

## **Behavioral aspects in finance: the influence of culture, risk and education on financial decisions**

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**Abstract.** *The paper reviews three dimensions of behavioral finance in decision-making: culture-driven differences in risk behaviour [4], [9], psychological reactions to losses illustrated by the Nick Leeson and Jérôme Kerviel cases [2], [3], [10], and the role of financial literacy against the backdrop of Poland's 'toxic options' crisis [1]. Embedding behavioral insights into education, policy and risk management helps prevent value-destroying choices.*

**Keywords:** *behavioral finance; culture; loss aversion; overconfidence; financial literacy.*

Financial choices are shaped not only by rational-choice models but also by cultural norms, cognitive biases and education. We review:

- 1) cross-country cultural drivers of risk behaviour,
- 2) loss aversion and overconfidence in traders' conduct, and
- 3) the consequences of limited financial literacy in the corporate sector [1], [5], [9]–[11].

In practice, the same individual can move along the risk spectrum depending on framing, time horizon and institutional setting. A portfolio choice that looks “risk-seeking” in a recovery frame may turn “risk-averse” under hard budget constraints or when accountability increases. For that reason, culture is best treated not as a single national constant but as layered norms at the firm, industry and country levels that interact with incentives and governance [4], [9].

Cross-country evidence links cultural indicators to entrepreneurship and investment. Higher uncertainty-avoidance correlates with lower business-ownership rates across 21 OECD countries (1976–2004) [4]; Thurik & Dejardin's review adds case-based support on cultural legitimation of entrepreneurship [9]. At the micro level, cohort studies indicate stronger risk appetite among younger investors, shifting portfolio allocations [5].

The Nick Leeson (Barings Bank, 1995) and Jérôme Kerviel (Société Générale, 2008) episodes show post-loss risk escalation and position concealment – textbook manifestations of loss aversion and overconfidence [2], [3], [10]. Weak internal controls and a “get back to zero at any cost” culture were critical contributing factors.

Case narratives also show that control failures are socio-technical: tooling, segregation of duties and incentive design reinforce (or neutralise) behavioural biases. While headlines focus on a “rogue trader”, post-mortems usually reveal permissive overrides, inadequate exception reporting and strong short-term bonus pressure. This is a useful caution for SMEs where front, middle and back office roles often overlap, amplifying the temptation to double-down after losses.

**Table 1.** Scale of losses in benchmark cases (estimates).

Case	Approximate losses	Source
Nick Leeson / Barings (1995)	≈ \$1.3 bn	[2], [3]
Jérôme Kerviel / Société Générale (2008)	≈ \$7.2 bn	[10]
Poland’s ‘toxic currency options’ (2008–2009)	≈ \$4.4 bn (aggregate)	[1]

Behavioural drivers are layered: the emotional cost of acknowledging a mistake, illusion of control, and the “house-money” effect. Empirical work on overconfidence among entrepreneurs and investors documents systematic overestimation of one’s abilities [10].

Poland’s ‘toxic’ FX options crisis showed how complex derivatives sold to SMEs as hedges can morph into large losses amid information asymmetry and underestimated tail risk. Case analyses highlight contract complexity and weak disclosure practices [1]. Parallel evidence on retail investors’ portfolios during the pandemic underscores the value of transparent risk communication [6].

Culture sets the ‘risk frame’, psychology drives loss responses, while literacy and regulation shape how complex products are interpreted. To mitigate destructive choices, institutions should:

- embed behavioural checklists and premortems into risk processes;
- strengthen tail-risk disclosure and stress testing for SMEs;
- institutionalise ethics and “error culture” training;
- tailor financial education to cultural and generational differences [1], [4], [6], [9]–[11].

## References

1. Liberadzki, K. (2015). Toxic currency options in Poland as a consequence of the 2008 financial crisis. *Contemporary Economics*, 9(1), 63–76. <https://doi.org/10.2139/ssrn.2669391>.
2. Chen, J. (2024). How did Nick Leeson contribute to the fall of Barings Bank? Investopedia. <https://www.investopedia.com/ask/answers/08/nick-leeson-barings-bank.asp>.
3. New York University Stern School of Business. (2012). Doubling: Nick Leeson’s trading strategy [Teaching case]. <https://ssrn.com/abstract=1300736>.

4. Wennekers, A. R. M., Thurik, R., van Stel, A., & Noorderhaven, N. (2007). Uncertainty avoidance and the rate of business ownership across 21 OECD countries, 1976–2004. *Journal of Evolutionary Economics*, 17(2), 133–160. <https://link.springer.com/article/10.1007/s00191-006-0045-1>.
5. Freedman, M. (2022). How different generations invest money. World Economic Forum.
6. JPMorgan Chase Institute. (2022). Retail trading in the pandemic: Investors' portfolios and risk. <https://www.jpmorganchase.com/institute/all-topics/financial-health-wealth-creation/retail-risk-investors-portfolios-during-the-pandemic>
7. Krylov, A., & Kuchuk, T. (2023). Institutional strategy of social entrepreneurship development in Ukraine. *Economics, Finance and Management Review*, 1(3), 15–28.
8. Verkhohlyad, I. (2021). Percent risk tolerance level by age: Dataset and methodological notes. ResearchGate.
9. Thurik, R., & Dejardin, M. (2011). The impact of culture on entrepreneurship. *The European Business Review*, January–February, 57–59. <https://personal.eur.nl/thurik/Research/Articles/TEBR%20jan-feb%202011%20Impact%20of%20Culture%20on%20Entrepreneurship.pdf>.
10. Salamouris, I. S. (2013). How overconfidence influences entrepreneurship. *Journal of Innovation and Entrepreneurship*, 2(8), 1–8. <https://doi.org/10.1186/2192-5372-2-8>.
11. Simon, H. A. (1987). Making management decisions: The role of intuition and emotion. *Academy of Management Executive*, 1(1), 57–64. [https://iiif.library.cmu.edu/file/Simon\\_box00062\\_fld04727\\_bdl0001\\_doc0001/Simon\\_box00062\\_fld04727\\_bdl0001\\_doc0001.pdf](https://iiif.library.cmu.edu/file/Simon_box00062_fld04727_bdl0001_doc0001/Simon_box00062_fld04727_bdl0001_doc0001.pdf).