Research Statement
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Research Area

My research interests revolve around the links between Macroeconomics and Financial Markets, which emerges at the intersection of Finance, Macroeconomics/Money, and International Macroeconomics/Finance. Traditionally, finance models are developed without any macroeconomic contents, and macroeconomic analysis often incorporates the financial sector by using only a single interest rate variable. The Macroeconomics/Finance area eliminates the long separation of Finance and Macroeconomic analyses by modeling the feedback between financial conditions and real economy. This rapidly growing area explores the linkages and channels between the financial sector and the real economy, and it estimates the impacts of alternative fiscal and monetary policies on financial and goods markets (Rudebusch, 2010). Recent financial crises also emphasize the importance of this area by revealing a close interconnection between financial conditions and the real economy.

Recently, this area has extended its research focus to open economy macroeconomics by using cross border portfolio choices and transnational asset pricing to conduct international macroeconomic analysis (Pavlova and Rigobon, 2010). The important achievements of macroeconomics/finance are the modeling of contagion of financial crises across national boundaries and the rising global imbalances due to the integration of national financial markets into a global system.

Current Research

My motivation for studying and doing research in Macroeconomics/Finance originated while I was working for an investment banking division at a commercial bank in Bangladesh. I observed that financial assets substantially react to domestic and international macroeconomic developments, but financial markets seldom price this risk. As a result, uncompensated investors regularly lose their investment. Later, during my graduate studies at the University of Utah, I developed a keen interest for the macroeconomic impacts of asset pricing research and tailored my subsequent research accordingly. My first research in this area took place under the supervision of Professor Michael Halling, and with his guidance, I quantitatively estimated
whether US equity markets price the unexpected exchange rate movement as a systematic risk. By using the Fama-French multifactor model and adding exchange rate risk as an additional factor, this study examines the industry-wide differences of the exchange rate risk exposure for US industries. It finds no significant support for existence of risk premium for investors. This study concludes that possible explanations for absence of risk premia for exchange rate risk may be the size of the US equity market. This market is so large and offers so many different classes of assets that exchange rate risk may be rendered diversifiable. The US equity market also has extensive forward (future) products for foreign currencies, which may offer a complete hedging strategy against a sudden exchange rate change. This paper was published by the International Journal of Economics and Finance in its November, 2013 issue, Vol. 5(11).

I am currently developing a collaborative work with Lauren Re Lo, an Assistant Professor of Finance at Westminster College. We are estimating the dynamic relationship between corporate payouts and the macroeconomic condition. Predominantly, research on corporate payouts focuses on short run fluctuations of corporate payout decisions and argues that payouts are largely determined by firm-specific characteristics, such as earnings, profitability, size and maturity of firms. In this work, we are examining aggregate payouts from a long run perspective and finding simultaneous and significant interactions between total payouts and macroeconomic factors. The major implication of this study is to demonstrate that total payout activity shares a long term trend with macroeconomic factors, and these relations help to explain aspects of corporate payout policy that are not explained by firm-specific factors. Re Lo presented our collaborative research at the Conference of International Academy of Business and Public Administration Disciplines (IABPAD), which took place in Las Vegas, Nevada in October 2013.

My dissertation work, conducted under the supervision of Professor Lance Girton, has focused on the municipal bond market, one of the least-explored over-the-counter financial asset markets. My dissertation project develops financial econometric models that explain the maximum variations of yields on general obligation municipal bonds in the primary market. My search for explanatory variables for these models is inspired by the existing literature on public finance, regional economics, and financial economics. After an elaborate search, I developed the following research questions for empirical testing:
1. General obligation bonds show a substantial variation in bond specific characteristics, such as maturity, callability, third-party insurance, credit ratings, state taxation, etc. How do these bond-specific characteristics impact yields on general obligation bonds?

2. Except for Vermont, each state has a balanced budget requirement, but the stringency of these requirements varies widely (Poterba & Rueben, 1999). Does the municipal bond market reward states with stronger balanced budget rules by offering lower borrowing cost?

3. Since the default risk of a borrowing state rises with the inability of that state to manage its primary budget deficit and to service its existing debt, investors in the municipal bond market need to judge the sources of the budget deficit (i.e. different components of revenue and expenditure). Yields on municipal bonds should reflect their judgments. Does the municipal bond market discipline a fiscally mismanaged state with higher borrowing cost?

4. The default risk of a state is not constant; it varies with time. The variation of a state’s default risk over time partly originates due to changes in the macroeconomic conditions (Figlewski, Frydman & Liang, 2008). One important source of macroeconomic shocks to the municipal bond market is investors’ expectations about future economic conditions, such as inflation, interest rate, monetary and fiscal policies, etc. Does the municipal bond market price the unexpected macroeconomic shocks over the business cycle?

In the first dissertation chapter, I explore the impact of states’ fiscal institutions and their fiscal management on the yields on municipal bonds. After analyzing 17,400 newly issued general obligation bonds, this chapter estimates significant risk pricings for states’ fiscal institutions and fiscal management in the municipal bond market. By charging lower interest rates, the municipal bond market rewards states that are fiscally prudent and have stronger anti-deficit, balanced budget rules. In the second chapter, I examine the time variation of these risk premia due to changes in market expectations about future macroeconomic conditions.

The dissertation marks the beginning of my research career. Since I have a deep passion for Macroeconomics and Finance and expertise in econometrics, I am looking forward to conducting further empirical research in this area.
Future Research Plan

Upon completing the dissertation, my first priority will be to submit for publication two articles that draw from my research. I also plan to extend research on the municipal bond market by concentrating on the revenue bond, which is a kind of municipal bond issued to finance capital development projects by local or state governments. Repayment for revenue bonds depends on the revenue generated by capital projects; it is business-cycle sensitive. Kidwell & Koch (1982) have already examined business-cycle sensitivity of yields on revenue bonds, and I hope to build on their study by identifying the sources of macroeconomic shocks to revenue bond pricing and developing an econometric model to predict the impact of these shocks to the revenue bond market.

In the immediate future, I also plan to examine cross border capital flow dynamics and to identify the push and pull factors for international capital investment. My main focus will be on portfolio capital investments since monetary and fiscal shocks often propagate across national boundaries through the portfolio capital flows. The subject of international portfolio capital flow for domestic financial market development provides an exciting and necessary avenue of research.

Finally, I am very much interested in conducting collaborative research with my prospective colleagues. Collaborative work amalgamates different perspectives and ideas. Collaborative research also ensures an interdisciplinary transfer of knowledge and skills, enhances creativity, and develops a sense of research companionship.

Reference

