9

The integration of European futures markets on long-term government securities

M. ESPOSITO AND C. GIRALDI

9.1 INTRODUCTION[1]

With the signing of the Maastricht Treaty in December 1991, the countries of the European Community achieved an important stride toward reaching monetary union, a prelude to the achievement of economic and political union. Nonetheless, the negative outcome of the Danish referendum has given rise to debate over the timing and methods for realising monetary union as proposed in the treaty and it has again brought to the surface the contrast between fixed and floating exchange rate systems. The objective of this paper is therefore twofold: on the one hand, it attempts to provide formal evidence on the confidence which the market placed in the process of monetary union prior to the crisis of the Exchange Rate Mechanism and, on the other hand, it puts forward a methodology suitable for identifying the degree of economic convergence between the countries participating in a system of almost fixed exchange rates.

In accordance with the Maastricht Treaty, the adoption of economic policies compatible with the achievement of the requirements outlined in the "Protocol on convergence criteria ..." and the "Protocol on the procedures for excessive deficits" is the necessary condition for the European Community countries to move from the preliminary to the final stage of monetary union. According to the treaty, one of the conditions which should be met in order to obtain admission to the final stage of Monetary Union is that of Article 4 of the Protocol, which refers explicitly to long-term interest rates.[2] The process of gradual European integration, therefore, must be measured not only on inflation rates or exchange

V. Conti et al. (eds.), *Bond Markets, Treasury and Debt Management*
© Chapman & Hall 1994

rates but also on the long end of the term structure of interest rates.

It is consequently important to determine if, and to what extent, it was possible to speak about the creation of a "single" market for long-term interest rates in Europe. The task is not simple because the presence of capital controls — with the main European countries abandoning them only a few years ago — and institutional differences gave rise to very heterogeneous financial markets and made it extremely difficult to carry out a sound comparative analysis. As an example of this difficulty, one should mention the Italian case, where the scant credibility of policies undertaken in the Seventies and Eighties to stabilise inflation and the public debt has delayed the issuance of 10-year fixed-interest securities until March 1991.

These difficulties do not arise when the futures markets are considered in place of the respective spot markets. The greater homogeneity of the instruments traded, the almost total lack of institutional constraints and the competition between market players - among other things, due to the concentration of such activity in two of the most advanced financial markets, London and Paris - allow us to represent more clearly the trends occurring in the long-term segment of the respective spot markets. The analysis becomes more significant if one considers the fact that the underlying bonds of the futures covered are the Treasury securities of the main European countries.

This chapter consequently uses the futures markets as an ideal laboratory to observe the integration process of long-term rates. In Europe, the two most important markets for futures in long-term government securities are the LIFFE (London International Financial Futures Exchange) of London and the MATIF (March a Terme International de France) of Paris. Of the contracts which we shall examine, the futures on German Bunds, English Long Gilts and Italian BTPs are traded on the LIFFE while the Notionnel-10 (the futures contract on long-term French government bonds, known as OATs) is traded in Paris.[3] In terms of trading volumes, the Notionnel-10 was the leading contract in the first three months of 1992, with average daily trading volume of 134,220 contracts; this was followed by futures on Bunds with 57,554 contracts, those on Long Gilts with 33,250 contracts and finally, those on BTPs with 9,502 contracts.[4]

The chapter is organised as follows. In Section 9.2, we shall verify under what conditions the futures price can be considered a "sufficient statistic" to describe the underlying spot market. With reference to the Italian case, we shall examine those factors (transaction costs, fiscal distortions, etc.) which, by hampering the correct functioning of the equilibrium relationship between futures prices and spot prices, weaken their correlation and limit the representativeness of the futures market. Particular attention will be devoted to the examination of fiscal distortions, also for the effects which these factors can potentially produce on the effectiveness of futures as hedging instruments.

In Section 9.3, we will start examining the question of the integration of the futures markets and test if interdependency between national government