Foreword

This text has a precise goal: to be a helpful tool for students and also for a wider audience to introduce financial markets in an organic way, illustrating their interconnection with the real economy and with market participants.

A new perspective: one step back

This book approaches the financial markets from a fresh new perspective that takes the reader on a journey, explaining the role of the financial markets as places where exchanges take place to satisfy the needs of people, businesses and institutions. Starting from a macro point of view, the book zooms in to give a detailed analysis of the instruments involved in these exchanges. The balance sheet of firms or institutions provides a snapshot of the extent to which their needs are satisfied; for families we can also draw up a similar accounting sheet. The authors, tapping into their expertise, also describe some elements of accounting and balance sheet analysis in order to help the reader to find a common thread connecting the real economy and the financial markets.

Financial markets very often are seen by many different market participants only for what they offer in terms of instruments, opportunities, returns or expenses. But this view is detached from the real economy and does not encompass the needs that the markets satisfy. Financial markets are something more than the sum of several instruments and asset classes, and this book gives a wider view of the role of the markets in the economy. Put another way, a market is not just a playground where you can toy with financial instruments, but a virtual market where needs meet other needs, for the well-being of the economy.

What's interesting

As president of AssoFintech and former member of the Italian Parliament, I truly appreciate the effort put into this book and its usefulness at several learning stages. Today the financial community, not only students, needs people who understand the main structure and function of the markets, seen as the whole "cosmos" before addressing specific "clusters" of this world. And only after that can they focus on the small "satellites," which is what financial instruments are. The innovation that we pursue with AssoFintech is closely linked to knowledge of the whole financial system, in order to give to the financial community a wider view that is not just limited to a single cluster, and to cultivate the people with the potential to introduce new innovations.

Serving as President of the Finance Commission for the Italian Chamber of Deputies between 2013 and 2018, I already made every effort to implement the introduction of "financial education" in the Italian system. I saw this as a key element in the new millennium for the growth of the country and of the Italian industrial sector, in cooperation with the banking system. This goal was finally achieved with the approval of Law 17/2017. Within this framework this textbook can be a strategic element to disseminate knowledge of the basics of the financial markets. This systemic dissemination can be achieved, and the challenges of the new millennium confronted, only with a new approach that brings knowledge of the financial markets to everyone, overcoming the old idea that finance and financial markets are something "only for banks and a select few."

Structure

The text is divided into four parts.

In the first section, Chapter 1, there are some introductory concepts about the functions, structure, and components of the financial system. This section also presents several kinds of financial intermediaries and the roles they play as the middlemen who make the markets work.

In the second part, Chapters 2, 3 and 4, the authors introduce how the markets work in terms of the concept of risk and return, giving a deeper description of the role of intermediaries.

In the third section, Chapters 5 and 6, the capital markets are described in their various forms, with the presentation of the debt and equity markets, from an accounting to a market/investment point of view.

In the fourth section, Chapters 7 and 8, other financial instruments are discussed as part of the whole system, underscoring how they help businesses, institutions and people to satisfy their needs.

Audience

This book is designed and structured for students who are approaching the financial markets for the first time. It is very useful tool that balances clarity and simplicity, giving them a step by step approach from macrostructure and mechanisms to details of market instruments, without losing touch with the real economy.

Moreover, as described above, this book is also for people from professionals to practitioners to those with a variety of backgrounds – anyone who wants to strengthen or simply refresh their knowledge about the financial market, its role and its structure, avoiding an approach that is overly specialized or monothematic.

For many people from different cultural and professional backgrounds and roles, this book can help them understand something more about what they do every day, that is, ignore what's behind what they purchase as an investment or how the system can finance their needs. In the step-by-step approach offered here, they can also learn and understand more about what options they might pass up on, simply due to fear or lack of knowledge, as is often the case for derivative instruments, for example.

As far as I am aware, there are few texts available that can help readers who do not already have a strong background in the understanding of the market system as a whole and which, at the same time, delve in-depth into financial instruments, with basic examples that clarify the theory.

This book differs from other texts on investments, financial markets and so forth in a number of ways.

1. It recognizes that financial markets are not just a way to make money, and it analyses the market from the perspectives of a number of disciplines. Many investment texts are based solely on financial economics; many others are highly specific about the technicalities of the instruments, very often addressing professionals who want to become experts. The present text does not separate the financial markets into independent and non-correlated clusters. Instead, it starts from a broad perspective that combines accounting, corporate finance, macroeconomy and then refocuses the analysis in detailed chapters only in a second step, once the basics have been already presented.
2. This book uses less mathematics and fewer formulas than many other texts. Although mathematics can provide rigor, it can also be a communicative hurdle that scares many beginners. Some readers find mathematics inaccessible, and can lose sight of the fundamental principles by being distracted by mathematical difficulties. In addition, the book is illustrated, and numerical examples make it easy to understand.
3. This book attempts whenever possible to bring the most recent evolution of the financial markets into the discussion (for example the ESG bond, with a detailed report of the world's first issuance) so that readers become acquainted with ground breaking ideas in terms of sustainability, topics that are also affecting the financial world and financial instruments.
4. The text recognizes that the financial market is about needs. That is not only for the people at the top, but for everyone in excess or in lack of money who is looking for a smart and efficient solution.
5. The text has an international approach, while many textbooks available today are US-market oriented. There is much more emphasis instead on the fact that nowadays the evolution of financial markets and financial instruments also helps domestic-regional investors to enter markets that would normally not be accessible for them. In addition, international players can improve their balance sheets thanks to the financial markets.

In conclusion, I can sincerely say that I hope this book will represent a very useful instrument for a wide audience to approach finance in a more constructive way, helping them to understand the basics behind something that seems quite common but, very often, still has a "dark side." My hope is that, with this approach to teaching about the financial market, with insight from several disciplines, students will enjoy their course, and that many other non-students can use their non-academic way of learning something more about the market. In the end, I hope this book will provide the financial education that everyone needs.

Maurizio Bernardo
President of Assofintech Italia

Introduction

What does the word "finance" convey to you?

The term arouses many feelings in people, both positive and negative. Sometimes it is also associated with a world of fear; sometimes it is interpreted as gambling. Whatever the case, finance as it is most commonly used in the world has a predominantly cynical meaning: the science of making a profit through improper behaviour.

This is partly due to the negative events of the past. Simply consider the numerous financial crises, especially in 2008-09, which were related to the infamous sub-prime mortgages and toxic assets like ABS (asset-backed securities).[1] But who knows, for example, what "sub-prime"[2] refers to? And what is a derivative anyway?[3] Our society's prevalently low level of financial culture means financial markets are demonized. But in reality, finance is much more than this general perception, which brings us to the primary objective of this book: to make closer contact with the financial world. We will do this by addressing some issues that are often taken for granted, and by describing some interesting things that occur in everyday life that we need to pay more attention to.

In its broader meaning, finance is first and foremost a science. It has a theoretical framework built by scholars over time, which is in continuous evolution. However, this science is also a profession: who hasn't seen *The Wolf of Wall Street*?[4] Thousands of individuals choose this path in their working life as an expression of their inclinations and skills. Yet finance is also an art, meaning the financial markets are an art exhibition where people, businesses and institutions satisfy their needs while following the proper guidelines (although to be honest, this is not always true). This book aims to demonstrate how even something as complex as finance and the financial system can represent a positive expression of the capabilities of human beings.

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[1] ABSs are debt securities whose payments of principal and interest derive from cash flows generated by separate pools of assets.

[2] Subprime refers to borrowers or loans who have poor credit ratings.

[3] Derivatives are financial instruments that "derive" their value from other underlying assets, as presented in section 6.2.

[4] Film directed by Martin Scorsese with Leonardo Di Caprio (2013). Introduced to life in the fast lane through stockbroking, Jordan Belfort takes a hit after a Wall Street crash. His career terminated following Black Monday, the largest one-day stock market drop in history. Thanks to his aggressive pitching style and the high commissions, Jordan makes a fortune. And a style of life.

Our aim is not just to provide a deep analysis of the financial markets, instruments, rules and mechanism adopted by traders for better results in their work. The ultimate goal of this book is to offer a coherent view of finance to ensure a less distorted and more balanced assessment of its role in everyday life. To achieve this objective, we move step by step from the basic needs of individuals and firms to the general concept of the financial markets, instruments and systems. We will give readers a better understanding of how finance is very closely related to our everyday life and business, as well as the institutions that govern our live.

We use this approach precisely to ensure that we consolidate the three aspects of finance we previously mentioned (science, profession and art); our point of reference will be the financial system. In particular, we will explore this system both in general terms, as an essential infrastructure for the economic system, and in specific terms relating to its own structure and functioning.

A **financial system** is the heart of a country's economy, facilitating its function. Indeed, the financial system is what makes the economy working better. From an institutional point of view, the system can be seen as a complex set of subjects and structures, including intermediaries, markets, financial instruments, regulations and supervisory authorities. The financial system performs several functions from payment collection to fund management, from investment financing to risk management. Because of these many functions, the financial system cannot exist per se. Instead it is closely linked to the economic system and the political-social system.

The **economic system** is the set of institutional sectors[5] of the economy which operate on the basis of the range of goods and services. The **political-social system,** on the other hand, is the set of national and supranational authorities characterized by the pursuit of general interests. So it is easy to see a strong link between these three interdependent systems, which help to ensure adequate governance of the real economy.

Within this broader framework, the financial system carries out four main functions:

1. the transfer of financial resources;
2. the provision of payment methods;
3. risk management and coverage;
4. the transmission of monetary policy initiatives.

The **transfer of financial resources** coincides with the credit function, ensuring the connection between surplus and deficit units of funds – the central focus of this book. The credit mechanism is fundamentally important as it satisfies the investment needs of people with excess resources by facilitating the transfer of this capital to people in need of additional funding.

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[5] "Institutional sectors group institutional units which have a similar type of economic behaviour." (Source: Eurostat.)

The **function of providing payment methods** is closely linked to the need to facilitate trade in goods and services. This too is handled by the financial system, which uses banking intermediaries and a complex support infrastructure: the payment system. Goods and services are mainly paid for through the different currencies used in countries across the globe. The financial system also enables cross-currency trades thanks to the Foreign Exchange Market (FOREX).[6] In order to ensure the proper functioning of the payment system, an entity is needed to ensure the issuance and the circulation of money and currencies. In particular, the function of materially issuing currency is attributed to the central banks, while the regulation of trade is carried out through special instruments embedded in the payment system.

Risk management and coverage are the natural consequences of the operations conducted by various intermediaries who are forced to take on numerous risks. Examples include failure to repay loans and securities, asymmetric information[7] and inevitable price fluctuations. In light of this, a middleman is needed to manage both speculative risks (involving the possibility of losses and gains) and pure risks (losses only). This middleman is exactly what the financial system represents, taking different forms and modalities depending on the risks in question, and playing an essential role for the financial community.

Finally, the **transmission of monetary policy initiatives** arises from the need to have a medium capable of implementing relative interventions throughout the economic system.

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[6] *Forex*, the largest money market in the world, is where foreign currencies are traded. We will present it in section 6.3.

[7] In financial markets one party often does not know enough about the other party to make accurate decisions. The Lack of information creates problems in the financial system both before and after the transaction is entered into. If the problem occurs before the transaction is called “adverse selection”; if the problem takes place after the transaction the problem is called “moral hazard.”