Chapter 23
Financial Linkages and Shock Spillovers in the Countries of Central, Eastern, and South-Eastern Europe:
Evidence From a Global Macroeconometric Model

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ABSTRACT

At the start of the third decade of the 21st century, the countries of Central, Eastern, and South-Eastern Europe (CESEE) are still lagging behind 'old' EU Member States in regards to various macroeconomic and social indicators. This is particularly evident when considering the development of the financial sector, especially the non-banking part. This chapter focuses on the stock markets of eleven CESEE countries and analyzes potential macroeconomic factors that contribute to explaining the dynamics of real equity prices. To account for cross-country linkages and potential spillovers, global vector autoregressive (GVAR) methodology is applied. The estimated impact elasticities enabled the pinpointing of CESEE countries with stronger linkages to foreign stock markets. Generalized impulse response functions indicated the existence of statistically significant spillovers, the strongest spillovers coming from the German stock market. The empirical results also showed spillovers from CESEE countries' stock markets, bond markets, as well as from real shocks.

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INTRODUCTION

The fall of the Berlin wall symbolically marked the end of the planned economy systems prevailing in the countries of Central, Eastern and South-Eastern Europe (CESEE) and the beginning of the transition of these countries towards market-oriented economies. Fast forward thirty years later, the transition towards market economies has not gone so smooth and the CESEE countries are still below average EU28 per capita income level (Borosak et al, 2019).

There are many reasons why the CESEE countries' growth is below potential. First, the privatization of state-owned companies was not as successful as it could have been, and in most countries, even after thirty years, it is still not completed! Second, the slow and inefficient justice system (International Monetary Fund, 2017) hinders tackling corruption. Third, lack of commitment towards implementing the necessary structural reforms, along with insufficient investments in infrastructure, education and innovation are standing on the way of achieving higher growth rates (European Commission, 2018).

On the upside, trade integration has been relatively successful particularly with mature economies of Western Europe (Bussière et al, 2005). However, intra-regional trade flows between the CESEE countries are still below full potential, especially regarding their geographical proximity.

The lagging behind advanced economies is particularly evident concerning the financial sector. This does not come as a surprise, as the notion of a capital market and allocation of funds towards profitable projects and initiatives is in complete contrast to a planned economy setting. Consequently, due to the less developed financial sector and weak integration of capital markets, firms and households have limited access to financial services necessary for investment financing, thus limiting economic growth potential.

The focus of this chapter is on the CESEE countries' stock markets. In particular, this chapter analyses eleven CESEE countries. Namely, it centers on EU New Member States (NMS) that joined the EU in the last two decades: eight countries from the 2004 enlargement wave (Czech Republic, Poland, Hungary, Estonia, Latvia, Lithuania, Slovenia and Slovakia), and countries that joined the EU afterwards – Romania and Bulgaria (2007) and Croatia (2013). Therefore, the empirical analysis performed in this chapter does not include Turkey, Russia, Ukraine, Moldova, Belarus and non-EU Balkan states (Albania, Bosnia and Herzegovina, Kosovo, North Macedonia, Montenegro and Serbia). Although the list of countries is narrowed, still the analyzed countries are quite heterogeneous and the 'symptoms' listed above do not equally apply (and to an exact extent) to every country. The heterogeneity especially became apparent in the aftermath of the 2008 economic and financial crisis, as countries were not equally affected. While some economies remained almost unaffected, in some countries (Croatia), the recession lasted for six years.

As it is very unlikely that these differences are just due to unfortunate turn of events, this chapter analyses what are the key determinants of the dynamics of the CESEE countries' stock markets? Along the lines, other interesting questions emerge. Is the role of domestic and foreign factors equally important in all CESEE countries? Does the relative importance of domestic and foreign factors change over time? Considering the setting, the answers to these questions would provide an insight to the potential vulnerabilities and exposures of CESEE countries' stock markets.

In assessing the determinants of the dynamics of the CESEE countries' stock markets there are two prevailing approaches: time series models which base the analysis around individual country models (for instance: Jakšić, 2009; Hsing, 2011) and panel models (Şükrüoğlu & Nalin, 2014) which usually treat the countries in a panel as independent units and neglect possible spillovers. Therefore, the prevailing approaches fail to address the interactions between the countries which are likely to be important in an