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## **The Euro and Trade: A Historical Perspective** \*

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### **Summary**

In 1999, eleven European countries formed the European Economic and Monetary Union (EMU), thereby agreeing to use a single currency, the euro. Several recent papers conclude that the introduction of the euro has led by itself to a sizable and statistically significant increase in trade between EMU members. In this paper, we put the adoption of the euro by EMU members in historical perspective. We argue that the creation of the EMU was simply a continuation, or culmination, of a series of policy changes that have led over the last five decades to greater economic integration among the countries that now constitute the EMU. Using a data set that includes 22 industrial countries from 1948 to 2003, we find strong evidence of a gradual increase in trade intensity between European countries. Once we control for this trend in trade integration, the effect of the formation of the EMU disappears.

A number of recent papers, including studies by Micco, Stein, and Ordoñez and Barr, Breedon and Miles in the October 2003 issue of Economic Policy, argue that the formation of the Economic and Monetary Union (EMU) in Europe has had a sizable effect on the member countries' pattern of international trade. Micco, Stein, and Ordoñez (2003), for instance, find that for pairs of countries that have adopted the euro, trade has increased by about 4-16 percent in the first four years of the euro's existence. Other papers report similar, and often even larger, estimates.

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\* Prepared as a web essay for Economic Policy. The essay is based on our paper "Zooming Out: The Trade Effect of the Euro in Historical Perspective". Corresponding author: Volker Nitsch, Freie Universität Berlin, Department of Economics, Boltzmannstr. 20, 14195 Berlin, Germany, e-mail: [vnitsch@wiwiss.fu-berlin.de](mailto:vnitsch@wiwiss.fu-berlin.de). A current version of the paper is available at the authors' personal websites.

While these results should be generally taken with caution given the small amount of data from the EMU period, the finding that the introduction of the euro has a positive and significant effect on intra-EMU trade has attracted considerable attention for at least two reasons. First, the result has important policy implications. If a common currency immediately boosts trade even among highly integrated territories, currency unions become more attractive, and countries that are currently considering joining EMU may opt for an early adoption of the euro.

Second, and more importantly, even a moderate increase in trade resulting from the introduction of the euro would appear to provide empirical support for Andrew Rose's (2000) finding that establishing a common currency significantly increases trade among union members. These findings were met with great skepticism. Critics noted, among other things, that Rose's conclusions were based on a data set that includes small, poor and dependent territories and therefore might not apply to larger, more developed and integrated economies. The formation of the EMU allows addressing at least some of these objections; it produced one of those rare "natural experiments" where the impact of the introduction of a common currency on trade between advanced economies can be analyzed.

Seeking to identify the trade effect from the introduction of the euro in EMU countries, most of the previous studies focus on the most recent patterns of trade; the analyzed sample period in these papers is relatively short, typically less than 20 years. As we argue, however, the potential trade-creating effects of EMU must be viewed—and analyzed—in the proper historical perspective. After all, the creation of the EMU is best seen as a continuation, or perhaps a culmination, of an integration process that started almost half a century ago. Thus, the real question of interest is: "What has been the euro's impact on trade between EMU members above and beyond the impact of previous and ongoing steps toward economic integration in Europe?"

To analyze this issue, we examine a data set that covers the same twenty-two countries as in Micco, Stein, and Ordoñez but starts as early as 1948. More specifically, we illustrate the evolution of trade over time (i.e., the development of cross-country variation in bilateral trade) by running separate regressions for every single year in the sample. The coefficient on the currency union dummy then captures, year by year, the extent to which trade between (future) EMU member countries deviates from the sample average, after controlling for other factors.<sup>1</sup> Taking such a long-run view of European integration, we find a number of interesting results.

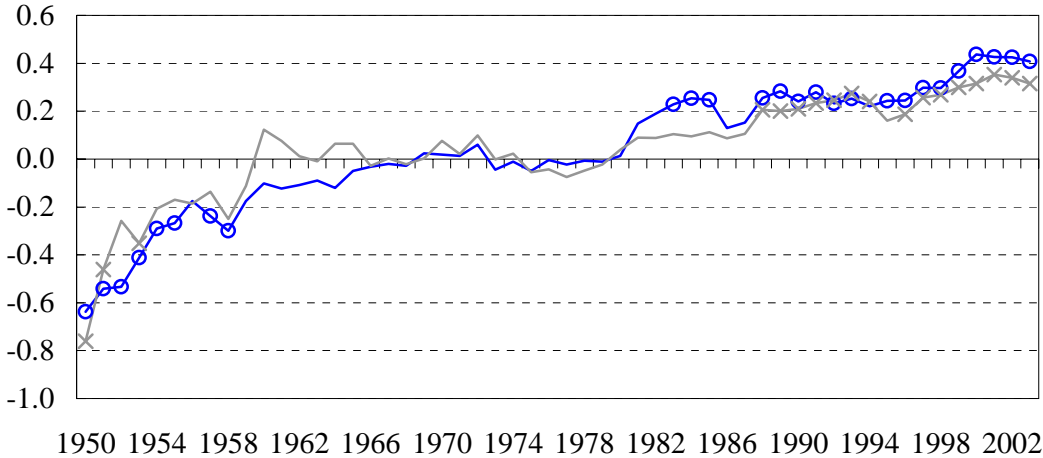
First, trade between countries that later form EMU significantly exceeds trade with and between other countries in the sample already since the early 1980s, holding other things constant. This is in contrast to Micco, Stein, and Ordoñez's finding that trade between (future) EMU members becomes disproportionately large in 1998, i.e., immediately before the formation of EMU.

Second, there is strong evidence for a gradual increase in trade intensity between European countries (especially between the countries that later join the EMU) over a period of more than a half century (see Figure 1).

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<sup>1</sup> Alternatively, we also estimated a pooled regression for the full sample period, adding separate annual currency union dummies. While this specification requires the coefficients on the control variables to be constant over time, it turns out that the results are largely identical.

**Figure 1: Evolution of trade intensity between EMU11 countries over time**



Notes: The lines report estimated coefficients on trade between the eleven countries that in later form the EMU in a sample of 22 industrial countries. The line with circles (crosses) plots coefficients derived from pooled (yearly) regressions. A circle/cross indicates that the coefficient is significant at the 5% level.

What could explain this particular time pattern in the evolution of intra-EMU trade? The growth spurt in the immediate post-war period seems to reflect the rapid re-emergence of the pre-war patterns in European trade that was fostered by institutions established under the auspices of the Marshall Plan, including the European Payments Union. These institutions helped to overcome problems of convertibility and alleviated the notorious European trade deficit with the US by re-integrating the German economy into the European network of trading partners. Moreover, this process was accompanied by the formal integration of tariffs, regulation, and economic policies culminating in the founding of the European Community in 1957 and of the European Free Trade Agreement in 1960. While the process of institutional integration slowed somewhat during the 1960s, it was rejuvenated in the late 1970s when—in the aftermath of the demise of the Bretton Woods system—European monetary cooperation took shape. After another period of low activity in the early 1980s (often denoted as ‘euro-pessimism’), the integration process re-intensified again in the second half of the 1980s with the preparation and passing of the Single European Act (which set up the single market framework), a streamlining of the work of the European Commission, and the start of the political process that culminated in the Maastricht Treaty of 1991.

Finally, once we control for the historical trend in trade integration, the effect of the euro weakens considerably or even disappears completely. More specifically, we experiment with the additional inclusion of simple linear and non-linear time trends; the coefficients on these variables are economically and statistically significant and the effect of EMU on trade is reduced sizably. We then also show that a large part of this trend can be explained by structural measures of economic integration that paved the way for the introduction of the euro.

In sum, the effect of the formation of the EMU on trade is much smaller than initial estimates suggest. Most of the observed increase in trade after the adoption of the euro can be explained by measures of economic integration preceding the introduction of a common currency.

## References

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