Chapter 7
The Structure of Financial Networks

Stefano Battiston, James B. Glattfelder,
Diego Garlaschelli, Fabrizio Lillo,
and Guido Caldarelli

Abstract We present here an overview of the use of networks in Finance and Economics. We show how this approach enables us to address important questions as, for example, the structure of control chains in financial systems, the systemic risk associated with them and the evolution of trade between nations. All these results are new in the field and allow for a better understanding and modelling of different economic systems.

7.1 Introduction

The use of network theory in financial systems is relatively recent, but it has exploded in the last few years, and since the financial crisis of 2008–2009 this topic