives, shareholders and regulators of financial institutions across the globe will be focused on the governance of their organizations, ensuring that all of the risk inherent in the business is managed effectively.

In order to do this successfully, stakeholders will require far more detailed information concerning the risks within their operations and the quality of the controls in place to mitigate these risks. When executives ask for this information and require that it be of very high quality, they will be informed by their staff that it is not possible to provide entirely accurate data due to the fact that the processes and products within the financial organization are very fluid and constantly undergoing change. In countless financial institutions we have been told that their industry is far too fluid, competitive and complex for good quality, up-to-date information on risks and controls to be provided to senior management.

Is this credible? There exist a number of global industries that are complex, competitive and huge while having stable core products and processes. Within these industries, every company must be able to prove to regulators that each and every core process and product has gone through rigorous reviews and each control is of the highest quality. While this results in long lead times for new products and considered responses to market changes in these industries, there is no pressure to relax the regulations due to the importance of risk management in these particular industries.

The reason for this level of regulation and the focus on formal processes and controls is that if a control fails or a process is not followed entirely, then people's lives are at risk. Industries with these characteristics include pharmaceuticals, life sciences, chemicals, nuclear power, and aircraft manufacture.

> "Financial systems contribute essentially to the well functioning of our economies and are therefore a necessary prerequisite for growth and a high level of employment. Millions of depositors have trusted their wealth to our financial institutions. The consequences of the current financial market crisis jeopardize the crucial economic role of the financial system".
>
> *- Summit of the Euro Area Countries, 12 Oct. 2008*

Now that most of the countries in the developed world have decided that their financial institutions are of vital importance to the running of their economies it is time to regulate them in a similar manner to those industries where lives are at stake.

This will require all financial institutions to have a list of agreed products and processes that directly effect the risk figures provided to stakeholders. Should they wish to deviate from those products or processes they should be required to obtain a regulatory approval not dissimilar to that required for FDA approval. For example, when a financial institution's marketing staff invents the latest "adjustable rate mortgage" (ARM) product, it will be forced to go through a rigorous review process where all of the impacted stakeholders (clients, back office staff, risk staff, senior management and regulators) will be consulted and a lengthy testing cycle completed.

Given a firm footing of stable processes and controls, senior executives will now be able to receive information concerning the risks being taken in the business and the controls mitigating them. They will be able to rely on this information and to effectively govern their organizations in a manner consistent with the global importance of their industry.

Exposition

The financial industry has always been about capital: its availability, cost and usage. In recent times, the allocation of capital to and within financial institutions has been increasingly based upon theories of risk-based capital. These theories attempt to associate capital with the risk taken in its usage.While the basic tenets of this approach are very sound, its implementation relies upon risk models that have some basic flaws when applied to modern financial companies.

Any model requires assumptions be made concerning the data that drives the model. This is particularly true of models that take a very large and wide ranging set of inputs and generate a relatively small set of outputs. Within risk models these assumptions fall into two categories: mathematical assumptions and data and process assumptions.

There are many mathematical assumptions within financial risk models that can be challenged but that is for the mathematicians and actuaries to discuss. Our concern is with the assumptions concerning the data inputs and the processes that were operated to generate this data.

Most modern financial institutions are very complex and dynamic places. Many new products and processes are developed each year and many of these have far reaching consequences in terms of IT systems, people and controls. In this environment, it is impossible to be sure that the data being input to risk models is in fact accurate and timely. We are not talking here only about the correctness of trades or the timely input of pricing details, but also about the validity of the processes that generate the data and the effectiveness of the controls within those processes.

For example, a chemical engineer would not change an input to their process without fully understanding the ramifications and effects that may occur many years into the future. Going back again to the ARM example, while many credit risk systems will have

captured all of the actual mortgages issued the process of recording borrowers details (upon which the probability of default was calculated) has been shown to be faulty and not subject to the correct controls.

Many other industries have already realised that fluid processes and ineffective controls make for very shaky risk models and have, thereafter, taken the decision to ensure that all of the processes upon which the risk models are reliant are "locked down" and subject to very rigid change control procedures.

We see no other way to achieve reliable risk figures without the stabilisation of these processes and controls, whether this be through internal decisions or external regulation. This may indeed lead to a less flexible customer experience or more limited service choices with more time being spent by customers in transacting business with their banks. However the current economic downturn is showing people that "easy credit" is not necessarily good for their long-term financial welfare no more than fast food is good for their long-term health.

This hardening of the underlying processes will enable all stakeholders to be sure that the risk models are being fed with reliable data resulting in credible models.

This brings us to the efficacy of the models in identifying unlikely events. The recent crisis has already been defined by many in this business as a "fat tail" event that caught the models unaware. It seems that mathematical modelling is not yet capable of reliably predicting such events which seem to be less rare than the models predict.

A focus on how other industries face this challenge again begets results in the form of scenarios analysis. Many large industries and corporations place great store on senior management defining detailed scenarios and from these aligning business objectives and planning processes. While the insurance industry is an avid user of scenarios the banking industry has been slow to take up this activity. Scenarios provide an execellent way of understanding possible "fat tail" events and can be used both for risk capital modelling and for strategic planning.

Conclusion

The regulation of the financial industry in such a way as to "lock down" the processes and products that drive risk and then to enforce high quality scenario analysis will make financial insitutions more reliable leaders in the global economy.

About the Author

Richard Pike, CCH SWORD product director, has more than 15 years experience in risk management and treasury IT, He has analysed, designed and project managed the development of core treasury and risk management systems for large international financial institutions. He is a regular speaker and writer on risk management issues.

Headquartered in Ireland, CCH SWORD is a leading developer and supplier of operational risk control solutions to the global financial services sector. Established in 1995, CCH SWORD became part of CCH, a Wolters Kluwer business in 2008 and was renamed from Ci3 to CCH SWORD.