**Distribution Agreement**

In presenting this thesis or dissertation as a partial fulfillment of the requirements for an advanced degree from Emory University, I hereby grant to Emory University and its agents the non-exclusive license to archive, make accessible, and display my thesis or dissertation in whole or in part in all forms of media, now or hereafter known, including display on the world wide web. I understand that I may select some access restrictions as part of the online submission of this thesis or dissertation. I retain all ownership rights to the copyright of the thesis or dissertation. I also retain the right to use in future works (such as articles or books) all or part of this thesis or dissertation.

Signature:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Zhao Li Date

Essays on Macroeconomics and Finance

By

Zhao Li

Doctor of Philosophy

Economics

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Tao Zha

Advisor

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Kaiji Chen

Committee Member

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Vivian Yue

Committee Member

Accepted:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Lisa A. Tedesco, Ph.D.

Dean of the James T. Laney School of Graduate Studies

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date

Essays on Macroeconomics and Finance

By

Zhao Li

M.Sc., Emory University, 2014

B.A., Peking University, 2011

Advisor: Tao Zha, Ph.D.

An abstract of

A dissertation submitted to the Faculty of the James T. Laney School

of Graduate Studies of Emory University in partial fulfillment

of the requirements for the degree of

Doctor of Philosophy

in Economics

2016

Abstract

Essays on Macroeconomics and Finance

By Zhao Li

This dissertation documents important issues on finance and macroeconomics. The first two chapters study the impact of uncertainty, which has recently become a hot research topic, although the mechanism of how it works remains an open question. I investigate the relationship between uncertainty and lending behavior in the syndicated loan market in order to propose new micro mechanisms. The Dealscan, Compustat, and CRSP databases are merged and the firm-level uncertainty is calculated from stock return volatility. Through comprehensive empirical studies, I ascertain that uncertainty substantially affects the quantity and price of the market. When uncertainty is higher, the loan shares tend to concentrate in the hands of lead lenders and the credit spread is higher. Along with empirical analyses, I propose a simple model to explain why higher uncertainty leaves the lead lenders with higher loan shares. The mechanism relies on the fact that uncertainty raises the unobservable investigation effort, which makes the benefit of shirking for the lead lenders higher. As a result, the participant lenders have to pull back their investment in order to leave the lead lenders with a higher share, which reduces the incentive of lead lenders to shirk responsibility. The first chapters thus propose new transmission channels of uncertainty's impact and sheds light on further theoretical and empirical works in this topic. The third chapter explores the BVAR forecasting methodologies for China. While it is well known that many models used for Western economies do not perform well in explaining and forecasting China's economic data, I challenge this convention by building rigorous econometric forecasting models for the Chinese economy. Different state-of-the-art Bayesian Vector-autoregression (BVAR) models are built, revised, and evaluated. It is found that the richer data set of additional macroeconomic data and sectoral data helps forecast the GDP, CPI, and interest rate. The large-scale BVAR model with 124 variables turns out to be the champion of forecasting models and it is more effective in extracting information from a large database than factor models and hierarchical models.

\

Essays on Macroeconomics and Finance

By

Zhao Li

M.Sc., Emory University, 2014

B.A., Peking University, 2011

Advisor: Tao Zha, Ph.D.

A dissertation submitted to the Faculty of the James T. Laney School

of Graduate Studies of Emory University in partial fulfillment

of the requirements for the degree of

Doctor of Philosophy

in Economics

2016