

JOURNAL

THE CAPCO INSTITUTE JOURNAL OF FINANCIAL TRANSFORMATION 04.2017 N°45

Opinion

Risk Culture: Risk Prevention
Starts With the Individual

Ulrich Hunziker

RECIPIENT OF THE APEX AWARD FOR PUBLICATION EXCELLENCE

TRANSFORMATION

CAPCO

EMPOWERING THE FINANCIAL WORLD

Pushing the pace of financial technology, we help our clients solve technology challenges for their business – whether it's capital markets in Mumbai or community banking in Macon.

We leverage knowledge and insights from our clients around the world:

20,000 clients in towns everywhere are becoming more efficient, modern and scalable.

27 billion transactions processed help solve clients' challenges – big and small.

\$9 trillion moved across the globe in a single year empowers our clients' communities to build storefronts, homes and careers.

55,000 hearts and minds have joined forces to bring you greater capabilities in even the smallest places.

Empowering the Financial World

FISGLOBAL.COM



JOURNAL

THE CAPCO INSTITUTE JOURNAL OF FINANCIAL TRANSFORMATION

Recipient of the Apex Award for Publication Excellence

Editor

Shahin Shojai, Global Head, Capco Institute

Advisory Board

Christine Ciriani, Partner, Capco

Chris Geldard, Partner, Capco

Nick Jackson, Partner, Capco

Editorial Board

Franklin Allen, Nippon Life Professor of Finance, University of Pennsylvania

Joe Anastasio, Partner, Capco

Philippe d'Arvisenet, Adviser and former Group Chief Economist, BNP Paribas

Rudi Bogni, former Chief Executive Officer, UBS Private Banking

Bruno Bonati, Chairman of the Non-Executive Board, Zuger Kantonalbank

Dan Breznitz, Munk Chair of Innovation Studies, University of Toronto

Urs Birchler, Professor Emeritus of Banking, University of Zurich

Géry Daeninck, former CEO, Robeco

Stephen C. Daffron, CEO, Interactive Data

Jean Dermine, Professor of Banking and Finance, INSEAD

Douglas W. Diamond, Merton H. Miller Distinguished Service Professor of Finance, University of Chicago

Elroy Dimson, Emeritus Professor of Finance, London Business School

Nicholas Economides, Professor of Economics, New York University

Michael Enthoven, Board, NLF, Former Chief Executive Officer, NIBC Bank N.V.

José Luis Escrivá, Director, Independent Revenue Authority, Spain

George Feiger, Pro-Vice-Chancellor and Executive Dean, Aston Business School

Gregorio de Felice, Head of Research and Chief Economist, Intesa Sanpaolo

Allen Ferrell, Greenfield Professor of Securities Law, Harvard Law School

Peter Gomber, Full Professor, Chair of e-Finance, Goethe University Frankfurt

Wilfried Hauck, Chief Financial Officer, Hanse Merkur International GmbH

Pierre Hillion, de Picciotto Professor of Alternative Investments and Shell Professor of Finance, INSEAD

Andrei A. Kirilenko, Visiting Professor of Finance, Imperial College Business School

Mitchel Lenson, Non-Executive Director, Nationwide Building Society

David T. Llewellyn, Professor of Money and Banking, Loughborough University

Donald A. Marchand, Professor of Strategy and Information Management, IMD

Colin Mayer, Peter Moores Professor of Management Studies, Oxford University

Pierpaolo Montana, Chief Risk Officer, Mediobanca

Steve Perry, Chief Digital Officer, Visa Europe

Derek Sach, Head of Global Restructuring, The Royal Bank of Scotland

Roy C. Smith, Kenneth G. Langone Professor of Entrepreneurship and Finance, New York University

John Taysom, Visiting Professor of Computer Science, UCL

D. Sykes Wilford, W. Frank Hipp Distinguished Chair in Business, The Citadel



Transformation

FinTech/RegTech

- 8 **Opinion: Open APIs and Open Banking: Assessing the Impact on the European Payments Industry and Seizing the Opportunities**
Thomas Egner
- 14 **Algorithmic Regulation: Automating Financial Compliance Monitoring and Regulation Using AI and Blockchain**
Philip Treleaven, Bogdan Batrinca
- 22 **RegTech is the New Black – The Growth of RegTech Demand and Investment**
Kari S. Larsen, Shariq Gilani
- 30 **From “Blockchain Hype” to a Real Business Case for Financial Markets**
Massimo Morini
- 41 **Trade Finance Disrupted: A Blockchain Use Case**
André Brunner, Nourdine Abderrahmane, Arjun Muralidharan, Patrick Halfpap, Oliver Süme, Stephan Zimprich
- 49 **Towards a Standards-Based Technology Architecture for RegTech**
Tom Butler
- 60 **Machine Learning: A Revolution in Risk Management and Compliance?**
Bart van Liebergen
- 68 **Data-centered Dependencies and Opportunities for Robotics Process Automation in Banking**
Sandeep Vishnu, Vipul Agochiya, Ranjit Palkar

Investments

- 78 **John Bull Can’t Stand Two Percent: QE’s Depressing Implications for Investment**
Jason M. Thomas
- 90 **Do Credit Rating Agencies Inflate Their Ratings? A Review**
Kee-Hong Bae, Hamdi Driss, Gordon S. Roberts

- 101 **The Power of “Negative Beta”: Why Every Portfolio Should Include Private Equity**
Andrew Freeman, Iordanis Karagiannidis, D. Sykes Wilford
- 111 **Downside Risk Protection of Retirement Assets: A New Approach**
Atanu Saha, Alex Rinaudo
- 121 **The Asset Management Industry, Systemic Risk, and Macroprudential Policy**
Claude Lopez
- 129 **The Role of Asset Owners in the Market for Investment Research: Where Are the Fiduciary Capitalists?**
Alistair Haig, Neil Scarth
- 136 **Risk, Data, and the Barcodes of Finance**
Allan D. Grody

Banking

- 159 **Opinion: Risk Culture: Risk Prevention Starts With the Individual**
Ulrich Hunziker
- 164 **The Troubled Future of Global Banking**
Brad Hintz, Roy C. Smith
- 177 **Policy Response Asymmetry and the Increasing Risks From Rising Government Debt Level**
Blu Putnam, Erik Norland
- 187 **Public Disclosure and Risk-adjusted Performance at Bank Holding Companies**
Beverly Hirtle
- 207 **What do New Forms of Finance Mean for Emerging Markets?**
M. S. Mohanty

Risk Culture: Risk Prevention Starts With the Individual

Ulrich Hunziker – Board Member, S.U.P. (Societät für Unternehmensplanung, Basel and Frankfurt)

THE BIGGEST RISK FACTOR IS THE HUMANS

There are two reasons for regulating the behavior of international financial dealers and the conduct of international financial markets. One is to moderate and restrain greed and the other is to moderate and restrain fear. Greed and fear are the two human emotions most evident in the day-to-day behavior of the international financial system today. The result is mad money. Dealers are either drawn by greed to take excessive risks with their own – or, more often, with other people’s – money or they are overcome by fear that they will be caught out by the risks they have taken. In their rush to escape the consequence of greed, they may start a chain reaction, an avalanche of panic that carries away the innocent along with the guilty.

There are two interesting facts that make this statement interesting, if not remarkable. The first is that it was not

made in the context of the latest financial crisis, but 18 years ago by Susan Strange.¹ The second is that it became a bitter reality. Decades of deregulations stimulated the globalization of the financial markets – and unfortunately its excesses.

The dramatic events surrounding bank bailouts and failures and the impact on national budgets have led to a political rethinking, and in certain circumstances banking laws that had been abolished or suspended in order to support the development of financial markets were reintroduced. In addition, international organizations, regulators, and governments have successfully pushed for the adoption and implementation of many new regulations that will have major implications for the structure, size, and business strategy of financial institutions. A stringent risk culture in financial services organizations will, in the longer term, also need to encourage behavioral change, as a result of which the world of finance becomes more predictable and customers are better protected.

But is this sufficient? The benefits of a safety net are greatest when it is woven as tight as possible. Official regulations, laws, supervisory checks and transfers are undoubtedly essential elements. One cannot deny that the pendulum of financial regulation is currently set too “high.” But how much energy had to be spent in order to get to this point despite all that we have learned from the crisis, and where will this policy-influenced-pendulum stop when we are in the next cycle of boom and prosperity?

The most significant and sustainable solution lies with the individuals themselves. Regulations should ensure that the known risks are treated in a compliant manner. They should also help ensure that missteps, which are usually identified and punished by ex-post controls, are prevented. However,

¹ Strange, S., 1998, Mad money: when markets outgrow governments, University of Michigan Press

individuals with strong characters also behave honestly and make the correct decisions in unpredictable circumstances provided they have the necessary characteristics.

After focusing on the drivers and the impact of the financial crisis and the importance of effective and sustainable risk culture, we shall return to this question.

DEREGULATION AND ITS CONSEQUENCES

In the last 40 years, a few selected events and factors have contributed very much to the liberalization, and consequently the globalization, of world markets and in particular the financial markets. Not only were the individual events critical per se, but their interactions were also of great importance.

The first was the abolition of the Bretton Woods system in March 1973. The founding treaty was established in July 1944, with the war still raging, by 44 nations for the purpose of Europe's recovery as an economic center and trading partner of the U.S. It forced the central banks of the Member States to maintain the movements of their currencies within specified limits. Compliance with these limits has been ensured through appropriate interventions in the currency markets. Although Europe in the 1950s and 1960s experienced an "economic miracle," some shortcomings in the system became clear. Particularly serious were the dwindling possibilities of autonomous monetary policies of the Member States and the absence of a mechanism for balance of payment adjustments. Finally in 1973, the Bretton Woods system was terminated and partly, through regional arrangements (such as in 1979 the European

Monetary System), replaced. Ultimately, this provided much support for globalization – the free movement of capital.

The second important event was the Big Bang, which brought financial deregulation to the City of London. Some of the important implications of the Big Bang were initially not recognized, and the move itself was deemed by some to be merely technical and insignificant. Two main drivers eventually made the liberalization of trades in the City of London successful. On the one hand was the fact that Margaret Thatcher's political reform program "privatization and deregulation" also encapsulated the financial markets, and on the other was the fact that fee cartels with fixed rates and the separation of dealers (jobbers) and intermediaries (brokers) were of great concern for the British competition authorities. To avoid the risk of larger legal dispute, the LSE negotiated a compromise with the competition authorities. By promising to lift the restrictions on competition, an investigation by the Office of Fair Trading was dropped. Introduced as a Big Bang on 27th October 1986, these changes had groundbreaking effects: many foreign brokers and banks got access to London's stock market or took over long-established "gentlemen-capitalism" companies. The simultaneous introduction of electronic trading – beyond the trading floor and around the clock – additionally accelerated the upward trend. London rose within a few years to become a major global financial center.

The third and most important event was clearly the lifting of the two-tier banking system in the U.S., the Glass-Steagall Act. What had been introduced in response to the Great Depression in 1933, and had significantly helped prevent banking crises for 66 years, was suspended in November 1999 under

pressure from globalization and competition. However, before discussing what happened after the Act was repealed, it is important to discuss how we got to that point.

The significant increase in production in the 1920s had generated an unequal distribution of wealth; consumer loans on a large scale helped to provide some compensation (consumer loans exploded from U.S.\$100 million in 1919 to U.S.\$7 billion a decade later.) The market crash of 1929, predominantly caused by speculation, not only resulted in a massive loss of confidence in the economy, but also in the banks. Many banks fell into bankruptcy. By combining the traditional lending business with the securities business, they were doubly vulnerable; credit losses on the one hand and price drops in the securities business on the other brought the banks under immense pressure.

The Glass-Steagall Act (named after Senator Carter Glass and Congressman Henry B. Steagall) decreed the two-tier banking system. Thus, the institutional separation of the deposit and loan businesses from the securities business was demanded – the main objective was the elimination of proprietary trading by commercial banks. The Banking Act signed by President Franklin D. Roosevelt on June 16th 1933 was intended to prevent repetition of such crises. During the 1970s and 1980s there were repeated attempts to revise the restrictive law or to override it. Competition considerations increasingly encouraged these efforts. Consequently, in the 1980s, the U.K. and Canada lifted their two-tier banking system. The U.S. banks fell further behind in the international rankings: in 1960, six U.S. domiciled banks were ranked in the top ten, by 1980 there were two and by 1989 there were no longer any U.S. banks among the world's top 25.

The pressure from the banking lobby and politicians increased. The Banking Law was considered “out of line with reality.”² “It was now the time for laws to adapt to changes in the international financial system.”³ Finally, the Act was repealed in 1999 by an overwhelming majority in Congress and the Senate. The normative power of the facts had been successful.

As a result, the deregulated, global financial markets developed a great “momentum” and there was some decoupling from the real economy. Terms such as “Casino Capital” and mad money found their way into the economics literature. Susan Strange commented as follows:

Bankers therefore are still with us but they are not what they used to be. Intermediation – taking in deposits and making loans – which was their traditional function, is no longer the name of the game. Commercial banks have become investment banks and are increasingly tempted into proprietary trading – that is, betting their own capital in the casino.⁴

The compensation system was a consequence of the fact that banks could make money out of money. The increasingly exorbitant remuneration, particularly in the investment banks, was increasingly becoming a socio-political problem. In the boom years of the new millennium (2003 to 2006) the growth was extrapolated – the rapid development of financial markets were carried forward into the future. Getting oneself into debt, with the use of, in particular, derivative financial instruments being developed on an almost daily basis spiraled out of control. This development found an abrupt end with the subprime crisis in the U.S.; in September 2008, Lehman Brothers went bankrupt. Worldwide governments had to step in

to save the banks and protect the financial system from collapse.

THE HIGHLY REGULATED POST-CRISIS FINANCIAL WORLD

The fact that the efforts to introduce more stringent rules during the deregulation phase were extremely difficult is illustrated by another quote from Susan Strange:

By 1996, the BIS had virtually thrown in the towel on capital adequacy rules. It abandoned, in effect, the whole idea of agreed common standards of banking supervision. This virtual U-turn is not easily perceived by reading its annual reports, which naturally concentrate on the institution’s positive achievements. The BIS general manager, Andrew Crockett, however, in an unofficial study has explained why a policy that had been developing for twenty years was finally abandoned (Crockett 1997).⁵ No regulatory system, he observed, was perfect, and applying standard rules to banks in very divergent national banking systems encountered all sorts of difficulties and dilemmas.

It was as a consequence of the crisis that the worst suspicions were confirmed and the weaknesses of the regulation mercilessly exposed. Financial institutions had to be rescued on a large scale; a redistribution of the debt burden and responsibility of private institutions in the U.S. was the result. Politicians and regulators appeared prominently on the scene – it was time for more stringent measures. Although the financial industry is already highly regulated in many areas, the recent financial crisis has been used as an opportunity to strengthen the regulation

significantly. Individual countries have unilaterally added various restrictions to national laws. Internationally, banking regulation is driven by the Basel Committee on Banking Supervision and the Financial Stability Board. In particular, the reform package “Basel III” should resolve many of the previous weaknesses. The fact that the regulation is now more comprehensive and complex becomes vividly apparent when one considers that the Basel Convention of 1988 comprised 30 pages, the succession plan “Basel II” had 347 pages and “Basel III” is 616 pages.

Ironically, the two-tier banking system, which was abolished in the U.S. in 1999, is highly topical in Europe: at a press conference on February 6th, 2013 Wolfgang Schäuble, the German Finance Minister, declared the announcement of the design for two-tier banking system:

We know that excessive deregulation was a mistake. Back then, we were blinded by technological innovations, new financial products and rapid developments in the financial markets and the realization is that we have to – also for the financial markets – create an open framework to enable financial markets to function as a market and not destroy themselves.

An essential element characterizes the regulations according to the

2 Taylor, A., 1995, “Banking: Jim Leach gently rocking the boat,” CQ Weekly (Washington, D.C.): 1162, April 29

3 Glater, J. D., 1995, “Rubin urges changes in U.S. banking laws; Treasury chief would end curbs on competition,” Washington Post, February 28, p. C.01

4 Strange, S., 1998, page 9

5 Crockett, A. D., 1997, “Why is financial stability a goal of public policy?” Economic Review, issue Q IV, 5-22

repercussions of the recent financial crisis: the focus is not only the safety of individual banks (or their customers) but also the implications for the entire financial system and the macro economy. To prevent future contagion and minimize the impact of future crises, special arrangements for so-called “systemically important banks” were adopted. In the current context, it refers in particular to implementation of Basel III and the guidelines for how to manage too-big-to-fail institutions, the execution of which is in full swing within most, if not all, of the major financial centers. The text and implications of these guidelines are currently available in detail from numerous professional publications, magazines, and newspapers.

A SUSTAINABLE RISK CULTURE NEEDS TO BE DEVELOPED AND “CULTIVATED”

The implementation of, and compliance with, statutory-regulatory rules and requirements must be ensured in individual banks. The fact that this leads to larger projects and requires an army of specialists in the legal departments (compliance), is shown in the following figures: in 2011, banks worldwide adopted about 14,000 new global regulatory changes, with over 40 new regulations being implemented in the compliance department of a global bank each day. Based on this, instructions are issued and their compliance regularly checked. However, this is not enough – the correct behavior must be embedded in the organization’s risk culture.

An effective risk culture facilitates compliance with all regulations and laws and can make a significant, positive contribution to improvements on and retention of corporate value. This is

particularly important for financial institutions because taking and managing risks is the core of the business. The recent financial crisis demonstrated how quickly reputation and credibility can be lost – with severe consequences. However, for an effective functioning of a sustainable risk culture some essential factors are “conditio sine qua non” in order to bring the written guidelines to life.

First and foremost is the role model. Each employee can read numerous documents on how to behave ethically and comply with the codes, and it is essential that these expectations are continuously communicated. However, the decisive factor is ultimately that the execution is exemplified consistently by the top management, and whether this is also recognized in the organization.

Of particular importance are the structural and organizational parameters. The provision of clear guidelines on responsibilities and efficient processes should ensure that the risks are systematically identified, weighted and provided to the relevant decision makers at the right time with appropriate proposals for management. In large institutions it is especially important not to leave this process entirely with the specialists. Each individual is a risk manager in their own environment, while the specialized units focus “full time” and independently on risk control. Risk committees at various levels should fulfil their responsibility to take appropriate action and monitor these actions.

The fact that deep technical expertise and continuous training are necessary is obvious. In addition, however, other skills and talents are in demand. A good understanding of the probable risks and a cross-departmental view (front-to-back) are also important requirements for rapid risk identification.

This is especially important for operational risks, since they usually cannot be measured with quantitative models and require qualitative assessment capabilities.

Just as performance targets and contributions to consolidated earnings are considered in the evaluation and compensation processes, risk behavior must also be an integral and mandatory part of this process. Risk adjustments should not only be made with regards to financial results, but also with regards to remuneration. There are excellent models, with a sufficiently high number of well-defined KPIs (Key Performance Indicators), for measuring risk behavior that can be incorporated into the annual performance review. These models do have high success rates, but require that they are applied consistently.

However, an effective risk culture is one that not only facilitates an open, critical environment for expression and discussion, but demands it. Risk control must not be limited to mechanically checking off individual control steps. Complex mathematical models and stress tests are essential tools but provide ultimately only “raw results.” To ensure that the right decisions are taken it is necessary that critical, qualitative assessments are accompanied by a dose of common sense. It was, for example, already much too late when the highest (AAA) ratings of subprime securities and their issuers were questioned in the recent financial crisis.

THE INDIVIDUAL IS AT THE HEART OF THE PROCESS

The introduction of a dense network of regulations has certainly made the financial markets more secure. Their forced implementation within financial

services organizations has once again led to greater focus on risk culture. Regulators and politicians will ensure that the pressure is maintained for even more stringent measures in this area. But can the safety net be so tightly woven that it can prevent future crises and thus restore the reputation and trust in banks? Even the most intensive regulations are only as effective as they are understood, accepted and complied to – voluntarily or involuntarily.

The greatest risk factor is the human being. Consequently, the real question is how can this important risk be managed. The evaluation criteria employed in the financial services industry focus primarily on professional expertise, performance, potential and motivation. Social skills have been largely neglected, as has character building. Current assessment methods have avoided this issue. The crucial question of character, however, hinges on the understanding of virtue of the individual. This question is so important since in today's world qualities that are often expressed as vices are considered desirable – for example greed.

If there are methods that can be used for the identification and analysis of the characteristics of employees and managers, then you should use this methodology because there are numerous indications that sustainability and prosperity are particularly linked to the question of character. Research shows that the modern crisis managers who are in great demand today are those characterized by outstanding character values.

As a result, a very important element in instituting an effective risk culture is the ability to judge the character of one's staff. Interestingly, this crucial component does not as yet appear on the radar of most businesses. Integration of

a systematic "character assessment" in the top management selection process could lead to a key competitive advantage. With a proactive analysis of attitudes on the topic of "character assessment" in connection with management's portfolio planning it is clear that a key competitive advantage could be achieved. Or in economic terms: if only a small fraction of what was lost in losses and fines during the financial crisis would be invested in such a methodology, a remarkable return on investment could be achieved.

Layout, production and coordination:

Cypres – Daniel Brandt, Kris Van de Vijver and Pieter Vereertbrugghen

© 2017 The Capital Markets Company, N.V.

De Kleetlaan 6, B-1831 Machelen

All rights reserved. All product names, company names and registered trademarks in this document remain the property of their respective owners. The views expressed in The Journal of Financial Transformation are solely those of the authors. This journal may not be duplicated in any way without the express written consent of the publisher except in the form of brief excerpts or quotations for review purposes. Making copies of this journal or any portion thereof for any purpose other than your own is a violation of copyright law.

BANGALORE
BRATISLAVA
BRUSSELS
CHICAGO
DALLAS
DÜSSELDORF
EDINBURGH
FRANKFURT
GENEVA
HONG KONG
HOUSTON
KUALA LUMPUR
LONDON
NEW YORK
ORLANDO
PARIS
SINGAPORE
TORONTO
VIENNA
WASHINGTON D.C.
ZURICH



CAPCO.COM