

Understanding Financial Risk Tolerance

Caterina Cruciani · Gloria Gardenal · Giuseppe Amitrano

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Institutional, Behavioral and Normative Dimensions



Caterina Cruciani Department of Management Ca' Foscari University of Venice Venice, Italy

Giuseppe Amitrano WieldMore Investment Management London, UK Gloria Gardenal Department of Management Ca' Foscari University of Venice Venice, Italy

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PREFACE

This book focuses on the contribution of financial risk tolerance in shaping the workings of financial markets. It takes a bold approach combining very different views to understand how this concept, lying at the crossroads of different domains of study and practice, including financial regulation, scholarly studies, and financial advisory practice, has been formalized over the last 30 years.

The book looks at the feedback loop among the different domains in which risk tolerance is assessed and operationalized to reorganize the current stream of research on financial risk tolerance and suggests further relevant domains in which a new risk tolerance definition will need to be defined.

Using key landmark moments in the normative evolution of financial services in the European Union including the introduction of the Markets in Financial Instrument Directive (MiFID) and its successor MiFID 2, this book will try to highlight the relationship between scholarly definitions of risk tolerance, key measurement tools, and the formal requirements imposed by regulatory institutions to key market players.

This book provides a snapshot of the most important dimensions in which financial risk tolerance has been analyzed and highlights the relationship between policy-making and scientific endeavor. We touch upon precursors of financial risk tolerance, reviewing key socio-demographic variables that have been found to affect it, and move on toward more dynamic versions of financial risk tolerance that include the role of life

events. The different chapters focus on the debate on financial risk tolerance in specific time frames marked by regulatory events and provide an in-depth overview of two important changes in European financial markets—sustainable investment and fintech and robo advisory. A practitioner's view section authored by the CEO of a UK-based investment firm is included as a commentary and includes relevant insights from the world of financial advisory tied to the academic debate discussed in the text.

This book represents a valuable contribution to both the academic and the professional debate as it brings together different streams of literature in a critical review, exploring the feedback loop between academic research and financial practice to draw insights on the regulatory future of financial services.

Venice, Italy Venice, Italy London, UK Caterina Cruciani Gloria Gardenal Giuseppe Amitrano

ACKNOWLEDGMENTS

The idea to write this book stems from the thought-provoking and fruitful discussions between persons with different jobs but a similar passion for knowledge and understanding.

Bringing together a practitioner with decades of experience and two academic scholars studying financial markets and institutions was our way to prove that contamination between different approaches is the best way to look at ever-changing concepts like financial risk tolerance. As financial markets continue to evolve, there is a profound need for open discussion and exchange of ideas and we hope that this book provides useful material in this respect.

A very important part of this book could not have been written without the support of Federico Melotti and Andrea Papoff at Wield-More Investment Management, who organized and chaired the webinar in which we launched the practitioners' questionnaire discussed in the last chapter of this book. Caterina Cruciani and Gloria Gardenal wish to thank Giuseppe Amitrano and all the WieldMore Investment Management team for believing in the soundness of the project and for helping in the promotion of the survey among practitioners.

The list of acknowledgments would not be complete without mentioning our supporting and loving families. Writing a book is no easy feat and we all owe the biggest thank you to our spouses and children, who cheered us along the process, provided inspiration, and much-needed entertaining breaks and to whom this book is dedicated.

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ABOUT THE AUTHORS

Caterina Cruciani is Assistant Professor in Financial Markets and Institutions at the Department of Management, Ca' Foscari University of Venice, where she also received a Ph.D. in Economics. She is the Operating Director of the Center for Experimental Research in Management and Economics (CERME) and a member of the Risk-Lab at Ca' Foscari University of Venice. Caterina's research interests focus on behavioral finance, financial advisory, and SME financing. Caterina teaches Financial and Banking instruments, Corporate banking and Behavioral Finance at the University of Venice and in professional training activities for financial advisors. Caterina provides regular updates on her latest publications, achievements, and research interests on the main professional social networks (LinkedIn, Academia.edu, ResearchGate) and on Twitter.

Gloria Gardenal is Associate Professor of Corporate Finance and a member of the Risk-Lab and the Center for Experimental Research in Management and Economics (CERME) at Ca' Foscari University of Venice, where she also received a Ph.D. in Business. Her research focuses on corporate finance, risk management, and investment decisions, with a particular interest in behavioral finance. She taught several Bachelor's and Master's courses including Corporate Finance, Valuation, Financial Policies and Investment Strategies and also has been involved in more advanced courses like M.B.A. in Finance and International Finance. She is present on the social networks (Facebook and Twitter) and in all the main

professional social networks (LinkedIn, Academia.edu, ResearchGate) where she promotes her published work and academic achievements.

Giuseppe Amitrano is the Chief Executive Officer at WieldMore Investment Management, London UK. A leading expert as Head of Trading and Sales, senior Managing Director in rates and credit derivatives with over 25 years of experience, Giuseppe has created and led fixed income derivatives teams at Scotiabank, RBS and UBS where he has been running absolute and relative return strategies. He has been board member of the Corporate Social Responsibility Committee of Scotiabank Europe, London. Further to his M.Sc. in Economics he obtained the CISI Level 4 Investment Advice Diploma in 2018.

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CHAPTER 1

Financial Risk Tolerance: Where Does It All Start From?

Abstract This chapter introduces the relevance of the debate on financial risk tolerance starting from reconstructing the key macroeconomic changes that progressively expanded the investor base in Europe and beyond starting in the 1990s, focusing both on financial markets and on other relevant sectors. The increased investment opportunities available to the retail investor expanded potential opportunities for financial gain for individuals but also highlighted the need to provide clear guidelines to structure and shape these opportunities considering all the risks. The need to govern this important change in financial markets favored the convergence of different disciplines on the importance of financial risk tolerance: regulation, academia, and practitioners were all called upon figuring out how to measure this somewhat elusive concept. This chapter focuses on the period prior to the introduction of the Markets in Financial Instruments Directive (MiFID) in Europe when financial advisory was not yet considered a proper financial service and investors were still transitioning from direct holdings of stock to more flexible tools like mutual funds. Besides briefly describing the regulatory framework, a literature review of risk tolerance measurement and drivers is provided, to conclude with a practitioner's view regarding the relevance of risk tolerance measurement in this period.

Keywords Mutual funds · Risk tolerance drivers · Financial knowledge

1 A Crossroad: Why Looking at Risk Tolerance?

Starting in the 1990s a combination of factors set the stage for a major convergence of the interests of very different disciplines toward the activities within financial markets and their implications for the different actors involved. While economists had been interested in why individuals should engage in financial markets for decades drawing mixed messages, financial institutions developed and started offering new investment opportunities available to most of the population in developed countries. Financial markets became more necessary as public policies started to change; contribution-based pension reforms and massive privatization waves in key utilities rightly attracted the attention of many. The importance of new professional figures changed as markets started drawing the attention of less financially literate individuals in need for advice and guidance and not only financial products. The combination of all these factors finally attracted the attention of the regulator, interested in shaping this transition while protecting the interests of all. This section reviews these major changes starting from the traditional economic view on stockmarket participation and discusses the macroeconomic changes and the regulatory implications they brought about.

1.1 The Economists' View

Financial risk tolerance is a key element in the determination of investment choices that has consequences both on current and future consumption: the level of risk tolerance is likely to determine how much liquidity is steered toward saving or investing, reducing the liquidity available for current consumption to increase it in the near or distant future when the investment bear its results.

A natural starting point for this analysis is understanding why and how financial risk tolerance matters is asking why individuals should invest in the financial system. Despite providing numerous opportunities and services, financial markets expose individuals to artificial risks with the promise of returns that are governed by the laws of probability rather than by natural laws they are accustomed to.

One starting possibility is that participation in financial markets yields positive results for society as a whole. In this context, a large literature developed on **stock-market participation and wealth**. While the

macroeconomic literature is not conclusive on whether increasing stock-market participation improves general welfare (Basak, 1996; Black, 1974; Errunza & Losq, 1985, 1989; Eun & Janakiramanan, 1986; Stulz, 1981; Subrahmanyam, 1975), a key finding is that increases in stock-market participation do not necessarily reduce wealth inequality in the population in the medium run. Individuals differ along a variety of relevant dimensions and their attitudes and propensities make them enter and exit the stock market at different times: more risk averse, less financially educated individuals are drawn to participating in market upswings but tend to leave the stock market in the downswings and be replaced by larger stockholders. Thus, despite larger participation, individual wealth inequalities are not necessarily reduced (Bilias et al., 2017).

Individuals feel differently about risky investment, but classic portfolio analysis suggests that those interested in utility maximization might want to hold at least some stocks, as they indisputably yield higher returns, provided that the portfolio is properly constructed (Arrow, 1994). Thus, even risk averse individuals may take on some risk provided that it is correctly managed.

In the 1990s the empirical evidence focusing on stock-market participation showed that despite this theoretical consideration there were individuals who did not invest in stocks with major differences across countries. Guiso et al. (2003) show that total participation in financial markets ranged from 54% of individuals in the United States to 15% in Italy and explain these diverse patterns by discussing entry costs into the stock market related to the supply of more affordable financial products or to the pressure to plan for the future due to institutional changes in the pension systems. Guiso and colleagues conclude that individual differences in households (especially in terms of risk aversion and financial education) are a key factor to monitor the long-term implications of larger participation.

1.2 The Macroeconomic Perspective

The 1990s represent a very interesting decade for stock markets all over the world that affected the direct and indirect entry costs: among the first group, we find changes in market supply (both in terms of quantity and quality) that differentially affected the United States and Europe. Indirect entry costs were shaped by changes in neighboring sectors that will be discussed shortly.

For what concerns supply, a general trend, that affected countries all over the world, regards the wave of privatization of public utilities that brought to the market well-known stocks with a large potential investor base. Already started in the late 1970s, the privatization of State-owned enterprises saw almost 2500 deals in 121 countries being concluded over the period 1977–1999 for a net worth of over 1110\$ billion (Bortolotti et al., 2004). Privatizations benefit from more liquid stock markets that can accommodate larger issues easily, increasing the speed and size of the revenues. Using a panel of 34 countries over the 1977–1999 period, Bortolotti and colleagues empirically show that privatization waves tend to exploit hot market periods: the increase in the extent of privatization activities thus signals that domestic stock markets have already become more liquid.

In terms of direct entry costs, the blossoming of the mutual stock fund industry finally brought to investors easy access to well-diversified products, helping the transition from direct acquisition to fund subscription (Guiso et al., 2003). The growth in the mutual fund industry was remarkable all over the world: between 1992 and 1998 the average annual growth rate of US mutual funds was over 22.4%, while European funds grow by an annual rate of 17.7%. The development of equity mutual funds was stronger in the United States than in Europe where bond funds were more popular (Fernando et al., 2013). Mutual funds are naturally targeted to households looking for a good level of diversification with a relatively low level of fees and commissions: individual investment is pooled and invested in very diversified funds, whose policy is defined in advance and is not subject to the preferences of the investors participating in the fund. While mutual funds require well-developed securities markets, where market integrity and liquidity are high (Fernando et al., 2013), they also have the potential to enlarge the investor base to less financially educated individuals, who might otherwise refrain from investing (Guiso et al., 2003). The overall effect of these trends is that new entrants—less educated than experienced stockholders and with fewer financial means to face the stock-market fluctuations—will influence the behavior of excess returns on equity, as education tends to correlate negatively with risk aversion (Guiso & Paiella, 2018).

Another macroeconomic factor that supported the increased pace in the regulation of financial markets to support the demand for financial products is that improved levels of well-being led to the progressive aging of the population in many countries. Economists were already puzzled