# Chapter 11

# TESTING CREDIT CHANNEL IN TURKEY WITH SMALL FIRM LOANS AND INTEREST RATE SPREADS

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## INTRODUCTION

Asymmetric information between firms and their external finance suppliers create agency problems[2] and make agency costs as central concept beyond credit channel (Kashyap & Stein, 1995: 153, Mishkin, 1995: 7; Holtemöller, 2002:1-2). Agency problems stimulate credit view and its two sub-components; balance sheet approach (known as financial accelerator mechanism or broad credit channel) and bank lending approach. Less-favoured financially weak borrowers having high level of asymmetric information and monitoring costs encounter more agency cost of borrowing in credit markets (Bernanke, Gertler & Gilchrist, 1996: 1-6; Mishkin, 1995: 7; Norrbin, 2000: 7; Oliner & Rudebusch, 1996: 300) and many of them leave out of direct capital markets. Nontraded bank loans produce private information that help reduce agency costs especially in developing markets where it is harder to collect information (Mishkin & Eakins, 2015, 185-190,203). Non-bank source of credit does not perfectly substitute bank loans because banks specialize in overcoming information asymmetries of hard to value firms. These relations between the high agency cost of small firms and the ability of banks to eliminate these agency costs force many firms, say small firms[3], to become substantially reliant on bank loans (thereafter we call them as bank-loan reliant or bank-reliant). Thus any corruptions in the supply of bank financing may have substantial impact on bank reliant firms firstly and the whole economy ultimately. Bank lending channel predicts that tightened monetary policy reduces bank loans for bank-reliant firm and spending/investment fall by more than that can be ac-

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[2] Agency problems examined under the framework of agency cost theory (Mishkin & Eakins, 2015: 181) accept that lenders (principals) have to incur a cost to obtain information about future cash flows and financial structures or incentives about borrower (agents) (Bernanke, Gertler & Gilchrist, 1996: 1-2).

[3] In both theoretical and empirical parts of this study, small firms refer to bank-reliant firms that face several financial difficulties of credit market.

itive responses of financing cost spreads realize immediately and peaks 2 and 3 months after the contradictory money shocks but finish off in the 4 and 5 months. Bank credit ratio into SME and micro loans drag down while loan ratio to large firms augments as a reaction to monetary innovations. Timing pattern of bank loan responses trace the timing of spreads, with the peaks at 3rd months and sharp returns during the following months, although in opposite direction for large and small firms, thus revealing the disproportional effect on small firms. Reaction of micro loans to SME loans mirror its response to overnight rates and augment the differential impact of monetary impulses on smallest firms. Error variance decompositions also indicate that overnight rates have power to explain financing cost and disproportional bank loan extension variables. Consequently, we can evaluate our findings as keeping with the credit channel theory and support the predictive power of the financing cost for bank lending and balance sheet mechanism.

Supporting credit channel in Turkish economy using financing premiums and disproportional allocation of bank loans means that we also accept financing difficulties faced by small firms. Some policy makers struggle to promote start-ups or established small firms by offering grants or developing some tools via institutional programs to solve their financing problems, on the other side some other policy makers, through natural process of credit channel, limit small firm's credits. Although the existence of bank-dependents is a prerequisite requirement to arrive at monetary goals in an open economy, regulations balancing the impact of money policy on small and large firms may be established. For example, certain size firms (in terms of asset size, sales volume or number of employees) may be exempt from increases in interest rate with fixed rate loan types. Regulations may force or stimulate banks to maintain a predetermined loan percentage for local SMEs.

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