Page, Scott E. – The Difference

Princeton University Press, 2007, [Surrounding Knowledge] Grade ★★★★

Most equity portfolio managers will at some time come in contact with the question of gender quotas in corporate boards. Those who argue for quotas claim that these would increase the profitability of corporations. Is there any substance to this claim? As convincingly argued by Scott Page, Professor of Complex Systems, Political Science, and Economics at the University of Michigan and external faculty member of the Santa Fe Institute, the answer is yes – but perhaps not due to the factors the most vocal proponents of mandatory so called affirmative action think.

More diverse groups make better decisions, everything else alike. But any claim that these improvements materialize out of something like gender quotas hinges on three conditions: first that there is a link between identity diversity and - what we are really after - cognitive diversity, second that the diverse competences are also relevant competences for the specific job at hand and thirdly that the friction that diversity brings can be overcome. The link between identity and cognitive diversity can be overstated. People of different sex can think alike and people belonging to the same race, age, gender, religion, social class etc. can think differently. Yet, identity diversity clearly increases the probability of cognitive diversity. The politically correct minefield, whether all this should lead to the use of quotas in corporate boards, I leave to others. There is also a minor detail called ownership rights to factor in.

So is this book mostly relevant for an investor due to its applicability to corporate governance? No, the understanding of why diverse groups take better decisions and the conditions that either supports or invalidates this effect, is crucial for the understanding of financial market functionality and the markets' constant oscillating between rationality and irrationality. This pendulum, in turn, is the basis for understanding why investment strategies building on momentum and reversal to the mean works.

If you ask a group of sufficiently many, diverse and capable persons to make a prediction or an estimation of a tricky question and then average the individual solutions, the errors made by each person will matter little. Every individual's analysis is made up of one part information and one part error. As long as the various people's errors are independent of the other person's errors they generally net out. What remains is the aggregated information. How good the answer then is depends on how much of this information the group had. Often it is quite a lot. Note that, with regards to market rationality, this does not require an arbitrageur or rational agents.

The author presents a Diversity Prediction Theorem which states that the collective error equals the average individual error minus the prediction diversity. Hence, the collective error is reduced if the individual error is decreased or if cognitive diversity increases. Competence and diversity contributes in equal amounts to the quality of the solution and the average individual error will be larger than the collective error. The last topic is a cause for reflection when it comes to the ability to earn money out of the reactions to quarterly results where an individual investor competes with a collective consensus estimate and a collective market pricing.

Communication between the participants on a market is a double-edged sword. On the one hand it can increase the competence of the individual person to learn from a more informed one. On the other hand they will start to think more alike. Diversity will decrease. When diversity due to mass psychology breaks down everybody thinks alike and the errors made will not cancel out. The pricing becomes irrational and value investors will soon take notice.

Unfortunately this book of almost 400 pages is a heavy read. It is academic, theoretical and littered with abstract theoretical examples. A certain amount of dry humor offsets, but not fully.

Understanding both the wisdom and the madness of the crowd is paramount for forming a view of the market. Being able to detect phase shifts between the two states would be an investment nirvana. Page's contribution to the puzzle is clearly important.

Mats Larsson, July 25, 2012