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Why did the banks overbid? An empirical model of the fixed rate tenders of the European Central Bank

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Abstract

This paper tests two alternative hypotheses for the overbidding behavior of the banks in the fixed rate tenders conducted by the European Central Bank (ECB) from January 1999 until June 2000. One hypothesis attributes the overbidding to the expectations of a future tightening of monetary policy, while the other attributes it to the liquidity allotment decisions of the ECB. The model is estimated with individual bidding data of the Spanish banks, and also with aggregate bidding data of all Spanish banks and all banks in the euro area. The empirical results provide support for the second hypothesis.

JEL Classification: E52; E58; D44

Keywords: European Central Bank; Open market operations; Money auctions; Bidding behavior

1. Introduction

The monetary policy instruments used by the European Central Bank (ECB)[1] are (i) minimum required reserves, (ii) open market operations, and (iii) standing facili-

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[1] Strictly speaking, we should refer to the monetary policy of the Eurosystem, which comprises the ECB and the national central banks of the countries that have adopted the euro. However since the Eurosystem has no legal personality and is governed by the decision-making bodies of the ECB, with a slight abuse of terminology, in this paper we will simply use the latter term.

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ties. The minimum reserves help to ensure that the euro area banking system has an aggregate liquidity deficit which is covered by two main types of open market operations: the main refinancing operations and the longer-term refinancing operations. The former (latter) are liquidity providing collateralized transactions with a weekly (monthly) frequency and a maturity of two weeks (three months). The banks can also obtain or place overnight liquidity at the marginal lending and deposit standing facilities.

The refinancing operations can be conducted via fixed rate or variable rate tenders. In fixed rate tenders the ECB announces an interest rate and the banks bid the amount of liquidity they want to borrow at this rate. If the aggregate amount bid exceeds the amount of liquidity that the ECB wants to provide, each bank receives a prorata share of this liquidity. In variable rate tenders the banks bid the amounts they want to borrow and the interest rates they are willing to pay. In this case, bids with successively lower interest rates are accepted until the total liquidity to be allotted is exhausted.

From the beginning of the Monetary Union in January 1999 until June 2000 the main refinancing operations were conducted as fixed rate tenders. A striking feature of these tenders was the very high degree of overbidding by the banks. Fig. 1 depicts the total amount bid and the liquidity allotted by the ECB in the 76 tenders that took place during this period. From the beginning, the difference between bids and allotments was high, and it increased dramatically over time. To give an idea of the quantities involved, in May and June 2000 the banks were bidding on average an amount that was more than eight times the size of the consolidated balance sheet of

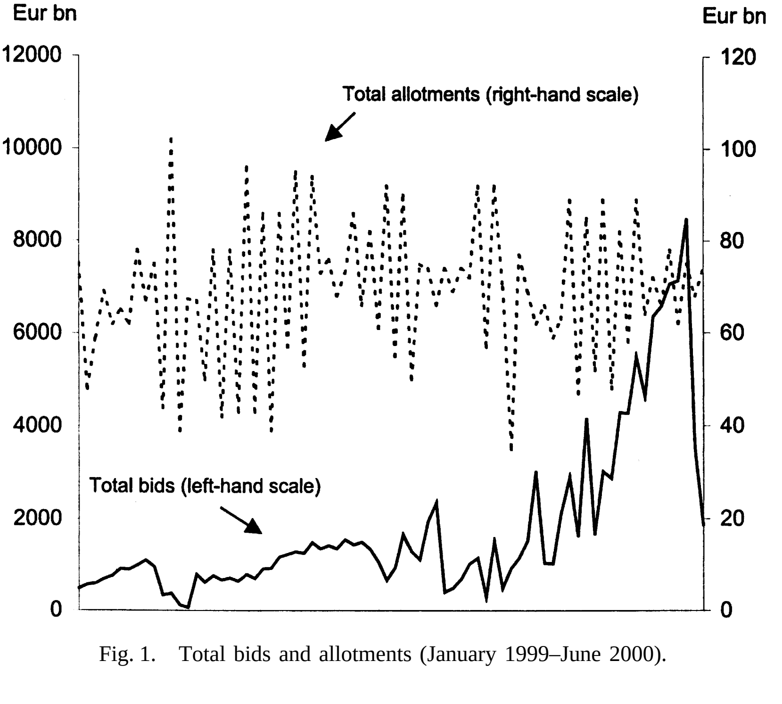

Fig. 1. Total bids and allotments (January 1999–June 2000).