

## **Description for the General Public**

### **Exchange traded funds as innovative products on financial markets: development factors and impact on financial system. Experiences of European countries, implications for Poland.**

Within the project four major goals have been defined:

[1] Adaption of innovation diffusion models in order to facilitate analysis of ETFs market development paths, treating ETFs as innovative financial products, and identification of dynamics of this process, critical mass and forecasts.

[2] Identification of ETFs markets development paths in the European countries.

[3] Identification of factors determining the development of ETFs markets in the European countries.

[4] Identification of the impact of the development of ETFs markets on the development of the financial system at large and its specific segments.

Research sample will cover member states of the European Union, with the highest values of ETFs tracking local assets (according to data as of end of October, 2015): United Kingdom, Germany, Italy, France, Spain. Another country included in the research sample is Poland. Due to similar regulations regarding financial markets and market environments, research will be conducted on two levels: one of them for the whole EU area with the most developed ETFs markets, and the second for individual countries. The time coverage will be the period 2004-2015 (due to minimal level of ETFs markets development in Europe prior to 2004 and lack of sufficient data); for Poland it will be 2010-2015 due to lack of ETFs on the Polish exchange prior to 2010. Data on Japan and South Korea (countries with highly developed ETFs markets) will be used for comparison purposes. Level of the development of the ETFs markets will be measured using the assets and value of turnover in the shares of ETFs.

ETFs market, i.e. market for this type of innovative financial products, has been one of the most rapidly developing parts of the global financial system – between 2001 and 2014 its assets grew from 110 billion USD to almost 3 trillion USD (ETFIGI 2015). Polish ETFs market remains underdeveloped – value of assets of the only ETF listed solely on the Warsaw Stock Exchange amounted in 2014 to ca. 80 million USD (WSE 2015).

In their basic form ETFs are funds structured in order to mimic the performance of selected financial assets, usually stock indexes (Deville 2008; Gastineau 2010). Shares of ETFs are listed and traded on one or more stock exchanges. Due to the rapid development of the ETFs market and growing complexity of this category of investment funds, issues related to ETFs comprise an important and current research topic.

However, in the previous research most attention was paid to the attractiveness of the investments in ETFs for single investors, the attempts to analyze the ETFs markets in selected regions or countries (including the dynamics of this process and predictions) were rare (an important exception is the work of Lechman and Marszk (2015)). Moreover, factors influencing the development of ETF markets (i.e. diffusion of this category of innovative financial products) remain to a large extent a topic neglected in scientific research.

Impact of ETFs on the financial systems is also a relatively new research field; first publications dedicated to this subject can be traced back to 2011 (FSB 2011; IMF 2011). Results of the conducted studies indicate that impact on the financial system grows with the increased size of the ETFs market and share of synthetic ETFs (typical for the European market). Main negative effects for the development of the financial system caused by the ETFs market development are (Diaz-Rainey and Ibikunle 2012; Foucher and Gray 2014; Kosev and Williams 2011; Lechman and Marszk 2015; Ramaswamy 2011; Rubino 2011): lack of transparency, risk of shock transmission or contagion, increased volatility of prices on the linked markets. Positive effects include increased pricing efficiency and liquidity of the tracked assets (Hill et al. 2015). Topic of the ETFs in Poland has been undertaken by a few authors, e.g. Nawrot (2007), Chodnicka and Jaworski (2012), Miziołek (2013) and Mitrenga (2014). Some of the works concentrated on the possible benefits and costs for investors resulting from the usage of ETFs, while others compared ETFs to other products and evaluated their risk/return profile. To the best of our knowledge, there have been no studies dedicated to the ETFs market development in Poland or its impact on the Polish financial system.

Planned research has not yet been conducted, despite the rapidly growing role of innovative financial products such as ETFs, both on the global and European financial markets. Results of this project may thus be regarded as significant contribution to the present state of knowledge.