Summary for non-specialists
Economic Papers No. 402 / February 2010
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Business Cycle Synchronization in Europe: Evidence from the Scandinavian Currency Union

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A number of recent studies have demonstrated that the adoption of a single currency increases trade among members of a monetary union. Increased trade feeds into increased business cycle synchronization within the monetary union. Membership of a monetary union has raised bilateral trade considerably in the past. This relationship held also during the classical gold standard period. The link from trade to business cycle synchronization is also strongly significant. An increase in bilateral trade thus feeds into increased business cycle synchronization.

To shed light on the question to what extent membership of a monetary union increases business cycle synchronization, it is promising to examine the historical record of monetary unions, taking into account observations before their creation, during their existence and, in case data permits, after their demise. The literature analyzing the properties of business cycles in a historical perspective usually focuses on comparisons across monetary regimes such as the pre-1914 gold standard (the classical gold standard), the interwar period and the post World War II period, commonly split into the Bretton Woods era and the years following with floating exchange rates without explicitly considering monetary unions.

The Scandinavian Currency Union (SCU), lasting from 1873 to 1921, is a most interesting episode in the monetary history of Europe. Denmark, Norway and Sweden established the SCU in the 1870s when these three countries adopted the gold standard and as part of an agreement to introduce a new common currency unit. The SCU lasted until World War I. Wartime shocks gradually undermined the foundations of the union. Eventually it was dissolved in the early 1920s.

The purpose of this paper is to examine whether business cycles in the three Scandinavian countries were more synchronized during the SCU-era compared both to the period prior to the establishment of the union and after its abolishment. We document regularities of cyclical movements both across the three Scandinavian countries and across time. We also compare our findings for the Scandinavian with a select number of European countries. In order to examine regularities of business cycles and their interrelationships we make use of both simple correlation analysis and factor analysis.

Our empirical study extends the existing literature in several directions. To our knowledge this is the first paper comparing the behaviour of business cycles in the Scandinavian countries before, during and after the SCU era. We also extend the historical data backwards using recently published data for the Scandinavian countries allowing us to further explore changes in synchronization over time. We also compare our findings with the behaviour of business cycles in eight EU countries and their relationships with Scandinavian business cycles.

Our main result is that business cycles in the three Scandinavian countries were more synchronized during the SCU compared to the post-World War II period but not more than during the period prior to the establishment of the union. For the European countries in our sample, we find an increase in average cross-correlations consistent with the view that increased economic integration leads to more synchronized business cycles.