ESSAYS IN INTERNATIONAL MACROECONOMICS AND FINANCE

This doctoral thesis in Economics consists of three self-contained chapters in international macroeconomics and finance.

"The distributional implications of fiscal devaluations" examines the distributional implications of a fiscal devaluation acquired through a shift from labor to consumption taxes using a Heterogeneous Agents New Keynesian model with incomplete markets and uninsurable income risk.

"Demographics and the real exchange rate" analyzes the general equilibrium effect of increased demand of nontradables due to population ageing on the real exchange rate using an overlapping-generation-model calibrated for European Union and United States.

"Bank lending and sovereign debt availability: evidence from Italian SMEs" evaluates the effect of the increased availability of sovereign debt on banks’ lending to Small- and Medium-sized Enterprises (SMEs) using a large sample of Italian firm-bank level data.

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Marta Giaggheddu
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To Lucia & Domenica
Foreword

This volume is the result of a research project carried out at the Department of Economics at the Stockholm School of Economics (SSE).

This volume is submitted as a doctoral thesis at SSE. In keeping with the policies of SSE, the author has been entirely free to conduct and present her research in the manner of her choosing as an expression of her own ideas.

SSE is grateful for the financial support provided by the Jan Wallander and Tom Hedelius Foundation which has made it possible to carry out the project.

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Director of Research
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During the PhD I had also the biggest luck of life of meeting Paul. Besides now also being my husband, you have been my biggest fan, believing in me also when, most of the times, I didn’t. Your invaluable support and encouragement is all in this thesis in the form of discussions, interesting takes, ideas and writing tips. Without you my Italian writing would have made this thesis many pages longer. Most importantly, without your love this PhD would have been a much tougher journey. Since we met I always felt you were holding my hand to go in the direction we choose together and nothing felt scary any longer. Thank you!

Stockholm, June 20, 2018

Marta Giagheddu
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Introduction

This doctoral thesis in Economics consists of three self-contained chapters. The first two chapters revolve around heterogeneity in international macroeconomics while the third chapter focuses on a topic of relevance within the realm of financial economics. In the first chapter, I analyze how a fiscal policy aimed at improving one country’s competitiveness affects asymmetrically agents who differ with respect to their wealth accumulation in the domestic economy. The second chapter analyzes how the change in the demand composition due to population ageing leads to an appreciation of the real exchange rate of the faster ageing economy. Finally, in the third chapter I analyze the role of increased sovereign debt availability on lending to small and medium sized enterprises during the European debt crisis. Abstracts for each chapter follow below.

The distributional implications of fiscal devaluations

I examine the distributional implications of a fiscal devaluation acquired through a shift from labor to consumption taxes. To do this I build an open-economy Heterogeneous Agents New Keynesian model with incomplete markets and uninsurable income risk. A permanent fiscal devaluation that perfectly mimics a nominal devaluation in a representative agent setting implies that tax revenues, and hence transfers, increase by the same amount as profits decrease. This does not have any implication for the consumption of the representative agent. In my model with endogenous wealth, distributional effects arise, as the higher transfers affect all agents symmetrically while decreased profits impact agents according to their position on the wealth distribution. The implicit insurance provided by higher transfers outweighs the effect of lower profits and generates ex-ante welfare gains in the domestic economy. This suggests that a fiscal devaluation is beneficial for agents on the lower tail of the wealth distribution and hence it can be a suitable policy for countries that want to simultaneously tackle
competitiveness and inequality issues.

Demographics and the real exchange rate
with Andrea Papetti

What is the effect of the projected demographic change on the real exchange rate ($RER$) in the long-run? We answer by calibrating an overlapping-generation-model with tradable and nontradable goods for two areas: European Union (EU) and United States (US). We find that, due to differences in the demographic change between the two areas, the deviation of the real exchange rate from its initial steady state value in the long-run ranges from about 2 percent to 6 percent. The range depends on whether structural-change forces and general equilibrium effects are considered or not. These numbers represent a real exchange rate appreciation for the area that is projected to age relatively more, EU. The channel through which demographic change impacts $RER$ depends on the way age-specific sectoral consumption shares and imperfect sectoral substitutability of working hours impact the relative price of nontradables in response to demographic change. Using a panel-dataset of 45 countries over the period 1980-2004 we empirically confirm that the more a country ages relative to the trading partners the more appreciated its fundamental real effective exchange rate will be.

Bank lending and sovereign debt availability: evidence from Italian SMEs
with Timo Autio and Marco Casiraghi

During the European debt crisis governments had to roll-over large amounts of expiring debt. Simultaneously, in the aftermath of the financial crisis, private firms suffered a drop in demand and needed liquidity to survive the lean period and to finance new investments. We argue that the banking sector found itself in a trade-off between buying domestic sovereign debt and lending to firms. We evaluate the effect of the increased availability of sovereign debt on banks’ lending to Small- and Medium-sized Enterprises (SMEs) using a large sample of Italian firm-bank level data. We estimate how periods with higher net issuance of sovereign securities affect banks’ lending to firms differently depending on
how exposed banks are to the foreign wholesale market prior to the liquidity dryout. We allow for different effects in the liquidity dryout period and when ECB intervened via expanding the Long Term Refinancing Operation program, making more assets collateralizable. We find that banks that are more exposed to the foreign wholesale market decreased their lending relative to other banks in high net issuance episodes during the dryout period whereas the opposite holds during the intervention period. A high rollover episode during the dryout phase is associated with a 10 percent decrease in lending granted of the banks that have a one unit higher exposure to the foreign wholesale market in June 2011. The corresponding effect during the intervention suggests a 9.5 percent increase in lending granted to SMEs.