The Effects of the Euro on Intra-Euro Area Exports

st Gavin Murphy and Iulia Siedschlag

An important argument for the adoption of the euro was the expectation that it would boost trade. Existing theory suggests several channels through which the euro would enhance trade. First, eliminating exchange rate uncertainty reduces the risks associated with trading when different currencies are in use. Second, eliminating transaction costs related to operations in different currencies is likely to lead to an increased volume of trade. Third, increased price transparency fosters competition among firms and leads to a fall in the mark-up which in turn is expected to increase the volume of bilateral trade. Fourth, the single currency could improve the ability of euro area countries to hedge against exchange rate risk in their trade with non-euro area countries. This suggests that the euro might also boost trade with countries outside the euro area. However, existing empirical evidence on euro-enhanced trade is inconclusive.

In a recent paper** we analyse the effects of the euro on Irish exports to euro area countries. Our results indicate that the euro effect on Irish exports to euro area countries relative to the rest of the trading partners of Ireland has been positive, significant and increasing since 2000. Furthermore, we find that the impact of the euro on trade varies across industries. We find consistent significant positive euro effects for industries characterised by increasing returns to scale.

We use a panel of annual data on export flows between Ireland and its main trading partners across 21 industries over the period 1993-2004. We focus in particular on Irish exports to 28 OECD countries. Ireland exported on average approximately 90 percent of its total exports to this set of advanced economies over the period. We first estimate the aggregate effect of the euro on Irish exports to the euro area countries relative to other trading partners. Second, we estimate time-specific euro effects on export patterns. Third, we identify average industry-specific euro effects.

^{*}gavin.murphy@esri.ie; iulia.siedschlag@esri.ie

Our results suggest that on average, the adoption of the single currency has had no significant aggregate effect on the Irish exports to euro area countries relative to the rest of the Irish trading partners. However, when we relax the assumption of homogeneous euro effects over the analysed period, we find that the impact of the euro on exports to euro area countries relative to non-euro area countries was significant and positive from 2000 onwards – shortly after the final "locking" of exchange rates, and before the advent of the physical euro currency. This effect has increased over time.

Our estimates indicate that the euro effects have varied across industries. We find a positive and significant euro effect on exports in chemicals (excluding pharmaceuticals); other non-metallic mineral products; office, accounting and computing machinery; and radio, television and communication equipment. These industries are characterised by substantial economies to scale. Furthermore, the reduction of trade costs benefited goods that became more competitive in markets outside the euro area as well. We find that the advent of the euro has led to higher exports to the non-euro area countries relative to euro area countries in iron and steel; non-ferrous metals; motor vehicles, trailers and semi-trailers; textiles, textile products, leather and footwear; rubber and plastics products.

Our empirical evidence on industry-specific and time-specific trade gains from the single currency suggests the importance of going beyond the analysis of aggregate average effects of the euro on trade.

^{**}Gavin Murphy and Iulia Siedschlag, 2011. <u>Has the Euro Boosted Intra-Euro Area Exports? Evidence from Industry Data</u>. *Review of Economics and Institutions*, Vol. 2, No. 3.