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Curtailing the black box: German banking groups in the transmission of monetary policy

Markus Küppers*

Sal. Oppenheim jr. & Cie., Unter Sachsenhausen 4, 50667 Cologne, Germany

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Abstract

The paper examines the role of portfolio decisions of German banking groups in the transmission of monetary policy. A small econometric model is augmented with segregated bank balance-sheet variables in order to study potentially different effects of tight money on these variables. The results provide evidence for banks playing an active role in the transmission process and are beneficial for two fields of research: The findings indicate sectoral differences of monetary policy in line with transmission models based on informational frictions. In addition, the results lend econometric support to the existence of close bank–customer ties for certain banking groups in Germany: Whereas large banks adjust their credit position markedly following a monetary shock, the smaller savings-banks and credit cooperatives seem to shield their customers from the brunt of a policy tightening. © 2001 Elsevier Science B.V. All rights reserved.

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1. Introduction

Models studying monetary policy made extensive use of a *black box* (Bernanke and Gertler, 1995) to circumvent the analysis of the tedious

* Tel.: + 49-221-145-2213.

E-mail address: markus.kueppers@oppenheim.de (M. Küppers).

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interactions between borrowers and lenders in capital markets. However, by their very nature, black boxes are transitory research tools at best, designated to facilitate step-by-step incorporation of variables not yet explicitly modelled. Nevertheless, for the time Arrow–Debreu *contract wonderland* being the reference point, monetary economics made no substantial efforts to trim the box in size.

Renewed interest in monetary transmission corresponds to the resurgence of small econometric models. They assembled stylised facts on the macro-dynamics following a monetary shock that were hard to explain by traditional transmission theories (e.g. Bernanke and Gertler, 1995). Timing and magnitude of the responses could, however, be replicated by models who left the orbit of perfect capital markets and incorporated real world phenomena such as imperfect and asymmetric information. Whereas this spurred research foremost in the U.S., European interest has kicked in just a few years ago (BIS, 1995), and still, it is far from being a lively one. This is all the more startling, since the question whether a single monetary policy translates symmetrically throughout the EMU-11 seems far from being settled. An answer in the affirmative is, however, hard to defend even on a priori grounds. Institutional responses to informational frictions in capital markets have evolved historically such that there is no single European finance and banking system (Europäische Wirtschaft, 1997). Thus, it seems worthwhile to dismiss the idea of the *financial system as a veil*. Instead, a thorough reference to institutional answers concerning the information problem might augment our understanding of monetary transmission substantially.

Existing cross-country time-series studies come up with rather inconclusive evidence on potential asymmetries in the transmission of monetary policy.[1] Most of them submit some descriptive material on idiosyncrasies in national finance designs, but their econometric model largely abstracts from transmission theories that incorporate external finance premia. Instead, a huge black-box degenerates the financial system to a machine capable of frictionless money-bond swaps.

Dornbusch et al. (1998) conclude that the potency of a monetary tightening in terms of real activity is weaker in countries with a bank-centred financial system. They quote France and Germany as examples. Experience in the U.K., generally cited as the paradigmatic example for a market-centred system, shows a stronger susceptibility to monetary shocks. Giovannetti and Marimon (1998), on the contrary, motivate their study with descriptive evidence of two inherently different financial systems in France and Germany. The existence of such disparate views is most likely due to the fact, that the widely held distinction between archetypal *market-oriented* and *bank-oriented* financial systems is a very

[1] See e.g. Cottarelli and Kourelis (1994), Gerlach and Smets (1995), Tsatsaronis (1995), Barran et al. (1996), Britton and Whitley (1997).