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Bank competition and ECB's monetary policy ☆

Fabio C. Bagliano [a,*], Alberto Dalmazzo [b], Giancarlo Marini [c]

[a] *Dipartimento di Scienze Economiche e Finanziarie "G. Prato", Facolta di Economia, Università di Torino, Corso Unione Sovietica 218bis, 10134 Torino, Italy*
[b] *Dipartimento di Economia Politica, Università di Siena, Piazza San Francesco 7, 53100 Siena, Italy*
[c] *Dipartimento di Economia e Istituzioni, Università di Roma "Tor Vergata", Via di Tor Vergata snc, 00100 Roma, Italy*

Abstract

In a model of oligopolistic competition in the banking sector, we analyse how the monetary policy rule chosen by the Central Bank can influence the incentive of banks to set high interest rates on loans over the business cycle. We exploit the basic model to investigate the potential impact of EMU implementation on collusion among banks. In particular, we consider the possible effects of the European Central Bank's policy criteria with regard to the cost of credit in national markets. © 2000 Elsevier Science B.V. All rights reserved.

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* Corresponding author. Tel.: +39-11-670-6084; fax: +39-11-670-6020.
E-mail addresses: bagliano@econ.unito.it (F.C. Bagliano), dalmazzo@unisi.it (A. Dalmazzo), giancarlo.marini@uniroma2.it (G. Marini).

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1. Introduction

The campaign on the benefits of the EMU emphasises the increase in consumer's surplus brought about by smaller transaction costs and, in general, increased competition in all markets. Also the banking sector will have to undergo formidable changes. Although the implications of the EMU on the banking system have been discussed exclusively at the microeconomic level (see e.g., Dornbusch et al., 1998), the likely consequences of the changed macroeconomic scenario on increasingly integrated financial markets have still to be investigated. The conduct of monetary policy is going to change under the EMU, even though the ultimate goal of the European Central Bank (ECB) remains price stability (European Central Bank, 1998). Sharing the same objective of the Bundesbank is not indeed a guarantee of unchanged policy for a number of reasons. Since voting participants outnumber the ECB's executive board (Kenen, 1995), monetary policy will no longer be aimed at achieving German domestic objectives (as in the EMS era), but will be geared to pursue the interests of all countries in the Union.

In this paper, we argue that the novelties brought about by the EMU in policy-making criteria may influence competition in the credit markets of member countries. We model inter-bank competition in national credit markets by using the oligopoly model developed by Rotemberg and Saloner (1986) (see also Bagwell and Staiger, 1997) and show that "implicit collusion" can arise without any overt cooperation among banks. [1] Thus, even when loans are priced following non-cooperative Nash strategies, lending rates may be set above their competitive level. The pricing behaviour of banks depends on the (current) gains and on the (future) losses of undercutting. When an oligopolistic bank undercuts on its loan rate, it manages to steal the current market share of its competitors. Then, banks will have an incentive to compete more aggressively when the loan market is buoyant. However, undercutting entails a cost, since the rival banks will punish aggressive behaviour by setting competitive loan rates in the future (trigger-strategy). A similar model has been used by Dutta and Madhavan (1997) to examine implicit collusion among securities dealers.

Although we abstract from many aspects that are frequently considered in modern banking theory (such as asymmetric information in the lender–borrower relation: see Freixas and Rochet, 1997), the adoption of the Rotemberg–Saloner framework presents several advantages. First, it can encompass

[1] Other papers have used non-competitive models of the banking sector to represent the credit market. For example, Hannan and Berger (1991) consider a monopolistic competition model of the loan market to justify "interest rate stickiness".