

# QUANTITATIVE EVALUATION OF EXCHANGE RATE POLICY INFLUENCE ON FOREIGN TRADE

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One of the most important directions of influence of exchange rate policies is foreign trade. Results of known theoretical researches of this question have qualitative character, that is they specify, that, for example, the physical volume of export grows with devaluation, but as far as, remains unknown. Similarly, known Marshall – Lerner or Bickerdike-Robinson-Metzler conditions of trade balance stabilization do not specify, by how much it is necessary to devalue national currency in order to reduce initially negative trade balance to zero.

Classical studies of link between supply and demand for exports and imports, on the one hand, and their prices in a general form, on the other, does not allow to get quantitative results at all.

Quantitative researches of devaluation's influence on foreign trade were carried out only at an empirical level when econometric concrete kinds of export and import supply and demand models were made.

We have offered to carry out **theoretical** researches for concrete kinds of a export and import supply and demand functions. In particular, it is made for the most widespread classes of functions: linear and power (linear in variables' logarithms). Application of concrete functions instead of classical consideration of general view functions has enabled to receive some new results:

1) The dependences of export and import parameters (physical volumes, the prices and the cost volumes estimated in domestic and foreign currencies) from an exchange rate are deduced in an obvious kind.

2) Quantitative estimations of these parameters at certain devaluations at different export and import supply and demand elasticities are received.

3) For different combinations of elasticities, it was identified the factor, either price or physical volumes, that led to the changes of the exports and imports values.

4) We determined, which elasticity (demand or supply) has stronger influence on change in exports and imports values in the result of devaluation.

5) We deduced necessary condition of trade balance without imposing restrictions concerning zero balance of payments and infinite price elasticities of exports' and imports' supply, which are required for validity of the Marshall-Lerner condition. Our necessary condition of trade balance's stabilization, received for these specific functions, coincides with classical, if trade balance is zero.

6) We deduced the sufficient condition of trade balance's stabilization, also without imposing restrictions concerning zero balance of payments and infinite price elasticities of exports' and imports' supply.

Quantitative results for linear and power functions are similar thus we hope that obtained results have a general character.