# Chapter 1 Is the World Flat or Not (Yet)? Trade Globalization and Digitalization

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#### ABSTRACT

This chapter adds to the understanding of trade globalization by accounting for the complexity and multidimensionality of the phenomenon at hand. This approach captures different aspects of the phenomenon, such as the interconnectedness of countries, geographical distance, and sectoral trade relationships over a period of 50 years. Thereby, both the commonalities and differences in the long-term trends for the individual dimensions of trade globalization are highlighted. Results indicate that regarding the number of positive bilateral trade flows, globalization was almost completed by 2016. Also, distance diminished significantly in importance for trade relationships. Yet, data shows that the degree of globalization was significantly different for high-tech sectors compared to low-tech sectors even though the latter could catch up over time. During recent years, protectionism tendencies have led to the discussion about a new age of slowbalization to be on the way while digitalization processes can integrate countries even further into global production and trade networks.

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#### INTRODUCTION

Along the last decades, globalization has been a hot topic both in academic literature and policy debate regarding not only its current characterization but also its effects and, although to a lower extend, the sustainability of the phenomenon (see for instance Figge, 2017; Beumer, Figge, & Elliott, 2018). Between 1990 and 2010, trade volume measured as a portion of world GDP has constantly risen, with China's integration into the world trade network playing a major role in this development. Additionally, the success of GATT and WTO rule settling lead to the abolishment of quota regimes and the decline in tariffs, making the establishment of global value chains more advantageous (OECD, 2005). Moreover, advances in information and communication technologies as well as automation and digitalization processes reduced trade costs even further, making it ever more easily to trade between faraway places. Especially since the early 1990s, globalization has dramatically gained momentum regarding size, scope and speed; this is why this phase is sometimes also referred to as the golden era of globalization or as hyper-globalization (Subramanian & Kessler, 2014). With the Great Recession in 2009, the trend of growth in world trade and trade integration, however, had come to a pause. Protectionist policies and trade tensions between US and China lead to an increase in tariffs on Chinese imports as well as global tariffs on steel and a European tariff on automobiles. The Economist referred --to this new situation as slowbalization. Bordo (2017) and The Economist (2019) identified several additional factors for the decrease of the growth rate at which trade volume (that is used as a proxy for globalization) had evolved. First, as trade costs had already declined by a large fraction, there is hardly any further room for additional cost cutting when goods have to be shipped from one country to another. Second, many advanced economies have moved on towards service economies. As such, services are still far less traded compared to goods and trade in services and data are still less captured in traditional trade data, thus underestimating trade volume. Third, China has become more self-reliant in the production of medium-tech to high-tech as well as high-skill products, making China less dependent on imports and thus having a dampening effect on world trade volume. Fourth, global supply chains and completely integrated global firms become more ineffective since the Great Recession in 2009 as with lower income, less consumption and lower volumes of trade, splitting tasks of production over a set of countries has run into diseconomies of scale. However, digitalization also made the coordination of global value chains easier and more cost-effective, which should be able to boost trade globalization and the number of sectors that countries trade with in the long run.

In this chapter, the authors aim to address three critical topics related to the broad phenomenon of economic globalization. First, the authors provide a broad conceptual discussion on the definition of trade globalization and show that this concept has to be captured in a multi-dimensional way and cannot be satisfactorily analysed by the interpretation of world trade volume alone. This builds the foundation to clarify the differences between the concept of globalization and other connected research topics, such as internationalization or regionalization of trade. Second, the authors focus on identifying key dimensions of trade globalization and aim to shed more light onto these important components. In more detail, the authors study trade volume as well as distance, the number of trade flows, and sectoral components. Based on that discussion, the authors present evidence on the evolution of trade globalization along a period of 50 years. Describing the multi-faceted process for that time period, the authors can catch important developments and show a differentiated picture of the evolution of trade globalization. Third, the authors discuss how major trends in contemporary world economy – such as digitalization – affect globalization and how distance has become less relevant for global value chains, leading to a higher degree of interdependence of countries worldwide.

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