# RETAIL FINANCIAL MARKETS AS A DRIVER FOR THE DEVELOPMENT OF FINANCIAL SECTOR

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Abstract: In this research I analyze the influence of retail financial markets on the development of financial sector on the data for 39 countries for the period 1990–2018. To measure retail markets development a composite indicator is constructed. Then this indicator is included in the models of the size of non-retail financial markets. The results show that, on the one hand, development of retail markets (households credit market, life insurance market and private pension funds) stimulates the development of non-retail financial markets (corporate lending market, stock market and non-life insurance market) as they have a role of resources of funds. On the other hand, overheating of retail credit market has a negative impact on the stability of the banking sector and subsequently leads to a reduction of corporate credit market. At the same time, excessively rapid growth of life insurance market may hinder the development of its other segments.

Keywords: financial sector development, retail financial markets, credit market, loans to households, financial stability

## INTRODUCTION

The analysis of the factors determining the dynamics of financial markets is widely presented in the literature on finance, including papers that analyze the interrelationships of various segments of the financial sector, for example, studies on the impact of the credit market on the development of the insurance market (Beck, Webb, 2003; Chan et al., 2005), the market of non-state pension savings on the capitalization of the stock market (Davis, 2005; Rocholl, Niggemann, 2010; Alda, 2017), the household lending market to the credit market as a whole (Cottarelli et al., 2005; Beck et al., 2012; Mian et al., 2017; Mian, Sufi, 2018). At the same time, it wasn't paid sufficient attention to the dynamics of retail segments of the financial sector as one of the factors of financial development. This trend in the empirical literature began to develop actively after the global financial crisis of 2007-2009. It made it possible to realize that the era when the role of the household sector was limited to the role of the lender of the economy and the financial system was over, as the household became important participants of the credit market (Jappelli et al., 2013). Analyzing the dynamics of the retail lending market, the researchers found that its accelerated development can lead to painful financial crises (Cottarelli et al., 2005; Beck et al., 2012; Mian et al., 2017; Mian, Sufi, 2018), which are longer and deeper compared to crises provoked by overheating of the non-financial lending market companies, as well as they lead to protracted recessions (Cecchetti et al., 2011; Sassi, Gasmi, 2014; Garcia-Escribano, Han, 2015; Jorda et al., 2016).

In this paper, I attempt to summarize the results of the previous studies that revealed the importance and ambiguity of the dynamics of retail segments in the development of the credit market for other markets and the financial sector as a whole. Thus, the main objective of the study is to analyze how retail markets affect the development of the financial sector by influencing other non-retail markets. For this purpose, the impact of the dynamics of retail segments as a single system of several retail markets (household lending, life insurance, non-governmental pension savings) on the development of the largest non-retail financial markets: the company lending market, the stock market and the insurance market (excluding life insurance) is assessed.

Since household finances can play a significant role in the development of the financial sector and the economy (Guiso, Sodini, 2013), estimating the impact of retail segment dynamics on the development of other (non-retail) financial markets is important for financial development, as well as for economic growth. Using panel regression I try to estimate the impact of retail markets (households credit market, life insurance market and private pension funds) on non-retail financial markets (corporate lending market, stock market and non-life insurance market). It brings me to the conclusion that the growth of the size of retail markets, on the one hand, stimulates the development of non-retail financial markets - the corporate lending market, the stock market and the insurance market (excluding life insurance), allowing them to generate additional investments. On the other hand, overheating of the retail credit market negatively affects the stability of the

banking sector and leads to a reduction in the corporate lending market, and excessively rapid growth of the life insurance segment may hamper the development of other segments of the insurance market.

#### **METHODOLOGY**

The main objective of the study is to analyze the role of retail segments of the financial sector in the development of other (non-retail) financial markets and, as a result, the financial sector as a whole. This requires an indicator reflecting the development of retail segments. For example, in many resaerches (Cecchetti et al., 2011; Beck et al., 2012; Jorda et al., 2016; Mian et al., 2017; Mian, Sufi, 2018), the authors used household loans for this purpose. However, I need to take into account the complex impact of the development of retail segments, not only the debts of households, but also their assets. At the same time, the presence of a significant correlation between indicators reflecting the dynamics of retail segments does not allow to directly take into account in one equation the impact of each of them on the development of non-retail financial markets. To solve this problem, I apply the principal component method to construct composite indicator of the development of retail segments, which includes indicators of retail segments of the financial sector.

To test the assumption about the nonlinear influence of the level of development of retail segments on the depth of non-linear financial markets, I assumed a quadratic form. The impact of the dynamics of retail segments of the financial sector on the development of other financial markets was assessed using panel-data models. In addition to the retail development factor, all models also include as control factors macroeconomic, demographic, and institutional variables.

To construct the models of the impact of retail segment dynamics on the development of the financial sector, I formed a sample of 39 developed and developing countries for the period 1990-2018.

The composite indicator of the financial development of retail segments is based on the principal component analysis (Sahay et al., 2015; Svirydzenka, 2016) and includes indicators of the depth of development for the following retail segments of the financial market (in % of GDP): loans to households; assets of non-state pension funds; volume of life insurance premiums. Application of the principal component analyses helps to take into account simultaneously the dynamics of all key retail segments and to prevent the problem of multicollinearity, which could arise if several indicators of financial depth were simultaneously included in one model equation.

### **FINDINGS**

Estimation of panel models of the impact of retail segment dynamics on the development of corporate lending market, stock market and insurance market allows to shed some light on the importance of the influence of retail markets on the development of the financial sector.

First of all, the balanced development of retail segments contributes to lending to non-financial companies. For example, an increase in household deposits creates conditions for lending to companies by increasing the resources of banks, development of the life insurance market reduces risks (Feyen et al., 2013), an increase in retail lending allows banks to generate more profits and thereby develop corporate business. However, aggressive expansion of the retail loan portfolio and, as a result, the overheating of the retail lending market have a negative impact on the lending segment of companies. Overheating leads to increased instability and accumulation of excessive risks, which, as a rule, leads to a financial crisis, subsequent contraction of the credit market and economic recession (Beck et al., 2012; Cournede et al., 2015; Mian et al., 2017; Mian, Sufi, 2018). At the same time, lending is being squeezed not only in the retail, but also in the corporate segment due to the loss of stability of the banking system and a reduction in the resource base. In addition, retail lending can have a negative impact on corporate lending due to the displacement of loans to the corporate sector by retail loans (the effect of competition).

Secondly, the dynamics of retail segments of the financial sector significantly affects the development of the stock market. This is consistent with the results of earlier studies, where it was shown that the formation of markets for non-state pension savings and life insurance promotes the development of the stock market (Boersch-Supan, Winter, 2001; Impavido et al., 2003; Thomas et al., 2014; Alda, 2017) stimulating additional investments. In contrast with the model for lending to non-financial companies, for the model for stock market I don't observe the quadratic (nonlinear) nature of the influence of the dynamics of retail segments on the development of the stock market. The dynamics of loans to households does not have a

significant impact on the capitalization of the stock market. At the same time, the expansion of pension savings and life insurance markets reflects the growing demand from households for financial products as a means of saving, which increases the volume of investment resources and contributes to a more intensive development of the stock market.

Thirdly, for all estimated model specifications for the insurance market (excluding the life insurance segment), the development of retail has a significant impact on its growth. At the same time, the influence of the dynamics of retail segments of the financial sector on the development of the insurance market turns out to be non-linear. The growth of retail segments contributes to the development of the insurance merket. In particular, the formation of the retail lending market implies an increase in the volume of collateral, which, as a rule, is insured by banks, which increases the supply of relevant insurance products and positively affects the development of the insurance market (Feyen et al., 2013; Trinh et al., 2016). However, it was not revealed that overheating of the retail lending market can negatively affect the dynamics of the insurance market, although a similar effect was described earlier (Kamiya, 2018). Still, the excessively intensive development of the life insurance segment after reaching a certain level can negatively affect the dynamics of other types of insurance, displacing them. The negative impact found can be explained by competition between different insurance products.

## **CONCLUSIONS**

The results of the study show that the dynamics of retail segments of the financial sector has a significant impact on the development of other financial markets and, as a result, the financial sector as a whole, since households are the main supplier of financial resources, as well as the driver of changes in the structure of the financial sector. It means that balanced growth of household assets and liabilities is a factor in the sustainable development of the financial sector, outstripping dynamics of financial liabilities in comparison with assets leads to instability and an increase of risk of a financial crisis, which negatively affects the long-term development of the financial sector.

Moreover, it was reavealed that the influence of retail segments on other financial markets is non-linear, there is a saturation effect depending on the development of retail segments. Both underdeveloped and overheated retail markets limit the development of other segments of the financial sector

The growth of retail markets (household lending, life insurance, non–state pension savings) stimulates the development of non-retail financial markets (corporate lending market, stock market and insurance market (excluding life insurance)), allowing them to generate additional investments. On the contrary, overheating of the retail credit market negatively affects the stability of the banking sector and leads to a reduction in the corporate lending market, and excessively rapid growth of the life insurance segment may hamper the development of other segments of the insurance market.

To put it a nutshell, regulators should pay attention to the sustainable development of retail financial markets applying macroprudential and other measures which allows to control risk accumulation in retail markets.

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