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## Summary of Ph.D. Thesis entitled:

## "The Effects of Money Supply Growth from the Perspective of Cantillon Effect"

The subject of this doctoral thesis is a particular effect of the increase in money supply, namely the Cantillon effect, also called the first-round effect — which is the distributional effect resulting from uneven changes in the money supply — and its impact on the economy. As the money supply growth does not affect all cash balances in the same proportion and at the same time (new money is introduced into the economy only through specific channels), it entails the distribution of income and the following changes in the structure of relative prices and production. It means that the Cantillon effect causes the non-neutrality of money.

The research problem is to determine the impact of Cantillon effect on the economy, i.e. which is to examine how important for the real economy is the method of increasing the money supply. This is why the dissertation classifies the various channels through which new money can be injected into the economy. It also examines the differences that occur depending on the way in which the money supply increases, and their importance to the economy and the business cycle. Therefore, the main idea of this study is that what matters for the economy is not a mere increase in the money supply, but also a method of monetary inflation. Thus, the aim of the thesis is to solve the above mentioned research problem through the systematic study of the Cantillon effect not presented in the economic literature up to now.

The main area of research is monetary economics, but also theory of business cycle, theory of economic bubbles, theory of income distribution and income inequality, economic history and the history of economic thought. The dissertation contributes to the development of economic theory in general and the Austrian school of economics in particular by providing an extensive study of the Cantillon effect and disaggregated research of monetary inflation and its impact on the course of the business cycle. It also offers a systematic classification of the various channels through which new money can enter the economy and a proposal of a preliminary typology of business cycles, based on the methods of credit expansion.

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The doctoral thesis putsforward three hypotheses: 1) the Cantillon effect is one of the reasons behind the non-neutrality of money; 2) the distinct methods of monetary inflation results in different realizations of the Cantillon effect, affecting the real economy and the course of the business cycle differently; 3) the Cantillon effect resulting from the credit expansion contributes to the business cycle, the formation of asset-price bubbles, the growth of financial sector, and the increase in income inequality.

The dissertation is mainly theoretical, however the statistical evidence – if available – is used to illustrate the mechanism of Cantillon effect in historical and contemporary processes of monetary inflation from various countries, but to a large extent from the U.S. economy.

The doctoral thesis is structured as follows. The first part provides an introduction and describes the research methodology. The second part presents a theoretical discussion of the Cantillon effect and the relationship between this effect and the non-neutrality of money. The review of the economic literature on the first-round effect and the analysis of the views on the subject in the history of economic thought are also presented in this part. The third part examines the various methods of monetary inflation and analyzes theeconomic differences between them. The fourth part focuses on the Cantillon effect resulting from the credit expansion, which is the prevailing type of monetary inflation in modern economy. It examines the differences in how the credit expansion can occur, and how these variations influence the course of the business cycle. The fourth part analyzes the various ways in which: central banks can conduct monetary policy, commercial banks can conduct the credit expansion, and borrowers can spend the granted funds. It also examines whether non-banks can also create money, and if so, how it affects the Cantillon effect and the course of the business cycle. Last but not least, the fourth part analyzes the interaction between the fiscal policy and the Cantillon effect, the international dimension of the first-round effect, as well as its impact on the formation of asset-price bubbles and income inequality. The fifth part concludes and provides suggestions for further research.

The conducted analysis does not allow for rejecting the hypotheses put forward – they are plausible. Therefore, the main findings of the research are that the Cantillon effect entails significant economic consequences, contributing to the non-neutrality of money. It means that what matters for the economy is not a mere increase in the money supply, but also methods of monetary inflation. For example, the credit expansion, unlike other methods of monetary inflation, leads to the business cycle and contributes to the formation of asset-price bubbles. Moreover, the differences in ways how the money is created by the central and commercial

banks are responsible for the so-called secondary effects of business cycle, which make business cycles not identical, despite all the similarities. The differences between them can be partly explained by the various methods of monetary injections into the economy, resulting in distinct realizations of the first-round effect.

The dissertation shows that despite the 'monetarist counter-revolution', the mainstream economics neglects the Cantillon effect. Instead, economists focus on other causes of non-neutrality of money, such as price rigidity (new Keynesians) or incomplete information (new classical economists). Thus, the thesis contributes significantly to the debate on the neutrality of money, as the first-round effect makes money non-neutral even in the long-run.

The doctoral thesis points out several negative effects of monetary inflation in general and credit expansion in particular, such as business cycles, asset-price bubbles, the international spillovers of money and credit supply growth, or the income redistribution (which widens the income inequality). Therefore, not taking into account the Cantillon effect by central banks and financial supervision authorities leads to overly loose monetary policy and credit expansion. Thus, the dissertation also contributes to the debate on the benefits and costs of the expansionary monetary policy and credit creation.