Is the Diversification Benefit for Teams More Sustainable Than at the Financial Market?

Or: Tough Times Don't Last, Tough Teams Do!

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Since 2007, the financial crisis has been the dominant issue of the last two years in society, politics, science, and practice. Thus, countless contributions and discussions in newspapers, radio and television as well as in scientific journals deal with backgrounds, causes, solutions, possible future scenarios, and many other aspects of the crisis. This is indeed appropriate as the economic crisis has, according to the International Labor Organization (ILO), destroyed at least 20 million jobs. "In case of a premature end of government programs to stimulate the economy, up to 43 million jobs could be at risk" (n. a. 2009b; translated into the English language). In addition, a study by Commerzbank Research estimated the worldwide losses evoked by the crisis at well over ten trillion U.S. dollars (n. a. 2009c). To gain a faint idea of the dimensions of this amount: If you burned a 1,000 U.S. dollar bill on each of 200 working days a year, you would need 50 million years to destroy this amount. For comparison: About 50 million years ago the collision of the African and European tectonic plate formed the Alps with their twelve thousand feet mountain peaks like Matterhorn, Monte Rosa, and Jungfrau. The oldest remains of modern humans discovered up to now are said to be cranial bones of the Homo sapiens idaltu from today's Ethiopia, which are dated to an age of 160,000 years (n. a. 2003). Consequently, for the destruction of such an amount of money in the above example we would require a period that is more than 300 times as long as the currently known human history. And yes, we too will dedicate the current editorial to this issue. In spite of all contributions and discussions, truly sustainable solutions to prevent future crises still remain a scarce commodity. And even worse: particularly executives in the financial sector seem not even to have learnt recognizable lessons from the current crisis. Thus, for example, it became known in July 2009 that Goldman Sachs and Barclays Capital are developing a new version of CDOs (Collateralized Debt Obligations – a variant of multiple structured securities whose values crashed in the course of the financial crisis) to facilitate risky assets that reduce capital costs up to 50%. The difference to the recent CDOs supposedly is that they are about the securitization of assets which the banks already hold in their books, rather than a new deal. Barclays calls this new method "elegant securitization" (Jenkins 2009). Sounds frighteningly familiar, doesn't it? And this happens in an era in which many banks have not yet recovered despite government aid in the billions. At least at this point one must question the bank managers' connection to reality. An equally frightening as memorable demonstration of an apparent loss of reality was given by Lloyd Blankfein, CEO of Goldman Sachs by profession, in an interview with the Sunday Times in November 2009. He justified the current rise of salaries and bonuses in his house to a barely communicable height with the explanation that banks would help firms that want to grow with fundraising. Growing companies would in turn create wealth, so that banks would serve a social purpose and thus would accomplish "God's work" (n. a. 2009e). Goldman Sachs was jointly responsible for causing the crisis and even gained profits in the range of billions of dollars through ethically questionable business practices. Given this development, we should actually not be surprised that in particular the public debates on responsibilities as well as on moral and ethical aspects of the crisis are becoming increasingly emotional. But what is the cause? Of course, one could very easily join the partly perceivable demonization of a whole profession or even individuals at this point. This, however, would be neither constructive nor effective, not to mention expedient. Where can we thus find starting points?

One possible answer might be to look at the composition of many governing bodies. On closer examination, it is striking that the executive and supervisory boards of

The Author

Prof. Dr. Hans Ulrich Buhl (\boxtimes) FIM Research Center Finance & Information Management University of Augsburg Universitätsstraße 12 86159 Augsburg Germany hans-ulrich.buhl@ wiwi.uni-augsburg.de

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many large companies are very homogeneous regarding gender and professional backgrounds of the members. For example, the eleven-member Board of Directors of the former fourth largest U.S. investment bank Lehman Brothers, which gained notoriety through its bankruptcy on September 15, 2008 in the course of the financial crisis, exclusively consisted of men (Thorborg 2009). But this is not an isolated case. Only 1.3% of all board members of Germany's top 100 companies are currently female. In the supervisory boards the proportion of women is slightly higher with 9.6%; however, 60% of them are employee representatives. The German economy thus remains "topless" (Stauber-Klein 2006). Also in Austria and Switzerland, things do not look much better (n. a. 2009a, p. 30). In the U.S., at least 16% of the boards in the 500 largest U.S. companies are female (Stauber-Klein 2006). Numerous studies suggest that just an increased testosterone level leads to a higher willingness to take risks (n. a. 2009d). And at this point we presumably do not have to discuss any longer what immense, even partially existence-threatening risks many male-dominated boards of banks took before the outbreak of the financial crisis.

In addition, for example 88% of the members of executive committees of Swiss companies in the financial sector have a pure business background. Only 10% have an education in the natural sciences and 2% in the humanities (Rost and Osterloh 2008). At this point one might argue that particularly in the financial sector indeed mostly managerial skills are of relevance. However, this falls short. Numerous psychological studies support the hypothesis that experts in their respective fields are often victims of the famous organizational blindness. More specifically, experts often overestimate the accuracy of the information available to them and draw incorrect conclusions in estimating probabilities that can occur with certain events (Rost and Osterloh 2008, p. 8 f). A similar picture arose during the financial crisis. Obviously, almost all market participants incorrectly assessed the actual risks of securities and securitization structures without paying attention to the problematic incentive structures. Just an increased willingness to take risks alone does not seem to explain that so many market participants invested in structured financial securities to a partly substantial and existence-threatening extent. Even Joseph Stiglitz, a Nobel Prize winner and professor at the Columbia University in New York, said in August 2008: "The banks claim they can manage risk. But they are not able to do so. They are not even able to properly quantify their risks. It's phenomenal how far the banks have been off the mark" (Schäfer 2008; translated into the English language).

But what is the conclusion and, more importantly, the solution for the future? Would there have been a chance to prevent the financial crisis, if less homogeneously educated men and more interdisciplinary trained women had been employed at Wall Street? Are women better managers in general? Should we only allow interdisciplinarily trained employees for management positions in future? To put it bluntly: Should the management of banks and other large companies therefore and from now on be placed solely in the hands of female BISE specialists and female industrial engineers? And what can we imagine this scenario to look like? Would – to put it highly exaggerated and provocative – for example Wall Street and the City of London then be wonderful places with lots of little cafes where people maintain relationships preferably via Skype and ICQ while consuming Latte Macchiato and low-calorie raspberry tarts? Hardly.

When dealing with this issue in greater detail, actually only one serious and sustainable conclusion and solution remains. It seems that the real problem is neither the men nor the experts themselves, but the homogeneity of the management bodies. An increased willingness to take risks especially in the business environment does not seem negative, quite the contrary. As the saying goes: "No chance without risk." But if in some situations the critical and moderating counterpart is missing, so to speak the advocatus diaboli (which of course can also be an interdisciplinarily trained man), then there is the danger that excessively high risks are taken, sometimes without reflection and without a prior, controversial debate – perhaps even being unaware of them. This is exactly what we have seen with the example of the emergence of the financial crisis and the rapid burst of the market bubbles through homogeneous behavior. And of course, also in the financial sector executives with expert knowledge in business administration will always be necessary. However, it can be extremely healthy for a company, if, in particular in early stages of a beginning exaggeration, some non-experts critically question the herd behavior in a perhaps even a somewhat amateurish and naive way and try to resolve the possibly dominant organizational blindness of experts by means of common sense. In agriculture and forestry it has long been known that monocultures are particularly vulnerable to diseases and the spread of specialized pests. A truly sustainable approach would be to change from monoculture to mixed cultures or – to turn away again from the admittedly very provocative metaphor – the heterogeneous design of managerial and supervisory bodies. Even Rolf Breuer, former CEO and Chairman of the Supervisory Board of Deutsche Bank, mentioned the frequently encountered "lemming behavior" as a reason why the financial crisis hit many banks in surprise (Thorborg 2009).

And indeed, studies from the consulting company McKinsey and the American lobbying organization Catalyst show, for example, that the companies with the highest number of women in the company's management acted far more successfully compared to those without women and reached an up to 53% higher return on equity (Thorborg 2009). In addition, also the Cranfield University, the prestigious London School of Economics, and the World Bank point to various benefits of complementary leadership styles of men and women (n. a. 2009a, p. 30). Moreover, some scientific studies confirm that companies should arrange for a greater heterogeneity of their management bodies not only through a higher percentage of women, but especially through the involvement of several members with a non-purely business background. Apart from a fundamentally different attitude towards taking risks, not only do women seem to give better estimates in situations of uncertainty in comparison to men, but so do non-experts as compared to experts (Rost and Osterloh 2008).

And perhaps these relations are not restricted to companies. Although we are not aware of similar studies of the university sector, these should be suggested hereby. Perhaps this would even reveal, for example, that the often significantly higher-thanaverage success of BISE chairs in their faculties in terms of many performance indicators is less a consequence of the quality of the professors than of the greater heterogeneity of their department teams. And perhaps such studies in science and practice show that this diversification advantage of teams is much more sustainable and more resistant to crises than the diversification benefits of portfolio theory, for which Markowitz received the Nobel Prize in 1990. This diversification benefit largely dissolved in the crisis in many portfolios due to the fact that the correlations of many assets jumped to almost +1. Such a diversification effect, which disappears in the crisis, is about as good as an insurance policy that does not pay the claim, namely, significantly less than zero. Therefore, we dare suggest the theory that team diversity defeats asset diversity. The best is probably both.

So what should actually be done from today's perspective?

- From a societal perspective, it would be desirable to provide a change of consciousness in the minds of all stakeholders and at all social levels to allow equal opportunities for men and women, disciplinary and interdisciplinary qualified executives alike. On the one hand, it is important to question traditional rolespecific attitudes and behaviors in order to strengthen the vocational-functional potential, especially for women. However, it remains questionable in regard to the proportion of women in management bodies to what extent this approach can be successful in the future, as long as most senior management members leave their wives at home with the children, and thus their own family attitude plays a major role in the boardrooms. On the other hand it is an even more important challenge to create a social acceptance of a greater heterogeneity in teams. Only in this way, the basis can be provided to break the esprit de corps of mostly male, mostly technically homogeneous and conformist top management groups and to promote a desirable variety of thought patterns for the society.
- And what can politics contribute at this point? Politics are specifically committed to create the basic conditions for an even greater promotion of women in leadership positions. Measures, such as the expansion of child care or a better tax deductibility of childcare costs are just some examples of how women can be better supported in their career. Whether the Dutch model with a statutory 30% quota for women in managerial and supervisory bodies is the right approach, remains an open question (even if this approach is very successful in terms of women's advancement; Haas and Kur 2009). But there is also hope in Germany: the coalition agreement of the new government states the intention to significantly increase the proportion of women

in leadership positions in the economy and the public sector in the current legislative term. Whether this is merely lip service will become apparent in the near future. In any case, Ursula von der Leyen, Federal Minister for Labor and Social Affairs, emphasizes in one of her first interviews: The previous work environment was "middle-aged and masculine", the new working environment will be "older, more feminine, more colorful, and more innovative" (Öchsner 2009). Furthermore, it is seen as a key challenge in the context of education policy to still further expand the interdisciplinary and soft-skill training of future leaders. For doing so, on the one hand university teaching should increasingly develop appropriate core areas, such as soft-skill seminars or interdisciplinary curricula. On the other hand it is also about developing extracurricular offers – such as the Bayerische EliteAkademie for example.

- A very significant contribution to the promotion of heterogeneity in management bodies can be made by the company itself. Equal opportunities, both in terms of gender and technical training, should be the main objective. Thus, in successfully and sustainably managed companies there should be no way for e.g. different salaries between men and women or even the phenomenon of "glass ceilings," which lead to the fact that men prefer to stay among themselves in the top management. In addition, companies must create a culture allowing for - and even encouraging - critical questions and constructive discussions on all levels and across all levels at any time. This also includes the involvement of non-experts in disciplinary discussions as valued discussion participants. If a possibly critical opinion of a debate participant is not taken seriously solely because of its possibly less strongly developed expertise in a particular area, the company ultimately just harms itself. Also implicit career criteria should be explicated by companies. Thus, an American study has come to the sobering conclusion that often the success of a person is ultimately more dependent on the person's assertiveness, perseverance, attention to detail, and efficiency than on the ability for teamwork. Strengths in leadership have almost nothing to do with the probability of a promotion to the boardroom (Thorborg 2009). As a consequence, this significantly more likely leads to homogeneous groups of executives which more often fall victim to a permanent organizational blindness. Thus, companies are invited to create a corporate culture that should not encourage executives - men and women - to be selfcentered and one-dimensional, but instead flexible, team-oriented, sensitive, empathetic, well-educated and above all open for different ways of thinking and opinions
- However, also science has to accomplish an important task for resolving this issue, since it is responsible for the training of tomorrow's young leaders. What can it therefore contribute to this issue? Society's awareness of scientific studies regarding the desirability of heterogeneous management bodies is of course only one aspect. Unfortunately, even in universities this seems to have remained mere theory if one considers the proportion of female academics pursuing a scientific career. Here the same applies as in practice: we must create attractive models for women and thus increase the, unfortunately, far too small number of female professors. In this way, the significantly increased average level of testosterone in some professoriums could be substantially reduced for the benefit of a university. Another very important challenge of science lies in particular in the interdisciplinary education of students and postgraduates in order to train those individuals who dare look beyond the horizons. Thus, the education in originally interdisciplinary fields such as BISE must be expanded and there should also be an increasing emphasis on interdisciplinary training aspects particularly in the mono-disciplinary fields. We can only effectively address the impending organizational blindness of future specialists in a mono-disciplinary field, if they acquire a fundamental understanding of adjacent subjects from other disciplines and for interdisciplinary connections during their education.

And what can BISE specifically contribute? Regarding the vocational training, BISE as an interdisciplinary field on the border between economics and computer science on the one hand and between research and practice on the other hand, is extremely well positioned and does not need to fear comparison with purely mono-disciplinary fields. However, a higher proportion of women would not only be desirable in university education, but also in science and practice. The Federal Statistical Office quantified

the nationwide percentage of female BISE students in the winter term 2007/2008 at almost 14%. In case of postgraduates, the proportion is lower, even lower in case of the post doctorates/professors. There is again an urgent need for action to meet the above mentioned challenges successfully.¹

Hans Ulrich Buhl

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