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Project name: INTRA-INDUSTRY TRADE IN PERFECTLY COMPETITIVE MARKETS: POLICY IMPLICATIONS FOR COUNTRIES ACCESSING EUROPEAN UNION

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Executive Summary

Introduction. In a few years Eastern European countries will start to enter the European Common Market and intensify trade relationships with other members of European Union. Before integration, however, accessing countries, have to meet a number of formal requirements concerning trade liberalization and EU standards, and prepare themselves to operate in a new environment (i.e., to take advantage from the trade between countries which start to be more and more similar to each other). Thus, since, international trade is crucial for contemporary economic development there is a need for deep understanding of basic drivers of trade between similar industrialized countries in perfectly competitive products. The trade in similar or identical products has been partially explained by product differentiation and economies of scale: the presence of economies of scale creates incentives for countries to

specialize in the production of a small number of differentiated products and therefore naturally leads towards intra-industry trade, but it is also at the root of imperfectly competitive markets. The intuition concerning gains from international trade is simple: by creating larger and more competitive markets within a single industry, trade reduces the distortions associated with imperfect competition in a closed economy. Based on these assumptions, it has been shown in the literature that there are reasons to expect two-way trade even in identical products, due to strategic interactions among firms operating in non competitive markets. What has not been so widely recognized is that there are reasons to expect international trade in identical commodities (i.e., within a single industry) even if markets are perfectly competitive. Therefore, the purpose of the research undertaken was (i) to contribute to the theory of trade between similar or even identical countries and formally present new motives for international trade (market diversification caused by risk aversion of the firms operation in uncertain environment in perfectly competitive markets); (ii) to show implications which such kind of trade mechanism could have on new entrants to EU.

Research output and basic results. In the framework of the project two research papers have been developed, published as a working papers, and then submitted to economic journals:

I. "Perfect Competition and Intra-industry Trade".¹ This paper presents a formal analysis which incorporates risk aversion to international trade. It seeks to illustrate, amongst other things, that risk-averse firms operating in perfectly competitive markets with uncertainty of demand tend to diversify markets and that this provides the basis for international trade in identical commodities between identical countries. The paper argues that such trade may be welfare-improving, despite efficiency losses due to

¹ Cukrowski, J., Aksen, E., (2001) "Perfect Competition and Intra-industry Trade", *CASE-CEU* Working Paper No. 40, Warsaw.

cross-hauling and transportation costs. Moreover, the analysis shows that reduction of tariff per unit of imported goods increases trade flows but does not necessarily improve total welfare. Therefore, in some particular cases, the use of sophisticated government intervention can lead to better outcomes than can free trade.

"Propagation of Crises across Countries: Trade Roots of Contagion II. Effects".² This paper provides an explanation of the mechanisms underlying trade roots of the contagion effects emanating from the recent turmoils. It is argued that under demand uncertainty risk-averse behavior of firms provides a basis for international trade. The paper shows by means of a simple two-country model that risk-averse firms operating in perfectly competitive markets with uncertainty of demand tend to diversify markets what gives a basis for international trade in identical commodities even between identical countries. It is shown that such trade may be welfare improving despite efficiency losses due to cross-hauling and transportation costs. The analysis reveals that change of the expectations concerning market conditions caused by the turmoil in the neighbor country (i.e., shift in the perception of market conditions) may lead to macroeconomic destabilization (increase in price level and unemployment, worsening of terms of trade, and deterioration of trade balance).

² Cukrowski, J., Aksen, E., Fischer, M.M. (2001) "Propagation of Crises across Countries: Trade Roots of Contagion Effects", *WSG Discussion Paper* 78, Department of Economic Geography and Geoinformatics, Vienna University of Economics and Business Administration, Vienna.