# International Monetary Policy Transmission, Exchange Rate Dynamics and Welfare

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**Title**
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**Abstract**

The new open economy macroeconomics (NOEM) represents the leading development in international economics. Its development began in the early 1990s. The objective of NOEM models is to overcome the limitations of the Mundell-Fleming model and in the same time preserve the empirical wisdom and close connection to policy debates of the traditional literature. The framework of NOEM models consists of general equilibrium framework featuring nominal rigidities in imperfect competition in the markets for goods or labour, in order to reconsider the conventional views on the transmission of monetary and exchange rate shocks. In my master thesis I will research two NOEM models. Redux model is developed by Obstfeld and Rogoff (1995) and the PTM model by Betts and Devereux (2000). The thesis is based purely on theoretical models and the methods applied are of mathematical nature. No mathematical programme was used. The results are presented in Appendices. The most important methods used are log-linear approximation as well utility function maximization. In addition, numerous derivations and substitutions were used in order to derive the results of the research. In this thesis researched two issues. The first issue concerns the transmission effects of monetary policies in two different environments. One is set in the open economy of two countries where the law of one price (LOP) and purchasing power parity (PPP) holds. The other is set in the environment where the pricing-to-market (PTM) is present. The flexible exchange rate dynamics in these two settings makes the results strikingly different and sheds light on the exchange rate pass-through. My first research question is how the transmission mechanisms of monetary policies operate in open economies with flexible exchange rates. I analysed how the monetary disturbances affect the movements of major macroeconomic variables in the economic system: consumption, output, current account, and terms of trade, real and nominal interest rate. The second issue touches the welfare analysis which can be performed as a result the established groundwork for credible policy evaluation. My second research question is what the welfare effects of monetary policies are. I will analyse the social welfare which is constructed as a sum of consumer surplus and producers' profit. This will be done in two environments already explained above. The idea behind this analysis is to assess the international spillover of monetary policy. The results of the analysed models yield different conclusions. The presence of pricing-to-market produces in many aspects opposing results to the ones where the law of one price holds. Exchange rate volatility is higher, which implies that it reduces the expenditure switching effects as opposed to increasing them with LOP and PPP. International transmission of macroeconomic shocks with PTM has reversing ordering: deviations from PPP make consumption co-movements fall and the elimination of expenditure switching of the exchange rate makes the co-movements of output between countries higher too. In terms of welfare, PPP raises welfare for both countries while with PTM, monetary policy is a beggar-thy-neighbour instrument (i.e. benefits of Home country at the expense of the Foreign).

**Keywords**

- rahapolitiikka
- talouspolitiikka
- hinnoittelu
- hyvinvointi
- international policy transmission
- exchange rate dynamics
- welfare
- pricing-to-market
- purchasing power parity

**Additional Information**

- Muita tietoja-Övriga uppgifter-Additional information