Currently, financial stability authorities – whether in the form of central banks, macroprudential bodies or stability boards – all have the aim to oversee systemic risk. To be successful in this respect, they need to employ various methods of identifying, measuring and managing risks which encompass the financial systems under their jurisdiction. This means that regulators and supervisors of financial stability must be able to form informed ex-ante views on the levels of risk in the financial systems which combine the probability aspect – how likely the risk is to realise; with the impact aspect, i.e.: what the expected magnitude of risk materialisation might be, and what is the expected impact of this materialisation on the financial system functions and on the real economy as a whole. Academic researchers in this field can add to this crucially important task of the regulators and monetary authorities by carrying out theoretically focused research enabling – based on cross-country empirical analyses and original ideas – abetter comprehension of systemic risk.

The major premise of the proposed research project – coming from the research carried out thus far – is that the application of existing models of systemic risk analysis and measurement which are predominant in the current literature and have been applied successfully by central banks in most advanced economies in the world, is not sufficient in capturing systemic risk in developing countries. In particular, for emerging economies the existing models do not allow to analyze this risk with the necessary depth and breadth. In consequence, there is a knowledge gap regarding this type of risk in emerging markets that have relatively young financial systems characterized by different statistical properties of risk. Therefore, the goal of the research is to analyze systemic risk in such countries using authors' original modelling concept (developed in the preliminary research phase), to allow for comparison of systemic risk properties between emerging and developed countries, to better understand the underlying properties of systemic risk in emerging countries.

Major hypothesis is: **Systemic risk of financial systems in advanced economies and emerging economies has different properties.** Partial results will be captured a form of concise conclusions on the differences between the properties of systemic risk between the sets of analyzed countries. In that way two or more concise groups of countries with different systemic risk characteristics will be identified. Observed statistically relevant characteristics of systemic risk, and especially of differences between the analyzed countries, will be used to infer and identify properties of this risk in different economies.

Selected research methods are based on the research carried thus far and include the expanded analysis of the literature, advanced methods of risk modelling, utilizing econometric tools and advanced methods of statistical analysis and inference. Data to be analysed includes publicly available financial time series (stock market and book value) data for the period 2005-2018 – the set of developing countries to be analyzed includes the Balkan, Eastern European and Central European region (e.g. Croatia, Albania, Estonia, Latvia, Ukraine, Hungary, Slovakia, Romania, etc.), for which the three aspects of systemic risk have not yet been analyzed by a combination of advanced econometric methods. Then, in the final step of the research, the results obtained for these countries will be compared to the results of the analogous analysis carried out for advanced European countries (including e.g. Germany, UK, France, Switzerland).

The expected results consist mainly in filling the knowledge gap on how systemic risk differs between the two sets of countries, which will allow to draw conclusions regarding the different properties of systemic risk between emerging and advanced counties in Europe. The solution on systemic risk analysis and measurement refined in the research will be universally applicable to a wider set of countries (as opposed to the currently existing models) and therefore will allow for systemic risk to be more precisely analyzed in many countries where currently there is a lack of such advanced econometric tools. On the other hand, if in the course of research for any of these countries some alternative approaches will be developed by others, then there will be ready-made results to be compared – allowing for better understanding of the phenomenon. The results additionally have a utilitarian value, as developed knowledge might be used by regulatory bodies and monetary authorities in their pursuit of financial stability and prevention of financial crises.